Report
drawn up on behalf of the Committee on Public Health and the Environment

on the proposal from the Commission of the European Communities to the Council (Doc. 223/75) for a multiannual Community research programme on biology and health protection for the period 1976-1980

Rapporteur: Mr C. MEINTZ
By letter of 7 August 1975 the President of the Council of the European Communities requested the European Parliament, to deliver an opinion on the proposal from the Commission of the European Communities to the Council for a multiannual community research programme on 'Biology and Health Protection' for the period 1976-1980.

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

On 2 October 1975 the Committee on Public Health and the Environment appointed Mr C. Meintz rapporteur.

It considered this proposal at its meetings of 2 and 21 October 1975.

The draft resolution and the explanatory statement were adopted unanimously on 21 October 1975.

Present: Mr Della Briotta, chairman and deputy rapporteur; Lord Bethell, Mr Didier, Mr Duval, Mr Evans, Lady Fisher of Rednal, Mr Marras, Mr Noè, Mrs Orth, Mr Rosati, Mr Springorum and Mr Vandewiele (deputizing for Mr Martens).

The opinions of the Committee on Budgets, the Committee on Agriculture and the Committee on Energy, Research and Technology are attached.
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The Committee on Public Health and the Environment hereby submits to the European Parliament the following motion for a resolution, together with explanatory statement:

**MOTION FOR A RESOLUTION**

embodying the opinion of the European Parliament on the proposal from the Commission of the European Communities to the Council for a multi-annual Community research programme on biology and health protection for the period 1976-1980

The European Parliament,

- having regard to the proposal from the Commission of the European Communities to the Council (Doc. COM(75)351 final);

- having been consulted by the Council (Doc. 223/75);

- having regard to the report of the Committee on Public Health and the Environment and the opinions of the Committee on Budgets, the Committee on Agriculture and the Committee on Energy, Research and Technology (Doc. 336/75);

1. Approves the Commission's proposal for a multiannual Community research programme on biology and health protection for the period 1976-1980;

2. Expresses its satisfaction at the fact that the Community is further pursuing its efforts in the field of research into the effects of nuclear radiation;

3. Urges the Commission, however, not to expand participation by the Biology Group at the JRC at Ispra;

4. Requests the Commission to incorporate in its draft decision a further article making possible a review during the course of the programme;

5. Requests the Council to approve the full amount of the allocation asked for, and to make these funds available in full for the programme years in question;
6. Notes with satisfaction that the results of the research will be published, and that information and experience of potential use to the various laboratories will be exchanged;

7. Urges the Commission to ensure that the Advisory Committee on the management of these programmes carries out its task of coordination and guidance in such a way as to guarantee optimum implementation of the programmes;

8. Finally, considers it of the utmost importance for the protection of health and of the environment that the Commission should examine in what areas there is still no research, or inadequate research, in relation to the dangers associated with ionizing radiation, and should if necessary introduce proposals.
Proposed by the Commission of the European Communities

Proposal on a multiannual Community research programme on biology and health protection for the period 1976-1980

Preamble and recital unchanged

Articles 1 and 2 unchanged

Article 3

The Commission shall exercise permanent supervision over the execution of the programme in order to see whether there has been effective coordination, and whether changing circumstances or unexpected research results are making modifications necessary. To this end, it shall report to the Council and to Parliament before 30 June 1977, and propose any modifications that may be needed.

¹ For full text, see COM(75) 351 final
I. Introduction

1. Article 7 of the EABC Treaty reads: 'Community research and training programmes shall be determined by the Council, acting unanimously on a proposal from the Commission, which shall consult the Scientific and Technical Committee. These programmes shall be drawn up for a period of not more than five years.'

The third 'Biology and Health Protection' programme comes to an end on 31 December 1975, and the Commission is therefore submitting to the Council a proposal on a new five-year research programme.

2. The Commission is proposing, in this new programme, that research activities should be concentrated in two areas, i.e. radiation protection and the development of nuclear techniques applicable in agricultural research.

This is not to say that a start has still to be made on Community research in these spheres; indeed, a great deal of work has already been done in these areas, both nationally and at Community level.

