

EUROPEAN PARLIAMENT

Working Documents

1982-1983

25 October 1982

DOCUMENT 1-775/82

REPORT

drawn up on behalf of the Committee on Energy and Research

on the proposal from the Commission to the Council
(Doc. 1-572/82 - COM(82) 489 final) for a decision
revising the research programme to be carried out
in 1983 by the Joint Research Centre on behalf of the
European Atomic Energy Community and the European
Economic Community (1980-1983)

Rapporteur: Mr M. PEDINI

By letter dated 26 August 1982 the President of the Council of the European Communities asked the European Parliament to deliver its opinion on the proposal from the Commission of the European Communities to the Council for a decision revising in 1983 a research programme adopted in the framework of the European Atomic Energy Community and the European Economic Community (1980-1983).

On 13 September 1982 the President of the European Parliament referred the proposal to the Committee on Energy and Research as the committee responsible and to the Committee on Budgets for an opinion.

On 23 June 1982 the Committee on Energy and Research appointed Mr Mario PEDINI rapporteur.

The committee considered the Commission proposal and the draft report at its meetings of 24 September and 20 October 1982.

At the latter meeting the committee decided unanimously with four abstentions to recommend that Parliament approve the Commission proposal unchanged and adopted the motion for a resolution.

The following took part in the vote: Mrs Walz, chairman; Mr Gallagher, Mr Seligman, Mr Ippolito, vice-chairmen; Mr Pedini, rapporteur; Mr Colleselli (deputizing for Mr Sassano), Mr Flanagan, Mr K. Fuchs, Mr Kellett-Bowman (deputizing for Mr Moreland), Mr Lalor, Mr Müller-Hermann, Mr Pattison, Mr Petronio, Mrs Phlix, Mr Pintat, Mr Purvis, Mr Pearce (deputizing for Mr Normanton), Mr Rinsche, Mr Rogers (deputizing for Mr Adam), Mr Sälzer, Mr Schmid, Mrs Theobald-Paoli, Mr Vandemeulebroucke (deputizing for Mr Capanna), Sir Peter Vanneck and Mrs Weber (deputizing for Mr Rogalla).

The opinion of the Committee on Budgets is attached to this report.

C O N T E N T S

	<u>Page</u>
A. MOTION FOR A RESOLUTION	5
B. EXPLANATORY STATEMENT	9
I. Introduction	9
II. General remarks	10
III. Critical assessment of the proposed measures for revision	13
Overall balance of the programme	13
Super-SARA project	13
Employment of staff	19
Age of staff	20
Financial resources	24
IV. Conclusions	26
Opinion of the Committee on Budgets	28

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

MOTION FOR A RESOLUTION

closing the procedure for consultation of the European Parliament on the proposal from the Commission of the European Communities to the Council concerning the proposal for a decision revising the research programme to be carried out in 1983 by the Joint Research Centre on behalf of the European Atomic Energy Community and the European Economic Community (1980-1983)

The European Parliament,

- having regard to the proposal from the Commission to the Council (COM(82) 489 final),
- having been consulted by the Council (Doc. 1-572/82)
- having regard to the results of the vote on the Commission communication,
- having regard to its previous resolutions on this matter, notably that of 10 May 1979,
- having regard to the report of the Committee on Energy and Research and the opinion of the Committee on Budgets,

A having regard to the position expressed by the Council on 30 June 1982, recognizing the vital need to provide the Community with the most effective possible instrument - in the form of the framework programme - for contributing to the industrial, technological and scientific integration so often called for,

B whereas the JRC with its scientific potential and its European vocation is an essential element of the abovementioned framework programme,

C whereas the European Community's multiannual research programmes are an essential instrument of science and technology policy and will become fully effective as soon as the Commission provides them with adequate funds,

D whereas, by embarking on research programmes which are of great value, proven content and scientific interest, the Community is showing its awareness of the problems now affecting the industrial sectors of the European economy and helping to resolve them,

E recognizing the efforts so far made by the JRC to integrate itself within an overall Community strategy for scientific and technological research - efforts which have produced favourable results despite the difficult conditions under which the JRC is forced to operate and for which it is not solely responsible; convinced of the value of a Community service for initiating European projects which are in the general interests of the Member States and can command adequate financial and human resources,

1. Approves the approach adopted in the revision of the 1980-1983 research programme, which upgrades the JRC's action, subject to the remarks made below;
2. Considers that the Commission's proposal to revise the final year of the 1980-1983 programme, with the aim of launching a new 1984-1987 programme more in line with present needs and goals, is consistent with the guidelines frequently advocated by Parliament;
3. Considers it significant and appropriate that the Commission is proposing to reduce the manpower and financial resources allocated to some programmes because of the scarcity of such resources; hopes, however, that programmes which have been temporarily cut back will be re-launched in the future and reserves final judgment until after consideration of the proposals for the next four-year programme;
4. Welcomes the intention to continue with non-nuclear activities, but wishes to see these increased and expanded;
5. Considers that the Super-SARA project, which is the main subject of the proposed revision and an integral part of the Community's research effort (it is also a long-standing project and a decision either to develop or abandon it must be taken), is a fitting extension of the JRC's involvement in reactor safety and utilizes important structures at the Ispra Centre for this purpose;
6. Calls on the Council to grant the Commission's requests without further delays, as these are damaging to the international standing of the Community. The Council must show purpose and determination, avoid wasting already scarce resources and be consistent with its frequent advocacy of a dynamic policy for the JRC, which, because it operates

mainly in the field of security, fulfils a specific social function;

