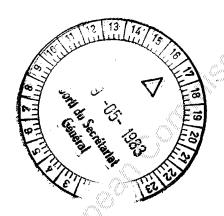
COMMISSION OF THE EUROPEAN COMMUNITIES

COM(83) 260 final. Brussels, 17 May 1983.



PROPOSAL FOR A COUNCIL DECISION

ON THE FRAMEWORK PROGRAMME FOR COMMUNITY SCIENTIFIC AND TECHNICAL ACTIVITIES 1984-1987

(Communication from the Commission to the Council and to the European Parliament)

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Introduction

At its session on 8 February 1983 the Council examined and discussed the Commission's Communication entitled "Proposals for a European Scientific and Technical Strategy: Framework Programme 1984-1987" (COM(82)865 final).

At the end of the session the Council particularly:

".... welcomed the Commission's basic objective, which is to encourage the integration of the whole range of European research and development efforts, whether at national or community level, in such a way as to achieve wide ranging common objectives to be identified by mutual agreement within a strategic framework."

".... stressed the importance taken on by community research which aims to improve the competitiveness of industry and agriculture as well as increasing energy independence and protecting the environment."

Furthermore the Council, "whilst declaring the need for a balanced development of expenditure, expressed a large measure of agreement as to the necessity of increasing community research and development expenditure, and its relative importance in the overall community budget, subject to the provision of supplementary clarifications relating to certain effects on the budget raised during the discussion."

Finally, apart from these clarifications relating to budgetary impacts, the Council expressed its wish to receive further data on :

¹ This is based on the draft minutes prepared by the Council Secretariat General following the Council meeting on 8.2.1983.

- the criteria governing the selection of specific objectives and of research programmes,
- the overall level of resources and the weighting between the principal options,
- improving the structures and procedures for preparing, approving and implementing community R&D activities.

The object of this communication and the supplementary material which appears at Annex 2 is, on the one hand, to preface the draft decision making the Commission's proposal formal and, on the other hand, to provide the clarification requested (except that dealing with structures and procedures which already forms the subject of a special Commission communication¹).

On the basis of the Commission's initial communication and this supplementary material, the Council should, as envisaged in the conclusions to its session of 8.2.83, "be in a position to arrive at an agreement, during the first half of 1983, upon the first Framework Programme dealing with community research and development activities.".

With this aim in view the Commission requests the Parliament for its opinion and proposes to the Council that it should adopt the decision which is enclosed as an Annex.

COM(83)143 final, "Communication from the Commission to the Council on Structures and Procedures for the Common Policy in the Fields of Science and Technology.

1. Selection criteria for the objectives of the common research, development and demonstration strategy.

As a basis for the political choices which must be made at community level - bearing in mind the potential which is to be found within Member States and the need to develop this potential - the Commission suggested five criteria which would assist in the identification of the specific scientific and technical objectives to be selected. These five criteria generally overlap or complement each other, and are not by any means mutually exclusive.

These criteria can be specified and illustrated by some concrete examples.

a) Criteria related to the Community dimension

- Scale of human and financial resources required

One should adopt those scientific and technical objectives which, because of the level of human, financial and technical resources required to implement them, cannot be carried out on a purely national basis. As an example one could cite controlled thermonuclear fusion which should, in the long term, make possible a significant reduction in the Community's energy dependence through the development of a new source of energy using almost inexhaustible and widely available fuels; the resources required to achieve this objective, both on the human and the financial levels go well beyond what is possible for one state on its own; thus European, not to say international cooperation is called for of necessity.

- Size of the potential market

At issue here are those scientific and technical objectives for which one large or organised market is needed. By way of illustration one could cite the development of new information technology and the market problems that this posed in the recent past and which are even more acutely posed today.

Non-cooperation, and the dispersal of research activities carried out in the past by European firms (colour TVs for example) has led in many cases to a fragmentation of the market, which has proved to be damaging to all concerned. Some degree of harmonisation, even pre-standardisation, brought about via joint research could have produced obviously beneficial spin-offs. The policies which have been pursued in Japan and the United States deserve mention in this respect.

