

# COMMISSION OF THE EUROPEAN COMMUNITIES

COM(88) 191 final

Brussels, 12 April 1988

## COMMUNICATION FROM THE COMMISSION

"Cost and the European Technology Community"

---

MEMORANDUM FROM THE COMMISSION TO THE COUNCIL

Subject: Communication from the Commission to the Council "COST AND THE EUROPEAN TECHNOLOGY COMMUNITY"

1. Provisions for European cooperation in Scientific and Technical research with non-member countries have been extended and diversified in recent years. Since its introduction in 1971, COST has paved the way for other forms of cooperation: the Community has concluded framework agreements on bilateral cooperation with the EFTA countries for research activities at Community level and, at the same time, the Eureka venture has begun to be developed successfully.

The Commission now needs to review this range of possibilities and consider the best way to choose the right arrangement for obtaining optimum cooperation in a given research area. This choice depends mainly on the features of the project and its promoters, the procedures used and the benefits expected from cooperation.

If a certain amount of competition were to exist between these three types of cooperation for the same research area, it could in theory lead to a reduction in the number of COST projects.

In fact, there were more COST projects in 1987 than in previous years and it appears that this growth will continue in the short term.

The Commission has noted that the European countries continue to show a genuine interest in COST owing to its complementary nature and "added value" in relation to the other more recent forms of cooperation referred to above.

2. The purpose of this document is to highlight the specific features and advantages of COST and to determine the necessary adaptations and procedures required to ensure that it is fully complementary with other forms of cooperation within the "European Technology Community", interpreted in its broadest sense and including Eureka in particular.

After summarising the general factors influencing the development of European Scientific and Technical Cooperation and, concerning COST in particular, the various distinct types of agreements and projects, this document describes the position of COST in relation to the framework programme and Community research, the framework agreements on bilateral scientific and technical cooperation with EFTA countries, and Eureka.

.../...

3. On the basis of this analysis, the Commission considers that:
- There is room for different forms of cooperation established on the basis of Community research programmes, framework agreements on bilateral cooperation, Eureka projects and COST projects; the use of these various forms of cooperation satisfies, with greater flexibility than in the past, the scientific and technical needs of the Community and of the non-member European countries.
  - COST agreements category I and II - which have the advantage of opening up participation in some Community programmes to non-members countries - can be continued within the COST framework.
  - Projects in Categories III and IV should be strengthened by more closely investigating new fields of scientific and technical research and by giving the Commission departments the right to put forward proposals for these categories, the appraisal and dissemination of the results of COST projects to the exterior world should be augmented. In addition, the Commission will undertake to examine or review Category III and IV projects in fields which are now covered by Community programmes. This will be done when new specific programmes are adopted or existing programmes are revised.
  - The COST framework could be suitable for the implementation of certain complementary programmes if the number of Member States interested in the programmes is less than 12, with or without the participation of Third States, as provided for in the Single Act; this cooperation could also satisfy new requirements emerging up to the year 2000: refocusing or extending the scope of existing COST projects; extending geographical coverage - at least for one-off projects - to countries which are not currently members of COST, where it can be shown to be of mutual benefit to the countries taking part.
  - The Community institutions must give their firmest support to the technical and administrative secretariats for COST projects situated in the Council Secretariat and in the various Commission departments.
  - COST cooperation in categories I and II with those countries having bilateral agreements with the Community should be re-examined when the Framework programme is reviewed in its third year.
4. In conclusion, taking into account the particular way in which COST works, the Commission would ask the Council to take note of the attached communication and to hold up the Commission's intentions as expressed in this document. The Commission would also ask the Council to continue to give its full support to COST cooperation.

