

COMMISSION OF THE EUROPEAN COMMUNITIES

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COMMUNICATION FROM THE COMMISSION TO THE COUNCIL

New proposals concerning the revision of the multiannual research and training programme of the JRC and new activities for the PETTEN establishment.

COM(74) 2200 final.

COMMISSION
OF THE
EUROPEAN COMMUNITIES

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I. Preliminary Note

1. In the context of the review of JCR's multiannual research and training programme, as provided for by the Council in its Decisions of 14 May and 18 June 1973, the Commission submitted, in April 1974, a general proposal involving the reorientation of certain objectives, a reassessment of the programme funding and new activities for the Petten Establishment¹.

In view of an unexpectedly rapid evolution in economic circumstances and new requirements which had become apparent in the meantime (funds for the preparation of future programmes and to ensure the safety of Ispra installations), in July 1974 the Commission submitted several new proposals involving the reassessment of the total sums allocated².

2. When the Working Party on Atomic Questions examined the original proposal, it found two major problems: one was the new work to be allotted to the Petten Establishment, and the other was the financial reserve to be set up to enable the programme allocations to be increased.

¹Doc. COM(74)500 final of 3 April 1974 or R/1073/74 (ATO 58).

²Doc. COM(74)1114 final of 11 July 1974 or R/2038/74 (ATO 108).

An analysis of these major problems convinced the Group that it was quite fruitless to continue its examination of these proposals until the Commission had clarified and, where necessary, amended its proposals¹.

3. In consequence, the Permanent Representatives Committee agreed to postpone an examination of this file until some future meeting, and suggested to the Commission that it should prepare a statement of revenue and expenditure relating to research and investment activities in its preliminary draft budget for 1975, on the basis of the programme as decided upon in 1973².

4. An ad hoc solution on these lines was adopted for the budget for the financial year 1975, and the Council took advantage of this opportunity to stress the importance it attached to the Commission's submitting appropriate proposals with a minimum of delay, in particular concerning the problems raised by the financing of the programmes and the new activities for the Petten Establishment³.

5. The main cause of disagreement over the Commission's proposals was the fact that a favourable opinion from the General Advisory Committee on the activities proposed for the Petten Establishment had not been obtained in advance, nor were those activities approved by the national delegations.

¹Doc. R/1641/74 (ATO 82) of 20 June 1974.

²737th meeting of 18 July 1974.

³Explanatory memorandum regarding the 1975 draft budget - Doc. R/2471/74 (FIN 579) (ATO 131), of 26 September 1974.

For this reason the Director General of the JRC undertook, on 18 July 1974, to prepare new proposals before the end of the current year¹, to enable the Council to come to a decision before 1 April 1975.

II. New proposals by the Commission in the context of the programme review

1. General considerations

1.1 Taking into account earlier discussions with the Council's subsidiary bodies and further developments in the situation, the Commission is presenting a new file of proposals in four separate parts:

- (a) an economic reassessment of the allocations for each objective with the activities remaining unchanged, i.e., in accordance with the programmes adopted by the Council in 1973;
- (b) partial revision of some objectives, within the total financial allocations thus defined, i.e., a number of minor adjustments and some redirection involving no more than the redeployment of some of the staff;
- (c) additional activities for the Petten Establishment;
- (d) measures to facilitate the preparation of future programmes.

¹737th meeting of 18 July 1974.

1.2 The Commission stresses the high priority to be given to the definition of satisfactory new activities for Petten and to a reassessment of the total sum allocated. Nevertheless, from a formal standpoint the measures envisaged in paragraph 1.1 above necessitate appropriate modification to the programme decisions of 14 May and 18 June 1973: the decisions which the Council is asked to take will take effect as follows:

- (a) reassessment of the financial allocations 1 April 1975
- (b) partial revision 1 April 1975
- (c) new activities for Petten 1 January 1975
- (d) preparation of future programmes 1 April 1975

1.3 The corresponding proposals for Council decisions are contained in the Annex.

2. Reassessment of the allocations for the objectives of the multi-annual programme of the JRC with no change in activities

2.1 An average annual rate of increase of 6% was adopted for calculation of the multiannual programme allocations.

At that time (end 1972) this appeared adequate to cover the normally predictable increases in JRC running expenses. Moreover, no provision was made in the programme allocations for increases in the salaries of officials to be decided by the Council. The Commission had planned to incorporate the consequences of such decisions in the course of periodic programme reviews.

Provisional solutions to the problem of increased costs were adopted on the occasion of the establishment of the 1973 and 1974 budgets by the expedient of setting up reserve funds within total sum originally allocated. Since the credits remaining available for the last two years thus became totally inadequate, the Commission suggested regularizing the situation by setting up a general reserve extra to the programme¹.

2.2 However, by the time this proposal was considered by the Council, economic developments had rendered the working hypotheses invalid. At this stage, the Working Party on Atomic Questions saw no point in continuing its study².

¹Doc. COM(74)500 final of 3 April 1974, or R/1073/74 (ATO 58).

²Revised working document, drawn up as a result of the meeting of the Working Party on Atomic Questions of 12 June 1974 (without reference, dated 19 June 1974).

The Commission prepared specific new proposals¹ but the packed schedule left no time in which to consider them. Another ad hoc solution was therefore found for the adoption of the budget for the financial year 1975, which means that a decision, particularly on the financing of the programme, must be taken as quickly as possible, and in any case before 1 April 1975, so that this budget can be amended and the 1976 budget prepared normally.