At the same time, nowadays, the development which this technology has undergone and the strength and diversity of demand entail research and production efforts of considerable scale within scientifically developed countries.

Performance and reliability remain, next to cost, the determining factors in maintaining research and production centres within the international mainstream of innovation based competition. The investment which should be sustained, and above all anticipated for the future, is of such a scale for the Member States that it requires at least the European market as an outlet, a frequently necessary staging post for tackling the world market.

The ESPRIT programme goes a long way, in its conception, towards the application of this criteria.

Transnationalism

The S/T objectives which should be adopted in this category are those which, to be fulfilled, call for the development of activities which are essentially international. The protection of the environment can be used as a direct illustration of this selection criterion which, in fact, is very much a part of the objective set out in the Treaty to improve the living conditions of citizens in the member States. In fact there are very many specific objectives connected with the environment and the

prevention of health hazards which cannot be achieved without community-wide cooperation. It is clear, to take up a research issue recently suggested by a Member State, that complex phenomena such as the destruction of forests (acid rain) should be analysed and understood in the framework of European, even international cooperation, if it is desired to find a solution to the problems they raise.

b) Criteria related to Community interest

- Collective needs

In this category come those objectives which form a response to identical or similar collective needs within the Member States. In fact similarity of certain scientific and technological problems frequently justifies a common approach to finding solutions. It is as much in avoiding fruitless duplication as in promoting a degree of harmonisation in the methods and approaches adopted that systematic cooperation makes it possible, at least cost, to resolve many of these common problems. The example of the promotion of nuclear fission energy and especially of improving safety at power stations is particularly striking in this respect.

- Support for the Community's major objectives

This heading includes those S/T objectives to be adopted for the contribution they make to implementing activities already decided upon at Community level or to defining new activities, and whose common value has been recognised by the Community Institutions.

For example, they are the sort of specific objectives whose implementation makes a basic contribution either to supporting a particular community policy - such as the policy in connection with development aid - or to helping set out and clarify the bases of a future community policy (on raw materials, for example).

Also included in this category are the activities to be developed or the expertise to be provided in order to respond to the requirements of the Commission services responsible for carrying out the various sectoral policies, such as the social policy.

These five criteria, which have been closely followed in making the choice of objectives proposed in the Framework Programme 1984-1987 all in fact correspond to one major preoccupation: how can the European Dimension be exploited in a suitable and relevant way for the benefit of the Community?

R, D&D calls for investment in the long and medium term which is often considerable. How can the risks and costs be shared? How can the stability and continuity which is so necessary be guaranteed? How can dangerous weaknesses in the research front be avoided?

Joint action can often be the most appropriate answer to the fundamental questions.

See summary table at end of Annex II "Goals and Objectives" of this document.

2. Participation of the Member States in the Common Strategy

The selection criteria set out above may, because of the very diversity of national R, D&D strategies and potential, be differently assessed by Community Member States. Thus, the Commission proposes that alongside the formal adoption of the Framework Programme, the Council and the Parliament should recognize:

- a. the possibility of including, among the activities to be undertaken in order to achieve common objectives, activities not involving participation of all Member States.
- b. the possibility of taking part in national or international activities, projected or taking place, wherever these correspond to objectives of common interest as adopted in the Framework Programme

This dual facility could usefully be operated in the context of a general Framework Programme covering a four year period, although it would be difficult if not impossible to consider in the case of sectoral action programmes.

A Framework Programme of this kind, covering the whole gamut of community scientific and technical activities, makes it possible to reconcile the common interest and national or regional interests which are expressed in differing priorities, themselves a reflection of the differences there are between the policies followed by each Member State, either at the national level or by means of international scientific and technical cooperation in progress or under consideration by Member States.

This new approach, which directly corresponds to the Commission's desire to make it possible, within the Community, for the most relevant choices to be made between national, international or community levels of activity would be expressed:

- in the form of a group of community actions, both programmed and non programmed (stimulation actions), to be set by the Framework Programme and combining activities in which all ten Member States participated and activities where the level of participation varied;
- in the form of participation by the Community as a small scale participant in major national and/or international programmes which could range from basic research to mainly industrial research.