7. Recommends that the Commission respect the timetable for the execution of the projects, particularly that for Super-SARA. With regard to the phases of the project, considers that priority should be given to those which command sufficient agreement, while maintaining a flexible approach to the others; considers in particular that, in view of the opinions of the groups of experts consulted, there should be no further delay in constructing the Super-SARA circuit, which is a natural starting-point for any further development of the programme;
8. Considers the following to be essential to both the execution and effective coordination of the project:
 - creation of a steering committee to back up the project leaders;
 - independent management of the project once started;
 - permanent national and international contacts, to exchange information and anticipate any changes of course which may be dictated by circumstances;
 - punctual application for security licences from the Italian authorities for the execution of the various stages of the project;
 - precise indication of the numbers of staff assigned to the project;
9. Recommends also that the external personnel which the Commission is proposing to recruit should:
 1. be specifically assigned to the Super-SARA project, and only for as long as it takes to complete the project;
 2. consist of highly-qualified, specialist staff, recruited mainly from national research centres and universities, where they should be engaged in research compatible with the project;
10. Recommends that the Commission undertake as of now to improve and make more transparent its management of the human and financial resources necessary for the programme, so as to enable Parliament and the Council to devote greater attention to existing problems and to those which may eventually arise, and to reassess the scientific and professional aspects of the work carried out at the JRC;

11. Considers that the implementation of the proposed measures for internal mobility would be an indication of good will, provided that these measures are part of a modern personnel management strategy and are not used as a convenient instrument for readjustment; with a view to speeding up the beneficial renewal of staff required at the JRC, calls on the Commission to introduce voluntary and early retirement schemes as soon as possible and to present an initial report on the subject when submitting its next four-year programme;
12. Considers it essential that both staff salaries and investment costs should be automatically updated each year and calculated in real terms;
13. Invites the Commission to implement the Super-SARA programme without losing sight of the fact that it is a Community project which must be used to coordinate and strengthen the action taken by the individual Member States on LWR safety and bearing in mind the need to situate this original programme in an international context.
14. Draws attention to the indicative nature of the numerical data contained in the proposal for a decision; asks for the conciliation procedure to be opened if the Council intends, in violation of the agreement of 30 June 1982, to fix new maximum limits on expenditure.

EXPLANATORY STATEMENTI. INTRODUCTION

1. The Joint Research Centre (JRC), which comprises the Central Office for Nuclear Measurement (CONM in Geel (Belgium), the establishment in Ispra (Italy), the European Institute for Transuranium Elements in Karlsruhe (Germany) and the establishment in Petten (Holland), is at present executing the multiannual research programme 1980-1983, as adopted by the Council on 13 March 1980¹.

2. In accordance with the 'sliding programme' principle, the Commission is due, in 1982, to submit a new proposal for a multiannual programme, cancelling the last year of the current programme (1983) and replacing it by the first year of a new programme. However, the Commission is proposing instead to execute the last year of the 1983 programme, suitably revised, and has undertaken to submit, in good time, a new draft programme for the period 1984-1987, for which it has already laid down guidelines. The aim is to direct the JRC towards a specific role within the framework of a new Community Research and Development strategy.

3. The Council has already taken note of the revision proposal for 1983 and the new guidelines advanced by the Commission for a four-year programme 1984-1987. It could certainly not be said that the Council has reached firm conclusions and formally approved the Commission's intentions. Nevertheless, there are sufficient indications of an inclination, or at least a political readiness to follow this approach and thus grant formal approval. This is confirmed by the last paragraph of the communiqué of 30 June 1982 in which the President of the Council noted that several delegations insisted that the Super-SARA project should be 'more closely integrated into the set of actions of Member States in the field of the safety of nuclear reactors', with a view to making an 'increased effort' in favour of the project.

¹ OJ No. L 72/11

4. By proposing amendments to the 1983 budget, mainly in respect of the Super-SARA project - the principal subject of the present report - the Commission is not going beyond its brief or anticipating Council decisions. With commendable diligence it is putting forward proposals designed to ensure the continuous successful development of a project already launched under the old programme and due to continue in the future. It is diligently and conscientiously fulfilling its role as an initiator, especially as the Commission - as Parliament has always maintained - has a 'right of initiative' which is not dependent on the prior, formal consent of the Council of Ministers.

II. GENERAL REMARKS

5. It should be pointed out at once that the Commission's proposed amendments to the 1983 budget, under consideration here, do not call into question the basic guidelines frequently defined by Parliament which the Commission has undertaken to follow. These proposals, which are of genuine importance, comply with the philosophy and spirit of the Euratom Treaty, whose provisions, if anything, have a more current application at present.

6. The Committee on Energy and Research welcomes this fact, because it has always maintained, as it did in the excellent LINKOHR report, that the JRC, which originated as a nuclear Community, should increasingly act to direct and encourage the Community towards an overall commitment to the development of scientific and technological research, especially in those areas in which it influences the living conditions of the population and makes a significant contribution to the development of the Community as a whole.

7. Over the years, the need for an organized scientific and technological community as an instrument for essential scientific services has become increasingly apparent. We therefore believe that - taking account of the present proposals concerning the 1983 budget - the Commission's desire to use the JRC as an effective action instrument is a valid one, subject of course to any reservations and remarks which Parliament may see fit to make on the strategy for implementing individual objectives and on the new programme as a whole.

8. Already, in the context of the current programme, the JRC is dividing its activities between the nuclear and non-nuclear sectors. The proposed new programme, which will be discussed in due course, also maintains and strengthens this twin approach. The present proposals are therefore perfectly consistent with the 1980-1983 programme, which the future programme must develop and extend, on the basis of the experience so far gained and with the encouragement of the successful results achieved, although these have often benefitted the activities of individual countries.

9. However, we are pleased to note that the Community is increasingly turning its activities towards a Community scientific research strategy, with the JRC as its central instrument. In addition to atomic research, other vital research areas are emerging - and will emerge in the new programme - and the manpower and financial resources available should be shared between them in a balanced manner.

10. The document submitted by the Commission for our opinion states that the JRC can contribute to the realization of the fundamental objectives set by the Council on 8 March 1982 in the following areas in particular, taking account also of the proposed amendments to the budget:

- (1) improvement of the management of energy resources (fission, fusion, new energy sources and energy savings);
- (2) reinforcement of aid to developing countries;
- (3) promotion of agricultural competitiveness (remote sensing programme), improvement of living and working conditions (environment and safety), promotion of industrial competitiveness in specific high-technology sectors.

There is no doubt therefore as to the diversity of the Community's present and future scientific research activities and of its Joint Research Centre, which is operating within an increasingly coherent framework.