2.3 Taking into account the preliminary discussions on this subject in the Council's subsidiary bodies and the existence or definition of the budgets for 1973, 1974 and 1975, the Commission proposes, as a stage in the review of the programme, that the total sum be increased with no change in activities in order to ensure that the programme can be carried out in full as regards both content and duration.

Details of the calculations and their justification are set out in Technical Annex I.

¹Doc. COM(74) 1114 final of 11 July 1974 or R/2038/74 (ATO 108).

3. Revision of certain objectives with unchanged funding

3.1 The original proposals of the Commission on this subject¹ were essentially technical in character, and concerned the following seven objectives:

- Waste processing and storage,
- Reactor safety,
- Remote sensing of the earth's resources,
- Training
- ISPRA-1 reactor,
- Thermonuclear fusion,
- Hydrogen production.

3.2 Examination of this part of the file by the Working Party of Atomic Questions revealed no major difficulties². However, one delegation refrained from defining its position on the proposals pending a satisfactory agreement on the new activities for the Petten Establishment.

Nevertheless, all or a majority of the other delegations declared themselves in favour of each of the seven points in question, with the exception of the "training" objective (on the grounds that it was not the best moment to extend or to give new impetus to those activities) and a few specific recommendations.

3.3 Consequently, taking into consideration the results of this technical study, and the fact that the planned adaptations continue to be necessary, if not urgent, the Commission has drawn up proposals, details of which appear in Technical Annex II.

¹Doc. COM(74) 500 final of 3 April 1974.

²Revised working paper, drawn up following the meeting of the Working Party on Atomic Questions held on 12 June 1974 (without reference, dated 19 June).

Their technical content remains basically the same as in the original file, with the exception of the "training" objective from which the idea of organizing summer courses has been dropped for the present.

As far as the presentation is concerned, the texts have been brought up to date to take into account developments in the work since they were first drafted.

Finally, the financial data have been rectified to agree with those resulting from the "reassessment of allocations to the various objectives". It should be noted that the total sum has not now been exceeded which was not the case with the original proposals; on the other hand, the changes in staff deployment remain the same.

The various elements of this revision will take effect on 1 April 1975.

3.4 It is envisaged that further proposals for readjustments amongst objectives, with the volume of activity and financial ceilings remaining unchanged will be introduced in the future, to take effect on 1 January 1976.

4. New activities for the Petten Establishment

4.1 On 5 February 1973, when approving the multiannual research programme of the JRC, the Council expressed the hope that the Commission would also submit to it suitable proposals for the Petten Establishment.

The proposals formulated by the Commission, and attached to the programme review proper included activities to assist the Commission, particularly in the administration of the Customs Union, and work on carbon chemistry and technology.

The reserved opinion of the General Advisory Committee on these proposals was confirmed by the views of the Council's subsidiary bodies^{1,2}.

4.2 Consequently, on 18 July 1974, the Director General of the JRC informed the Permanent Representatives Committee³ that his organization intended to formulate new proposals within a short time.

¹Doc. R/1641/74 (AWO 82) of 20 June 1974.

²Revised working document, drawn up following the meeting of the Working Party on Atomic Questions on 12 June 1974 (without reference, dated 19 June 1974).

³737th meeting of 18 July 1974.

The corresponding drafts prepared by the staff in September, were submitted to the General Advisory Committee for the first time on 23 September 1974. Two groups of experts were subsequently commissioned to study the research projects on "high temperature materials", and on standards and reference materials. On 7 November 1974, the General Advisory Committee confirmed the favourable view of the experts, and issued a positive opinion.

The Scientific and Technical Committee delivered a favourable opinion on the Programme for high temperature materials at its meeting on 18 December 1974.

4.3 On the basis of the recommendation in these opinions, the Commission finalized its proposals. The technical content of the proposals together with the experts' opinions appear in detail in Technical Annex III. The planned date for the start of the new activities is 1 January 1975.

5. Proposal concerning the preparation of future programmes

5.1 A small proportion of the JRC's activities is always devoted to preparations for the future.

To enable the Commission to provide reasoned grounds for its proposals and the Council to base its decisions on sound and verified data - prior to formal consultation of the various Committees set up - it appears necessary for the JRC to have available, in addition to the specific funds for the programmes in hand, a financial reserve of its own for surveys, consultations or preliminary studies to provide guidance for the definition of future programmes.

5.2 This idea, brought up as a side issue in the discussion of the Commission's initial proposals, was rejected by the Council's subsidiary bodies, mainly because the normal procedure of consulting the General Advisory Committee had not been followed.

5.3 When a draft on the subject was referred to it, the General Advisory Committee acknowledged that the request was justified, but left it to the JRC's Director General to formulate the precise terms.

It is planned to increase the funds for the "direction and coordination" objective for this purpose with effect from 1 April 1975. This activity is described in Technical Annex IV.

6. Proposal to set up an unallocated financial reserve to meet certain expenditure, especially in connection with personnel costs

This reserve, which would be added to the total funding for the programme, amounts to 5 million u.a. It appears necessary to provide this additional amount as a contingency to cover any financial implications resulting from the adoption of the new staff regulations for staff paid from research and investment appropriations and the consequences of certain Council Decisions regarding remuneration.