## CONTENTS

	<u>Page</u>
Introduction	1
I    Background	2
Factors affecting the development of COST and its current situation	
II   The position of COST with respect to Community research, the framework programme and bilateral agreements	3
A.   With respect to Community research and the framework programme	3
B.   With respect to bilateral framework agreements with EFTA countries	5
III  The position of COST in relation to EUREKA	6
IV  Cooperation procedures under COST	7
A.   Agreements and projects in categories I and II	7
B.   Projects in categories III and IV	7
C.   Possible future developments	8
V   Measures recommended by the Commission	8
Conclusions	9

## ANNEXES

1	The four categories of COST agreements and projects	1
2	Year-by-year inventory of COST agreements and projects in force	3
	Diagram	6
3	Forms of bilateral scientific and technical cooperation for the participation of EFTA countries in Community programmes	7
4	Differences between COST cooperation and bilateral cooperation with EFTA countries	8
5	Differences between COST cooperation and EUREKA cooperation	9
6	Cooperation procedures for COST agreements and projects in categories I and II	10
7	List and titles of all COST agreements and projects since 1971	12

Commission of the  
European Communities

Communication from the Commission to the Council

COST AND THE EUROPEAN TECHNOLOGY COMMUNITY

INTRODUCTION

Arrangements for European cooperation in scientific and technical research with non-member countries have been extended and diversified over the past two years (1986-87): while COST has operated successfully without a break since 1971, it has been followed by other forms of cooperation: the Community has concluded framework agreements on bilateral cooperation with the EFTA countries for research activities at Community level and at the same time the EUREKA venture has been launched and developed with its own specific procedures.

It is now necessary to review this range of possibilities and consider how best to choose the right arrangement to obtain optimum cooperation in a given research area. The choice depends mainly on the features of the project and its promoters, the procedures used and the benefits expected from cooperation.

This purpose of this paper is to give a better definition of the specific features and advantages of COST together with the adaptations and procedures needed to ensure that it is fully complementary with other forms of cooperation within the European Technology Community.

## I. Background

COST is above all a framework for cooperation - allowing either the coordination of national research or the participation of non-member countries in Community programmes - which generally takes the form of precompetitive or basic research or activities of public utility.

At its meeting on 18 July 1978, the Council of the European Communities approved the four categories of COST cooperation\* set out in Annex 1.

In the first group, consisting of COST projects and agreements in categories I and II, the project is the subject of or an integral part of a Community programme and therefore involves Community financing with a complementary financial contribution from the non-Community countries towards the implementation of the programme.

In the second group of COST projects (the majority), the research is pooled and the rule is that each participating state accepts responsibility for the costs it incurs. The costs of coordinating the cooperation (secretariat, meetings, publications, interpretation) are mainly paid by the Council and Commission of the European Communities. These costs have always been relatively low.

One of the valuable features of this cooperation is the option open to each COST country to put forward a proposal and the right of any other State concerned to approve it and participate in its implementation.

### Factors affecting the development of COST and its current situation

The European context in which COST cooperation has developed has undergone far-reaching changes since COST's inception in 1971, which means that the different factors involved in the changing European scientific and technical scene must be taken into consideration when endeavouring to map out the future of COST.

The factors (in approximate chronological order) that have emerged are the following :

- the development of Community research through the diversification and extension of Community programmes, which have gradually come to cover most of the research fields that were specific to COST;
- the enlargement of the Community, which has displaced the geo-political balance of COST, between seven non-member countries and twelve EEC Member States, in favour of the latter;
- the tightening of links with the EFTA countries following the Luxembourg Declaration (April 1984) and the conclusion of framework agreements for bilateral scientific and technical cooperation between the Community and those countries;
- the launching in 1985 of the Eureka venture, with the emphasis it places on "à la carte" scientific and technical cooperation, mainly between European industrial firms;

\* OJ C 100, 21.4.1979.

- the Single European Act, under which the EEC Treaty henceforth provides explicitly for cooperation in technological R&D with non-member countries, such cooperation being implemented through the framework programme.

The COST Committee of Senior Officials has noted this development and, in the conclusions which it adopted at its meeting on 24-25 June 1986\*, emphasized the complementary character of COST in relation to both the Community research activities and the EUREKA projects.

Because of the difficulties encountered in financing any research activity, competition between these forms of cooperation might arise and, were the choice between these three forms of European scientific and technical cooperation fully operative for a given research area, it could theoretically result in a reduction in the number of projects bearing the COST label. The diagram in the Annex refutes this argument, however, as it shows that the number of COST projects in 1986 was slightly higher than before and will remain so in 1987. This is also confirmed by the number of proposals for new COST projects which in 1986-87 was at least as high as in earlier years. The launching of these new COST proposals bears witness to its vitality and the interest which the European countries still have in it.

The Member States themselves have constantly emphasized - especially through the Community institutions (Council, Commission, CREST) - the importance which they attach to the continuation and development of COST.