11. It is also clear that the Commission's present proposals for nuclear initiatives are consistent with the approach which has continued

to gain ground in the atomic energy community in recent years - that of an increased emphasis on 'nuclear safety', a vast research field, absorbing increasing amounts of resources and a stabilizing factor in Community nuclear policy. This is a positive and useful approach.

It cannot be forgotten that Euratom is a Community which has passed through severe crises over its aims and activities - a Community which, after the failure of its first attempt to produce and bring onto the market a European reactor (ORGEL), the only partial implementation of the proposals for a European prevention and security code and the failure to even draw up a plan for a European uranium enrichment plant, seemed with the passing of the years to be heading into decline. Indeed that decline would have become reality had not the latest four-year programme re-assessed the role of the ESSOR experimental reactor, which is suitable for the simulation and monitoring of nuclear accidents and thus vital to the safety programme.

12. Although it devotes research sectors to new energy sources (solar energy, hydrogen production, fusion technologies, high-temperature materials, etc.), the JRC's programme is beginning to take significant action in the field of nuclear safety (the LOBI and PAHR projects), both for light-water reactors and fast-breeder reactor technology. In the nuclear field, Super-SARA is a highly significant project. With it the Centre is fulfilling an essential social function for the Community. Mindful of the incidents involving nuclear reactors which have occurred in the USA and Europe, it is ensuring on behalf of the people of Europe that research is carried out into the controllability of nuclear accidents and that information on the means of prevention is passed on to manufacturers and managers. Provision must be made now - with the Commission's proposals for the 1983 financial year - for the manpower and financial resources required for the adequate development of the Super-SARA project and a gradual improvement in its quality. This would mean that, rather than the last year of the current four-year programme, the 1983 financial year would be a year of adjustment and transition in readiness for the new four-year programme 1984-1987 with its special emphasis on safety, as indicated in the document 'Proposal on new guidelines for the 1984-1987 multiannual research programme', already drawn up by the Commission.

III. CRITICAL ASSESSMENT OF THE PROPOSED MEASURES FOR REVISION

13. Overall balance of the programme

Most of the extra resources requested are designed to strengthen a small number of nuclear activities which require large numbers of staff and considerable investment. Some of the non-nuclear activities which the Commission considers to be of priority importance as part of its overall Research and Development strategy will receive smaller, though substantial increases.

14. While recognizing the Commission's previous efforts to offset the imbalance between nuclear and non-nuclear research programmes by making considerable cuts in nuclear programmes in order to launch programmes such as those on renewable energy sources, the environment, remote sensing and data processing, Parliament notes with regret that the intrinsic scale of nuclear programmes tends to maintain and reinforce this imbalance, which it wishes to see progressively corrected.

15. Super-SARA project

This project merits special attention because it is at once the most important challenge facing the JRC, the source of its main budgetary and staffing problems and an experiment of genuinely international significance.

The project was launched in 1975 under a specific system and widely debated at all levels. Successive stages of the project were authorized by the Council (the last in May 1981), although its validity was called into question for a long period until it was to some extent rehabilitated by the Three-Mile Island incident. At present, the Super-SARA project is at a stage where increased investment must be made available and the definitive research, management and safety teams assembled.

16. The obstacles which have held up the final authorization of the project and the allocation of the appropriate resources can be summed up as follows:

- the cost of the programme (approximately 300 m ECU over ten years),
- the length of the programme (the ten-year estimate is more reasonable here),

- feasibility doubts, although these concern only a part of the planned experiments,
- the need for certain specialized sectors and general support services at the JRC to be considerably strengthened,
- disagreement between the experts of the Member States over the order in which the twenty-one scheduled experiments should be carried out and over the desirability of carrying them out in full,
- accumulation of delays and escalation of costs.

17. In fact, many of these difficulties could be overcome if the Community reached a definitive decision - a decision which, after due consideration, must take account of the following circumstances:

- (1) the cost of the project, according to the most recent estimate, which on this occasion has been corroborated by groups of independent experts and by an American firm of consultants, amounts to about 300 m ECU, or an average of 30 m ECU per year (although this is a sizeable sum, it remains relatively small when compared with the JRC's annual budget of 202 m ECU, or the cost of, say, the fusion programme, which is 600 m ECU over five years).
- (2) in the course of the Super-SARA programme the Community as a whole is likely to build about 20 light-water reactors at a cost of around 30,000 m ECU and the Super-SARA project could make a valuable contribution (at only one tenth of the cost of this investment) to an understanding of the factors on which the safety of nuclear reactors depends.
- (3) the estimated duration of the programme is ten years but, despite the likelihood that the specifications of the various projects will evolve over such a long period, nothing should be allowed to affect the initial design of the experimental circuit and its auxiliary components which form the major part of the initial investment.
- (4) once the project has started, the initial technical doubts can be overcome, especially as there are a wide range of experiments which command a general consensus and on which work can begin.

(5) although they are closely linked to Super-SARA - and thus to a nuclear experiment of great importance - the general technical services, which need to be utilized and strengthened, cannot all be assigned to the project. Nevertheless, these services have been allowed to decline for too long and have not been assigned to projects of sufficient importance. In this respect, Super-SARA is drawing attention to an irregular situation which certainly needs to be rectified.

A number of other criticisms can also be made, and to these we now turn.

18. The effect of inflation on costs is of considerable importance in assessing the Super-SARA project. However, although the JRC is partly responsible for this inflation, because unrealistically low estimates were given in 1980 and, unfortunately, confirmed in 1981, another factor in the increase in costs is the decision-making process itself - as can easily be imagined.

19. There have also been delays in the construction of the circuit because, for budgetary reasons, the JRC has been unable to conclude the principal contracts with the Harwell national establishment, which is responsible for the operation (work proceeds on the basis of temporary short-term contracts and the contractor is tempted to transfer his teams to different projects). Similarly, the debate amongst experts on the feasibility and relative priority of the various experiments has been prolonged because the research programme designed to prepare for and complement the Super-SARA project is itself largely dependent on the extra resources requested by the JRC and is going ahead at reduced speed at present.