It is pointed out in this connection that, compared to the financial estimates on which the reassessment of the total sum for the programme was based, the Council Decision of 3 December 1974 on the adjustment of weightings and purchasing power makes it necessary to provide for additional expenditure. If the ~~rate~~ rate of adjustment noted by the Council were to continue in 1975 and 1976 the outcome could be an extra 3 million u.a.

7. Summary table

The following table shows opposite each objective the figures in terms of staff and allocations resulting from the initial Council Decisions and from the present review.

It should be noted that the effects of inflation (increase of 0.187 million u.a. in costs) on the European data processing network objective have not been included in the table; the relevant decision will be dealt with separately.

SUMMARY TABLE

O B J E C T I V E	Initial staff		New staff at end programme		Initial allocation	New allocation
	Total	First line	Total	First line		
1. JOINT PROGRAMME						
2.11 Waste processing and storage	75	40	61	32	6.900.000	6.911.000
2.12 Plutonium and transplutonium elements	126	63	126	63	13.000.000	15.861.000
2.13 Materials science	139	79	146	79	8.500.000	17.259.000
2.13 Basic research on materials	70	37	70	37	6.700.000	8.687.000
2.14 Hydrogen production	232	115	241	122	21.100.000	27.275.000
2.21 Reactor safety	51	31	50	31	6.050.000	7.323.000
2.22 Applied data processing	51	27	51	27	5.100.000	6.308.000
2.23 Information analysis office	170	92	170	92	20.350.000	24.028.000
2.24 Central Bureau for Nuclear Measurements	60	23	56	23	6.100.000	6.661.000
2.25 Technical assistance to power plant operators	15	10	15	10	1.450.000	1.779.000
2.26 Training	25	15	-	-	2.200.000	1.557.000
2.27 Use of Ispra-1 reactor	20	12	20	12	2.000.000	445.000
2.28 Technical assessments in support of Commission activities	7	4	7	4	1.000.000	1.000.000
2.30 European data processing network (COST II)	17	5	17	5	1.850.000	2.096.000
2.40 Research under contract	71	39	71	39	6.200.000	8.138.000
2.51 Standards and reference materials	172	93	174	93	15.850.000	19.314.000
2.52 Protection of the environment	10	4	19	8	1.050.000	2.109.000
2.53 Remote sensing of the earth's resources	30	15	33	15	3.050.000	3.494.000
2.54 New technologies	79	55	72	55	8.100.000	11.650.000
2.90 Direction and coordination	-	-	21	12	-	1.362.000
2.15 Thermonuclear fusion	-	-	20	10	-	1.399.000
2.60 Petten	-	-	50	34	-	3.987.000
2.61 High temperature materials						
2. COMPLEMENTARY PROGRAMME						
4.11 Plutonium and transplutonium elements	84	42	84	42	8.650.000	10.546.000
4.12 Supervision and management of fissile materials	57	27	57	27	5.400.000	6.561.000
4.13 HFR reactor	95	-	95	44	23.000.000	25.644.000
3. GENERAL RESERVE						
T O T A L	1.656	828	1.726	916	178.700.000	226.394.000
Biology Infrastructure	20	-	20	-		
Awaiting allocation	20	-	-	-		
T O T A L	1.696	828	1.746	916	178.700.000	226.394.000

ANNEX

PROPOSALS FOR COUNCIL DECISIONS

PROPOSAL FOR A COUNCIL DECISION

amending the Council Decisions of 14 May and 18 June 1973 adopting a
research and training programme for the
European Atomic Energy Community

The Council of the European Communities,

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

HAVING regard to the proposal from the Commission put forward after
consultation with the scientific and Technical Committee;

WHEREAS the Council adopted on 14 May¹ and 18 June² 1973 a research
and training programme for the European Atomic Energy Community;

WHEREAS Article 3 of the programme Decisions provide for the review of
this programme;

WHEREAS it therefore seems appropriate to review the above-mentioned
programme;

WHEREAS, in the context of the common policy on science and technology,
the multiannual research and training programme is one of the principal
means whereby the Community can contribute to the speedy establishment
and growth of nuclear industries and also to the acquisition and dissemination
of information in the nuclear field;

¹OJ No L 153, 9.6.1973, p.1

²OJ No L 189, 11.7.1973, p.36

HAS DECIDED AS FOLLOWS:

Article 1

The Annexes referred to in Article 1 of the Council Decisions of 14 May and 18 June shall, with effect from 1 April 1975, be replaced by the Annex to this Decision, of which it forms an integral part.

Article 2

The maximum expenditure commitment and staff necessary for implementing this programme shall be 181.953 million units of account and 1 352 staff for the duration of the programme.

The allocation of funds and staff, and the establishment of the scales of financial contributions from the Member States for supplementary programmes, are shown in Annexes II and III respectively.

The unit of account is defined in the Financial Regulation of 25 April 1973 applicable to the general budget of the European Communities.

Article 3

The programme defined in Annex I shall be subject to review at the beginning of 1976, in accordance with the appropriate procedures.

Article 4

Articles 2 and 3 of the Council Decisions of 14 May and 18 June 1973 are hereby repealed.

Done at

1975

For the Council
The President

ANNEX I

JOINT MULTI-ANNUAL RESEARCH AND TRAINING PROGRAMME
AND COMPLEMENTARY MULTI-ANNUAL PROGRAMMES

DIRECT ACTION

1. Waste processing and storage

Joint programme

A maximum of 6.911 million units of account shall be allocated to this objective, the number of staff being fixed at 61 (including a programme staff of 32).