## II. The position of COST with respect to Community research, the framework programme and bilateral agreements

COST cooperation covers a wide area of Europe since, together with EEC member states, 7 non-member countries (5 in EFTA - Austria, Switzerland, Norway, Sweden and Finland - together with Turkey and Yugoslavia) are full members.

### A. With respect to Community research and the framework programme

COST has for some 16 years been at the root of a substantial proportion of the effort devoted to R&D by the European Community and, by virtue of its special position and the support it has constantly been afforded by the Community, has always been closely connected with Community activities.

\*OJ C247, 3 October 1986

In particular, the fact that non-member countries are able to take part in Community programmes was made possible and facilitated by the existence and flexibility of COST cooperation; moreover, a number of Community programmes has originated from proposals for COST projects (Environment, Food Technology, Biotechnology).

However, some of the Community's new programmes have gradually been extended to areas of research that were already the subject of COST projects, in particular materials and telecommunications research.

In view of the scope of the Community's activities, the Commission will, as in the past, ensure that whenever new specific programmes are adopted or existing programmes revised, the situation of both new COST projects and existing projects in categories III and IV are examined and reviewed. This should allow for efficient coordination between COST projects and Community activities, and, where appropriate, with the agreement of the partners involved, enable these projects to be incorporated into the Community research framework by reclassifying them in category II instead of III or IV.

COST cooperation is a very practical framework for the negotiation, and preparation of agreements has so far enabled the third countries to participate in Community programmes that are of general interest but relatively remote from the market place (e.g. environment and medical research).

At the same time COST has made it possible to develop a whole set of research projects in 10 areas suited to such cooperation. Although it is desirable for COST in future to be able to expand into new research areas that are covered only slightly or not at all by Community programmes, the existence of projects in categories III and IV (29 COST projects under way at the end of 1987 for those two categories alone) clearly demonstrate the complementary role played by COST in relation to Community research and the future RTD framework programme for 1987-91\*.

It is because of this complementarity that the role of COST was emphasized in the recitals of the Council Decision on the new framework programme. Through this programme the Commission will ensure maximum consistency between the COST project and the specific Community programmes.

\*Council Decision of 28 September 1987 concerning the framework programme for Community activities in the field of research and technological development (1987-1991) (OJ L302, 24 October 1987).



B. With respect to bilateral framework agreements with EFTA countries

Bilateral cooperation in Community research has long existed with certain European countries, for example with Sweden and Switzerland on fusion, and also with the United States and Canada under the EURATOM Treaty. It is because this experience was considered useful and valuable that it has been extended to other research areas through bilateral framework agreements.

Consequently scientific and technical cooperation with European non-Community countries now takes place either within the COST framework or under bilateral framework agreements for scientific and technical cooperation concluded with the EFTA countries\*.

Bilateral cooperation resulting from the framework agreements will in particular allow the EFTA countries to participate in Community research programmes that are not (or only to a limited extent) open, within the COST framework (e.g. ESPRIT, RACE, BRITE).

Unlike COST cooperation, bilateral cooperation with the EFTA countries takes place in a more limited geographical area; outside the Community, it applies to Austria, Finland, Norway, Sweden and Switzerland and shortly Iceland, but excludes Turkey and Yugoslavia.

In the context of bilateral cooperation, the framework agreements with these EFTA countries will have to be implemented by specific agreements concluded in the various fields of Community research. In relation to this form of cooperation the Commission started the first negotiations with non-member countries in 1986 and defined three types of possible participation by those countries in Community programmes:

- participation in a full programme or in one or more sub-programmes,
- participation in projects within a programme,
- concertation.

The procedures for bilateral scientific and technical cooperation are explained in Annex III.

The table in Annex 4 analyses the differences between COST cooperation and bilateral cooperation with the EFTA countries.

It is the Commission's responsibility to propose the areas within Community programmes that are open to bilateral cooperation and to recommend the most suitable procedures for participation. In framing its proposals the Commission bears in mind the interests of the Community and the wishes expressed by the non-member countries during the discussions and exchanges of information held in accordance with the bilateral framework agreements. Where the research programme comes under the EEC Treaty, pursuant to Article 130Q(2) of the Treaty, as amended by the Single Act, an agreement between the Community and a non-member country is concluded by the Council on a proposal from the Commission, in cooperation with Parliament and after consulting the Economic and Social Committee. Should the programme come under the EURATOM Treaty, the agreement is concluded by the Commission.

