

EUROPEAN  
ECONOMIC  
COMMUNITY

EUROPEAN PARLIAMENT

WORKING DOCUMENTS

1968 - 1969

EUROPEAN  
ATOMIC ENERGY  
COMMUNITY

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25 SEPTEMBER 1968

DOCUMENT 112

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EUROPEAN  
COAL AND  
STEEL  
COMMUNITY

# Report

drawn up on behalf of the Committee on Energy,  
Research and Atomic Problems

on the European policy  
for research and technology

**Rapporteur : Mr. Bersani**

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\*) This translation must not be treated as an official text. Readers are reminded that the official texts exist only in the Dutch, French, German and Italian languages.

Adopting points 7 and 8 of its resolution of 18 October 1966,<sup>(1)</sup> the European Parliament asked its responsible committee to draw up a report showing what measures could be taken to concentrate research within the Community and make the most of Euratom's Joint Centre by bringing all areas of research within its purview.

On 10 April 1967 the Committee on Energy, Research and Atomic Problems asked Mr. Bersani to draw up this report.

On 25 May 1967 the Committee decided to enlarge the mandate originally given to Mr. Bersani, so as to bring the whole field of European technology and science policy within the scope of his report.

At its meeting of 22 June 1967, the Enlarged Bureau of the European Parliament gave its assent to this decision.

Bearing in mind the decisions taken by the Council of the European Communities on 31 October 1967 concerning the policy for research and technology, the Committee on Energy, Research and Atomic Problems decided to assess the situation through the medium of an interim report for the benefit of the general public in the Community countries.

On 27 November 1967, Mr. Bersani submitted this report (Doc. 146/67) to the European Parliament.

In passing the resolution introducing the report,<sup>(2)</sup> the European Parliament called on its Committee on Energy, Research and Atomic Problems (in point 16) to follow the implementation of a common research policy and to submit a report in due course.

The Committee devoted its meeting of 5 February 1968 to a discussion with the Commission of the Communities on the problems raised by the European policy for research and technology.

It resumed its study of these questions at its meetings of 4 March 1968 in Ispra, 30 April in La Casaccia and 14 June at Julich.

At its meeting of 22 February 1968, furthermore, the Committee decided to append to Mr. Bersani's report the memorandum jointly drawn up with the British experts after the meetings the Committee had held with them on 23 and 24 October 1967 to discuss European scientific and technological co-operation.

At its meeting of 22 March 1968 the Bureau of the European Parliament gave its agreement to this.

This motion for a resolution and explanatory statement were unanimously adopted by the Committee at its meeting of 16 September 1968.

The following were present: Messrs. Bousch, Acting Chairman; Oele, Vice-Chairman; Bersani, Rapporteur; Angioy, Behrendt (deputizing for Mr. Lautenschlager), Bergmann, Berthoin, de Broglie, Brunbes, Hougardy, Kulawig, Leemans, Lenz, Lucius, Miss Lulling (deputizing for Mr. Arendt), Messrs. Memmel, Posthumus (deputizing for Mr. Mitterrand), Radoux, Raedts and Springorum.

(1) O.G. No. 201 of 5 November 1966, p. 3455/66.

(2) O.G. No. 307 of 18 December 1967, p. 6.

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# A

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

## Motion for a resolution on the European policy for research and technology

*The European Parliament,*

having regard to the report of the Committee on Energy, Research and Atomic Problems (Doc. 112/68),

1. Recalls that it has, on many occasions, stated its attitude to the policy on scientific research and technology;
2. Views with great concern the delays in achieving the aims laid down by the Council in its Decisions of 31 October and 8 December 1967, especially bearing in mind that research and technology are axiomatic to economic expansion and that the technological gap between Europe and the major technological powers is increasing;
3. Is perturbed by the continued inactivity of the working party set up in pursuance of the Council Decisions referred to, at the faltering of scientific co-operation both within the Community and European scientific organizations and the threat still hanging over Euratom's existence owing to its complete lack of any activity programme;
4. Warns the general public and the Community authorities of the danger of going back to national programmes and ideas in the field of scientific research and technology;
5. Commends the Commission's efforts in contributing, within its power, to the achievement of a genuine Community research policy;
6. Urges that a more rational use of the resources and experience of the member States be made to put an end to the waste of time, money and manpower stemming from a failure to bring national programmes into line with each other;
7. Calls upon the member States to comply with the Euratom Treaties and the medium-term economic policy and communicate details of their various national programmes for technological research to the Commission so that the necessary recommendations for co-ordinating European science may be made;
8. Renews its request for a suitable system of European patents and a legal dispensation for European companies, and for a harmonization of the financial aid and fiscal systems of the member States;
9. Recommends that the Community be vested with appropriate financial autonomy to enable the responsible Commission agencies to draw up and carry through action programmes under satisfactory conditions of stability;
10. Reaffirms the urgent need for (a) new programmes to be worked out for Euratom's Joint Centre, (b) improving its structure and operation, and (c) a precise indication as to how Euratom's experience and structure could be harnessed to industrial objectives once it emerges from its chronic state of impotence in the technological sector;

11. Stresses that a genuine policy for research in the Community presupposes co-operation that is not limited to research centres with respect to the fundamental sectors but which also involves the industrial utilization of results so that research is directly linked with industry in order to bring about a real industrial strategy at Community level;

12. Recalls that the seven research areas selected by the Council on 31 October 1967 when considering possibilities of Community co-operation were to be regarded as the initial basis of a wider and more consistent programme, and particularly deplores the fact that these areas have not been extended and that no programme has been submitted for other sectors;

13. Notes, on the other hand, that the implementation of a Community research policy implies a 'Europeanization' of the universities so that the free movement of lecturers and students may be ensured, together with the harmonization of syllabuses and diplomas;

14. Stresses the importance of creating and developing as soon as possible useful relations between the universities, industry and public and private research laboratories as part of a European research policy, bearing in mind the reform in the university structures taking place in the member States;

15. Is aware of the importance of stepping up work on disseminating information and documentation to implement a European research policy and requests the Commission to submit practical proposals to provide the necessary means for enlarging its own activity in sectors having an importance equal to that of Euratom;

16. Stresses the desirability of extending scientific and technological co-operation to third countries, particularly those that have applied for membership of the Communities;

17. Expresses its satisfaction at the talks organized at parliamentary level by the Committee on Energy, Research and Atomic Problems with a group of British experts to look into the possibilities of co-operation on research and technology between the Six and the United Kingdom and suggests that initially the two parties should concentrate on specific subjects and programmes, particularly the seven sectors referred to in the memorandum issued at the end of this meeting as wider co-operation could then be envisaged to facilitate subsequent membership;

18. Requests that an early and positive decision be taken on building a European isotope separation plant which could be one of the aims in the context of co-operation between the Six and the United Kingdom;

19. Instructs its Committee on Energy, Research and Atomic Problems to keep a close watch on the implementation of this Community policy for scientific research and technology and to submit a report on the subject in due course;

20. Asks its President to forward this resolution and the explanatory statement relating thereto to the Council and the Commission of the European Communities.

