

II

(Acts whose publication is not obligatory)

COUNCIL

COUNCIL DECISION

of 18 July 1977

adopting a research programme to be implemented by the Joint Research Centre for the European Atomic Energy Community and for the European Economic Community (1977 to 1980)

(77/488 /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 presented after consultation, with regard to nuclear projects, of the Scientific and Technical Committee,

Having regard to the opinion of the European Parliament ⁽¹⁾,

Having regard to the opinion of the Economic and Social Committee ⁽²⁾,

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 rapid and safe growth of nuclear industries and to the acquisition and the dissemination of information in the nuclear field;

Whereas in future the Joint Research Centre, in particular the establishment at Ispra, will be called upon to

play a role in the Community programme for thermonuclear fusion, in particular in the field of fusion technology;

Whereas Article 2 of the Treaty establishing the European Economic Community assigns to the Community *inter alia* the task of promoting throughout the 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 powers required for this purpose;

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 ⁽³⁾;

Whereas the Italian Government has undertaken to take over 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,

⁽¹⁾ OJ No C 238, 11. 10. 1976, p. 12.

⁽²⁾ OJ No C 278, 24. 11. 1976, p. 12.

⁽³⁾ OJ No L 16, 20. 1. 1971, p. 13.

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 1977.

Article 2

The total of commitments for expenditure necessary to implement the programme defined in Annex A is established at 346 million units of account. The maximum number of staff shall be progressively reduced from 2 118 to 2 038 members. The indicative breakdown of funds and staff is given in Annex B. The scale of financial contributions from the Member States for the supplementary research and training programme of the European Atomic Energy Community is determined in Annex C.

The unit of account shall be that defined in the Financial Regulation applicable to the general budget of the European Communities.

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 ⁽¹⁾.

Article 5

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

Done at Brussels, 18 July 1977.

For the Council

The President

A. HUMBLET

⁽¹⁾ OJ No L 255, 20. 9. 1974, p. 1.

ANNEX A

RESEARCH PROGRAMME (1977 to 1980)

I. NUCLEAR SAFETY

(joint programme)

1. Reactor safety

(nuclear)

The programme comprises six projects covering the following research:

- reliability and risk assessment,
- out-of-pile and in-pile studies of accidents involving loss of coolant in light water reactors,
- liquid metal fast breeder sub-assembly thermohydraulics,
- core melt-down and fuel-coolant interactions,
- dynamic structure loading and response,
- prevention of structural failure in reactors.

2. Plutonium fuels and actinide research

(nuclear)

The programme comprises three projects covering the following research:

- utilization limits of plutonium fuels,
- plutonium and actinides aspects of the safety of the nuclear fuel cycle,
- actinide research.

3. Management of nuclear materials and radioactive waste

(nuclear)

The programme comprises three projects covering the following research:

- assessment of the long-term hazards of radioactive waste storage,
- chemical separation and nuclear transmutation of actinides,
- studies on reactor component decontamination.

II. FUTURE FORMS OF ENERGY

(joint programme)

1. Solar energy

(non-nuclear)

The programme comprises three projects covering the following research:

- habitat and thermal conversion,
- European solar irradiation facility,
- orientation studies centred around direct conversion.

2. Hydrogen

(nuclear)

The programme comprises two projects covering the following research:

- thermo-chemical processes for the decomposition of water,
- heat source coupling.

3. Thermonuclear fusion technology (nuclear)

The programme comprises the following activities:

- conceptual studies on thermonuclear fusion reactors,
- research on materials necessary for fusion, in particular on their behaviour under irradiation, and analysis of required testing methods and equipment,
- study of the problems concerning safety of the environment.

4. High-temperature materials (nuclear)

The programme comprises four projects covering the following fields:

- meeting point Petten,
- the effect of the operational environment on the mechanical properties of high-temperature materials,
- failure modes of high-temperature materials,
- the relationship between structure, impurities and properties of high-temperature materials.

III. ENVIRONMENT AND RESOURCES (Joint programme) (non-nuclear)

The programme comprises four projects covering the following fields:

- atmosphere,
- water,
- chemical products,
- renewable resources.

IV. MEASUREMENTS, STANDARDS AND REFERENCE TECHNIQUES (METRE) (Joint programme)

The programme comprises five projects covering the following fields:

- measurements of nuclear data (nuclear project),
- nuclear reference materials and techniques (nuclear project),
- non-nuclear reference materials and techniques (non-nuclear project),
- scientific support for the Commission (non-nuclear project),
- scientific support for the Secretariat of the Community Bureau of References (CBR) (non-nuclear project).

V. SERVICE AND SUPPORT ACTIVITIES (nuclear)

The programme comprises five projects covering the following activities:

(a) Joint programme

- informatics,
- training and education,
- fissile material control,
- technical evaluations in support of the Commission.

(b) Supplementary programme

- operation and utilization of the HFR reactor for programmes of the participating States. The free capacity can be placed at the disposal of the JRC without charge or of third parties in return for a fee.

ANNEX B

INDICATIVE BREAKDOWN OF FUNDS AND STAFF

	Commitments for expenditure (in million units of account)	Staff on 1 January 1977 (¹)		Staff on 31 December 1980 (¹)	
		Total	of which research staff	Total	of which research staff
1. Nuclear safety					
reactor safety	77.20	564	229	531	207
plutonium fuels and actinide research	39.29	219	121	212	117
management of nuclear materials and radioactive waste	21.06	138	64	133	62
Total	137.55	921	414	876	386
2. Future forms of energy					
solar energy	14.53	74	35	70	33
hydrogen	15.33	102	50	100	50
thermonuclear fusion technology	11.99	62	30	62	30
high temperature materials	8.20	52	36	50	35
Total	50.05	290	151	282	148
3. Environment and resources	35.18	232	109	227	109
4. Measurements, standards and reference techniques (Métré)	53.37	340	175	328	170
5. Service and support activities	33.26	241	107	234	105
Total	309.41	2 024	956	1 947	918
Operation and utilization of the HFR reactor (²)	36.59	94	42	91	41
GRAND TOTAL	346.00	2 118	998	2 038	959

(¹) Not including the staff members placed at the disposal of the ESSOR complex in accordance with Article 6 (c) of the EAEC Treaty. These staff-members total 222 on 1 January 1977.

(²) Supplementary programme.

ANNEX C

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

Flat-rate scale

Operation and utilization of the HFR reactor:

— Federal Republic of Germany:	50%
— Netherlands:	50%