\*OJ No L71, 14 March 1987; final conclusion of the framework agreements by the Council and the Commission on behalf of the EEC and EURATOM.

The Joint Research Committees, an ideal forum for exchanges of information on the research programmes of the Community and of the EFTA countries, ensure that this cooperation progresses satisfactorily.

The ultimate aim of bilateral cooperation is to promote and give preference to scientific and technical relations with each of the EFTA countries; for some projects, it calls in return for more specific conditions than under COST. These depend on the nature and characteristics of the programme and the reciprocal strategic interests of the Community and the EFTA countries.

Category III and IV COST projects, complementary to Community programmes, are not in any way affected by the abovementioned framework agreements and therefore there is no need for any change in the current situation.

### III. The position of COST in relation to EUREKA

Although because of its origins and the support it receives from the Commission COST remains closely linked to the Community activities, EUREKA and COST generally follow a similar approach with their flexibility and "à la carte" participation of countries or firms in the implementation of projects.

The main differences between these two systems of cooperation - already mentioned in the Communication from the Commission to the Council on EUREKA and the European Technology Community\* - are set out in Annex 5.

This comparative table shows that cooperation under COST is more open than the EUREKA framework where those who put forward a project may refuse applications for participation from others. The other distinguishing criteria show that there are complementary features between the two forms of cooperation.

As in the case of Community programmes and EUREKA projects, a case-by-case analysis of the EUREKA project shows that the relations with COST may be put in the following categories:

- no links between a EUREKA project and the COST activity,
- links between a EUREKA project and the COST activity,
- complete or partial overlap between the COST and EUREKA projects.

\*COM (86) 664 final of 20 November 1986.

This classification should lead to optimum coordination between COST and EUREKA projects in allied research areas\*.

In this context it would also be advisable to examine whether a number of COST projects could not give rise to corresponding activities in the EUREKA framework where it appears appropriate and reciprocally whether certain EUREKA projects would not be better implemented under the COST framework. With the agreement of the bodies concerned with COST projects, arrangements for reciprocal changes of information could be established with the EUREKA national project coordinators.

#### IV. Cooperation procedures under COST

##### A. Agreements and projects in categories I and II

The Commission considers that cooperation under the former categories I and II of COST agreements is still useful in that it helps to break down barriers - in a way that bilateral cooperation cannot do - by enabling all the COST third countries who so wish to take part in certain Community programmes (e.g. Environment, Raw Materials, Stimulation, Medical Research).

The provisions on COST cooperation and its links with the Community programmes satisfy the wishes often expressed by the Member States and non-member countries; they do not affect bilateral cooperation with EFTA States since that type of cooperation is more specifically bilateral between the Community and each of those countries.

The cooperation procedures for these two categories are described in Annex 6.

Generally speaking the form of cooperation - COST and/or bilateral cooperation - should be specifically stated in the programme decision.

The Commission has already given thought to the necessary coordination between these 2 forms of cooperation since it has made one and the same department responsible for preparing and negotiating the COST agreements and the bilateral agreements with the EFTA countries.

##### B. Projects in categories III and IV

The COST project in categories III and IV could be given a fresh impetus by allowing the Commission departments to propose new projects in those categories.

\*Links of this kind have already been established in transport (for example for the COST project 310 on goods transport logistics and the EUREKA project "Transpolis").

Commission staff are sometimes aware of promising proposals for S/T cooperation but are not able to follow them up, either because they do not meet the necessary conditions for the granting of Community support or because only a few Community countries wish to take part in them. In such cases they could refer proposals for new projects -in agreement with the proposers - direct to the COST Committee of Senior Officials (until 1987 only the representatives of States could lay new project proposals before the Committee).

In addition, it would appear to be necessary to investigate new avenues of scientific and technical research and to provide more information for the outside world on the progress and results of these projects, on the lines set out in the "Conclusions" approved by the COST Committee of Senior Officials on 24-25 June 1986.