The objective includes:

basic studies on the separation of fission products from irradiated fuel by the "Saltex" process;

studies and research on the chemical separation of actinides from high level radioactive waste;

physical measurements to determine the neutronic properties of actinides and studies to establish the optimum conditions for their consumption in reactors;

activities concerning the processing of low-level radioactive waste and instrumentation for alpha-emitters.

These activities will be conducted mainly by the ISPRA establishment.

2. Plutonium and Transplutonium elements

(a) Joint programme

A maximum of 15.861 million units of account shall be allocated to this objective, the number of staff being fixed at 126 (including a programme staff of 63).

The research constituting the programme based on plutonium and its compounds shall deal with the following:

phase diagrams, thermodynamic properties and structures of ceramic compounds of plutonium (carbides, nitrides and their combinations);

energy transport mechanisms (thermal conductivity and diffusibility);

mechanical properties of ceramic compounds in their microscopic aspects and the effect of irradiation on these properties;

processes and kinetics of material transport phenomena and the effect of irradiation thereon.

The irradiation required for these basic studies will take place in instrumented capsules.

In addition, certain studies will be carried out on determining the physical properties of certain very high purity actinides and their compounds.

(b) Complementary programme

A maximum of 10.546 million units of account shall be allocated to this objective, the number of staff being fixed at 84 (including a programme staff of 42). Research for the programme of applied studies will deal with the following:

the study of the behaviour of advanced fuels in a fast reactor;

the development of the manufacture of samples of materials of this kind for irradiation;

the analysis of irradiated materials and fuels in existing power plants;
work required by the projects.

These activities will be conducted at the European Institute for
Transuranium Elements in Karlsruhe.

3. Materials science

Joint programme

A maximum of 17.259 million units of account shall be allocated for this
objective, the number of staff being fixed at 146 (including a programme
staff of 79).

The objective shall include:

studies of lattice defects;

studies of surface reactions (particle/surface interaction);

studies of mechanical behaviour, fractures of metals and composite
materials (mechanical properties and structure, physical properties,
plastic deformation and fracture);

studies of the physical properties of materials at high temperatures
(solid and liquid).

studies of the effects of structural changes and crystalline imperfections
on the properties of materials;

studies of transport phenomena and structural behaviour in metals,
polymers and other materials.

These activities will be conducted by the Ispra Establishment.

4. Application of nuclear energy for purposes other than electricity generation (hydrogen production by decomposition of water on the basis of chemical cycles)

Joint programme

A maximum of 8.687 million units of account and a staff of 70 (including a programme staff of 37) shall be allocated to this project.

This objective shall include:

chemistry studies: thermodynamic calculations, monitoring of unknown reactions, measurements of the physical properties of the compounds used, study of the effect of impurities, etc.;

kinetics studies: calculation of reaction parameters (kinetics, yield etc.) and continuous simulation on laboratory scale of the various reactions and then complete cycles, again on laboratory scale;

studies of materials: corrosion tests, firstly for indicative evaluations and then for quantitative measurements on the required materials;

chemical engineering studies: preliminary definition of 'flowsheets', calculations for cycle optimization, studies of the problems of coupling chemical processes with reactors.

Initially, emphasis will be placed on defining the data required for evaluating the technical and economic potential of the process in cooperation with the circles involved.

These activities will be conducted by the Ispra Establishment.

5. Fusion

Joint Programme

A maximum of 1.362 million units of account shall be allocated to this objective, the staff being fixed at 21 (including a programme staff of 12). This objective shall consist in direct support for studies on thermonuclear fusion reactors being carried out by the "systems groups" within the "Fusion" associations.

This work will cover magnetic and inertial confinement systems and include feasibility studies and experiments relating for the most part to the nuclear problem in thermo-mechanics and the problem of the first wall, the cladding and the shielding of the magnet and design studies on the assembly, operation and impact on the environment of the reactor.

These activities will be conducted by the Ispra Establishment.

6. Reactor safety

Joint programme

An amount of 27.275 million units of account shall be allocated to this objective, the number of staff being fixed at 241 (including a programme staff of 122).

The objective shall include:

engineering research associated with serious accidents and their prevention;

research into accident-related thermohydraulic phenomena in coolants;

preventive failure detection;

reliability studies;

theoretical accident analysis;

These activities will be conducted by the Ispra establishment.

7. Applied data processing

Joint programme

A maximum of 7.323 million units of account shall be allocated to this objective, the number of staff being fixed at 50 (including a programme staff of 31).

The objective shall include:

computer program library activities for the Community (collection, testing and analysis of computer programs, consultation on their use);

studies of an integrated system of documentation and automatic translation;

methodological aids to computing (Caronte modular system, special programming language for experimental mathematics).

These activities will be conducted by the Ispra Establishment.

8. Information Analysis Office

Joint programme

A maximum of 6.308 million units of account shall be allocated to this objective, the number of staff being fixed at 51 (including a programme staff of 27).

The objective shall include: three units responsible for collecting, analysing and disseminating scientific and technical information in the following fields:

nuclear reactor shielding (ESIS);

integrate nuclear data (INDAC);

structural mechanics with application to reactor technology (ESMIS).

These activities will be conducted by the Ispra Establishment.

9. Central Bureau for Nuclear Measurements (CBNM)

Joint programme

A maximum of 24.028 million units of account shall be allocated to this objective, the number of staff being fixed at 170 (including a programme staff of 92).

