COMMISSION OF THE EUROPEAN COMMUNITIES

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COMMUNICATION OF THE COMMISSION TO THE EUROPEAN PARLIAMENT AND TO THE COUNCIL ON THE UPDATING OF THE JET PROJECT

AMENDMENT OF THE PROPOSAL FOR A COUNCIL DECISION

ADOPTING A RESEARCH AND TRAINING PROGRAMME (1979-83)

FOR THE EUROPEAN ATOMIC ENERGY COMMUNITY

IN THE FIELD OF CONTROLLED THERMONUCLEAR FUSION

(presented by the Commission to the Council

Pursuant to the second paragraph of article 149 of the EEC Treaty)

COMMUNICATION OF THE COMMISSION TO THE EUROPEAN PARLIAMENT AND TO THE COUNCIL ON THE UPDATING OF THE JET PROJECT

INTRODUCTION

In its proposal for a fusion programme 1979/83 the Commission indicated (1) that the JET Joint Undertatking was updating the cost estimate for the JET project in its basic performance and considering the possibility of proceeding at an earlier stage than previously foreseen to the implementation of the extended performance during the construction phase. At the request of the Chairman of the JET Council, the Director of the Joint Undertaking recently submitted corresponding proposals to the JET Council, which examined them during its meeting on 8/9 February 1979. The Commission attaches great importance to informing the Parliament and the Council forthwith on this examination and is putting forward in this document its proposals for the solution of the resulting problems.

1. PRESENT SITUATION OF THE COST ESTIMATES OF JET

In updating the JET Project the JET Council took into account four elements:

- (a) acceleration of commitments,
- (b) inflation.
- (c) operation of the JET device,
- (d) possible earlier access to extended performance.

1.1 Acceleration of commitments

On 30 May 1978 the Council approved the following timetable for financing the JET project (2) (in MEUA at January 1977 terms):

¹⁾ See doc. COM(78) 616 final, page 30 and pages 78/79, paragraph 5.2.

²⁾ See doc. R/820/78 (ATO 17), Doc. COM(78) 158 final, page 4.

Years	1976/77/78	1979	1980	1981	1982	1983 1st half	Total
Commitments	20	60	48	35	17	4.6	184.6
Payments	12	35	50	43	30	14.6	184.6

In order to achieve completion of construction by the end of 1982 instead of mid-83, the JET Council has proposed to increase the commitment forecast for 1980 by 10 MEUA (at January 1977 terms) and to decrease the forecasts for 1981 by 4 MEUA and for 1982 by 6 MEUA. The payments profile would remain unchanged, as well as the total of 184.6 MEUA at January 1977 terms.

The new commitments profile would be (in MEUA at January 1977 terms) :

1976/78	1979	1980	1981	1982	1983	Total
20	60	58	31	11	4.6	184.6

1.2 Inflation

On 30 May 1978 the Council approved the cost estimates for the construction phase of the JET project, amounting to 184.6 MEUA at January 1977 prices.

Taking into account inflation in 1977 and 1978, the JET Council has now estimated the cost of the construction phase at January 1979 prices at about 200 MEUA.

The commitments and payments profiles of the 200 MEUA, already adjusted to acceleration shown under paragraph 1.1, would become:

Years	1976/78	1979	1980	1981	1982	1983	Total
Commitments				33.2	11.7	5.0	200
Payments	11.85			46.8			200

- 1) committed
- 2) spent
- 3) budget adopted

The Community has to finance 80 % of the JET expenditure. The commitment and payment profiles for the Community would therefore be (in MEUA at January 1979 prices):

Years	1976/78	1979	1980	1981	1982	1983	Total 79/83	Grand total
Commitments	16	54.4	49.6	26.6	9.4	4.0	144	160
Payments	9.48	32	43.7	37.4	26.2	11.22	150.5	2 160

Therefore the appropriation of the Commission needed to finance the JET commitments for the years 1979-1983 covered by the fusion programme is now estimated at 144 MEUA at January 1979 prices.

1.3 Operation of JET

The JET Council estimates the yearly cost of operation to be about 30 MEUA at January 1979 prices. The present planning of JET provides for completion of construction by the end of 1982 and start of operation at the beginning of 1983. Therefore the full amount of 30 MEUA has to be provided for in 1983 to cover the operation of the device. Since for 1983 5 MEUA devoted to operation (at January 1979 prices) were already included in the cost estimates for the construction phase, an additional amount of 30 - 5 = 25 MEUA is to be provided for the operation of JET in 1983 (of which 80 % = 20 MEUA for the Community).

1.4 Possible earlier access to extended performance

Several very encouraging results obtained recently in the field of Tokamaks, and the desire to keep JET competitive with other large devices outside the Community, have led the JET Council to examine the possibility of proceeding at an earlier stage than previously foreseen to the implementation of the extended performance of the JET device and to ask the JET Scientific Council whose members have just been appointed, to give advice on the programme proposal on the extended performance established by the Director of the JET Joint Undertaking.

The cost for the implementation of the extended performance is estimated at about 60 MEUA at January 1979 prices, of which 80 Z = 48 MEUA for the Community. As already stated in doc. COM(78) 158 final (page 6) on the establishment of the JET Joint Undertaking, approved by the Council on 30 May 1978, and reiterated in the proposal for the 1979/83 programme (page 79), it is probable that most of this expenditure will have to be committed during the construction phase. However, a final recommendation on the timing of the implementation of extended performance and the related expenditure profile can only be given after completion of an assessment to be made by the JET Scientific Council and the subsequent proposal of the JET Council.