This participation would only exceptionally involve Community patronage or responsibility for managing the activities, but they would open up the prospect of access to the knowledge resulting from these programmes to all Member States.

A development of this kind in the common R, D&D policy can, however, only be undertaken on a sound and unequivocal basis to the extent that

- the implementation of the Framework Programme as a whole is the subject of a clear commitment on the part of the Council and the Parliament,
- the expenditure required for its implementation is appropriated from the Community budget, (own resources),
- the dissemination of knowledge is carried out, except where there is very good reason for the contrary, on the basis of Community regulations giving access to information and to the results to all Member States,

Both bilateral and multinational activities, under way or projected, ought to be considered so far as major international programmes are concerned.

- information relating to national policies and particularly to medium term forecasts in the field of R, D&D is regularly imparted to the Community Institutions (it would form an important element in the Community Institution's assessment of activities which might be better carried out by a proportion of the Member States, and of act ivities in which participation should be sought). This information should extend to scientific and technical cooperation in progress or being considered by Member States.

3. IMPLEMENTING THE FRAMEWORK PROGRAMME

a) Programming R, D&D activities

The Framework Programme sets out a range of scientific and technical objectives which have to serve as the basis for the preparation of action programmes and plans for community activities which respond to identified needs (so far as the objectives are concerned) and which correspond to the relative priorities which have been selected (weighting).

Thus the Framework Programme is not just a scientific and technical programming guide, but also a financial guide adopted by the Community Institutions to indicate to those who are responsible for programming what the relative volume of expenditure should be. This financial reference table set out by objectives also makes it possible for the Council and the Parliament to check the extent to which the Framework Programme objectives are progressively being achieved whenever new programmes or action programmes are put forward.

Once the Framework Programme has been approved it will be sent for implementation to all services and sectoral scientific and technical committees responsible for preparing programme proposals.

From that time on each sectoral proposition (action programme) put forward by the Commission would set out in detail, over and above the scientific and technical content of the suggested activities and the extent of human and financial resources considered necessary:

- the goals and objectives in the Framework Programme to which the proposition under consideration corresponded,
- the percentage of the expenditure proposed relating to the different objectives in view, in other words, an indication in financial terms of the level of commitments corresponding to the various objectives of the Framework Programme.

This method recommended by the Commission will offer the triple advantage:

- of keeping the concept of scientific and technical objectives to the forefront within the programme preparation system,
- of making it possible, in the case of each proposal to make judgements at the political level (Commission, Council, Parliament) about its impact on the achievement of objectives and priorities adopted by the Community Institutions,
- to facilitate the evaluation of the scientific and technical results of programmes vis-à-vis the selected objectives.

b) Periodic review

To the extent that the very concept of the Framework Programme constitutes a major change by comparison with the approaches which have been followed up to now, it would be expedient to evaluate and progressively to improve the methods of designing and reviewing it. In this respect the <u>first</u> Framework Programme 1984-1987 should give rise to periodic examination during the first years of its implementation.

This being so, the Commission, in the desire to establish solid and stable bases for community activity in the field of science and technology, feels that Framework Programmes on the subject should have a four year timespan. The goals and major objectives, the financial implications and the percentage of the Community budget to be devoted to scientific and technical activities should therefore be issues upon which a position is taken by the Community institutions every four years.

However, because of both the uncertainties of the socio-economic situation and the pace of change in science and technology, it would appear to be desirable to provide for a reexamination of Framework Programmes every two years in order to reassess and where necessary adjust priorities and the relative weighting to be accorded to various objectives. When these reexaminations were carried out the Commission would put forward its forecasts as to objectives and financing for two further years.

Consequently, the Commission proposes that a <u>review of the first</u>

<u>Framework Programme</u> 1984-1987 take place in the second half of 1985,
linked to an examination of forecasts relating to 1988 and 1989.