## B

### EXPLANATORY STATEMENT

#### Introduction

1. Less than a year ago the Committee on Energy, Research and Atomic Problems submitted an interim report to Parliament on Europe's policy for scientific research and technology (Doc. 146/67). The purpose of this report was to keep public opinion posted on the latest developments in the Community's policy in this field, particularly following the Council decisions of 31 October 1967.

The intention was that the Committee should continue looking into these matters and then submit its conclusions in a report.

Meanwhile, events have shown that the general public in Europe is taking a growing interest in the serious situation that has arisen in the field of co-operation between the member States over scientific research and technology; we shall discuss these events later in this report.

Atomic research is governed by a Treaty which lays down quite definite obligations for the Six; but even here we find an increasingly pronounced resurgence of the national principle and the gradual paralysis of Euratom even though the latter could, with its Joint Research Centre, have helped finding an original solution to the problem of Europe's leeway in this vital area.

We should like, within the scope of this report, to add that new ideas on research have to be given a chance, the general public's awareness of the problem underlines this need.

The time has come to review the Community's progress with regard to its policy for research and technology, bearing in mind developments since October 1967 and the fact that this report follows on from the interim report of November 1967 and the various moves made by Parliament to stimulate the Community's activity in the field of scientific research and technology (see, in particular, the report by Mr. Oele, Doc. 97/66).

#### I—The Council decisions of 31 October and 8 December 1967

##### The worsening state of research in the Community

(a) *Analysis of the Council decision of 31 October and 8 December 1967*

2. The interim report of November 1967 recorded with satisfaction the resolution passed by the Council on 31 October 1967:

'in view both of its manifest resolve to take vigorous action to promote scientific and technical research and industrial progress, and in view of the importance attached to early and constructive decisions on Euratom's future research work.'

On that occasion, as we know, the Council reaffirmed its determination to act in a dual direction, viz:

- (a) improving and standardizing legal and fiscal conditions conducive to the advancement of research and development in the Community;
- (b) looking into the possibilities of Community co-operation in some particularly interesting areas of research and development. Seven sectors were selected for this purpose: data processing, telecommunications, transport, oceanography, metallurgy, environmental nuisance and meteorology. The working party on the policy for scientific and technical research was asked to show what possibilities there were for co-operation between the Six in these seven fields and to submit a report to the Council by 1 March 1968; this was the group known as the 'Maréchal' working party—this being the name of its Chairman—and it was part of the Medium Term Policy Committee; it was given its terms of reference by the Council.

The Council also asked this working party to make a comparative analysis of what the Six were doing in respect of research: their plans, programmes and budgets.

Lastly, the Council re-emphasized the importance it attached to early decisions on Euratom's future research activities.

3. In this respect, the decisions of 31 October were part and parcel of the Council decision of

8 December 1967 on the future activities of Euratom; (the European Parliament returned its Opinion on this in the Oele report, Doc. 182/67).

The purpose of this decision was to get Euratom re-started on a new basis and it stipulated that Euratom's work would in future be covered by a joint programme, involving the work of the Joint Nuclear Research Centre and association contracts having the unanimous approval of the Six, on the one hand, and supplementary programmes involving only the States concerned, on the other.

The Council asked the Permanent Representatives' Committee for a report by 1 March 1968 on activities which could be covered by association agreements.

It was intended that the Council should endeavour to take its final decision on the breakdown of work between the joint programme and the supplementary programme by 30 June 1968.

4. These decisions taken at the end of 1967 appeared, at the time at least, to justify a measure of optimism that the Community's policy for research and technology would be getting under way again.

Indeed, research problems were envisaged comprehensively and the Council was guided mainly by the Maréchal working party's report entitled 'Towards a policy for research and innovation in the European Community.'

At the same time, a number of priority research areas, where it was felt that there could be effective Community co-operation, were selected.

Lastly, the schedule for decisions implementing a Community policy appeared to reflect a recognition of their urgency, both because of the Community's leeway in most research areas and because of the risk of a return to individual national policies, a risk that would soon become apparent if the Community policy took too long to materialize.

The decision of 8 December 1967 made it clear that Euratom was in the throes of a crisis. It provided the basis for getting Euratom off to a new start, it was more realistic about the choice of programmes despite the danger of creating a piecemeal Europe should the 'full return' principle become in any way institutionalized.

*(b) The worsening of the situation since the beginning of 1968*

5. It has to be admitted that the optimism, which was reasonable at the time when these decisions were taken, evaporated a few months later. To make matters worse, the centrifugal trends appear to be increasing; this is shown by the example of the European scientific organizations, which are in a state of chaos and where the withdrawal of certain States makes the likelihood of action programmes being carried through open to question.

In the early months of 1968, therefore, European scientific co-operation did not appear to have improved; on the contrary it was in a very much worse situation.

What is the position at present?

6. Despite the hopes expressed in the interim report, the urgency attaching to the problems involved was not enough to prompt the member States to abide by the time schedules set in the Council decisions of 31 October and 8 December 1967.

The Maréchal working party had a deadline of 1 March 1968 for submitting a report to the Council on the possibilities of co-operation in the seven sectors stipulated by the Council at its meeting of 31 October 1967. This time-limit was not adhered to because some member States<sup>(1)</sup> questioned the value of going on with the work initiated. This naturally held up all the work which was supposed to follow the submission of the report. The Permanent Representatives were in turn unable to submit the policy conclusions to the Council by the agreed date of 1 June 1968.

This had two immediate results: (a) the time schedules unanimously set up by the Council on 31 October were not adhered to and this is liable to worsen Europe's leeway in sectors vital to economic expansion; the Community will thus not be able to make good this lost ground until it introduces a common policy for science and technology; (b) the possibility of agreements with third countries is out of the question because the Maréchal party report was to have led to policy conclusions on the possibilities and forms of co-operation with third countries.

As for work on improving and standardizing the legal and fiscal conditions to promote research and innovation in the Community, it has to be admitted that here, too, as the Commission itself has acknowledged, no progress has been made since the autumn of 1967.

7. If one looks into the problems of Euratom's future one has to admit that the outlook is equally disappointing; the time-limit set on 8 December was not kept and the Council meeting scheduled to discuss these problems was deferred until the autumn of 1968; at present, therefore, no agreement has been reached on either the content or the form of Euratom's future work within a third five-year plan (theoretically due to come into force on 1 January 1969).

The member States are in serious disagreement on which of the current associations should be re-incorporated in Euratom's budget (despite the publication on schedule of the Permanent Representatives' report to the Council on the future of associations for research in the Euratom framework).