2. PROPOSALS OF THE COMMISSION

2.1 Acceleration of commitments

- The approval of the original timetable for financing the JET project, provided for in Article 46, paragraph 2(c), of the EURATOM Treaty, has been shown in the records of the Council session on 30 May 1978 (3).
- In these records, it was mentioned (4) that "The Commission will notify the Council if the timescale established by the Joint Undertaking in the framework of its annual budgetary procedure and converted to the rates of 1 January 1977 differs from the timescale above whether this is due to:
 - more rapid commitments. or
 - a likelihood of the estimated costs of building the experiment being exceeded".
- The Commission proposes then to the Council to take note of the <u>revised</u> timetable for financing (at January 1977 prices) as indicated under paragraph 1.1 of the present document and to show this approval in the records of the next Council session dealing with the proposal for the fusion programme 1979/83.

⁽³⁾ See doc. COM(78) 158 final, page 4, paragraph 2.2.d

⁽⁴⁾ See doc. COM(78) 158 final, page 7, paragraph 2.3.c.iii

2.2 Inflation

The Council of Ministers recorded that the costs of the JET construction phase have been estimated at January 1977 prices. In Article 2 of its proposal for a Council decision on the fusion programme 1979/83 (5) the Commission showed an allocation of 131.7 MEUA for JET (equal to 80 % of 164.6 MEUA = 184.6 - 20 MEUA committed in 1978) all these figures calculated at January 1977 prices.

The Parliament in its opinion on the proposed fusion programme 1979/83, recommended to round up the figure concerning the needs of the programme without JET (from 217 to 220 MEUA) and to modify the figure concerning the needs for the construction phase of JET (from 131.7 to 145 +) MEUA) in order to cope with the changes in economic conditions since January 1977. In its opinion the Parliament proposes to amend consequently Article 2 of the proposed Council decision adopting the fusion programme 1979/1983 and asks some other amendments in the drafting of Articles 1, 3 and 4. The Commission endorses these amendments.

Therefore the Commission under the terms of Art. 119 second paragraph of the Treaty establishing the EAEC modifies, following the opinion of the European Parliament, the proposed Council decision included in the "Proposal for a research and training programme (1979-83) for the EAEC in the field of controlled thermonuclear fusion" (6). The new proposed Council decision is given in Annex to the present document.

2.3 Operation of JET in 1983.

The additional funds required for the operation of JET in 1983 are to be committed in 1983. The Commission proposes to include these funds in the programme revision in 1981 when more accurate data are available.

2.4 Possible earlier access to extended performance

As stated in paragraph 1.3.a of doc. COM(78) 147 final, approved by the Council on 30 May 1978, the allocation of funds for the extended performance of the JET device requires a programme decision by the

⁽⁵⁾ See doc. COM(78) 616 final, page 63.

⁺⁾ This figure is a rounding up of the 144 MEUA at January 1979 prices resulting from the commitment profile given at the end of paragraph 1.2.

⁽⁶⁾ Doc. COM(78) 616 final.

Council. After completion of the relevant assessment to be made by the JET Scientific Council and the JET Council the Commission will submit to the Parliament and to the Council in due course, probably at the revision of the programme 1979/83 to be undertaken in 1981 but even earlier if it appeared to be advisable, a proposal for a programme decision on the implementation of the extended performance.

2.5 Summary of Commission proposals

The Commission:

- notifies the Council that the revised timetable for financing the JET project at January 1977 prices is the second table shown on page 2 of the present document,
- modifies, following the opinion of the European Parliament, the proposed Council decision included in the "Proposal for a research and training programme (1979-83) for the EAEC in the field of controlled thermonuclear fusion". The new proposed Council decision is given in Annex to the present document.
- intends to request, on the occasion of the revision to be undertaken in 1981, the funds needed for the operation of JET in 1983 and to forward in due course, probably at the same revision, a proposal for a programme decision on the implementation of the extended performance of the JET device.

AMEN DMENT

of the proposal for a Council Decision adopting a research and training programme (1979-83) for the European Atomic Energy Community in the field of controlled thermonuclear fusion

Original proposal (Doc COM(78) 616 final, p. 62-64)

Amended proposal (amendments underlined)

Preamble and recitals unchanged

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 beginning 1 January 1979.

Article 1

A research and training programme in the field of controlled thermonuclear fusion as defined in the Annex is hereby adopted for the period ending on 31 December 1983

Article 2

The global needs for the entire duration of the programme without JET are estimated at 217 MEUA and 113 Community employees.

The global needs for the construction phase of JET during the duration of the programme are estimated at 131.7 MEUA and 150 temporary staff within the meaning of Article 2(a) of the conditions of employment of other servants of the European Communities.

These figures are only indicative.

The European unit of account is defined in Article 10 of the Financial Regulation of 21 December 1977 applicable to the general budget of the European Communities.

Article 2

The global needs for the entire duration of the programme without JET are estimated at 220 MEUA and 113 Community employees.

The global needs for the construction phase of JET during the duration of the programme are estimated at 145 MEUA and 150 temporary staff within the meaning of Article 2(a) of the conditions of employment of other servants of the European Communities.

These figures are of an indicative nature only.

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1) O.J. No 1356, 31,12,1977, p. 1.

Original proposal

Article 3

The Commission shall submit to the Council in 1981 a review proposal designed to replace the present programme with a new five-year programme with effect from 1 January 1982.

Article 4

Decisions 76/345/Euratom and 78/470/Euratom are repealed. This Decision shall enter into force on 1 January 1979.

Amended proposal

Article 3

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

Article 4

Decisions 76/345/Euratom and 78/470/Euratom are repealed. This Decision shall enter into force immediately.