Finally, as a result of the slowness of the decision-making process, it has emerged that, although the JRC has not received the necessary resources for the construction of the 'loop', a vital element in the whole Super-SARA programme, neither has it received instructions to close down the project. As a consequence, work on the project is continuing at reduced speed and the management staff of the ESSOR reactor and the high activity laboratories, the project teams and related services (160 staff at present) have been left without clear

instructions, while the cost of maintaining the existing installations continues to increase.

20. It is clear that the overall cost of the project will continue to rise unless the teams are made operational and the major investments (in this case 25 m ECU) are authorized without delay. It is therefore vital that a decision be taken urgently, especially as it is largely on the decisions concerning Super-SARA that the future of the JRC, particularly the Ispra laboratory, depends.

21. Given that, as authoritative technical opinions have also shown, the Super-SARA project by its originality represents a vital contribution to nuclear safety and, as we shall see below, must act as a focal point for the coherent organization of cooperation and contacts between the national centres, the decision on the matter can no longer be delayed. By proposing the relaunch of Super-SARA, the Commission is therefore giving proof of wise administration and demonstrating its awareness of a clear objective.

22. The Commission's proposal must also be seen in the light of another fundamental consideration: if it is true that Ispra would have no future with only a feasible, but inadequate non-nuclear programme, and that a nuclear programme centred on nuclear safety would be weak and an example of poor administration, if it did not use the ESSOR reactor, then it is certainly not possible to halt the Super-SARA project at the stage it has reached at present. It would seem therefore that there is no alternative - either we close the Super-SARA project and with it the ESSOR programme, or we revive it and allow it sufficient scope to achieve the results which could prompt a re-assessment of the role of the Ispra establishment. This is why the Commission's proposals have a political significance which Parliament must not overlook.

23. The proposed financial revision, which would mean an increase in expenditure, must also be seen in the light of the benefits of a project such as Super-SARA and the international credibility which the Community would derive from the project's potential effects on the circulation and integration of information on nuclear safety and accident simulation, particularly vis-à-vis the United States. The Euratom and US experiments

on reactor cores are complementary and could be integrated to the benefit of both sides for a better understanding of this type of accident. Moreover, it is doubtful whether the United States would be prepared to divulge information to the Member States of the Community as individual countries. An exchange of information with a single partner - Euratom - on a Community-wide project, however, seems more feasible. We should place greater emphasis on this type of cooperation and probe the true extent of America's interest in Super-SARA, above and beyond that expressed in the general statements made all too often in recent years, although these have nevertheless been translated into firm operative agreements. A formal agreement between the EEC and USA would also improve the possibilities for contacts between Super-SARA and the related experiments in progress in Europe (notably the French PHEBUS project) and in other countries (ROSA in Japan and NRU in Canada).

24. With regard to experiments on LWR safety, Super-SARA is highly significant for the following characteristics:

- (1) the tests will be performed on fuel elements with specifications very similar to those used in nuclear reactors;
- (2) the proposed experiments will make it possible to study the phenomenology of a number of incidents on a real scale, up to and including the risk of core fusion;
- (3) the phenomenology of the Three-Mile Island incident will be studied in detail and investigated, with the reproduction of all the conditions which led to the enforced stoppage of the reactor.

25. The scientific and technical opinions which the Commission wisely sought are also favourable and add to the credibility of the present proposal (and thus to its international credibility). These opinions together with the Council of Ministers' communiqué of 30 June 1982 also prompt us to give greater emphasis to another important aspect of Super-SARA, an aspect which is particularly dear to the Commission and fundamental as far as we are concerned: the integration of Super-SARA with the action taken by the Member States in the field of LWR safety. Parliament also stresses the need for this integration. Indeed, this could signal a new method of working at the JRC and in this connection it seems essential to look for a further qualification amongst potential staff,

who, in order to be useful, must be not only selected from within the JRC but also brought in from national experiments compatible with Super-SARA. The centre must recruit or recover staff with managerial and industrial abilities as well as specific research skills.

26. Parliament agrees that, if it is properly conducted and due weight is given to its full complexity and ramifications, Super-SARA can be seen not merely as a vast project, but also, essentially, as an opportunity to transform the nature and functioning of the JRC. Super-SARA is not an alternative to national programmes nor an attempt to offset an absence of initiatives - it is a European programme which involves, integrates, complements and stimulates national activity. As such, it operates on a European scale which is beyond the range of the individual countries, however active they might be. At the same time, as a 'direct Community' initiative, it does not operate in isolation and can add an international dimension to national initiatives, acting as a stimulus to them. This also adds to Super-SARA's credibility and it is useful to reassure European public opinion - in line with Euratom's social role - of the Community's commitment to the control and prevention of nuclear accidents.

27. It should also be noted that, as a large-scale project which complements but also goes beyond national initiatives, Super-SARA is in a position through the international links it can establish to revitalize the electronuclear market which, for a variety of mainly psychological reasons and despite ambitious initial nuclear programmes, has been at a standstill for years, to the detriment of employment and industrial investment and thus of the general security of the Community's energy supplies. It is time to revive this market if Europe is not to be left behind the United States, Japan and the Soviet Union, and become an importer of nuclear reactors.

28. These industrial and economic consequences are a further reason why the results of the Super-SARA experiment must be punctual and made quickly available to the market, to users and to undertakings. Any delays in the programme will be extremely damaging. That is why it is vital that the programmes should be as transparent as possible and that the tables for the implementation of the various Super-SARA actions, shown in the

Commission's document, should be adhered to as closely as possible. It is necessary to know when the first year of the programme actually begins and to go ahead with purchases as soon as the individual Super-SARA programmes have been defined. Out of these programmes it is necessary to select those which are most urgent and can be immediately implemented. The JRC establishment at Ispra must provide the safety analyses as quickly as possible to avoid any doubts and delays in the examination and approval of the documentation by the Italian supervisory body, ENEA. Finally, appropriate 'points of control' must be determined to ensure that realistic documentation is available on the state of progress of the project.

29. Naturally, the European Parliament will monitor these operating conditions for the new programme, but the Commission must as of now give guarantees that they will be respected. This brings us to the remarks which must be made on manpower and financial resources, on which the feasibility of any project depends, but which are particularly important in this case because they also involve the managerial capacities of the Commission and of the Governing Board, which the Commission itself created.