CREST, as the Commission's advisory body, is called upon to give its opinion in advance both on new COST projects, so as to assess their value to Community research, and on the classification of these new projects proposed by the Commission. Thus a new COST project may, depending on circumstances, be classified in category II (Community programme and financing), in category III (the Community signs the memorandum of understanding and takes over secretarial services for the project but there is no Community programme or budgetary involvement) or in category IV (Community participation being limited where appropriate to providing secretarial services for the project).

#### C. Possible future developments

Sometimes not all the twelve Member States may be interested in certain proposals for projects put forward in the Community context. If new specific rules are defined, together with a financing plan where appropriate, the COST framework could be ideally suited to the implementation of complementary programmes whether or not there is any participation by non-Community countries within the meaning of the Single Act.

This cooperation may also be developed along other new lines in the future with respect to the nature, objectives or usual characteristics of COST projects or their accessibility to countries other than those currently belonging to COST. The flexibility of COST cooperation is ideally suited to such adaptation.

#### V. Measures recommended by the Commission

The contribution which the Community is thus offering to make to COST cooperation follows the lines approved by the Member States for the future role of COST, as set out in the letter which the President of the Council sent on 4 November 1986 to the Chairman of the COST Committee of Senior Officials.

For all the reasons set out earlier, the Commission intends to continue and to strengthen its support for the technical and administrative secretariats of COST projects located on its premises, by providing them with all the resources they need to operate satisfactorily and to coordinate the research, in particular by the organization of meetings, monitoring, evaluation and the provision of the necessary information on projects under way or planned.

However, the Commission is of the opinion that once bilateral cooperation has become operational it will generate a whole series of agreements and projects conducted in cooperation under each of the specific programmes; also the entry into force of the Single Act (Article 130 N) and the implementation of the framework programme on Community activities in the field of research and technological development (1987 to 1991) are likely to bring about major changes in the European scientific cooperation scene in the years ahead.

In this context the Commission considers that reflexions on COST cooperation and its procedures should continue. Consequently this cooperation - in particular for COST categories I and II - will be analysed again whenever the general Community RTD activities are examined and in particular during the review of the framework programme in its third year.

#### CONCLUSIONS

The Commission would wish to stress the complementarity and specific features of COST in relation to Community research, bilateral cooperation and Eureka, and considers that:

- (a) There is room for different forms of cooperation established on the basis of Community research programmes, framework agreements on bilateral cooperation, Eureka projects and COST projects; the use of these various forms of cooperation satisfies, with greater flexibility than in the past, the scientific and technical needs of the Community and of non-member European countries.
- (b) Category I and II agreements - which have the advantage of opening up participation in some Community programmes to non-member countries - can be continued within the COST framework as before.
- (c) Projects in Categories III and IV should be strengthened by investigating more closely new avenues of scientific and technical research and by giving the Commission departments the right to put forward proposals for these categories; increased information should be disseminated to the outside world on the results of COST projects. In addition the Commission undertakes to review category III and IV projects in fields which are now also covered by Community programmes. This will be done when new specific programmes are adopted or existing programmes are revised.
- (d) The COST framework could be used for the implementation of complementary programmes when the number of Member States interested in the programmes is less than 12, with or without the participation of non-member countries, as provided for in the Single Act. This cooperation could also satisfy new requirements that may emerge up to the year 2000: refocussing of COST projects on new objectives with geographical coverage extended to countries not at present members of COST.
- (e) The Community institutions must give firm support to the technical and administrative secretariats for COST projects situated in the Council Secretariat and in the various Commission departments.
- (f) COST cooperation in categories I and II with those countries having bilateral agreements with the Community, will be re-examined when the framework programme is reviewed in its third year.

**A N N E X E S**

## ANNEX 1

### THE FOUR CATEGORIES OF COST AGREEMENTS AND PROJECTS

- **Category I** : Third COST countries may be associated with programmes drawn up by the Community and adopted by the Council.  
Examples: . Medical research (concerted-action programme of a multilateral type)  
              . Wood research (shared-cost programme associating the Community with a European third country).
  
- **Category II** : Third COST countries may be associated with a Community programme originating from a proposal by a COST country  
Examples: . Research on food technology or the various concerted-action projects on environmental research carried out up to 1985 before the adoption of the new 1986-90 programme (concerted-action projects of a multilateral type).
  