8. This situation is aggravated by the crisis affecting the various European scientific co-operation organizations which go beyond the geographical scope of the Six and involve most of the States of Western Europe.

<sup>(1)</sup> Italy and Netherlands.

Indeed:

- (a) on 16 April 1968, the United Kingdom decided to withdraw from ELDO in 1972 and not to take part in the construction of telecommunication satellites;
- (b) in April 1968, Italy refused to take part in the financing of the TD 1 and TD 2 European satellite construction under ESRO so that this organization now has to try and work out a new space research programme;
- (c) in June 1968 the United Kingdom made it known that it was not prepared to help financing the construction of a giant particle accelerator of 300,000 m electron volts in the CERN framework;
- (d) it would also appear that the construction of a European prototype airbus—a project involving the British, French and German governments—once again appears to be in jeopardy (the Ministers of these three countries being due to take a final decision about this project in the near future).

It is, of course, quite understandable for States to hesitate in taking part in projects which are not always in line with their own priorities. It is also understandable that certain countries—Britain in particular—should have to restrict their budgetary spending on programmes which seem uneconomic in relation to the expenditure involved.

What does seem exceptional, on the other hand, is that these withdrawal decisions were taken unilaterally without there being any technical justification to explain the action taken and without consultations with partners about the desirability of making changes in the programmes drawn up.

Be this as it may, the breakdown in these projects is bound to have serious repercussions on Europe's political future, particularly in any confrontation with the Soviet or American space telecommunication monopolies at a time when negotiations are due to begin (in 1969) on renewing the INTELSAT agreement.

9. Thus, not only has there been no progress towards a Community policy on research but inter-European co-operation projects are falling by the wayside one after the other even though the Council stated on 31 October 1967

'... over the last few years, the progress of European countries in science, technology and its industrial applications has been slower than that of other countries particularly the United States; this involves sectors which are essential to the development of a modern industrial economy; Europe's leeway here is liable seriously to prejudice its medium and long-term economic and social development.'

It may be asked why Europe is marking time or why, depending on the individual case, the situation is deteriorating.

## II—The return to national ideas and programmes in scientific research and technology

10. It may be asked if this trend does not stem from an erroneous assessment of the national interest. Admittedly, the States of Europe are willing to lend themselves to international co-operation in some research work because they are aware that their limited size and resources (both as regards manpower and raw materials) do not permit them, individually, to carry through programmes essential to their economic and scientific development.

Too often, however, this international co-operation is only an expedient imposed by the fact that Europe no longer plays the part it used to play on the world stage. In fact it is the national programmes which really matter, which attract the largest appropriations and the greatest number of research workers. Programmes for international co-operation only take a secondary place in the list of priorities and are consequently under the greatest threat at times of budgetary restrictions. This narrow and obsolete concept of national egotism is the true source of this return to scientific nationalism as demonstrated by the events that have occurred since the autumn of 1967; it only leaves a marginal commitment to international co-operation and this can be revoked at will.

11. The priority given to national programmes may assume varying forms.

The national authority may on occasion take over from a supranational authority to which the State had, for the time being, delegated powers. The Council decision of 8 December 1967 on the future work of Euratom is a case in point. In future some very important work on technology may be excluded from the joint programme and be included instead with the supplementary programmes involving co-operation agreements with one or more member States.

This was a severe blow to the spirit of the Community; the powers of the supranational agency—the Commission—were reduced and those of the member States and their representatives were increased.

This represented a regression towards a restoration of national powers at the expense of the supranational bodies.

More often than not, however, this return to scientific nationalism is less overt: there is still co-operation on the same lines within international organizations; but although the legal context is not affected by economic nationalism, the spirit governing this co-operation is on the point of becoming quite unrecognizable. This is the familiar principle of the 'full return'. This is how the trend among member States is being described: not participating in joint expenditure unless they get back for their own programmes the full amount contributed. Such a state of mind naturally warps any form of international co-operation but what makes matters

even worse is that this is the spirit that is beginning to be the rule in most of the international organizations.

12. Giving priority to purely national objectives and relegating international co-operation to the second place is a misguided approach.

Far from being a luxury accessible only to the most prosperous States, international co-operation in research and technology is, in most fields of science, an urgent need. This is the only way of avoiding wasting time, experts and money, for this is the result of having a multiplicity of identical programmes in progress in each individual State.

13. The most striking example of wastage is the nuclear sector. In Europe today there are four different fast-reactor programmes competing with each other. The first type of reactor which was tested some time ago is British; the second, the Rapsodie, is French; the third comes under a private consortium involving Germany, Belgium and the Netherlands and is financed by the governments of those countries; the fourth, the PEC, is Italian. The expenditure involved in carrying through three Community projects totals at least 1,095 m accounting units.

The fact that the States of Europe are following divergent courses is demonstrated even more clearly in aeronautical engineering.

Germany is building its own fighter aircraft. France has built a swing-wing aircraft which has little chance of becoming 'European' because it would involve integrating military strategy and technique, which is today inconceivable. Some countries, such as Italy and the Netherlands, do not seem very interested in the 'Concorde' project, preferring the American SST project (in view of the difficulties encountered by the Boeing Corporation in building a swing-wing supersonic aircraft, this project may never materialize). In 1960, France proposed a co-operation project to build the 'Mirage III' but the Germans, Dutch and Italians chose the American 'Starfighter'. There have been other attempts at co-operation between France, Britain and the Netherlands with a view to adopting European aircraft but these have failed. The British do not wish to buy either 'Caravelles' or 'Transalls'.

This excludes, however, the Franco-British supersonic 'Concorde' and the 'Jaguar' combat aircraft.

As for the agreement between Germany, Britain and France on the European airbus, the German and Italian companies seem to prefer an American aircraft, although the latter project now seems to have been abandoned. Then again, there is no private company in Europe willing to risk hundreds of millions of dollars in constructing a prototype if they are not sure that it will subsequently be used by government-controlled airlines.

14. European scientific organizations have too often failed to measure up to the standards of efficiency that one has a right to expect of them; the management is open to criticism, there is instability in the working programmes, staff

appointments are made on political criteria or for geographical reasons, quite regardless of technical ability. This has all too often been the pattern.

In its note to the Council of 15 May 1968 on the future of technological co-operation, the Commission explained this inefficiency by reference to four factors: the effort made by the Six on research and technology, often involving considerable financial expenditure and manpower resources

'has fallen far short of the expected results. The main causes of inefficiency in the work carried out have been an undue dispersion of effort, precarious commitments, insufficient outlets and an inadequate association of enterprises with the projects.'

