II

(Acts whose publication is not obligatory)

## COUNCIL

#### COUNCIL DECISION

of 13 March 1980

adopting a research programme to be implemented by the Joint Research Centre for the European Atomic Energy Community and for the European Economic Community (1980 to 1983)

(80/317/EEC, Euratom)

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 (1) presented after consultation, with regard to nuclear projects, of the Scientific and Technical Committee,

Having regard to the opinion of the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee (3),

Whereas, in the context of the common policy relating to the field of science and technology, the multiannual research programme is one of the principal means whereby the European Atomic Energy Community can contribute to the safety and development of nuclear energy and to the acquisition and the dissemination of information in the nuclear field;

Whereas Article 2 of the Treaty establishing the European Economic Community assigns to the Community inter alia the task of promoting throughout the

(1) OJ No C 110, 3. 5. 1979, p. 4.

Community a harmonious development of economic activities, a continuous and balanced expansion and an increase in stability; whereas the objectives pursued by the Community's activities to this end are set out in Article 3 of the said Treaty;

Whereas the non-nuclear projects provided for by this Decision appear necessary for the attainment of these objectives;

Whereas the Treaty establishing the European Economic Community has not provided the specific powers required for this purpose;

Whereas on 14 January 1974 the Council adopted a resolution concerning the coordination of national policies and the definition of Community actions in the field of science and technology (4);

Whereas the programme was drawn up in accordance with the Council resolution of 17 December 1970 concerning the procedures for adopting research and training programmes (5);

Whereas the Italian Government has undertaken to take over until 31 December 1980 the Essor complex, made available to it by the Commission, within the meaning of Article 6 (c) of the Treaty establishing the European Atomic Energy Community;

Whereas it is in the common interest to further experiments in reactor safety, and the Essor plant may be utilized to this end;

<sup>(</sup>²) OJ No C 140, 5. 6. 1979, p. 83. (3) OJ No C 297, 28. 11. 1979, p. 9.

<sup>(4)</sup> OJ No C 7, 29. 1. 1974, p. 2.

<sup>(5)</sup> OJ No L 16, 20. 1. 1971, p. 13.

Whereas Article 3 of Decision 77/488/EEC, Euratom (1) provides for a review of the programme during its third year which may lead to the adoption of a new four-year programme (1980 to 1983) with 1980 constituting a year common to both programmes; whereas Decision 77/488/EEC, Euratom, should therefore be repealed;

Whereas, as a result of such repeal, 100 million European units of account assigned to the preceding programme will remain available; whereas this amount should be assigned to the new programme; whereas such a step must be taken into account in determining the level of expenditure commitments necessary for the execution of the new programme,

#### HAS DECIDED AS FOLLOWS:

#### Article 1

A research programme, as presented in Annexes A, B and C, is hereby adopted for a period of four years, as from 1 January 1980.

#### Article 2

The total expenditure commitments necessary to implement the programme defined in Annex A and the maximum number of staff are fixed at 510·87 million European units of account, including the amounts referred to in the second paragraph of Article 6, and 2 260 respectively. The indicative breakdown of funds and staff is given in Annex B. A scale of financial contributions from the Member States for the supplementary research and training programme of the European Atomic Energy Community is set out in Annex C.

The European unit of account shall be that defined in Article 10 of the Financial Regulation of 21 December 1977 applicable to the general budget of the European Communities (2).

#### Article 3

The programme shall be reviewed during its third year. Such review may lead to a Council Decision on a new four-year programme in accordance with the appropriate procedure.

#### Article 4

The dissemination of the information resulting from the implementation of the non-nuclear parts of the programme shall be carried out in accordance with Council Regulation (EEC) No 2380/74 of 17 September 1974 adopting provisions for the dissemination of information relating to research programmes for the European Economic Community (3).

## Article 5

The Commission shall be responsible for implementation of the programme and, to this end, shall call upon the services of the Joint Research Centre.

#### Article 6

Decision 77/488/EEC, Euratom, is hereby repealed with effect from 1 January 1980.

However, amounts which are authorized pursuant to the aforementioned Decision under the relevant headings in the 1977, 1978, 1979 and 1980 budgets, and which on 1 January 1980 have not yet been committed or which have been committed but not yet paid, may be used for the execution of the present programme.

Done at Brussels, 13 March 1980.

For the Council

The President

G. ZAMBERLETTI

<sup>(1)</sup> OJ No L 200, 8. 8. 1977, p. 4. (2) OJ No L 356, 31. 12. 1977, p. 1.

#### ANNEX A

#### RESEARCH PROGRAMME (1980 to 1983)

#### A. NUCLEAR SAFETY AND THE FUEL CYCLE (JOINT PROGRAMME)

## A.1. Reactor safety (nuclear activity)

The programme consists of the following 11 projects:

- project LOBI: study of loss of coolant accidents in light-water reactors,
- project Super-SARA: an in-pile experiment on the behaviour of light-water reactor fuel in the event of loss of coolant,
- project LWR primary circuit integrity: early detection of faults in light-water reactor vessels,
- fast-breeder fuel sub-assembly thermohydraulics,
- mechanical tests of fast-breeder structural materials,
- development of fast-breeder hypothetical accident codes,
- project PAHR: study of the evacuation of residual heat in a fast-breeder molten core,
- project PAHR in-pile,
- study of fuel-coolant interaction under accident conditions,
- study of the behaviour of structures and containments subjected to accidental stresses,
- analysis of reliability, risk assessment and data bank.