30. Employment of staff

The problem of staff at the JRC merits special consideration. Increases in staff, even if they are limited, spread over a period of time and are able to be reabsorbed, cannot be reduced to the level of a simple arithmetical calculation. Staff numbers in themselves cannot ensure the success of a project - two conditions must be met:

- (1) staff employed on the programme must be highly versatile with a high level of skills and competence;
- (2) there must be a high level of personnel management skills and the projects as a whole must be sufficiently transparent.

These conditions are extremely important because, at the JRC as at any national research institute, the major investment costs involve staff, and even more so if we remember that the recruitment of outside staff on long-term contracts will be very expensive.

Given the importance of the Super-SARA project, there is a need for a wider debate on the staff at the Ispra Centre, who have suffered

frequently in the past from the fluctuating fortunes of the Centre.

31. Age of staff

It is perhaps worth recalling that the ageing of the Centre's staff detracts from the efficiency of the JRC and makes it harder for it to respect its programming commitments. Two factors combine to worsen the staff situation from year to year:

- (1) the age distribution amongst staff;
- (2) the cancellation of posts made available by retirement or other departures.

It must be said that because of the large number of retirements at present, the age distribution amongst staff is abnormal. It should also be pointed out that the Council of Ministers is making ruthless use of the cancellation of freed posts to cut back staff numbers at the Centre.

Given that the availability of effective, efficient and committed staff is one of the necessary conditions for achieving the aims of a project such as Super-SARA, it has to be said that the continuation of the staff policy so far followed could well lead to a crisis at the JRC (and not only at Ispra). The new commitment represented by Super-SARA should therefore provide an opportunity to introduce a rational and far-sighted policy for the staff employed on research programmes in order to ensure maximum efficiency.

32. However, there is also another factor which affects staff efficiency and that is the extent of its job motivation. In many cases this motivation has been weakened by the long crises of direction at the JRC and the doubts and uncertainties affecting some of its programmes. Today it is more necessary than ever to ensure that the staff do not lose faith in the future of the JRC. In order to ensure the scientific credibility of the centre and to instil confidence in the staff, it appears necessary to:

- (a) select programmes which are of great value to European society from the economic, industrial and social standpoints,
- (b) undertake programmes only when the manpower, financial resources and skills are available at the JRC,

(c) respect the agreed timetables for decision-making and work.

It is in the light of these considerations - also valid for the future four-year programme - that we should judge the Commission's proposals on staff, which are designed to strengthen the Super-SARA programme by means of two measures:

- (a) redeployment of existing staff
- (b) creation of new posts.

33. The redeployment envisaged in the proposed amendment to the 1983 budget concerns 54 new posts, including 12 Research Staff¹ and 42 Service Staff.

The Commission's justification for its request is the need to remedy the lack of research staff and the chronic shortage of staff employed in general support services and infrastructures, which are also vital to the efficiency of the JRC and the feasibility of its programmes.

Notwithstanding that it is the Committee on Budgets which, as the committee responsible, will deliver the opinion on this question, we feel that the Commission's request is well-founded. We also consider that, particularly for a project such as Super-SARA, the increase in staff should be accompanied by a detailed list of the duties of the staff - something which is also requested by the safety authorities for the issuing of licences. The existence of such a list would make it easier to judge whether the staff possess the necessary training, efficiency, versatility and aptitude for cooperation which are vital to the proper functioning of Super SARA.

¹ Research Staff (RS) are front-line researchers whose activities are directly controlled on a monthly basis in line with the management of objectives. In addition to research staff, there are also the following categories of staff:

- S/T support services (reactors, high activity laboratories, computer centre, central workshop, etc.)
- internal support services for the scientific divisions (management, attached workshops, stores, etc.)
- general technical services (infrastructures, decontamination, security, transport)

and, finally, administration, finance, social affairs, etc.

The Commission makes no provision for strengthening these administrative services, as all the emphasis is placed on Research Staff and technical services.

In more detailed terms, the Commission is requesting:

- (1) the strengthening of the reactor safety programme with the creation of 29 new posts (3 RS and 26 support staff). Within this programme provision is made for the redeployment of staff between LOBI, PAHR and Super-SARA, with the aim of giving the necessary capacity to the Super-SARA and LOBI projects (it should be remembered that LOBI and PAHR are experiments connected with reactor safety and the reproduction of out-of-pile accidents).
- (2) the transfer to Super-SARA - in order to limit the number of new jobs created - of part of the staff currently assigned to the 'Plutonium fuels and actinide research' programme (+ 5 RS, - 6 support staff) and to the 'Safety of nuclear materials' programme (- 10 RS, - 12 support staff).
- (3) a reduction, as anticipated, of the staff assigned to the programmes on the fuel cycle and nuclear materials and the safety of fast-breeder reactors.
- (4) an increase in staff for the programme on renewable energy resources (nuclear fusion).

34. With regard to these requests, which are not unexpected, in as much as the Commission has raised the abovementioned problems on previous occasions, it should be noted that:

- (1) Parliament wonders whether it is really necessary, in order to strengthen the new programme on light-water reactors, for reductions to be made in the staff assigned to other important safety operations such as the safety of nuclear materials, plutonium fuels and actinide research. These are research projects which are making good progress and attracting the interest of a number of Member States. We should seek to convince the Council of Ministers to make sufficient research staff available for the new programmes without making reductions in other critical sectors. Parliament confirms its reservations about these reductions and will return to the matter when monitoring the programmes and examining the future budgets of the JRC.
- (2) Parliament considers that the staff question should be viewed in a broader perspective, especially as the Commission has not been sufficiently prompt in putting forward solutions to the basic problems, which means that the present anomalies in the

functioning of the JRC are likely to continue.

- (3) Parliament notes that, in its present proposals, the Commission points out that the new posts to be created will eventually have to replace those posts freed by retirement. Yet is this commitment - however positive - sufficient to ensure a more rational staff policy ?