15. These criticisms are justified, but sight should not be lost of the fact that these shortcomings are not due to excessive supranationality but rather to a lack of effective co-operation between the member States who, as we have seen, prefer national arrangements. Here, too, the Commission's note to the Council of 15 May 1968 gives an illuminating explanation:

'The biggest factor making for inefficiency is the way the work is scattered. The commitments to co-operate have never led to a complete co-ordination of the work done by the member States in the sector concerned. Duplication of work as between national programmes has persisted and the Community programme has often appeared not to supplement but to compete with some of the national programmes.'

The future of the work is precarious. This, too, proves that there is insufficient awareness of the value and importance of international co-operation:

'Each individual project is every year dependent on the political will and on the financial possibilities of each participant. Should this will be lacking or these possibilities not be open, then the whole enterprise becomes open to question.'

16. It is to be feared that the regressive trend in the field of Community research will continue as long as the Community institutions are not endowed with the necessary political authority to arrest it. As long as Council decisions have to be taken unanimously, and as long as the member States retain the power to oppose decisions by the supranational body and remain the watch-dogs of their national interests, without regard for the Community interests—unless it be to jeopardize them—it will not be possible to extricate Community research from its present state of complete stagnation.

There is at present no supranational political authority and the Community will not come to the end of the crises now afflicting it until it has. The Maréchal working party would not have suspended its work (for reasons not explicable by reference to the scientific subjects studied but which came as a result of the determination of some governments to stop the work of the Community at any price after the French Government's refusal to look at the British application) if there had been a political authority.



17. A vigorous drive is thus needed to contend with this eruption of scientific nationalism and to cure Europe of its paralysis. Yet both the Community institutions and the general public are opposed to any return to economic nationalism and the dangers it carries with it. For scientific nationalism is, indeed, just one of the many aspects of political nationalism.

### III—Reactions of Community bodies, international institutions and the general public to the delays and to the danger of a return to national principles and programmes in connexion with scientific research and technology

#### 1. *Reactions of the Commission*

18. The Commission is responsible for defending the interests of the Community against the self-interests of the Six and it has been legitimately concerned in recent months at the growing backlog in the Council's work on research and technology and the tasks it set itself in a time-table drawn up at its meetings of 31 October and 8 December 1967.

The Commission endeavoured to counter the trend towards an atrophy of the Community spirit and took a firm stand to prevent the use of the veto on the Council from becoming the general practice.

To deal with this, it made proposals intended to facilitate the choice of a solution to the major problems now facing the Community. It also drafted the broad outlines for a second, medium-term, economic policy programme and for the future work of Euratom.

Thus, in every respect, the Commission did what was expected of it and the European Parliament must here signify its support for the Commission in all its endeavours, again expressing its confidence in the Commission for the future.

A more detailed analysis of what the Commission has done since October 1967 will bear this out.

19. The Commission's determination to possible Community co-operation on research and technology has been most evident since the Maréchal working party suspended its work.

In reply to a question on this matter put on 13 March 1968—in accordance with the oral procedure with debate—by the European Parliament's Committee on Energy, Research and Atomic Problems, the Commission expressed, through its Vice-President, Mr. Fritz Hellwig, its concern at a state of affairs 'whereby the drawing up of a scientific and technical policy for the Community was liable to be jeopardized.'

In view of this danger, the Commission has tried—so far without success—to bring about an early resumption of the Maréchal working party's activity and to draw the Council's attention to the responsibilities it has assumed in not adhering to time-schedules and to the consequences of these delays.

The European Parliament strongly encouraged the Commission to persevere and welcomed its recent decision to set up a working party to draft a programme and a research budget for Euratom's activities in 1969.<sup>(1)</sup> This may mean that the European Parliament will be consulted in 1968 (the Council undertook to decide on Euratom's future activities by 30 June 1968).

20. The Commission has followed day-to-day progress on research work in the Community and drawn attention to the consequences of delays. But it has also endeavoured to outline future research programmes for the Community and to work out ways of making Community research more effective, by avoiding duplications of effort and other weak points which have considerably increased its costs and debased its achievements.

The European Parliament expresses satisfaction at the future course proposed by the Commission in the draft second programme for a medium-term economic policy and the conclusions given in the Opinion of the Commission to the Council of 2 April 1968 on 'certain problems contingent on the applications for accession of the United Kingdom, Ireland, Norway and Denmark' and in the Commission's communication to the Council of 15 May 1968 on 'continuing work in the field of technological co-operation'.

#### 2. *Reactions of the European Parliament*

21. Since October 1967 the Parliament has been endeavouring (a) to keep alive what chances there were for Community co-operation on research and technology and (b) to determine the principles of future co-operation; this could be wider-ranging and more effective for it could involve third countries, particularly the applicant States.

The supervisory powers vested in Parliament, particularly its Committee on Energy, Research and Atomic Problems, have been exercised in two ways; Parliament has sought to exercise a standing and immediate control over Commission and Council measures. In January, Parliament made known, through Mr. Oele, its opinion on the reforms decided by the Council on 8 December 1967 regarding Euratom's future activities, and expressed concern at the measures envisaged.

With the same end in view, the Committee decided in March to ask the Commission, by means of an oral question with debate, why the Maréchal working party had suspended its activity, this was at its session in May 1968, during the debate which followed the report on the work of this body by its chairman; Parliament informed the Council of its great concern that this suspension was continuing.

(1) The Commission noted that the Council had not been able to keep to its decisions of 31 October and 8 December 1967 and had decided, pursuant to Article 7 of the Euratom Treaty, to set up a working party to make a report on all the work done on the basis of Euratom projects. This report is to be submitted to the Commission at the end of September and the end in view is the finalization of a programme, covering a period of several years, which is to be the basis of the research budget for 1969.

This permanent and direct control also covered the Opinions drawn up by the Committee on Energy, Research and Atomic Problems on those parts of the General Report on the activities of the Communities in 1967 coming within its terms of reference (report by Mr. de Lipkowski) and on the draft second programme for a medium-term economic policy (report by Mr. Brunhes).

22. Control was also exercised over Community agencies concerned with research. The Committee attaches great importance to the function and operation of the joint nuclear research centres. It visited the largest of these at Ispra and enquired, during its talks there, on the progress of work being done and on the scale of the problems arising both in regard to future activities and for the teams of research workers.

The Committee also visited the national centres at La Casaccia in Italy and Julich in the Federal Republic of Germany; through association contracts concluded for certain projects valuable contacts with Euratom have been established.

Visiting these centres has convinced the Committee on Research, Energy and Atomic Problems of the unique value of co-operation between the member States of the Community. Only through such co-operation will it be possible for the European States to carry through projects which are of vital importance to Europe's economic expansion.