Yet Community, social, economic and industrial requirements demand that a thorough study be made of these problems, while at the same time ensuring a measure of continuity with earlier programmes.

3. The Committee on Public Health and the Environment has been asked, as the committee responsible, to examine the Commission's proposal, since both these research projects are aimed at ensuring protection of various aspects of the environment.

The Committee on Energy, Research and Technology, the Committee on Agriculture and the Committee on Budgets were asked for their opinions.

II. Discussion of the proposed projects

(a) Radiation protection

4. The radiation protection programme is intended to study and evaluate the dangers associated with ionizing radiation.

Increasing use of energy derived from nuclear sources calls for proper precautionary and supervisory measures, the scientific basis for which is obtained by striving objectively to gain adequate knowledge of the risks involved.
This knowledge is, furthermore, a very important factor in working out basic standards for protection against ionizing radiation.

5. At present there are more than 250,000 workers in the Community engaged in the application of nuclear energy for peaceful purposes, and this number will undoubtedly continue to grow.

Although nuclear energy has so far proved to offer a very high safety level, the risk of accidents cannot be wholly ruled out.

Both the number of nuclear installations and the applications of ionizing radiation and radioisotopes in medicine are moreover constantly on the increase, so that the bodies concerned with public health protection and the protection of the environment must have access to sufficiently full and accurate scientific information.

6. The Commission's objectives in this field are:

(1) to ascertain the level of reliability of present knowledge;
(2) to supplement the knowledge needed in order to limit the injuries that can be caused by ionizing radiation, and to avoid the results of these;
(3) to bring a solution to the health or ecological problems that can arise from particular situations or accidents.

7. To achieve these objectives, the Commission is suggesting five sectors in which research (already partly under way) can be concentrated:

(1) Radionuclide behaviour and irradiation levels

The aim here is to assess what radiation doses human beings receive, and to gauge the extent to which unacceptable changes in the environment are caused by nuclear radiation and to study means of prevention.

(2) Genetic effects of ionizing radiation

A study of the effects of radiation on human genetic material, using primarily plant and animal species (since these experiments cannot be performed directly on human subjects).

(3) Short-term effects of ionizing radiation

This study, in which special attention is to be paid to changes in the mechanism of cellular regeneration is extremely important because of the incidence of radiation injuries in industry, research and medicine.
Long-term effects of ionizing radiation

When studying long-term effects it is difficult to determine to what extent an observed effect is due to radiation and to what extent other influences to which the person has been exposed over the same period are responsible.

Radiation dosimetry and its interpretation

It is obvious that the effects of ionizing radiation can only be studied properly if the dose received can be measured and interpreted; the same is true when one seeks to lay down basic protection standards.

The text of the Commission proposal provides a full account of these five projects.

8. The Commission proposes that the greater part of this programme should be carried out under association or shared-cost contracts, i.e. in the form of individual activities. No radiation research is undertaken at the Joint Research Centre, and it must besides be noted that the Biology Group working at the JRC at Ispra does not form an integral part of this centre, though it is able to make use of the facilities available there.

The Biology Group takes part in activities within the framework of the programme, and also provides support to programmes being carried out under contract.

The Committee on Public Health and the Environment would emphasize, in this context, that it has always taken the view that joint research centres should be involved as closely as possible in Community research work.

9. As soon as the programme has been approved by the Council, the Advisory Committee on Programme Management will provide an opinion on proposals put forward by institutes and laboratories in the Member States.

While the programme is under way the ACPM will keep a close watch on progress and if necessary will redirect the lines of research, at the same time ensuring that the various sectors and subsectors of the programme are coordinated.

The Committee for Public Health and the Environment is glad to note that the Commission intends to publish and disseminate the results of research work, and also to see that information and experience that can be of use to the various laboratories is exchanged in as efficient a manner as possible.
10. The bulk of the work will be done under contract, the manning level for this being set at 73 persons plus 20 man-years for the JRC Ispra infrastructure. The cut-back in the number of staff from 97 (as laid down in the Council decision of 21 June 1971) to 93 in the present proposal can be explained by the fact that these four posts have not been filled and are now being taken over by the energy research programme.