The objective shall include:

determination of basic neutron data;

continuation of work on nuclear metrology (measurements of radioactive elements, measurements of the isotopic composition of elements by mass spectrometry, calibration and standardization of dosimetric methods);

the preparation and definition of nuclear reference samples and materials.

These activities will be the task of the Central Bureau for Nuclear Measurements at Geel.

10. Technical assistance to nuclear power plant operators

Joint programme

A maximum of 6.661 million units of account shall be allocated for this objective, the number of staff being fixed at 56 (including a programme staff of 23).

The objective is to consist of technical support in the following fields:

water chemistry;

in-pile inspection and intervention;

post-irradiation examination of fuel elements;

quality assurance methods for power plant materials and components,
establishment of reference techniques, training of operators' staff.

These activities will be undertaken by the Ispra Establishment.

11. Training

Joint programme

A maximum of 1.779 million units of account shall be allocated for this objective, the number of staff being fixed at 15 (including a programme staff of 10).

This objective includes courses at three levels: technical, post-graduate or advanced and specialized.

12. Transfer of ISPRA-I activities

Joint programme

A maximum of 1.557 million units of account shall be allocated to this objective, the number of staff being fixed at 8 (including a programme staff of 5) in 1975.

The programme comprises:

- (1) the closing-down of the reactor;
- (2) the transfer of the Euracos converter to the Pavia reactor;
- (3) the construction of a pneumatic irradiation facility, the installation thereof in the Essor reactor and the operation thereof.

The closing-down and transfer operations will be spread over six months; the programme staff will be reduced to zero at the end of 1975.

13. Technical assessments in support of Commission activities

Joint programme

A maximum of 0.445 million units of account, and a staff of 20 (including a programme staff of 12) shall be allocated to this objective.

The objective shall include:

public service activities using systems analysis techniques: collection and analysis of data, preparation of models, development of methods of calculation and codes for computers, studies of the results;

forward studies of the foreseeable development of electronic components required for building computers and their peripheral equipment.

These activities will be conducted by the Ispra Establishment in cooperation with the relevant Directorates General.

14. Research under contract

Joint programme

A maximum of 2.096 million units of account shall be allocated for this objective, the number of staff being fixed at 17 men per year (including a programme staff of 5 men per year).

This objective is intended to help make facilities or techniques available to outsiders against payment.

The staff carrying out these activities will be assigned to the Ispra Establishment.

15. Direction and coordination

Joint programme

A maximum of 11.650 million units of account shall be allocated for these activities, the number of staff being fixed at 72 (55 of these being for the management itself).

This item covers the activities of the Directorate-General, coordination and management of the Joint Research Centre programmes, some investments of a general nature and certain programming activities.

16. Supervision and management of fissile materials

Complementary programme

A maximum of 6.561 million units of account shall be allocated for this objective, the number of staff being fixed at 57 (including a programme staff of 27).

This objective includes:

systems analysis;

development of destructive and non-destructive methods;

study of tamperproof sealing and identification techniques.

These activities will be carried out mainly by the Ispra Establishment, in cooperation with establishments in the Member States.

17. Operation of the HFR reactor

Complementary programme

A maximum of 25.644 million units of account shall be allocated for this objective, the number of staff being fixed at 95.

It covers operation of the reactor and the design, execution and supervision of experiments for the benefit of the participating States' programmes. Surplus capacity may be made available to outsiders against payment.

This objective will be carried out at the Petten Establishment.

ANNEX IITABLE OF STAFF AND MAXIMUM EXPENDITURE

Objectives	Joint programme		Supplementary programme			Total (in millions of u.a.)	Total Staff
	Amount (in millions of u.a.)	Staff	Amount (in millions of u.a.)	Staff	Participating countries		
<u>DIRECT ACTION (JRC)</u>							
<u>Nuclear projects</u>							
Waste processing and storage	6.9111	61				6.911	61
Plutonium and transplutonium elements	15.861	126	10.546	84	(B/A/F/ (L/N/ (Irl/D/ (R-U	26.407	210
Materials science	17.259	146				17.259	146
Hydrogen production	8.687	70				8.687	70
Fusion	1.362	21				1.362	21
Reactor safety	27.275	241				27.275	241
Applied data processing	7.323	50				7.323	50
Information Analysis Office	6.308	51				6.308	51
Central Bureau for Nuclear Measurements (CBNM)	24.028	170				24.028	170
Technical assistance to nuclear power plant operators	6.661	56				6.661	56
Training	1.779	15				1.779	15
Transfer of the activities of the Ispra-I reactor	1.557	-				1.557	-
Technical assessments in support of Commission activities	0.445	20				0.445	20
Research under contract	2.096	17				2.096	17
Management and coordination	11.650	72				11.650	72
Supervision and management of fissile materials			6.561	57	(B/A/I/ (L/N/ (Irl/D/ (R-U	6.561	57
Operation of the HFR reactor			25.644	95	A/N	25.644	95
Total	139.202	1 116	42.751	236		181.953	1 352

ANNEX III

DEFINITION OF THE SCALES FOR FINANCIAL CONTRIBUTIONS FROM MEMBER STATES FOR THE EURATOM SUPPLEMENTARY RESEARCH AND INVESTMENT PROGRAMMES