23. It is because of this and because co-operation needs to involve as many countries as possible that the Committee took the initiative of organizing a meeting with British experts in October 1967 to look into the possibilities, forms and fields of application of technological co-operation between the Six and the United Kingdom, as envisaged in the statements by Mr. Harold Wilson, the British Prime Minister. At the close of these talks, a memorandum was published (see annex to this report, Doc. PE 18.649 déf.) which discusses the respective positions of both parties and lays down a list of sectors which could, in view of their importance, lend themselves to a practical form of co-operation.

Both sides were in agreement on the need to continue with the talks and a further meeting is planned for autumn 1968.

Thus the European Parliament and the Commission—which have often acted together—have been able to help deal with the centrifugal trends that have been seriously hampering scientific co-operation, both in the Community and in Europe, since October 1967.

However noteworthy this work may have been, it does not seem to have been sufficient to put an end to these adverse trends.

### *3. Reactions of the general public and of international organizations*

24. Fortunately, it appears that an increasingly wide section of the general public is becoming aware of the tremendous challenge of the pace and the scale of scientific progress now facing Europe.

In fact, books and studies dealing with these problems have proved to be best-sellers in every country in Europe.

This realization of the danger that threatens Europe if it goes back to scientific nationalism, which would mean that purely national answers would once again take priority over a Community one, has been reflected, in recent months, in the debates on research problems held in the six national parliaments.

25. Similarly, at the ministerial conference on science which the OECD held on 11 and 12 March 1968, the various problems of fundamental research were analyzed, as were the possibilities of reducing to manageable proportions the technological gap between the highly-industrialized countries and the others. A report was published at the conference on 'The promotion and organization of fundamental research'; this stressed the fact that fundamental research is the essential basis for science and technology and analyzed the innumerable organizational problems hampering research. To deal with this situation, the report advocated a series of investigations into the present state of science in Europe in specific sectors and stressed the need to support 'European' firms. One of the recommendations passed by the conference was that a programme for financing and selecting projects of a 'European' scale should be drawn up for fundamental research and a reserve fund created.

The action taken by other international organizations, the Council of Europe and the UNO, has also been very valuable in bringing home to people the importance of world trade and of international activities in terms of scientific progress.

These international bodies include NATO. Plans for overhauling this institution—to achieve closer economic and social co-operation between the member States—should also provide for an effective exchange of scientific information by enlarging, in particular, the existing Committee on Science.

The problem of using patents concerning technology and which NATO holds in reserve ought, at long last, to be appropriately solved.

26. Hence it is no exaggeration to say that Community and international institutions and the general public strongly oppose any return to scientific nationalism and expect an early solution to get Europe—the Europe of science—out of the present difficult situation. This hope must not be dashed. This is one reason why, as soon as possible, conditions conducive to introducing an effective common research policy must be created.

Under what conditions can such a result be achieved?

### **IV—Proposals for defining a Community research policy**

27. Much has been written on the problems of a European policy for scientific research and technology; unfortunately the results achieved so far are in no way commensurate with the volume of paper devoted to this subject.

The results of this co-operation are very slight:

- (i) there is some limited co-operation on nuclear questions in Euratom but, as we have seen, this co-operation has tended increasingly to become looser;
- (ii) there are a few specific projects being carried out bilaterally or multilaterally, viz:
  - (a) the Concorde and Jaguar projects between France and the United Kingdom;
  - (b) the Airbus project between France, the United Kingdom and Germany;
  - (c) the Transall aircraft project between France and Germany.(This is all for aeronautical engineering);
- (iii) the 1968 agreement for the joint construction of a prototype fast reactor by Germany, Belgium and the Netherlands; the high flux Franco-German reactor in Grenoble;
- (iv) the work of the specialized international organizations (ELDO, ESRO, CERN, CEST).

This situation can be accounted for by the fact that international scientific co-operation has so far been viewed within too narrow an angle: the States or the international organizations representing them have agreed to carry out a number of specific projects and to finance them but went no further. Thus the results often appear disappointing because of the inadequate technical co-operation between research workers of the various participating countries and the high cost resulting from bad management.

28. It is clear that for the Community research policy to be both effective and profitable it must be envisaged comprehensively; it cannot be divorced from its economic, political and social context. There is a close connexion between the implementation of the Community policy for research and the transition from the Common Market to the second stage i.e. from the customs union to the economic union. Implementing the common research policy is inseparable from the introduction of common policies for industry, education and economic affairs.

This argument in itself invalidates the desire of some governments to create a technological community which would be a kind of fourth community covering the technology sector.

There are however other possible answers for tightening the links between the Six and the applicant States and enhancing co-operation, as will be seen in greater detail in the following paragraphs.

29. The re-organization of the administration of the new Commission has made it possible to entrust one of its members with the task of working out the entire policy for research in co-operation with the general directorate for research on technology, on the one hand, and that for nuclear research and the management of Euratom's Joint Research Centres on the other; this re-organization is therefore to be welcomed, for it makes it possible to give to this field a unity of design, even though it will be subject to different legal systems until the merger

of the Treaties takes place. The Euratom and ECSC Treaties provide for financial participation by the Community but there are no precise regulations for other areas of research.

The unification of the administrative structure of the Commission represents a step towards working out a policy for research and technology within the Community context; but it is not enough on its own.

30. To achieve the desired result, a number of measures would seem to deserve priority. Throughout this report, there has been criticism of the States for the worsening situation in research. Yet this will continue for as long as national programmes have priority over Community programmes and for as long as there is no co-operation between research teams even though similar experiments are being carried out on a national basis. For this vast internal market to be created as soon as possible—and nothing short of this will make it possible to devote sufficient resources to the requirements of technical progress—it seems essential, as a first step (as the Commission stresses in the draft second programme for the medium-term economic policy), for 'all the interventions by the public authorities to come within a coherent framework and to be implemented by reference to the right priorities and the most effective machinery.'

The first priority is to concentrate research work in the Community context; a comparison could then be made of national programmes and the award of contracts by the public authorities; a list of priorities could eventually be drawn up.

Only measures such as these will make it possible to reconcile the decisions taken in the various countries and avoid any duplication of effort which is so costly in terms of time and manpower; a good example of this duplication is the competition between the French Phenix project and the Belgo-German-Dutch project on breeder reactors.

In this respect, it would be desirable to introduce a more rational use of the resources available to the member States and of the experience they have gained (particularly in respect of nuclear centres, electronic engineering, computers and data-processing, etc.). It would be pointless, in fact, for each country, seeking to divide its financial resources soundly, to engage in research in each of these sectors even though it could not afford to appropriate for them amounts comparable to those appropriated by the big powers.

This work will not be valid until the knowledge and information gathered is satisfactorily disseminated, and this means using appropriate technical and operational machinery.

31. At the same time, the work on harmonizing the legal standards governing research should be completed; there are the problems of the European-type company, European patents and the harmonization of fiscal systems. At its meeting of 31 October 1967, the Council stressed the importance of these questions and the priority it attributed to them, even though no progress at all has been made

since then, as the Commission points out in its memorandum to the Council on the progress of work in the field of technological co-operation.