The Commission official concerned also gave an assurance that this cut-back would have no adverse effect on the implementation of the programme in question.

11. A discussion of the financial provisions can be found in the opinion from the Committee on Budgets.

(b) Applications of nuclear techniques to agricultural research

12. Radiology and certain nuclear techniques have taken on great importance in agricultural and agro-ecological research.

There is, on the other hand, a need, within the context of the common agricultural policy, to strike a proper balance between two apparently contradictory tendencies - on the one hand the need for greater efficiency in food production, and on the other the move towards offering the consumer 'healthier' food.

This 'Applications' programme has certain points in common with the 'Radiation Protection' programme, e.g. the irradiation of foodstuffs and treatment of a plant cell culture.

13. The objective of this programme is greater coordination of experimental work in the field of applications for nuclear techniques, with a view to evaluating the results of radiobiological research and the application of nuclear techniques to benefit agriculture.

14. To this end, the Commission is proposing six areas of research, all aimed at improving the quality of agricultural production.

(1) Improving a crop species is an extremely important task from the agricultural viewpoint; here, nuclear techniques can speed up what is normally a lengthy process, and can besides lead to results achieved by genetic means (i.e. permanent results, obtained without causing pollution).

(2) This improvement will bring about an overall optimization of yield and quality, though growing conditions in the environment in question, and the whole complex of changes undergone by the end product, also have a part to play in this. From these latter two aspects, again, nuclear techniques have been found to offer excellent experimental results.
(3) **Plant cell culture**, with all its potential applications, is a third area of research in which nuclear techniques can play a role.

(4) **Combating insect pests** by means of insecticides entails many risks, and there is a growing tendency to switch over to 'integrated control', of which 'biological and genetic control' is one facet. This method of control relies in part on the use of radio-biology and radio-genetics, using radiation to bring about changes in the genetic make-up of the insects.

(5) The processes that have a part to play in **efficient beef production** (by which one means higher output and better quality) can be fully analysed only by using nuclear techniques.

(6) A final area of research suggested by the Commission is that of **irradiation used in food preservation**. Here, the Committee on Public Health and the Environment would urge the greatest caution in the practical application of this technology.

15. The comments on structure and management already made in connection with the 'Radiation Protection' programme (paragraphs 8 and 9) apply equally to this programme.

16. **All work under this programme should be carried out under contract**, with an approved manning level of 10 persons.

Since at present only four of the ten available posts are filled, your Committee would ask the Commission of the European Communities to fill all the posts as soon as possible, in order to allow the proposed programme to be carried out efficiently.

Comments on the financial provisions can be found in the opinion from the Committee on Budgets.

**III. Discussion of the proposal for a Council decision**

17. The proposal for a Council decision comprises only two articles, in the first of which the period of the two programmes is set at five years beginning on 1 January 1976, while Article 2 lays down the financial resources and manning level.

In the preamble to this draft Council decision, reference is rightly made to the great interest these research programmes present for supplementing the information needed for an objective evaluation of the effects and dangers arising from ionizing radiations with regard to individuals and to plant, animal and human populations.
For these reasons, the Committee on Public Health and the Environment can therefore support the content of this proposal, and expresses the hope that all authorities involved will make every effort to allow the proposed programmes to go forward in such a way that efficient use may be made of the results, so as to reduce the harm done by ionizing radiations to all forms of life.

18. Finally, it must be added that both the Scientific and Technical Committee and the ACPM for 'Biology and Health Protection' have given a favourable opinion on this Commission proposal. These two documents are attached to the Commission proposal.

IV. Discussion of the opinions from the Committee on Budgets and the Committee on Energy, Research and Technology

19. The Committee on Budgets has given a favourable opinion on the financial provisions proposed by the Commission of the European Communities.

   This Committee is also pleased at the completeness and clarity of the 'financial statement' accompanying the proposal.