The proposal dealing with the second Framework Programme will be put to the Council and the Parliament at the end of 1986 with a view to its adoption during the first half of 1987, and would be a proposal covering the period 1988 to 1991.

The Commission is of the opinion that, at the revision which is due to take place at the end of 1985, the forecasts as to objectives and financing for 1988 and 1989 should be the subject of a political commitment on the part of the Council in order to facilitate the preparation and adoption of the second Framework Programme. Experience gained during 1984 and 1985 should provide all the elements needed to make a judgement on this point, before putting this proposal forward formally.

c) Gaining budgetary approval

Each year, in the course of the budgetary process a report would be prepared for the attention of the Council and the Parliament upon the implementation of the Framework Programme. As was stated above, this report would set out - in relation to the programmes and action programmes decided and proposed - the level of commitment of the Framework Programme by objectives and its implementation by sector. The report would thus hold out the possibility for the political authorities to make judgements upon the progressive implementation of the adopted strategy and ultimately reorientate, speed up or partially review the work to be done.

The report would also <u>each year</u> specify, and make proposals on, the main priority lines for intervention so far as the action to "Stimulate the efficacy of the Community's scientific and technical potential" was concerned.

d) Financing the Framework Programme

On the basis of the profile of commitments relating to actions approved by the Council up to now, of that anticipated for actions proposed by the Commission and a hypothetical extrapolation forward corresponding to actions to be undertaken, the profile of commitment appropriations in the Framework Programme can be built up as follows, in MioECUs at 1982 constant values:

Bearing in mind programmes already approved, proposals put forward by the Commission, and on the basis of an assessment of the sort of

Figures to be clarified in connection with the preliminary draft budget which is shortly to be adopted by the Commission.

activity likely to be proposed in future as a function of the nature of the objectives of the Framework Programme, one comes to the following overall breakdown of estimated resources:

Partially financed Community action (shared cost R&D	
action, demonstration projects)	75 %
Fully financed Community action	
(direct action, stimulation, studies)	23 %
Concerted action (where finance is provided only	
for coordination)	2%

It should be stressed that this breakdown is only an <u>indication</u> of the levels which the Commission envisages.

Proposal for a COUNCIL DECISION

RELATING TO FRAMEWORK PROGRAMMES FOR COMMUNITY R, D&D ACTIVITIES, AND THE FRAMEWORK PROGRAMME COVERING THE PERIOD 1984-1987.

Proposal for a COUNCIL DECISION

RELATING TO FRAMEWORK PROGRAMMES FOR COMMUNITY R, D&D ACTIVITIES, AND THE FRAMEWORK PROGRAMME COVERING THE PERIOD 1984-1987.

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

HAVING REGARD to the Treaty establishing the European Economic Community, and article 255 thereof in particular,

HAVING REGARD to the Treaty establishing the European Atomic Energy Community, and article 7 thereof in particular,

HAVING REGARD to the COMMISSION's proposal,

HAVING REGARD to the EUROPEAN PARLIAMENT's opinion,

HAVING REGARD to the ECONOMIC AND SOCIAL COMMITTEE'S opinion,

WHEREAS Article 2 of the Treaty assigns to the Community the task among others, of promoting throughout the Community a harmonious development of economic activities, a continuous and balanced expansion and an accelerated raising of the standard of living: the objective of action undertaken by the Community to this end being set out in article 3 of the Treaty,

HAVING REGARD to the wish expressed by the Council, in its resolution of 14.1.74 dealing with the coordination of national policies and the definition of projects of interest to the Community in the field of science and technology,

WHEREAS the development of a common scientific and technical strategy involves the periodic adoption by the Community Institutions of objectives for this strategy and of the resources needed to achieve them,

HAVING REGARD to the value - which was reaffirmed by the Council at its session of 9 November 1981, 8 march and 30 June 1982, and 8 February 1983 - of clarifying and setting out the common strategy in the field of science and technology in multi-annual Framework Programmes which present the whole range of scientific and technical activities being carried out or to be carried on the basis of the treaties,

WHEREAS in its communication to the Council of 21 December 1982 (COM(82)865 final) the Commission estimated that the percentage of the Community budget needed in order to finance community R, D&D activities should amount to about 4% per year of the Community's resources by the end of the period covered by the Framework Programme 1984-1987,

WHEREAS the Council, in line with the desire expressed by the Parliament as to a realignment of the Communities' budget in favour of research, declared a high degree of unanimity on the need to increase community research and development expenditure and its relative proportion within the Community's overall budget.