32. In addition to these efforts to make national programmes more consistent with each other, the implementation of the common policy for research implies that a supranational agency should be asked to work out Community action programmes and see to their execution. These programmes should include all the major undertakings which are obviously beyond the capacity of a single State, in particular the construction of a European isotope separation factory to supply the Community with enriched uranium.

The basis for such an organization already exists: it is, of course, Euratom. Its operation and its terms of reference, however, need to be overhauled. Euratom should be regarded as the starting point for the creation of a much wider-ranging organization with powers not limited, as is the case at present, to nuclear matters but covering the whole field of research and technology—provided it keeps in close contact with industry.

33. Increasing the powers of Euratom would, however, be no more than a gesture if it continued to depend on the States, both as regards the choice of action programmes and financing them.

This holds the States have must in future be avoided, as must the resulting abuse which leads to five-year action programmes being abandoned and bargaining over the contents of programmes, etc.

With this in mind, the aim in overhauling Euratom should be both:

(a) to increase the powers of the Commission (the increasingly important part played by the Permanent Representatives is at present tending to devalue these powers): the Commission remains responsible to the European Parliament; an end should be put to the practice of the veto on the Council and its decisions should be taken by a qualified majority and no longer unanimously;

(b) to endow the reformed Euratom with financial independence and its own resources.

This very important problem has already been raised many times. As Mr. Oele pointed out in his report on the present situation and Euratom's future prospects, this is the only way of ensuring that Euratom retains sufficient independence in the choice of action programmes and in financing projects of general interest.

This is the only way of putting an end to the 'full return' policy and, again, this is the only system that is true to the real Community spirit, which should place the general interest above the individual interests of the member States.

The advantages of the financial autonomy, with which Euratom would be endowed when it has its own resources, are obvious (this problem will be hard to solve, however, as long as Euratom's activities are limited to research work on prototypes).

Having its own resources would give Euratom a much greater freedom of action in choosing programmes and the work in progress would not be liable to be called into question when the annual budget was drawn up. Euratom would thus have a budget covering the period of years of the action programme.

34. This series of measures could get Euratom out of its present difficult situation, which is mainly due to the fact that it is too cut off from the outside world, particularly the universities and industries; this explains why its work has not been followed up in industry. A limited use has been made of research and association contracts and of the common enterprise system and this helped to get Euratom out of its scientific isolation; the results, however, have been on too small a scale and the work done in the Joint Research Centres has allowed for practically no co-operation with the industries of the member States. This could hardly have been otherwise; the great error was to create a Community which was too limited in scope and whose work could not be integrated with the research of the member States and their industries and universities for lack of a common policy for industry and for lack of adequate contacts with industry and the academic world. As the Commission pointed out in its note of 15 May 1968:

'the Community is running up against increasing difficulties as nuclear energy enters into its industrial phase (involving the utilization of nuclear energy), particularly because the six member States differ in their industrial structure and because there is no common approach to relations between industry and the public authorities.'

35. Indeed, the efforts made to facilitate a Community research policy will prove inadequate unless they are followed up in the two contingent fields of industrial policy and education—as the Committee on Energy, Research and Atomic problems pointed out in its Opinion on the First General Report on the activities of the Communities.

Relations between universities, industrial concerns and laboratories should be such as to allow for reciprocal exchanges and close links between all of them and reduce to a minimum the time which normally elapses between research work and its industrial application.

Implementing a common policy for industry is of capital importance for those industries in the key sectors, as President Rey stated in the European Parliament on 15 May 1968, 'development implies too great a cost and too great a risk for enterprises of whatever size to engage in with their own resources.' In such a sector, co-operation should not only cover research but the industrial application of results so as to combine research with industry and the universities.

A genuine common policy for research must imply that co-operation is not limited, as has so often been the case, to fundamental research centres (notably Euratom's Joint Research Centres) but should also cover laboratories engaged in applied research and development.

36. In this respect it is regrettable that the seven sectors selected by the Council on 31 October 1967 with a view to exploring the possibilities of Community co-operation (as stated above, the Maréchal Group was instructed to report on this to the Council) are not all of fundamental importance for the technological and industrial development of the Community and are not all key sectors in technical expansion.

It is, furthermore, reasonable to suppose that comparing the methods, plans and programmes of the Six in these sectors will not of itself give rise to a genuine Community policy for industry—unless there is some overall design which allows for an inter-action between industry and technology.

The policy for industry is directly linked with that for science and technology; this is obviously the next stage.

This is why the lack of any comprehensive policy in this sector is liable to be prejudicial to the scientific and economic development of the Six (as the Commission points out in its First General Report, it is one of the fundamental tasks facing the Community to draw up such a policy).

It is true to say, however, that progress has been made in some sectors. In that coming within its scope, the ECSC has endeavoured to lay the foundations for a common industrial policy. The fact remains that the efforts so far made have not been enough; what is still lacking is a proper industrial strategy at Community level; this would be based on the policy for research and technology geared to the key sectors and on a policy for energy, employment and occupational training adjusted to prevailing circumstances.

There has so far been no overall design and piecemeal work is all that has been done in these sectors.

The Committee therefore welcomed the statement that President Rey made in the European Parliament on 15 May 1968 to the effect that one immediate result of merging the Executives was the possibility of giving fresh impetus to some areas of the Community's activities and particularly to the policy for industry. To achieve this result the Commission intends to deal with the obstacles which are still partitioning off the Community into separate departments (there are four legal and fiscal obstacles) and adopt specific measures in these sectors to help (i) old-established enterprises which are either threatened with decline or face structural difficulties and (ii) enterprises in what are known as the key sectors. The Commission is aware of the importance and urgency of a common policy for industry and it is to be hoped that it will soon be able to submit practical proposals to the Council for this purpose so as to deal with the serious consequences resulting from the unrelated decisions taken by the member States in this sector.

37. Relations between research work and the universities are equally important. As the Committee stated in its Opinion on the draft medium-term economic policy programme 'the universities play a decisive part in research both because of their irreplaceable contribution to the advancement of knowledge and in training new generations of

scientists.' More often than not in Europe the universities have few ties with firms and industrial and commercial organizations.

Europe might do well to follow the American example and create 'scientific complexes' which are one of the most effective ways of building a bridge between the universities, industries, and laboratories.

Such co-operation naturally implies a constant adjustment of the educational system to changing economic and technical conditions. So far little has been done in Europe to endow the organization of universities with the flexibility such co-operation calls for. What makes matters worse is that the structure of the universities in the Six makes it impossible to step up exchanges between research workers or to promote the free movement of students and university teachers of the member States; this is, moreover, made more difficult by the failure to harmonize syllabuses and diplomas.