20. On the subject of funds, the Committee on Energy, Research and Technology is requesting the European Parliament and the Council not only to approve the entirety of the financial appropriations requested, but also to make them available in full for the programme years in question without blocking budget items or other subdivisions; otherwise it will not be possible to achieve the objectives of this research, which is intended to serve the interests of the Community.

21. The Committee on Energy, Research and Technology calls on the committee responsible also to give its approval in principle to the proposed programme, with the proviso that participation by the Biology Group at the JRC at Ispra in the various activities is not expanded and that the Council decision incorporates an article allowing for the possibility of review during the course of the programme.

   In view of the arguments put forward by the Committee on Energy, Research and Technology in its opinion, the Committee on Public Health and the Environment endorses these comments.
OPINION OF THE COMMITTEE ON BUDGETS

Draftsman: Mr. M. YEATS

On 1 October 1975 the Committee on Budgets appointed Mr Yeats draftsman.

It considered the draft opinion at its meeting of 22 October 1975 and adopted it unanimously.

Present: Mr Lange, chairman; Mr Aigner and Mr Durand, vice-chairmen; Mr Yeats, draftsman; Lord Bessborough, Lord Bruce of Donington, Mr Dalyell, Mr Früh, Mr Maigaard and Mr Shaw.
Introduction

1. The Committee on Budgets has been consulted for its Opinion on this programme and not on the cuts in the appropriations made by Council in the 1976 draft budget for this: such aspects fall within the ambit of Mr Cointat's report. However, as was the case with Mr Scholten's opinion on the multi-annual programme for thermonuclear fusion and plasma physics (1), your rapporteur will be unable to avoid mentioning the general context in which the proposal is launched (see Paragraphs 13 and 14). The Council's decisions or non-decisions jeopardize both the programme and also the value of parliamentary consultations.

2. As will be explained later (paragraph 10), the Commission has now provided a financial schedule in all languages which is, in your draftsman's view, complete and satisfactory - representing as it does a considerable progress on previous statements of financial consequences of proposals. Originally your draftsman relied on the breakdown of figures provided within the annual preliminary draft budget itself - Volume V Section III - Commission - Annex I: Statement of revenue and expenditure for 1976 concerning research and investment activities.)

3. Your draftsman would like at the outset to make two general remarks:

(a) with complicated and technical proposals such as this, a document, resuming in layman's terms the main objectives of the programmes, should accompany the transmission of the programme;

(b) all the relevant financial information should be presented together and should accompany the original proposal. The present practice of transmitting information piecemeal, whilst perhaps acceptable during the period in which the departments of the Commission are for the first time implementing the internal directives from Mr Cheysson concerning financial schedules, makes the work of the draftsman more difficult.

The content of the programme

4. This biology programme is in two parts:

(i) a study in evaluation of risks associated with radiation (radiation protection programme) continuing the work of research leading to the establishment of basic radiation protection standards and adequate protection of workers and the general public, and the examination of the biological and ecological consequences of the use of nuclear energy

(1) PE 41.639/rev.
and ionizing radiation in order to ensure protection for the various aspects of the environment concerned;

(ii) development of nuclear techniques with a view to their application to agricultural research.

5. The Commission in its proposal explains the management and structure of the programme, whereby the proposed contracts are placed before the Advisory Committee on Programme Management, which gives an opinion and which is also free to examine programmes already in hand. The structure relies heavily on coordination and the free flow of information between partners. Furthermore the biology group at Ispra provides a major back-up service.

6. The Commission in its proposal provides first of all the opinion of the Advisory Committee on Programme Management and also of the Scientific and Technical Committee (CREST). Furthermore it lists the accomplishments of the present programme. It is clear that the major achievement has been the establishment of a degree of coordination in order to lead to the accurate formulation of Community objectives and to the orderly execution of such research. The Commission lists the scientific achievements and when your draftsman mentions that these include, for example, understanding the modes of transfer and factors of concentration of radio nuclides in the human food chain and the toxicology of certain ingested radioactive elements, the Committee on Budgets will understand that a detailed assessment should be left to the committee with basic competence in this field. However, what the Committee on Budgets will need to be satisfied about is whether or not the achievements have been such as to warrant a major expansion of the programme for the period ahead.