1. Scales based on 'relative shares'

- Plutonium and transplutonium elements
 - Supervision and management of fissile materials
- The scale applied corresponds, for each financial year, to the scale resulting from the 'relative shares' for the year concerned, the 'relative share' of the participating Member States being increased in proportion to the 'relative share' of the Member State (or States) which does (or do) not participate in the programme in question, except that for the new Member States the reduction coefficients provided for in Article 130 of the Accession Treaty are to be applied

11. Flat-rate scale

- Petten (HFR)

Germany	100%
Netherlands	

PROPOSAL FOR A
COUNCIL DECISION

adopting a research and training programme for the European Atomic Energy
Community on high temperature materials

The Council of the European Communities,

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

HAVING regard to the proposal from the Commission, submitted after consultation with the Scientific and Technical Committee;

WHEREAS the Council adopted on 14 May¹ and 18 June² 1973 a research and training programme for the European Atomic Energy Community;

WHEREAS, it must be supplemented by a research programme on high temperature materials;

WHEREAS in the context of the common policy in science and technology the multiannual research and training programme is one of the principal means whereby the Community can contribute to the speedy establishment and growth of nuclear industries and also to the acquisition and dissemination of information in the nuclear field;

¹OJ No L 153, 9.6.1973, p. 1.

²OJ No L 189, 11.7.1973, p. 36.

HAS DECIDED AS FOLLOWS:

Article 1

A research and training programme as set out in the Annex is hereby adopted for a period of two years from 1 January 1975. The Annex shall form an integral part of this Decision.

Article 2

The maximum expenditure commitment and staff for implementing this programme shall be 3.987 million units of account and 50 staff for the duration of the programme.

The unit of account is defined in Article 10 of the Financial Regulation of 25 April 1973¹ applicable to the general budget of the European Communities.

Article 3

The programme set out in the Annex shall be subject to review at the beginning of 1976 in accordance with the appropriate procedures.

Done at

1975

For the Council
The President

¹OJ No L 116, 1.5.1973, p. 1.

ANNEX
DIRECT ACTION
NUCLEAR PROJECT
HIGH-TEMPERATURE MATERIALS

Joint programme

A maximum of 3.987 million units of account, and a staff of 50 (including a programme staff of 34), shall be allocated to this objective.

This objective includes investigation and secretariat activities, basic research on refractory materials, applied research on materials for industrial applications at high temperatures, especially for the manufacture of circuit and heat exchanger components for new applications of high-temperature nuclear heat.

These activities will be conducted by the Petten Establishment.

PROPOSAL FOR A
COUNCIL DECISION

amending the Council Decision of 14 May 1973 adopting a research and training programme on the remote sensing of earth resources

The Council of the European Communities;

HAVING regard to the Treaty establishing the European Economic Community, and in particular Articles 41 and 235 thereof;

HAVING regard to the proposal from the Commission;

HAVING regard to the Opinion of the European Parliament;

WHEREAS the Council adopted on 14 May 1973¹ as provided for in Article 235 of the Treaty establishing the European Economic Community, a research programme for the European Economic Community on the remote-sensing of earth resources;

WHEREAS Article 4 of the programme decision provides for a review of this programme;

WHEREAS it therefore seems appropriate to review the above-mentioned programme;

HAS DECIDED AS FOLLOWS:

¹OJ No L 153, 9.6.1973, p. 13.

Article 1

The Annex referred to in Article 1 of the Council Decision of 14 May 1973 shall with effect from 1 April 1975, be replaced by the Annex to this Decision, of which it forms an integral part.

Article 2

Article 2 shall be replaced by the following:

"The maximum expenditure commitments and the staff necessary for the implementation of this revised programme shall be 2.109 million units of account and 19 staff, the unit of account being defined in Article 10 of the Financial Regulation of 25 April 1973 applicable to the general budget of the European Communities."

Article 3

Article 4 shall be replaced by the following:

"The programme defined in the Annex shall be subject to review at the beginning of 1976 in accordance with the appropriate procedures."

Done at

1975

For the Council
The President

ANNEX

DIRECT ACTION

NON-NUCLEAR PROJECTS

REMOTE SENSING OF THE EARTH'S RESOURCES

Joint programme

A maximum amount of 2.109 million units of account shall be allocated to this objective and the number of staff shall be fixed at 19 (including a programme staff of 8).

The objective shall comprise direct support for the departments of the Commission. A pilot experiment on irrigated fields and different types of forest shall be carried out with a view to establishing a technique enabling production inventories and assessments to be made on the basis of aerial and spatial observations.

These activities will be carried out by the Ispra Establishment in conjunction with the Directorates-General concerned.

PROPOSAL FOR A
COUNCIL DECISION

amending the Council Decisions of 14 May and 18 June 1973 adopting a programme for the European Economic Community on the protection of the environment

The Council of the European Communities,

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

HAVING regard to the proposal from the Commission;

HAVING regard to the Opinion of the European Parliament;

WHEREAS the Council adopted on 14 May¹ and 18 June² 1973, as provided for in Article 235 of the Treaty establishing the European Economic Community, a research programme for the European Economic Community on the protection of the environment;

WHEREAS Article 4 of the programme decisions provides for a review of the research and training programme;

WHEREAS it therefore seems appropriate to review the above-mentioned programme;

¹OJ No L 153, 9.6.1973, p. 11.

²OJ No L 189, 11.7.1973, p. 30.

HAS DECIDED AS FOLLOWS:

Article 1

The Annexes referred to in Article 1 of the Council Decisions of 14 May and 18 June 1973 shall, with effect from 1 April 1975, be replaced by the Annex to this Decision, of which it forms an integral part.