35. In short, if the proposed programme is to represent a new mode of functioning at the JRC, if it is to succeed in achieving greater integration with the national programmes, if there is to be an overall improvement in quality and if it is to be a basis for strengthening other significant research programmes, then it seems appropriate, as far as the staff are concerned, to establish a scale of priorities, which could be conceived as follows:

- (1) collaboration with research institutes in the Member States by concluding appropriate agreements which include provisions for the acquisition of staff highly qualified in the sector concerned, for the Super-SARA project;
- (2) achievement of internal staff mobility at the JRC, taking account of the most qualified manpower at the centre;
- (3) creation of new posts for both research and service staff;
- (4) introduction of measures to promote the renewal of staff through early or voluntary retirement.

36. In the context of these measures, Parliament attaches particular importance to the vital need for the introduction of outside staff (particularly for the management and execution of the Super-SARA programme), and recommends that this measure be implemented in a serious and rational manner. An infusion of temporary external staff would enhance Ispra's already effective resources and bring the best qualified national researchers to the Super-SARA project. Action must be taken to ensure that a genuine and beneficial 'osmosis' takes place at Ispra, so as to avoid the isolation which is one of the reasons why work at this establishment has become less attractive to European research workers, who look to international work as a better opportunity to gain qualifications. Ispra should be increasingly able to provide this opportunity, especially with a project of joint interest such as Super-SARA.

37. It also seems advisable, in the interests of wiser and more efficient administration and a better use of resources, for the Commission to ascertain which parts of the Super-SARA project could be commissioned from outside operators. Sub-contracting would also improve the work done within the Ispra Centre and would allow a more rational distribution of work which would benefit the new project as a whole. Naturally, this would have to be closely monitored both by the Commission and the Governing Board, which is responsible for the implementation of the Super-SARA project. In any event, what is needed in the matter is flexibility, which Parliament strongly recommends.

38. Financial resources

A number of general considerations are again relevant here. Once again the European Parliament is obliged to note that the financial resources allocated by the Community for research and development programmes are still too small by comparison with national programmes.

In 1981 the Community's expenditure on 'Research and Development' was approximately 300 m ECU, of which 140 m ECU was allocated to the JRC programmes. For the same period the overall expenditure on national research and development programmes was about 17,000 m ECU not including military programmes.

Community expenditure was therefore only 2% of the Member States' expenditure, while the JRC's was only 1%. If, on the one hand, the need for multiplicity in the Community's research and development activities is one of the main factors affecting the Community's involvement in this sector, on the other hand, the inadequacy of the resources allocated means that the Community's contribution is almost always marginal by comparison with that of the Member States.

39. The options chosen, therefore, must not fail to take account of the volume of investment allocated by the Member States, unless the Community's investments are:

- (a) concentrated on only a few projects in such a way that they represent a reasonable fraction of the amount invested by the Member States;

- (b) allocated to programmes capable of having a catalytic effect or of acting as an instrument for the exchange of information.

What is required then is a modern and efficient system of financial management and, particularly in view of the complexity of the Commission's present proposals, one which is capable of ensuring the priorities are not fixed a posteriori or during the execution of the programmes (especially when this is dictated by the need to correct unrealistic initial estimates). Still less should the institutions responsible for decisions find themselves confronted with estimates which differ widely from each other.

40. In view of these general considerations and in the light of the information available to us (which is reproduced here), it must be said that an increase in the finances for certain JRC programmes (and thus also for the proposed programme) is essential to ensure that:

- (1) the programmes already in progress are concluded as quickly as possible,
- (2) the new programme is launched with strict financial transparency,
- (3) the Community's financial commitment is more than marginal, particularly for the most useful programmes.

(It should be borne in mind that the biggest spending commitments are those involving contracts for equipment and services with external firms).

41. As for the specific financial aspects of the Commission's proposals for a revision of the current four-year programme (which have the value of guidelines for the new four-year programme, not under consideration here), the proposed measures involve:

- (1) an increase in investment;
- (2) a redistribution of spending commitments.

These operations concern both nuclear and non-nuclear activities and involve an overall sum of 31 m ECU.

However, the sector which will benefit most is the nuclear sector, where provision is made for an increase in investment finance and a redeployment within this framework of the spending commitments already fixed.

In the nuclear sector, the programme which will benefit most, as was mentioned above, is Super-SARA. With the aim of recovering financial resources, the Commission is proposing reductions in the finances allocated to certain safety programmes and we have already expressed our reservations on this matter. This is a further reason why the European Parliament must exert constant vigilance over all the JRC's activities, including both the new and revised projects. Parliament's Committee on Budgets is responsible for expressing a technical opinion on the proposed revision. Yet the fact that it is delivering its opinion - which we hope will be favourable - is further evidence of the need for a control function, which should involve the examination of the budgets and the preparation of special reports, for which our committee should take the initiative.

IV. CONCLUSIONS

42. Our resolution brings together the most important points of our debate on the subject and your rapporteur's comments on the revision of the JRC's budget for 1983, as proposed by the Commission. However, our position can be summed up in the following terms:

- (1) We approve of the innovatory character of the Commission's proposals, which place renewed emphasis on the safety of light-water reactors in a programme which is important, has wide international interest and socio-economic value, and opens a new future for the JRC, improving its nuclear capability without altering the balance between Euratom's nuclear and non-nuclear activities.
- (2) We recognize the value of Super-SARA in the Commission's proposal as a means of introducing a new method of working at the JRC. With this in view, we stress the need for the most appropriate forms of collaboration, in the context of Super-SARA, between Community and national experiments and the improvement of the criteria for the distribution of work - a conclusion already anticipated by the Council of Ministers in its communiqué of 30 June 1982.
- (3) We recognize the value of Super-SARA in prompting a reassessment of the role of the Ispra Centre, employing its ablest manpower and

making use of the ESSOR reactor - a step on which a definite decision has at last been reached. Moreover, the Centre could be in danger of falling into an irreversible decline unless it steps up its nuclear commitment through a new and wider programme. The sacrifices requested in other programmes in order to allow the strengthening of Super-SARA are being endured at present rather than accepted with reservations, and must be restored as soon as possible in future annual budgets.