- **Category III**: COST projects with which the Community as such is associated by signature of the Memorandum of Understanding (COST projects not included in a Community programme)  
Examples: Most of the COST projects in the field of "Transport" or "Materials" and also "Social Sciences".
  
- **Category IV** : COST projects involving "à la carte" participation of COST countries, in which the Community does not take part  
Examples: Most of the COST projects on telecommunications and also meteorology.

Referring to the above COST classification, agreements in category I (participation of non-member countries in Community programmes) have often been of a "bilateral" nature because only one non-member country was interested in them, even though accession to each of these agreements was offered to the other non-Community COST countries.

Category II agreements - where Community programmes are initiated within COST - have on the other hand generally involved multilateral participation by several non-member countries.

Despite the distinctions established above mainly on the basis of the number of non-Community signatories, these two categories of agreements are not fundamentally different and result from a single legal instrument provided by the decision adopting the Community programme.

\* \*  
\*



YEAR-BY-YEAR INVENTORY OF COST AGREEMENTS AND PROJECTS IN FORCE

1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987(*)	AGREEMENTS AND PROJECTS	FIELDS
X	X	X	X	X	X	X	X	X	X	X	X						11 11 BIS 11 TER 13	INFORMATICS (CATEGORY II)
X	X	X	X	X	X												25/1 25/2 25/4 201 202 202 BIS 204 205 206 207 208 209 210 211 211 BIS 212 213 214 215 216 217 218 219 PROJ. PROJ. PROJ. PROJ. PROJ.	TELECOMMUNICATIONS
X	X	X	X	X		X	X	X	X								30 30 BIS 33 301 301 BIS 302 303 304 305 306 307 308 309 PROJ. PROJ.	TRANSPORT
							X	X	X	X	X		X	X	X	X	43 43 BIS 46 47 48	OCEANOGRAPHY  (48: CATEGORY II)

(\*) AGREEMENTS AND PROJECTS IN FORCE AT 31 DECEMBER 1987 PROJ. = PROJECT

YEAR-BY-YEAR INVENTORY OF COST AGREEMENTS AND PROJECTS IN FORCE

1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987(*)	AGREEMENTS AND PROJECTS	FIELDS
X	X	X	X	X	X	X	X	X	X	X	X	X	X				50/51/52	MATERIALS
X	X	X	X	X													53	
					X	X	X	X	X	X							56	
										X	X	X	X	X	X		501	
											X	X	X	X	X		502	
												X	X	X	X		503	
												X	X	X	X		504	
												X	X	X	X		505	
																X	506	
																PROJ.	507	

																		CRP raw materials 1982/85 (CATEGORY I)
																X		Metals and mineral substances
												X	X	X				Recycling of urban and industrial waste
												X						Wood as a renewable raw material

X	X	X	X	X	X												61 A	ENVIRONMENT (CATEGORY II)
						X	X	X	X	X	X						61 A BIS	
												X	X				611	
																	612	
X	X	X	X	X													64 B	
						X	X	X	X	X	X						64 B BIS	
												X	X				641	
																	647	
X	X	X	X	X													68	
						X	X	X		X	X						68 BIS	
									X	X	X						68 TER	
																	681	
																PROJ.	-	

																		CRP ENVIRONMENTAL PROTECTION AND CLIMATOLOGY 1981-85 (CATEGORY I)
																X		CLIMATOLOGY

(\*) AGREEMENTS AND PROJECTS IN FORCE AT 31 DECEMBER 1987  
 PROJ. = PROJECT  
 CRP = COMMUNITY RESEARCH PROGRAMME

28

YEAR-BY-YEAR INVENTORY OF COST AGREEMENTS AND PROJECTS IN FORCE

1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987(*)	AGREEMENTS AND PROJECTS	FIELDS	
			X	X	X	X		X	X	X	X	X	X			X	X	70 72 73 74	METEOROLOGY
									X	X	X						X	82 83/84 84 BIS 85 86 87 88 PROJ. - PROJ. 89	AGRICULTURE (and also BIOTECHNOLOGY) (84 bis: CATEGORY II) (87 : CATEGORY II) Vesicular Mycorrhizae Coccidiosis vaccine
								X	X			X	X	X	X			90 90 BIS 90 91 BIS	FOOD TECHNOLOGY (CATEGORY II)
												X	X	X	X	X		A 1 B 1 PROJ. B 2	SOCIOTECHNOLOGIES MEDICAL RESEARCH