Article 2

The maximum expenditure commitment and the staff required for the implementation of this programme shall be 19.314 million units of account and 174 staff, the unit of account being defined in Article 10 of the Financial Regulation of 25 April 1973¹ applicable to the general budget of the European Communities.

Article 3

The programme defined in the Annex shall be subject to review at the beginning of 1976, in accordance with the appropriate procedures.

Article 4

Articles 2 and 4 of the Council Decisions of 14 May and 18 June 1973 are repealed with effect from 1 April 1975.

Done at

1975

For the Council
The President

¹OJ No L 116, 1.5.1973, p. 1.

ANNEX

DIRECT ACTION

NON-NUCLEAR PROJECTS

PROTECTION OF THE ENVIRONMENT

Joint programme

A maximum amount of 19.314 million units of account shall be allocated to this objective and the number of staff shall be fixed at 174 (including a programme staff of 93).

The objective shall be:

analysis and supervision (particularly the development of a multidetection unit; studies on the remote sensing and measurement of pollutants; creation of a data bank for chemicals);

transport and effect of pollutants (in particular studies of bio-indicators for water pollution, of genetic toxicity and of the bio-telemetric monitoring of subacute toxic effects on laboratory animals);

model and systems analysis relating to the process of eutrophication in an alpine lake and to atmospheric pollution;

theoretical studies on thermal pollution and the purification of water by means of catalytic oxidation;

optimization of the operation of the data bank on chemical products in the environment;

definition of environment compatibility criteria for new industrial products (environment 'label', evaluation and technical tests);

study of the thermal balance in an urban system.

These activities will be carried out by the Ispra Establishment.

PROPOSAL FOR A
COUNCIL DECISION

amending the Council Decisions of 14 May and 18 June 1973 adopting a research programme for the European Economic Community in the field of standards and reference materials (certified reference materials)

The Council of the European Communities;

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

HAVING regard to the proposal from the Commission;

HAVING regard to the Opinion of the European Parliament;

WHEREAS the Council adopted on 14 May¹ and 18 June² 1973, as provided for in Article 235 of the Treaty establishing the European Economic Community, a research programme for the European Economic Community in the field of standards and reference substances;

WHEREAS Article 4 of the programme decisions provided for the review of the research and training programme;

WHEREAS it therefore seems appropriate to review the above-mentioned programme;

¹OJ No L 153, 9.6.1973, p. 9.

²OJ No L 189, 11.7.1973, p. 32.

HAS DECIDED AS FOLLOWS:

Article 1

The Annexes referred to in Article 1 of the Council Decisions of 14 May and 18 June 1973 shall, with effect from 1 April 1975, be replaced by the Annex to this Decision, which forms an integral part of it.

Article 2

The maximum expenditure commitment and staff necessary for the implementation of this programme shall be 2.138 million units of account, and 71 staff, the unit of account being defined in Article 10 of the Financial Regulation of 25 April 1973¹ applicable to the general budget of the European Communities.

Article 3

The programme defined in the Annex shall be subject to review at the beginning of 1976, in accordance with the appropriate procedures.

Article 4

Articles 2 and 4 of the Council Decisions of 14 May and 18 June 1973 are repealed with effect from 1 April 1975.

Done at

1975

For the Council

The President

¹OJ No L 116, 1.5.1973, p. 1.

ANNEX

DIRECT ACTION
NON-NUCLEAR PROJECTS

STANDARDS AND REFERENCE MATERIALS
(certified reference materials)

Joint programme

A maximum of 8.138 million units of account shall be allocated to this objective, the number of staff being fixed at 71 (including a programme staff of 39).

The objective shall include:

technical assistance to the project secretariat: inquiry into the needs of and situation in the Community in this field, dissemination of information and processing of data;

experimental work (chemical analysis, physical and technological properties of reference substances) in laboratories participating in the project;

technical assistance to the Commission's departments (elimination of technical obstacles, Common Customs Tariff, etc).

technical assistance for Community projects connected with the elimination of technical barriers and the administration of the Common Customs Tariff;

experimental work on reference materials and methods (physical and technological properties).

The experimental work will be carried out, for the time being, by the Ispra Establishment.

PROPOSAL FOR A
COUNCIL DECISION

adopting a research programme for the European Economic Community in the field of standards and reference materials (certified reference materials)

The Council of the European Communities,

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

HAVING regard to the Proposal from the Commission;

HAVING regard to the Opinion of the European Parliament;

WHEREAS the Council adopted on 14 May¹ and 18 June² 1973, as provided for in Article 235 of the Treaty establishing the European Economic Community, a research programme for the European Economic Community in the field of standards and reference substances;

WHEREAS it is necessary to supplement it by a research programme on organic products;

WHEREAS, pursuant to Article 3(a) and (h) of the Treaty establishing the European Economic Community, the activities of the Community shall include

¹OJ No L 153, 9.6.1973, p. 9.

²OJ No L 189, 11.7.1973, p. 3.

especially the elimination, as between the Member States, of quantitative restrictions on the import and export of goods and of all other measures having equivalent effect, together with the approximation of the laws of the Member States to the extent required for the proper functioning of the common market;

Whereas the research projects which are the subject of this Decision are likely to make an effective contribution to the achievement of these objectives;

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

HAS DECIDED AS FOLLOWS:

Article 1

A research programme for the European Economic Community in respect of standards and reference materials (certified reference materials) as set out in the Annex to this Decision is hereby adopted for a period of two years beginning on 1 January 1975. The Annex forms an integral part of this Decision.