#### A.2. Plutonium fuels and actinide research (nuclear activity)

The programme consists of the following three projects:

- utilization limits of plutonium fuels,
- safety of actinide cycle,
- actinide research.

## A.3. Safety of nuclear materials (nuclear activity)

The programme consists of the following four projects:

- risk evaluation,
- protective barriers,
- actinide separation,
- actinide monitoring.

#### A.4. Fissile materials control and management (nuclear activity)

The programme consists of the following four projects:

- acquisition of data on accountancy and materials balance evaluation,
- development of measurement methods and instrumentation and of methods for the evaluation of the isotopic composition of irradiated fuels,
- containment and surveillance techniques,
- study of safeguards systems for the fuel cycle as a whole.

## B. NEW ENERGIES (JOINT PROGRAMME)

## B.1. Solar energy (non-nuclear activity)

The programme consists of the following four projects:

- European solar test installation (ESTI),
- solar energy for habitat and low-temperature applications,
- solar power plant materials,
- photo-electrochemical and photo-chemical conversion.

#### B.2. Hydrogen production, energy storage and transport (non-nuclear activity)

The programme consists of the following three projects:

- thermochemical production of hydrogen,
- advanced studies on energy carriers,
- systems studies.

### B.3. Thermonuclear fusion technology (nuclear activity)

The programme consists of the following five projects:

- conceptual studies on fusion reactors,
- blanket technology studies,
- studies on structural materials,
- studies on advanced materials,
- operation of the cyclotron.

## B.4. High-temperature materials (nuclear activity)

The programme consists of the following three projects:

- high-temperature materials information centre,
- materials and engineering studies,
- high-temperature materials data bank.

## C. STUDY AND PROTECTION OF THE ENVIRONMENT (JOINT PROGRAMME)

#### C.1. Protection of the environment (non-nuclear activity)

The programme consists of the following six projects:

- project Ecdin,
- exposure to chemical products, in particular indoor pollution and organic substances,
- analysis of air quality,
- analysis of water quality,
- heavy metals pollution and health effects,
- environmental impact of conventional power plants.

## C.2. Remote sensing from space (non-nuclear activity)

The programme consists of the following two projects:

- agriculture,
- protection of the sea.

#### D. NUCLEAR MEASUREMENTS (JOINT PROGRAMME)

## D.1. Nuclear measurements (nuclear activity)

The programme consists of the following two projects:

- measurement of nuclear data,
- nuclear reference materials and techniques.

## E. SPECIFIC SUPPORT FOR THE COMMISSION'S SECTORAL ACTIVITIES (JOINT PROGRAMME)

## E.1. Informatics (nuclear activity)

The programme consists of the following three projects:

- data communication,
- Eurocopi,
- European shielding information service (ESIS).

### E.2. Support to safeguards (nuclear activity)

- E.3. Support to the Community Bureau of References (non-nuclear activity)
- E.4. Training and education (nuclear and non-nuclear activity)
- E.5. Utilization of research results (nuclear and non-nuclear activity)
- E.6. Provision of scientific and technical services (nuclear and non-nuclear activity)
- F. OPERATION OF LARGE-SCALE INSTALLATIONS Supplementary programme
  - F.1. Operation of the HFR reactor (nuclear activity)

 $\label{eq:annex} \textit{ANNEX B}$  INDICATIVE BREAKDOWN OF STAFF AND FUNDS

Programmes	Expenditure commitments (million EUA)	Total staff	of which research staff
A. NUCLEAR SAFETY AND THE FUEL CYCLE			
1. Reactor safety	151·30 (1) (2)	716	308
2. Plutonium fuels and actinide research	56.35	207	117
3. Safety of nuclear materials	20.85	115	52
4. Fissile materials control and management	20.50	112	55
Total	249.00	1 150	532
3. NEW ENERGIES			
1. Solar energy	22.90	117	60
2. Hydrogen production, energy storage and transport	14.10	79	40
3. Thermonuclear fusion technology	26.10	124	60
4. High-temperature materials	14.90	63	38
Total	78.00	383	198
C. STUDY AND PROTECTION OF THE ENVIRONMENT			
1. Protection of the environment	33.90	174	90
2. Remote sensing from space	18.35	97	50
Total	52-25	271	140
D. NUCLEAR MEASUREMENTS	43·20	184	108
E. SPECIFIC SUPPORT TO THE COMMISSION			
1. Informatics	13.83	69	34
2. Support to safeguards	5.90	25	13
3. Support to the Community Bureau of References	2.62	13	7
4. Training and education	3.31	17	9
5. Utilization of research results	1.74	8	1
6. Provision of scientific and technical services	8.80	52	27
Total	36·20	184	91
SUB-TOTAL	458.65		
F. OPERATION OF LARGE-SCALE INSTALLATIONS			
1. Operation of the HFR reactor	52.22	88	41
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<sup>(1)</sup> Including a provisional amount of 6 770 000 EUA reserved for the PAHR in-pile project.

<sup>(2)</sup> Including a provisional amount of 40 610 000 EUA for the second phase of the Super-SARA project.

<sup>(3)</sup> A maximum of 20 staff is added to this figure in 1980 only corresponding to the decrease in Centre staff provided for in Decision 77/488/EEC, Euratom.

## ANNEX C

# SCALE OF FINANCIAL CONTRIBUTIONS FROM THE MEMBER STATES FOR THE EURATOM SUPPLEMENTARY RESEARCH AND TRAINING PROGRAMME

## Flat-rate scale

Operation and utilization of the HFR reactor:

- Federal Republic of Germany:

50 %,

- Netherlands:

*50* %.