7. This latest programme is one in a series starting with the first biology programme of the Community in 1959. The escalation of Community expenditure can be seen in the following table:

<table>
<thead>
<tr>
<th>Period</th>
<th>Amount</th>
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<tr>
<td>1959 - 1962</td>
<td>3.1 million units of account</td>
</tr>
<tr>
<td>1963 - 1967</td>
<td>17.5 million units of account</td>
</tr>
<tr>
<td>1968, 1969, 1970</td>
<td>temporary extensions of the programme</td>
</tr>
<tr>
<td>1971 - 1975</td>
<td>24.7 million units of account</td>
</tr>
<tr>
<td>1976 - 1980</td>
<td>66.3 million units of account</td>
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The financial consequences of the Commission's proposals

8. The total expenditure involved for the next five-year period is 47.6 m.u.a. for the radiation protection programme (Community participation) and 18.7 m.u.a. for the agricultural research sector. The number of staff involved will be 73 Commission posts with 20 staff per annum for the JCR Ispra infrastructure for the radiation programme and 10 posts for the agricultural research programme. The Commission provides in its proposal an annual breakdown of foreseeable payment appropriations for the two aspects of the programme (see pages 18 and 26 of the Commission's proposal):

(m.u.a.)

1976-1981: radiation programme 6.8 8.4 9.8 10.6 11.4 0.6
agricultural research 2.27 3.28 3.99 4.28 4.53 0.37

This annual breakdown of figures is not accompanied by a justification.

9. Clearly what is important for the Committee on Budgets is the justification for the ceiling, and here the Commission provides certain reasons why the ceiling has been raised, namely (a) the need for a significant Commission presence in the common effort being made on radiation protection research, (b) the gradual integration of the new Member States, (c) the launching of some new activities, (d) a need to take into account some increase in costs; yet there is no attempt to quantify each of these factors.

Conclusions

Points of satisfaction to the Committee on Budgets

10. (a) The Committee on Budgets welcomes the fact that the proposal is accompanied by a financial statement. This follows faithfully the guidelines suggested on 31 May, 1974 by Mr Cheysson and gives the Committee on Budgets clear indications of the annual breakdown of appropriations, the objectives of the programme, the division between commitment and payment appropriations, and some idea of the method of calculation utilized — as well as the control procedures operating within the Commission;

(b) The information concerning staff requirements is clear and represents no further increase on those currently involved in the programme;

(c) Indeed, the general administrative expenditure remains slight compared with the overall volume of the programme: 13% on cost of management and coordination, including staff costs for the radiation protection programme.

1 See PE 37.914
protection programme, and only 2% under administrative expenditure for the second part of the programme concerning agricultural research. This means that the vast bulk of the funds will be devoted to the carrying out of research activities:

(d) The Commission is, in its financial statement, frank about the factors of uncertainty - particularly as a result of price trends, and indicates that a revision of the programme will be necessary in the third year. This will accompany a reappraisal of the operation and will be the subject of a report to be drawn up by 30 July 1977 which will then be submitted to the Council and to the European Parliament. Continued parliamentary involvement in the programme is hence assured.

Points where further clarification was sought during the discussions of the Committee on Budgets

11. (a) Further information was sought on the year by year breakdown of appropriations to help the Committee on Budgets in its assessment of the programme.

(b) Further explanation was sought on the rate of Community participation in the projects for the two sectors.

(c) Further justification was obtained for the considerable enlargement of the programme.

12. The Committee on Budgets states that expenditure arising from this programme, as from the preceding programme, is non-compulsory expenditure.

13. A favourable opinion on the programme is justified by the clarity of the information provided by the Commission, and the major progress that this represents in the assistance provided by the Commission for the parliamentary work of assessing the financial implications of Commission proposals.

14. The Council has taken a decision concerning the appropriations for this programme for the 1976 financial year which, while maintaining expenditure for personnel, simply makes token entries in chapters 3.30 and 3.31 of the draft budget. This rigorous application of Council's doctrine concerning budgetary appropriations and legislative decisions means that the programme will either be interrupted or abandoned. In the former case, there will have to be yet another Supplementary Budget for 1976.