WHEREAS the Treaty establishing the European Economic Community did not provide the powers necessary for these objectives,

HAVING REGARD to the opinion which the Scientific and Technical Research Committee has given on the Commission's proposal,

HAS DECIDED AS FOLLOWS :

Article 1

- 1. The implementation of a common strategy in the field of science and technology shall take place under the conditions provided for in this decision;
- 2. The common strategy referred to in paragraph 1 shall be developed in accord with the Community's other strategies and policies.

Article 2

The common strategy in the field of science and technology shall be defined every four years in a general Framework Programme presenting the scientific and technical objectives to be achieved at Community level. On this basis the Commission shall undertake the programming corresponding to these objectives in order to ensure the preparation, adaptation or review of scientific activities carried out, or to be carried out by the Community during the period covered by the Framework Programme.

Article 3

The Council shall, following a proposal to this effect from the Commission and in the light of the opinion of the European Parliament:

- adopt the Framework Programme proposed by the Commission every four years as well as the indicative financial breakdown needed for its implementation,
- adopt the priorities as well as a table indicating the weightings between the various goals and objectives set out in the Framework Programme, taking into account the financial indications given in the multi-annual breakdown mentioned above.
- examine every two years and where necessary revise the Framework Programme.
- make decisions, on the basis of the Framework programme adopted and according to the procedures established by the Treaties, upon the various research development and demonstration programmes and groups of programmes (sectoral action programmes) proposed by the Commission during the period covered by the Framework Programme.

Article 4

Without in any sense prejudicing the functions of the committee provided for in article 4 of the Treaty of 8 April,1965 setting up one single Council and one single Commission of the European Communities, the Higher Policy Committee for Science and Technology established by Council decision of...... shall, in the context of its functions, assist the Council in making decisions on the Framework Programme and its periodic revisions.

Article 5

For the period 1984-1987 the goals and objectives of the Framework programme shall be as set out in the summary table attached, which forms an integral part of this decision.

On this basis, the Commission shall undertake the programming corresponding to these goals and objectives.

The financial estimates which appear in the attached annex and which relate to the objectives to be achieved, shall be considered as suitable indications to guide the programming of actions.

Article 6

As an overall goal it is agreed that 4% of the Communities' budget be set aside for Community research, development and demonstration activities by the end of the period covered by the Framework Programme adopted in this decision.

TABLE SUMMARISING THE OBJECTIVES AND THE AMOUNTS CONSIDERED NECESSARY TO ACHIEVE THEM

	MioECUs ¹	%
1. Promoting agricultural competitiveness	130	3,5
- developing agricultural productivity and		
improving products : agriculture	115	
fisheries	15	
2. Promoting industrial competitiveness	1060	28,2
- removing and reducing impediments	30	\
- new techniques and products for the conventional		
industries	350	
- new technologies	680	
3. Improving the management of raw materials	80	2,1
4. Improving the management of energy resources	1770	47,2
- developing nuclear fission energy	460	
- controlled thermonuclear fusion	480	
- developing renewable energy sources	310	
- rational use of energy	520	
5. Reinforcing development aid	150	4,0
6. Improving living and working conditions	385	10,3
 improving safety and protecting health 	190	
- protecting the environment	195	
7. Improving the efficacy of the Community's scientific	;	
and technical potential	85	2,3 ²
- Horizontal activities	90	2,4
· Ann.		
	3750	100,0

 $^{^{\}mathbf{1}}$ in ECUs at 1982 constant values

 $^{^{2}}$ corresponds to 5% by the end of the period.