38. The resulting difficulties for co-operation on research and technology in the Community can be imagined. It is thus no exaggeration to say that until the universities have been 'Europeanized', it will be impossible to introduce a common policy for research. This 'Europeanization' should bring about the free movement of university teachers and students and the harmonization of syllabuses and diplomas.

It was for a long time supposed that creating a European university could resolve these difficulties. The plans have been in existence for over ten years but, so far, the disagreements between the Six have made it impossible to achieve them. There was a time when the idea seemed to have been dropped. The question has, however, become topical again so that it could now be investigated from a different angle (this is borne out by a statement by Mr. Edgar Faure, French Minister for Education, in the National Assembly's debate of July 1968 on the problems of national education). Your Committee considers that a single European university, however interesting it may be, would be insufficient by itself to give such 'Europeanization' any reality. It should rather be regarded as a model for the universities of the member States which should open their doors to teachers and students from all the Community countries.

39. This need to widen the scope of research to include the problems of industrial outlets and of teaching would appear to be essential to implementing a genuine Community policy; but while research must not be cut off from industry and the universities, it would be even more regrettable if it were divorced from the external world. Indeed, even if scientific co-operation were extended to the scale of the Europe of the Six, the geographic area involved would still be too small. Wherever possible, the Community should try to co-operate with third countries, notably the four applicant States and, above all, the United Kingdom. Despite some of the inadequacies in the efforts made by the United Kingdom in connexion with research and technology (which were stressed by the Commission in its Opinion to the Council on the British application), Britain's participation in scientific and technological co-operation with the Six would be of exceptional interest to all, bearing in mind the

contribution it could make in certain key fields. This has been acknowledged by all the Community States, as indeed they are all agreed that the United Kingdom and the other democratic countries in Europe would be highly desirable members of the Community.

42. Some countries would like to give priority to the problem of British membership and to suspend the development of the Community until Britain joins the Common Market; this is the reason given by one of the six governments for suspending the work of the Maréchal Group.

The Commission took a strong stand against this view. In its memorandum to the Council of 15 May 1968, it stated that:

'the difficulties within the Communities since the Luxembourg Resolution was adopted could not justify the prejudice that the member States would suffer together if no fresh effort were made to try and solve the problems arising.'

Whether or no the United Kingdom belongs to the European Communities, these do exist and their development requires that early measures be taken in certain key sectors in order that, after having reached the stage of the customs union, the Six should now form a genuine economic union.

In view of their importance for the future of Europe, the provisions on research and technology are naturally among these measures. In an attempt to reconcile their wish to collaborate with the British with the urgency of resolving the problems relating to research and technology, some member States have suggested setting up a fourth community specializing in technology, which would include the Six, the United Kingdom and the other applicant States; they argue that technology is not covered by the Treaties of Rome.

In its Opinion of 2 April 1968, the Commission stated it was 'not in favour of creating a technological community as distinct from the Communities now being merged.'

The reasons why the creation of such a community seemed impossible, failing any common policies for education, industry and social and economic affairs, have been given. This would further be borne out if the United Kingdom were to join the technological community and not participate in the three existing Communities.

41. Bearing in mind these difficulties, the best approach to securing co-operation between the United Kingdom and the Six on technology would be to begin with specific projects and programmes, selected for their priority rating, on which the two could work together.

When the Committee on Energy, Research and Atomic Problems of the European Parliament met a group of British experts in October 1967, this was, furthermore, the prevailing view.

The memorandum which the two parties published at the close of the meeting stressed that the main need was to bridge the technological gap between the Six and the United Kingdom, on the one hand, and the United States and the Soviet Union on the other.

Co-operation should cover seven specific sectors, viz:

- (a) data-processing equipment,
- (b) aeronautical engineering,
- (c) the creation of 'European' companies,
- (d) transport and transport strategy,
- (e) space research,
- (f) nuclear policy (particularly high-energy physics, nuclear electricity and molecular biology), the creation of centres for fundamental research and development.

42. One of the main aims of this co-operation programme could be the joint construction of an isotope separation factory.

The fact that Europe depends on the United States for enriched uranium supplies raises serious political problems.

Considering that the cost of such a project is beyond the resources of any single State, co-operation is essential. The ultra-centrifuging technique, when fully developed, would make it possible to envisage producing enriched uranium at much lower cost than by using the diffusion method. At its meeting of 8 December 1967, when it discussed the problems of Euratom, the Council asked a special study group from the Consultative Committee for Nuclear Research to look into the Community's long-term enriched uranium supplies; the Commission was to make suitable proposals to the Council on the basis of this study.

The United Kingdom is the only country in Europe which produces enriched uranium for non-military purposes at its Capenhurst factory. However, the quantities produced are not very large and it could not, on its own, supply the whole of Europe. Here the closest possible co-operation with the United Kingdom would be desirable. Building a factory on a European scale could thus be one of the aims of co-operation between the Six and the United Kingdom. Since the British are eager to co-operate, it should be possible to start co-operating with them as of now on research and technology (even though the recent British withdrawal from ELDO and CETS and their refusal to help finance the CERN particle accelerator project seemed to call this desire to co-operate into question). It is also reasonable to suppose that this co-operation could widen out within an agreement foreshadowing membership, beginning, however, with participation in specific programmes.

Indeed, this would forge closer links between the British and the Community which would, by slow degrees, draw the two parties together, in terms of both human and economic relations, and progressively lead to Britain's membership.

43. Developing co-operation with the British is inseparable from intensifying intra-Community co-operation. If this should cease, as is borne out by what has happened since the Maréchal Group suspended its work, it would preclude any possibility of introducing a real common policy for research and technology and dim the prospects for international co-operation which mutual interests make imperative for all.

**Memorandum  
on European scientific and technological co-operation**

*I—Introduction*

1. At its Brussels meeting on 23 and 24 October 1967, the Committee on Energy, Research and Atomic Problems had an exchange of views with British experts, namely Dr. Owen, Dr. Moonman, Sir Antony Meyer, Dr. Copisarow and Mr. Layton on European technological co-operation. Mr. Mario Pedini was in the Chair.

The meeting resulted from certain voluntary efforts and, in a more general sense, from current economic and political circumstances.

2. It originated, in fact, in the need for seeking greater balance between Europe and the United States in the field of technology. Indeed, there is abundant evidence that technological progress is an essential component of economic progress and in this respect, there is good ground for the misgivings caused by the widening gap that separates Europe from the United States.

Thus it is understandable that considerable interest has been aroused in the Community by Mr. Harold Wilson's proposal that European technological co-operation be intensified between the United Kingdom and the Six.

In order to form a clearer picture of the prospects afforded by future co-operation in the field of science and technology, Mr. Pleven suggested on 25 May 1967 to the Committee on Energy, Research and Atomic Problems that an exchange of views be arranged with competent British representatives. This proposal was accepted by the Committee, as well as by the Bureau of the European Parliament.