15. The Committee on Budgets reiterates the protest that it has made already in connection with the programme on thermonuclear fusion and plasma physics: a protest to the Council against the dangerous habit of jeopardizing Community work in the field of research and development to which it does not seem to attach the priority that it deserves. No interruption in the programme should be necessitated through Council's procrastination.
At its meeting of 2 and 3 October 1975, the Committee on Agriculture appointed Mr Frehsee draftsman.

It considered the draft opinion at its meeting of 23 and 24 October 1975 and adopted it unanimously.

Present: Mr Houdet, chairman; Mr Laban, vice-chairman; Mr Frehsee, draftsman; Mr Bourdellès, Mrs Dunwoody, Mr Fabbrini (deputizing for Mr Cipolla), Mr Früh, Mr Gibbons, Mr Hansen, Mr Howell, Mr Hughes, Mr Kofoed, Mr Ligios, Mr McDonald, Mr Knud Nielsen (deputizing for Mr Espersen), Mrs Orth and Mr Scott-Hopkins.
1. The proposed programme follows on from its three predecessors which were introduced as long ago as 1960 with an initial research programme on biology and health protection. The current third programme expires on 31 December 1975. The Committee on Agriculture, as the committee asked for its opinion, is required to give its views on the section entitled 'Application of nuclear techniques to agricultural research'.

The legal basis for the programme is provided by Articles 4 and 7 of the Euratom Treaty in conjunction with Annex I(V)(c) to the treaty. These provisions state that 'the Commission shall be responsible for promoting ..... nuclear research ..... and (for) carrying out a Community research ..... programme, and that (Community) research ..... programmes shall be determined by the Council, acting ..... on a proposal from the Commission .....'. According to Annex I, the research mentioned in Article 4 includes, as far as nuclear energy is concerned, the agricultural sector.

2. The programme is designed to contribute to the further development of nuclear techniques with a view to their application to agricultural research. In this case, the programme relies on indirect action. Once the contracts have been concluded, the projects to be promoted will be implemented by national research establishments, the Community providing some of the financing.

The Commission feels that the projects carried out hitherto in this field in the Member States have sufficed to obtain convincing results for agriculture through the effective assessment of research findings. Consequently, the Commission intends not to expand the existing programme but rather to distribute research contracts among all interested Member States as even-handedly as possible.

3. As soon as the Commission's proposed programme has been adopted by the Council, the Member States can submit their programme projects to the Commission. The Programme Committee on Biology and Health Protection, the Standing Committee on Agronomic Research ¹ and, if necessary, scientific experts are consulted on these projects and consider them in detail. On the basis of the recommendations of these specialized committees, the Commission decides what research contracts to conclude. In addition to the Community's financial participation, which can amount to 40% of the total cost of a contract and thus have a decisive influence on the implementation of the research

¹ Set up by Regulation No. 1728/74 of 26 June 1974 on the coordination of agricultural research, OJ No. L 182 of 5 July 1974, p.1
contracts, it is also possible for the Commission to further increase its influence over individual projects by delegating its own scientists. Under the Council decision of 21 June 1971, ten posts were authorized for the agricultural applications programme. So far, four of these posts have been filled. In response to a number of requests by research institutes, however, this figure will soon be raised.

4. The basic question is to what extent such research projects could be implemented through direct action, i.e. in the Community's own research centres. Examination of this question reveals that the infrastructural costs involved, which would be borne exclusively by the Community, bear no relation to the objectives aimed at and that financial and, to a lesser extent, personal participation by the Community under a system of contracts with the national research establishments is much more productive.

   For a number of national research institutes whose work is partly financed by Community funds conclusion of these contracts naturally implies the financing of the jobs thus created. If the research programme is not adopted, many posts for scientific specialists and assistants would be jeopardized.

5. The second aim of the programme is, as already mentioned in the introduction, the development of nuclear techniques with a view to their application to agricultural research.

   The purpose of the proposed research projects is two-fold: to help to raise agricultural productivity and to contribute towards 'healthier living'.