Article 2

The maximum expenditure commitment and the staff necessary for the implementation of this programme shall be 1.399 million units of account, and 20 staff, the unit of account being defined in Article 10 of the Financial Regulation of 25 April 1973¹ applicable to the general budget of the European Communities.

¹OJ No L 116, 1.5.1973, p. 1.

Article 3

The Commission shall be responsible for the implementation of this programme and, to that end, shall avail itself of the facilities of the Joint Research Centre. It shall submit an annual report to the Council on the subject.

Article 4

The programme defined in the Annex shall be subject to review at the beginning of 1976 in accordance with the appropriate procedures.

Article 5

The dissemination of information resulting from the programme defined in the Annex shall be governed by Council Regulation No 2380/74 of 17 September 1974¹, adopting provisions for the dissemination of information relating to research programmes for the European Economic Community.

Done at

1975

For the Council
The President

¹ OJ No L 255, 20.9.1974, p. 1.

ANNEX

DIRECT ACTION

NON-NUCLEAR PROJECTS

STANDARDS AND REFERENCE MATERIALS

(certified reference materials)

Joint programme

A maximum of 1.399 million units of account shall be allocated to this objective, the number of staff being fixed at 20 (including a programme staff of 10).

The objective shall include:

technical assistance to the project secretariat in the organic products sector;

experimental work (organic analysis) in the laboratories participating in the project;

technical assistance to the Commission's departments (elimination of technical obstacles, Common Customs Tariff);

experimental work on reference materials and methods in the organic products sector.

The experimental work will be carried out by the Petten establishment.

PROPOSAL FOR A
COUNCIL DIRECTIVE

amending the Council Decision of 18 June 1973 adopting a research and training programme on new technologies (use of solar energy and recycling of raw materials

The Council of the European Communities;

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

HAVING regard to the proposal from the Commission;

HAVING regard to the Opinion of the European Parliament;

WHEREAS the Council adopted on 18 June 1973¹, as provided for in Article 235 of the Treaty establishing the European Economic Community, a research and training programme for the European Economic Community on new technologies;

WHEREAS Article 4 of the programme decision provides for the review of this programme;

WHEREAS it therefore seems appropriate to review the above-mentioned programme;

HAS DECIDED AS FOLLOWS:

¹OJ No L 189, 11.7.1973, p. 36.

Article 1

The Annex referred to in Article 1 of the Council Decision of 18 June 1973 shall, with effect from 1 April 1975, be replaced by the Annex to this Decision, of which it forms an integral part.

Article 2

Article 2 shall be replaced by the following:

"The maximum expenditure and the staff required for implementing this programme shall be 3.494 million units of account and 33 staff; the unit of account is defined in the Financial Regulation on the establishment and implementation of the budget of the European Communities and the responsibility of authorizing and accounting officers."

Article 3

Article 3 shall be replaced by the following:

"The programme defined in the Annex shall be subject to review at the beginning of 1976, in accordance with the appropriate procedures."

Done at

1975

For the Council
The President

ANNEX

DIRECT ACTION
NON-NUCLEAR PROJECTS

NEW TECHNOLOGIES

(Use of solar energy and recycling of raw materials)

Joint programme

A maximum of 3.494 million units of account, and a staff of 33 (including a programme staff of 15), shall be allocated to this objective.

The initial phase will be devoted to the preparation of a detailed programme. The objective shall include:

Use of solar energy

bibliographical research and technical and economic evaluation of the various concepts for the collection and storage of solar energy;

studies and measurements in the field of heat pipes and selective surfaces;

technico-economic and feasibility studies of self-contained units of 1 to 10 kW;

studies and assessments on photolysis and thermodissociation of water, and biological conversion.

Recycling of raw materials

general study of strategies (statistical studies of long-term trends, studies of the materials utilization cycle);

special studies on technical and/or technico-economic evaluations concerning:

- the pyrolysis of plastics;
- the separation of strongly-bound alloy waste;
- other subjects which might arise during the general studies.

These activities will be conducted by the Ispra Establishment.

Proposal for a
COUNCIL DECISION

amending the financial ceilings applicable to research programmes of the European Atomic Energy Community and European Economic Community adopted by the Decisions of

The Council of the European Communities,

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

HAVING regard to the Treaty establishing the European Economic Community and in particular Article 235 thereof;

HAVING regard to the proposal from the Commission which consulted the Scientific and Technical Committee;

HAVING regard to the Opinion of the European Parliament;

Whereas under Article 176 of the Treaty establishing the EAEC, the Council decision adopting the research and investment programme represents the limit to the allocations for research and investment expenditure;

Whereas Decisions (Nos.....) adopted by the Council on 1975 set the maximum expenditure commitments for each of these programmes;

Whereas in order to meet the extra costs likely to be incurred during the 1975 and 1976 financial years as a result of the adoption of new staff regulations for staff paid from research and investment appropriations and the increase in wage and salary costs, a reserve fund should be provided for in the budget;

HAD DECIDED AS FOLLOWS:

Sole Article

Irrespective of the maximum expenditure commitments in Council Decisions No of, the inclusion of a total financial reserve of 5 million u.s. in the budget for the 1975 and 1976 financial years is hereby authorized.

Each year, the budget shall allocate this reserve to the various objectives of the multiannual programme.

Done at

For the Council
The President