COUNCIL DECISION

of 13 March 1980

adopting a research and training programme (1979 to 1983) for the European Atomic Energy Community in the field of controlled thermonuclear fusion

(80/318/Euratom)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Haing 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,

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

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

Whereas in its Decision 76/345/Euratom (3), as amended by Decision 78/470/Euratom (4), the Council adopted a research and training programme (1976 to 1980) in the field of fusion and plasma physics; whereas Article 3 of that Decision provides that the Commission will submit to the Council in 1978 a review proposal designed to replace the 1976 to 1980 programme with a new five-year programme (1979 to 1983) with 1979 and 1980 constituting years common to both programmes; whereas Decisions 76/345/Euratom and 78/470/Euratom should therefore be repealed;

Whereas, as a result of such repeal, 44 million European units of account assigned to the preceding programme, exclusive of JET, and 86·40 million European units of account assigned to the preceding programme for the JET project will remain available; whereas these amounts shall be assigned to the new programme; whereas such a step must be taken into account in determining the upper limit for expenditure commitments necessary for the execution of the new programme;

Whereas, in view of the considerable efforts needed to reach the application stage of controlled thermonuclear fusion, which could be of benefit to the Community, particularly in the wider context of the security of its long-term energy supplies, the various stages of development of the work hitherto undertaken in this field should continue on a joint basis;

Whereas the scientific progress achieved in this field in recent years in the Community and the rest of the world illustrates the need, particularly for Tokamak systems, to construct larger and more complex devices and to concentrate, in particular, on the development of plasma heating techniques and the study of certain technological problems with the collaboration of the JRC;

Whereas it is necessary to equip the Community with a large Tokamak machine (JET: Joint European Torus);

Whereas the research proposed by the Commission constitutes an appropriate means of pursuing such action, and it is consequently in the common interest to adopt a multiannual programme in the field of controlled thermonuclear fusion, the existence of which is moreover a necessary condition for Community participation in strengthening world cooperation in this field;

Whereas it is important that the Community should continue to encourage both the construction of certain equipment having a bearing on projects accorded priority status, by granting a preferential participation rate for expenditure on such equipment, and the implementation of major projects carried out jointly by all or some of the associated laboratories;

Whereas, furthermore, the mobility of staff between organizations cooperating in the execution of the programme should be promoted,

HAS DECIDED AS FOLLOWS:

Article 1

A research and training programme in the field of controlled thermonuclear fusion as defined in the Annex is hereby adopted for a five-year period as from 1 January 1979.

(1) OJ No C 93, 9. 4. 1979, p. 69.
(2) OJ No C 171, 9. 7. 1979, p. 38.
(3) OJ No L 90, 3. 4. 1976, p. 12.
(4) OJ No L 151, 7. 6. 1978, p. 8.

Article 2

The upper limit for expenditure commitments and the maximum number of staff for the programme exclusive of JET are fixed at 190·50 million European units of account, including a minimum of 44 million European units of account from the amounts referred to in the second paragraph of Article 4, and 113 employees for the whole duration of the programme.

The upper limit for expenditure commitments and the maximum number of staff for the construction phase of the JET project, as regards its basic performance, during the duration of the programme are fixed at 145 million European units of account including a minimum of 86·40 million European units of account from the amounts referred to in the second paragraph of Article 4, and 150 temporary employees within the meaning of Article 2 (a) of the conditions of employment of other servants of the European Communities.

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 (1).

Article 3

The Commission shall submit to the Council, not later than 1 July 1981, a review proposal designed to replace the present programme by a new five-year programme with effect from 1 January 1982.

Article 4

Decisions 76/345/Euratom and 78/470/Euratom are hereby repealed with effect from 1 January 1979.

However, amounts which, pursuant to the aforementioned Decisions, are authorized under the relevant headings of the 1976, 1977, 1978, 1979 and 1980 budgets and which on 1 January 1979 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

(1) OJ No L 356, 31. 12. 1977, p. 1.

ANNEX

CONTROLLED THERMONUCLEAR FUSION

1. The subject matter of the programme to be executed shall be :

   (a) plasma physics in the sector concerned, in particular studies of a basic character or relating to confinement with suitable devices and to methods for producing and heating plasma ;

   (b) research into the confinement, in closed configurations, of plasma of widely varying density and temperature, if possible attaining ignition conditions ;

   (c) research into light-matter interactions and transport phenomena and the development of high-power lasers ;

   (d) the development and application to confinement devices of sufficient powerful plasma heating methods ;

   (e) improvement of diagnostic methods ;

   (f) study of technological problems connected with current research and problems relating to the use of thermonuclear reactions ;

   (g) implementation of the JET project.

   The work referred to in (a), (b), (c), (d), (e) and (f) shall be carried out by means of association or limited duration contracts which are designed to yield the results necessary for implementation of the programme and which take into consideration the work carried out by the JRC, in particular in relation to the technology referred to in (f).

   The implementation of the JET project referred to in (g) has been entrusted to the Joint European Torus (JET), joint undertaking, established by Decision 78/471/Euratom [1].

2. The programme set out in point 1 shall be part of a long-term cooperative project embracing all work carried out in the Member States in the field of controlled thermonuclear fusion. It is designed to lead in due course to the joint construction of prototypes with a view to their industrial production and marketing.

3. For the duration of the programme exclusive of JET a maximum amount of 190·50 million European units of account and a maximum number of 113 employees shall be allocated for this purpose. The amount in question is intended to cover :

   — expenditure on equipment having a bearing on operations accorded priority status and some expenditure in support of JET,

   — staff mobility costs,

   — other expenditure relating to operations to be carried out under the programme exclusive of JET.

4. The appropriation allocated to the programme exclusive of JET can be broken down as follows :

   (a) about 30 % for financing projects at a preferential rate, as specified in paragraph 5 ;

   (b) about 4 % for administration costs and for expenditure intended to ensure the mobility of staff to enable them to work in organizations cooperating in the implementation of the programme ;

   (c) the amount not set aside for the operations and expenditure referred to in (a) and (b) and any positive balance from the contributions of associated third countries under the programme, exclusive of JET, shall be used for financial participation by the Community in other expenditure incurred by the associations. This Community participation in other association expenditure relating to the joint programme shall be at a uniform rate of about 25 %.

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[1] OJ No L 151, 7. 6. 1978, p. 10.

5. After a technical examination, the Consultative Committee of the Fusion Programme may, as soon as it has been set up, accord priority status to projects belonging to one of the following areas :

   — Tokamak systems and support for JET,

   — other toroidal machines,

   — heating and injection, including support for JET in this field,

   — Fusion technology,

   — the work referred to in paragraph 1 (c).

   The Commission may finance these projects at a uniform preferential rate of about 45 %. In return, all the members of associations shall have the right to take part in the experiments carried out with the equipment thus constructed.

6. The upper limit for expenditure commitments and the maximum number of staff for the construction phase of the JET project, as regards its basic performance, during the programme period are fixed at 145 million European units of account and 150 temporary staff. The amount in question is intended to finance the construction phase of the JET project at a participation rate of 80 %. The Swedish and Swiss contributions to the JET project shall be deducted directly from the financing of that part of the overall budget laid down for the project which is to be borne by the Community budget.