- (4) We appreciate that the revised programme proposed by the Commission necessarily involves increases in staff and finances. Nevertheless, the measures proposed cannot conceal the need for a clearer, more transparent and more precise budget and planning policy and for systematic personnel management criteria, especially as the recruitment of outside staff and an improvement in the qualitative utilization of internal staff are vital to the Super-SARA project. Nor can the importance of adequate coordination structures for the best possible integration of external experiments be neglected in a programme of such significance.
- (5) We note that the Commission's proposals are accompanied by authoritative opinions and we urge the Commission to take full responsibility itself for the specific measures needed to ensure the success of the revised programme, especially the Super-SARA project. We have indicated here what these measures should be. We also place special emphasis on the need for Parliament to exercise all the appropriate controls over the execution of the proposed programme, observing the correct procedures and fulfilling its duties.

Opinion of the Committee on Budgets

Draftsman: Mr Kellett-Bowman

On 22 - 23 September 1982 the Committee on Budgets appointed Mr Kellett-Bowman draftsman of the opinion.

The committee considered the draft opinion at its meeting of 11 October 1982 and adopted it by 12 votes to 0 with 1 abstention.

The following took part in the vote: Mr Lange, chairman; Mrs Barbarella, vice-chairman; Mr Kellett-Bowman, draftsman; Mr Adonnino, Mr Arndt, Mr Baillot, Mr Balfour, Mr Bonde, Mr Langes, Mr Newton Dunn, Mr Price and Mr Saby.

1. The Joint Research Centre is currently implementing the 1980-1983 multiannual programme set out in the Council Decision of 12 March 1980¹. Article 3 of the decision provides that the programme shall be reviewed during its third year, and that this review may lead to a Council decision for a new four-year programme.

2. The proposal for a Council Decision submitted for Parliament's consideration concerns only a review of the current programme for 1983 with a view to preparing the future four-year programme (1984-1987). The Commission's choice may be understood in the light of the general review, now in progress, of the Community's research activities, which will lead, in 1983, to the adoption of an outline programme for the Community's scientific and technological activities of which the JRC's direct schemes here under consideration form part. The Commission envisages the following general timetable:

- (a) At the beginning of November 1982, the Council will have to decide on the new guidelines assigned to the JRC's research activities for the period 1984-1987 and decide, as a result, on the review of the 1980-1983 programme (certain parts of which might be entered in a 1982 supplementary budget, or in a transfer replacing this SAB);
- (b) At the end of November 1982, there will be a communication from the Commission to the Council on the 'Outline Programme';
- (c) In February 1983, the Council is expected to define its position on the outline programme;
- (d) In June 1983, a decision is promised by the Council on the 1984-1987 multiannual programme.

3. The Council stressed, at its meeting of 30 June, that an attempt should be made to ensure that the review for 1983 is finished before the second reading of the 1983 budget and the 1982 amending budget. In this connection, the Committee on Budgets points out, in the spirit of the agreement of 30 June 1982:

¹OJ No. L 72 of 18.3.1980

- firstly, that research and investment appropriations are non-compulsory expenditure;

- secondly, that overall appropriations and their breakdown, as they appear in the review proposal presented by the Commission, can only be taken as indicative.

The decision on the review of the 1980-1983 programme cannot replace a budgetary decision. In this connection, the Committee on Budgets notes that the figures in the proposal for a decision are explicitly called 'indicative' by the Commission. It draws the attention of the Council, which had deleted this term when adopting the 1980-1983 programme, to the fact that Parliament will consider its retention as a sign that the Council intends to respect the principles laid down in the agreement of 30 June 1982.

I. Content of the review proposal for 1983

4. The 1980-1983 research programme is divided into six research themes, each one including several programmes subdivided in their turn into a number of projects. The proposed review for 1983 does not modify the setup of the programme but seeks to reorientate the balance between schemes and resources so as to ensure a smooth transition to the future programme for 1984-1987.

A. Objectives

5. The main objective of the 1983 review is to alleviate the difficulties encountered with certain projects concerned with nuclear safety, in particular, Super-SARA (behaviour of light-water reactor fuel in the event of loss of coolant). This project, which has received convergent favourable opinions from independent experts as regards its usefulness and feasibility and the ability of the Ispra Centre to implement it, suffers, in the Commission's opinion, from a marked disparity between the necessary resources and the tasks assigned to the JRC in terms of objectives and deadlines. The delays which have occurred are the source of extra costs. The Commission calls for new resources to be allocated to it.

6. The programmes other than those relating to nuclear safety are judged to be generally satisfactory. The Commission does not envisage any stepping-up of these activities; the proposed modifications seek only to concentrate efforts on certain fields:

- making agriculture more competitive (remote sensing)
- development of telematics and office automation
- development of reference materials and techniques
- cooperation with developing countries

(formation of an institute for training and scientific cooperation to be run by the JRC).

B. Implementation

7. The increased resources to be made available for the priority objectives will be obtained in part from reorganization measures within the JRC based on increased staff mobility.

The development of internal mobility will lead to the reduction of certain activities and the abandonment of certain projects.

The Committee on Budgets welcomes an approach which is consonant with the European Parliament's concern that efforts be concentrated on certain priority projects.

8. The Commission, nevertheless, proposes the creation of certain posts, in particular for the general and scientific and technical support services: strengthening of the Ispra security services⁽¹⁾ and those providing assistance for the scientific divisions.

9. In addition, the Commission envisages, for the future 1984 - 1987 programme, the possibility of recourse being had to staff on secondment from the national research centres, constituting a reserve made up of reimbursable posts. This measure is put forward as an alternative to the creation of permanent posts.

(1)

As requested by Parliament, OJ L 172, 13.7.1981 (for PE 70.986/fin., para 16)

II. Budgetary consequences

10. The modifications relating to appropriations and staff contained in the review proposal concern both 1982, via supplementary and amending budget No. 1/82, and 1983.

A. Staff

11. The staff had been fixed at 2260 officials, of whom 1110 were appointed to research posts at the time of the decision on the 1980-1983 programme. The European Parliament had accepted the creation of 70 temporary posts intended to compensate for retirements and with the proviso that the level of staff at the end of the programme should be the same as at the beginning. This provision had not been adopted by the Council, nor was any appropriation entered when successive budgets were adopted.