The Committee further decided on 25 September 1967 to set up, from among its members, a Working Party that would be responsible for preparing the meeting.

*II—Considerations*

3. Those who took part in the debate on 23 and 24 October 1967 in Brussels arrived at the following conclusions:

Whilst fully appreciating the fact that research and technology matters are closely linked up with economic problems in general, the Committee wished to restrict discussions to problems falling within its province. Moreover, the Committee deemed it advisable to separate problems connected with the setting up of a system of technological co-operation embracing the United Kingdom from those raised by that country's application for membership of the three existing Communities.

4. It was felt, in fact, that although it was desirable to organize technological co-operation within the framework of an enlarged European Economic Community, the delays that will, in all probability, occur in achieving such an enlargement, made it necessary for the two problems to be dealt with separately and for immediate attention to be given to the possibilities of bridging the technological gap between the EEC countries and the United Kingdom on the one hand, and the United States on the other.

The British experts have found in this respect that divergent opinions were voiced with regard to the possibility of introducing an integrated technological and scientific policy in case Britain's application were to be rejected, it had also been said that the British Government regarded such a policy as impracticable. Nevertheless, the experts were convinced that however important these considerations may be, they were rather premature and that they (i.e. the experts) would therefore be in a better position to formulate their replies when the actual conditions for implementing the proposed policy were examined in detail.

The Parliamentary Committee was satisfied that these contacts were useful and that they should be pursued without delay.

5. The Committee noted, in particular, the observations contained in the Opinion submitted by the Executive Commission of the European Communities to the Council on 29 September 1967 regarding the United Kingdom's application for membership of the Communities; that document stressed certain alleged inadequacies or inefficiencies in Britain's research and development effort.

The Committee gave a favourable reception to the replies made by the British experts to the criticisms formulated in the aforesaid document; they assured the Committee that the Ministry of Technology created in 1964 would contribute, through a rationalization of efforts, to a closer form of collaboration between industrialists and technicians and that both the Industrial Reorganization Corporation and the National Research Development Corporation were playing a significant part in the bringing up to date of Britain's economy.

6. The Committee thus satisfied itself that Britain's participation in an enlarged system of technological and scientific co-operation would be of fundamental value to Europe's development in view of the important contribution Britain would be making in a number of sectors.

The Committee acknowledged that whilst it is possible to conceive of the Common Market without the United Kingdom, it would be difficult to reduce the technological gap that exists between Europe and the United States without Britain's aid. However formidable the obstacles to be overcome may be, they did not appear to be

insurmountable. There is, as yet, no Community research and technology policy. This fact could only facilitate Britain's participation in a system of technological co-operation.

7. The importance and particular nature of the problems raised by European co-operation in the field of technology have naturally caused the Committee to consider the form which such co-operation should take. The institutional aspect of the problem appears to be the one that claims the most attention. The Committee believes that it would be essential to found the proposed technological co-operation on the principle of integration and not on that of bilateral or multilateral agreements between States, in other words, mere formulas of co-operation would not make it possible to achieve ultimate aims. It would be necessary, in the Committee's view, to envisage a comprehensive form of strategy in regard to the problems to be solved, in particular those relating to the structure and size of the markets concerned. Only sectorial integration would make this possible.

8. The Committee believed it would be advisable, for this purpose, to create Community bodies that would be responsible for each given technological sector and endowed with financial means of their own. Only by this method would it be possible to prevent States from resorting to the 'full return' formula. This expression means, as one knows, the tendency on the part of some States to regard as natural the fact that the funds invested by them in Community concerns should be redistributed to them for completing their own projects.

9. The Committee found that on all these points the feeling of the British experts tallied with its own views. With regard to the structure of an organization or a Community whose aim was to achieve partial or full integration, the British experts felt there was unanimous recognition of the fact that it was essential to provide for independent management and independent funds in order to prevent the possible withdrawal of the financial share of some member States.

10. To which areas should one consider extending the activities and resources for developing co-operation?

A number of sectors—in view of their importance, their urgency and the possibilities they afforded for collaboration between the Six and the United Kingdom—seemed particularly suitable to both parties.

The two parties thus agreed that it would be desirable for the proposed co-operation to cover the following seven areas:

- (i) *Data-processing equipment*
- (ii) *Aeronautical engineering*
- (iii) *The setting up of 'European' companies* which are the only ones capable of securing the advantages attaching to large-sized concerns
- (iv) *Transport and transport strategy*
- (v) *Space research*, with a view to creating a European kind of NASA having its own secretariat, effective powers and financial independence
- (vi) *Nuclear policy*: this is a vast sector where co-operation between the Six and the United Kingdom would

make it possible to launch a number of projects concerning in particular:

- (a) *High-energy physics*, especially for the construction of a European 300m electron-volt particle accelerator
  - (b) *Nuclear electricity*, where it would be possible to design and extend the use of the new reactor strings and to build an isotope separation plant
  - (c) *Molecular biology*, where the setting up of a 'European' laboratory appears desirable
- (vii) *The creation of centres for basic research*, design improvements and contacts of personnel

11. The Committee, for its part, is delighted at the identical views shared by the two parties and notes with satisfaction Britain's resolve to co-operate in the above-mentioned sectors, a resolve that was given expression, in particular, in the wish that certain British firms or works (e.g. the Capenhurst Enrichment Plant and the ICT concern) should serve as a basis for the future pooling of resources to an extent that is in keeping with the size of Europe.

### III—Conclusions

12. The Committee is gratified with the encouraging nature of the exchange of views that has taken place and the growing awareness of the two parties concerned of the importance and urgency of the problems to be solved.

It finds in particular that, from all sides, the need has been stressed for creating institutions that would ensure technological co-ordination, as well as the need for swift action in a number of practical sectors.

With regard to future work, the Committee believes that the Working Party should be asked to consider the various alternatives as to the form of future European co-operation in the fields of science and technology.

13. The Working Party could call upon technicians when necessary and would keep the Committee regularly informed on the progress of its work.

The Parliamentary Committee felt, moreover, that the best means of achieving tangible results would be to draw up programmes common to the Six and to the British in a number of priority and fundamental sectors, a first list of which has been approved by both parties.

14. It is, indeed, by means of a sector-by-sector and point-by-point examination that it would be really possible to determine co-operation possibilities. Such a method would, in addition, allow of some diversification, depending on the sector concerned, in the structures to be created. Finally, by proceeding in this way, it would be easier to lay down a timetable for the progressive achievement of the anticipated co-operation.

The Committee is glad to record the unanimous resolve of those that took part in the meeting to pursue these exchanges at regular intervals, these would be attended by competent representatives in accordance with a procedure to be defined.