   The first objective is thus based on the goal set forth in the charter of the common agricultural policy - Article 39 of the EEC Treaty - namely, increased agricultural productivity and hence higher agricultural incomes and a guarantee of supplies to consumers at reasonable prices.

   The second objective concerns the constant demand for a better quality of life. These two complementary goals are welcomed by the Committee on Agriculture.

6. The proposed research projects aim at the following six objectives:

   - The improvement of crop species through induced mutagenesis. Through irradiation the most varied artificial mutations can be produced. The mutants thus produced are then used as initial material for further strains, according to the qualities desired.

   1 Three scientists are working at the Agricultural Research Institute in Wageningen (Netherlands) and another at a research institute at La Casaccia near Rome.
- Overall optimization of the yield and quality of products. The use of nuclear techniques is suited to experiments to increase yield, systematic selection of disease-resistant varieties, and the speeding up of improvements in the quality of products.

- The culture of plant cells and their assessment. Such research projects are playing an increasingly important role in the modern agricultural economy.

- The control of harmful insects by radiogenetic methods. Such methods have the advantage not only of dispensing with insecticides, which can be hazardous to human health, but also, in individual cases, of yielding much more effective results.\(^1\)

- The improvement of beef and veal production through the examination of certain physiological, nutritional and genetic procedures. The structural imbalance between milk, beef and veal production warrants in the long term increasing meat output.

- Food preservation by means of radiation treatment. There is no need to stress the importance to producers and consumers of preserving foodstuffs\(^2\) in our modern transport-based economy.

7. A final judgement on the importance of the proposed research projects to agriculture could only be given if a survey of all research projects in progress in the Community could be compared with a catalogue of all existing opportunities for applying nuclear techniques to agriculture and assessing their economic and technological consequences. However, this is not a task for a parliamentary committee. Your committee considers that the favourable opinions of the Programme Committee for Biology and Health Protection, the Scientific and Technical Committee and the Standing Committee on Agronomic Research provide a satisfactory and convincing assessment.

8. The European Parliament had already given its views in the Spring of 1973\(^3\), on a proposal for a regulation on the coordination of agricultural research. Your committee hopes that the present programme can be fitted into the framework of general agricultural research and coordinated with corresponding specific projects.

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\(^1\) See, for example, the control of the Mediterranean fruit fly.

\(^2\) In the Netherlands, for example, about 70% of Dutch mushroom production is preserved through irradiation with X-rays and gamma rays; further large-scale experiments on other products have also proved successful.

\(^3\) See report by Mr Vetrone (Doc. 329/72) and the plenary debate of 16 March 1973, OJ No. C 19 of 12 April 1973.
9. The Committee on Agriculture recommends the Committee on Public Health and the Environment, as the committee responsible, to give a favourable opinion. As, however, the funds needed for financing the programme are not included in the draft budget for 1976, your committee asks the committee responsible to urge their insertion in the motion for a resolution, so that a start can be made on 1 January 1976 under the new programme.
On 17 September 1975 the Committee on Energy, Research and Technology appointed Mr Lautenschlager draftsman.

It considered the draft opinion at its meeting of 29 September 1975 and adopted it unanimously.

Present: Mr Springorum, chairman; Mr Flamig, vice-chairman; Mr Lautenschlager, draftsman; Lord Bessborough, Mr Ellis, Mr Giraud, Mr Hamilton, Mrs Kruchow, Mr Normanton, Mr Osborn, Mr Schwabe (deputizing for Mr Rizzi) and Mrs Walz.
1. General

1. The document under consideration proposes an extension of a programme due to expire at the end of 1975. It is the fourth programme of its kind.

The major part of the programme is devoted to research on radiation protection, the remainder to the application of radiobiology to agriculture. The programme is for five years, i.e. up to the end of 1980.

2. Most of the work will be carried out in the laboratories of the Member States as indirect Community projects. Certain projects, however, will be carried out at the Ispra Joint Research Centre establishment, by a non-JRC Working Party on Biology.

The Commission is responsible for coordinating the programme projects carried out under contract at national level (indirect projects).