12. - The review proposal provides for an overall increase in staff of 54 posts in two stages:

- for 1982, the Commission has presented a preliminary draft amending budget providing for the transfer of 38 posts from the research appropriations to the operating appropriations of the Commission and, at the same time, the creation of a like number of new posts at the JRC for the benefit of the general and scientific and technical support services of the Ispra Establishment. This transfer satisfies in part the observations made by the Court of Auditors as it concerns the JRC's accountants (20 posts), who are henceforth placed under the responsibility of the Commission accountant. It will be noted, however, that this amounts to increasing the staff working for the JRC by paying them out of Commission appropriations.

- Net job creations at the JRC in 1983 would include 12 posts allocated to research and 42 posts allocated to general and scientific and technical support services.

13. Adopting the budget classification, the movement in job numbers is as follows:

	Scientific and technical staff	Administrative staff	Total
1979	1839	461	2300
1980	1803	457	2260
1981	1763	497	2260
Initial 1982 budget	1763	497	2260
SAB 1/82	(+26)	(-26)	(-38)
Amended 1982 budget	1789	471	2260
PDB 1983	1832	482	2314
PDB 1983 - initial 1982 budget	+69	-15	+54

14. These new appointments, together with internal transfers, result in a new distribution of staff over the various research sectors:

A. Nuclear Safety	:	+29	
including reactor safety	:		+18
B. New energies	:	+22	
C. Study and protection of the environment	:	+1	
D. Nuclear measurements	:	-4	
E. Specific support for the Commission's activities	:	+9	
F. Large-scale installations	:	-3	

15. These proposals prompt a number of comments:

1. While recognizing the justification for transfers which make for a clear distinction between the functions of authorizing officer and those of accountant, the Committee on Budgets has doubts about the job creations planned at the Commission for 1982. It stresses that there can be no question of increasing the numbers of staff working for the JRC by increasing the number working for the Commission.

2. The Committee on Budgets regrets the lack of sufficient justification for certain new posts; indeed, of the 22 posts created for the New Energies sector, justification was provided only for 5 research workers assigned to the nuclear fusion technology programme.

3. The Committee on Budgets cannot but observe that, in general, the rigorous approach announced by the Commission is scarcely manifested as regards staff. It would like the strengthening of priority schemes to be realized through the reassignment of existing staff, though it realizes the problems which such an approach may entail, seeing that the staff are highly specialized. It would like to see greater use made of specialists seconded from national research centres and paid on reimbursable posts, a procedure which also has the advantage of bringing Community research more into the framework of the Member States' research.

4. In addition, the committee reiterates its wish to see a better balance between staff appropriations and specific appropriations for programmes. In this connection, it is surprised that the share of staff expenditure, estimated at 51% of total expenditure when the 1980-1983 programme was adopted, appears, in the documents presented, to be in fact 58% before the review and 55% after the review and after the recruitment of additional staff.

B. Appropriations

16. The review proposal leads to an increase in appropriations broken down as follows: (commitment appropriations) :

- initial programme	:	510.87 million ECU	
- approved or expected salary increases	:	67.21 million ECU	
- amending budget No. 1/82	:	21.34 million ECU)
- 1983 review	:	15.76 million ECU) + 6.4%

		615.18 million ECU	

This represents an increase in commitment appropriations of 6.4% if one takes as a basis the initial programme, adjusted for salary increases.

17. The overall increase in appropriations breaks down differently according to research sector (in million ECU's):

A. Nuclear safety	: + 30.1	(+ 10.6%)
including reactor safety	: + 30.6	(+17.4%)
B. New energies	: + 2.9	(+ 3.2%)
C. Study and protection of the environment	: + 1.2	(+ 2.0%)
D. Nuclear measurements	: + 0.8	(+ 1.5%)
E. Specific support for the Commission's activities	: + 2.1	(+ 5.2%)
F. Large-scale installations	: -	(+ 0.1%)

18. The documents provided by the Commission are of no assistance for forming an opinion on the advisability of such increases in appropriations.

Although, within the 'nuclear safety' sector, savings have been possible on certain programmes, it can be seen that the overall appropriations for the other programmes have been revised upwards (with the provisional exception of programme E1 - Informatics), without it being possible either to determine the reasons for these increases or to verify the Commission's expressed desire to review the allocation of resources. The Committee on Budgets draws the Commission's attention to the need to present proper justifications at the budget debate.

In a general way, it repeats the request formulated in the European Parliament's resolution of 18 June 1981 on the budgetary control aspects relating to the Ispra establishment of the JRC¹ as regards the use of cost-benefit analysis techniques in efforts to make the JRC establishments efficient.

The Committee on Budgets is well aware of the difficulties posed by the use of such techniques in research laboratories. Nevertheless, it feels that this information is essential to the budgetary authority and

¹OJ L 172, 13.7.1981

therefore requests the Commission to provide it with a detailed report on the question in good time for consideration of the 1984-1987 programme.

Conclusions

19. The Committee on Budgets:

1. Approves the Commission's policy of seeking to bring the JRC's multiannual research programmes within the framework of the Community's scientific and technological activities as a whole.
2. Welcomes the direction it seems to be taking towards concentration on certain priority objectives.
3. Regrets that this tendency is only very partially discernible in the review proposal under consideration.
4. Considers that the increases in staff and appropriations cannot be approved unless they are duly motivated and notes serious inadequacies in this respect; expects the Commission to provide more detailed information during the budget debate.
5. Expresses serious reservations as regards the transfer from the JRC to the Commission of the 18 non-accountancy posts, and in general as regards the de facto increase of 38 in JRC staff by this means.
6. Again requests the Commission to provide it, when the future multiannual programme is examined, with information on the profitability of the projects being financed.
7. Notes with satisfaction that the Commission intends to encourage both the internal and external mobility of its staff; approves the principle, now being studied, of enlisting specialists on secondment from national research centres and requests that the budget presentation of this measure be such that the budgetary authority may exercise effective control.

8. Points out the indicative nature of the figures contained in the proposed decision; calls for the implementation of the conciliation procedure should the Council intend, in violation of the agreement of 30 June 1982, to fix new ceilings for expenditure.