3. The Member States' contribution towards the implementation of the programme is approximately equal to that of the Community, whose expenditure is estimated at 66.5m u.a.

There are no plans for reviewing the programme during its period of operation.

2. Observations of the Committee on Energy, Research and Technology

4. Independently of this opinion, the committee is also preparing an own-initiative report on the conditions for reactivating direct Community research, i.e. in the Joint Research Centre. Given the close relationship that exists or should exist between direct and indirect projects, we naturally bore in mind, in the drafting of the present opinion, the observations already made by the committee and the guidelines to be submitted to the European Parliament within the framework of the above-mentioned report.

5. It should be noted that the programme and budgetary funds of the Joint Research Centre are limited and will continue to be so. In view of the general attitude prevailing in the Council, based on the difficult budgetary situation of most of the Member States, it is to be expected that they will want to cut down the requested 66.5m u.a. and enter part of it in Chapter 98 of the Budget, from which release is subject to the approval of the Council in each individual case.

To this we must object in advance in the interests of successful research. Otherwise, it would only be theoretically possible to transfer projects which, for lack of funds could not be implemented under the indirect procedure, to the various establishments of the Joint Research
Centre, subject to available funds and personnel. This would mean that research workers would have to be employed on projects which did not correspond to their specific training and assignment. Our committee has always been opposed to this.

6. We must however insist on various general requirements in respect of research projects being taken into consideration:

   (a) research programmes in which the Joint Research Centre is engaged must be part and parcel of an overall plan for European research. There must be precise coordination by the Commission between direct and indirect projects; or, in more practical terms, between the Joint Research Centre and Directorate-General XII.

   (b) In view of the steadily increasing volume of research data, research programmes must be adaptable to changing conditions or unexpected research findings. Such a programme must therefore be subject to review during its period of operation.

   (c) The programme proposals must contain measures of a Community character, be of general value and support the activities of the Community. They should also advance existing nuclear research.

3. Assessment of the proposed programme

7. The object of the proposed programme is to define Community measures in the field of radiation protection and exploit nuclear-based techniques for the benefit of the agricultural sector.

   The programme is of general value since it serves to protect public health and could bring improvements in the quality of agricultural products generally used for consumption and processing.

   The programme supports Community activities within the context of both the EEC and the Euratom Treaties; it also increases the Community's nuclear research involvement.

   The objectives of the programme are therefore commendable from the point of view of a research committee.

   With regard to the procedure proposed for attaining the objectives our observations are as follows:

8. As we consider that indirect action is more likely to bring success than direct action in the sector under consideration, the proposed
involvement of the Ispra Biology Group should not be exceeded.

There must be considerable improvement of coordination between direct and indirect projects, i.e. between the Directorate-General for the Joint Research Centre and the Directorate-General for Research. There is good reason to believe that there is room for improvement here. This is the interpretation to be given to the Commission's statements in sections 2.4.4 and 3.4 of its proposal.

It should soon become clear whether the Advisory Committee on Programme Management in its present form will bring the best results in this connection.

9. For this reason alone, but also to allow for possible changes in circumstances or unexpected research results during the programme there must be a review provision. No such provision is made - this situation must be remedied.

4. Conclusions

10. For all the above reasons the Committee on Energy, Research and Technology submits the following considerations to the Committee on Public Health and the Environment:

(a) in respect of the motion for a resolution
the proposed programme should be approved in principle
- as long as the involvement of the Working Party on Biology at Ispra is not further increased,
- as long as the Council Decision includes a review clause to operate during the programme,

The Council should be called upon to not fully approve the requested allocation but also to make it freely available for each year of the programme, and not subject to later release of funds for individual items or sections as it will otherwise be impossible to attain the research objectives, which are in the general interest of the Community.

(b) in respect of the proposal for a Council decision:
add the following new Article 3:

'The Commission shall keep a continuous watch on the implementation of the programme to check the effectiveness of the coordination and to record changing circumstances or unexpected research results which may require adaptation of the programme. It shall submit a report to this effect to the Council and Parliament by 30 June 1977, in which it shall propose any adaptations to be made to the programme'.