											X	X	X	X	X				CRP MEDICAL RESEARCH AND PUBLIC HEALTH 1982-86 (CATEGORY I)
																		-	Registration of congenital abnormalities
													X	X	X			-	Detection of the tendency to thrombosis
																		-	Analytical cytology
												X	X	X				-	Cellular ageing
											X	X	X					-	Hearing impairment
											X	X	X					-	Nutrition

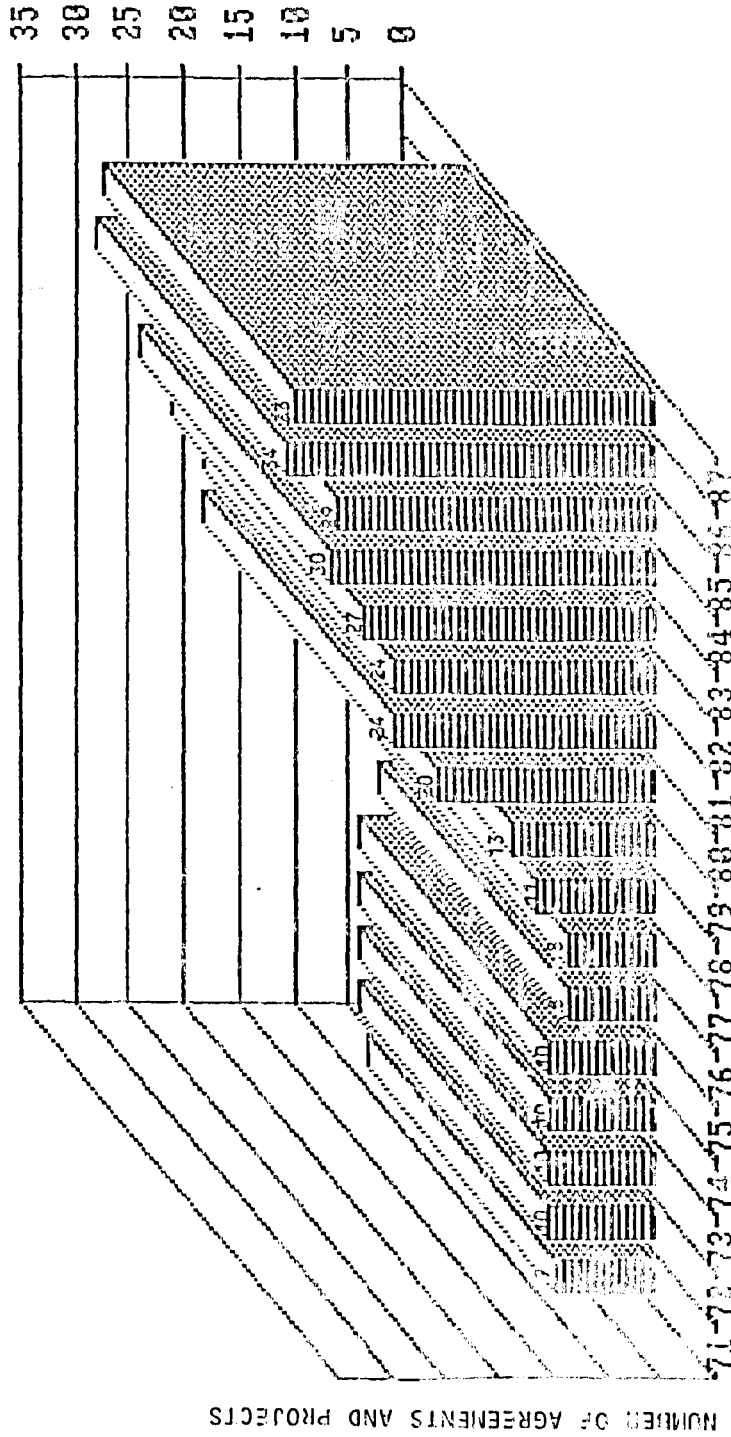
(\*) AGREEMENTS AND PROJECTS IN FORCE AT 31 DECEMBER 1987. PROJ. = PROJECT  
 CRP = COMMUNITY RESEARCH PROGRAMME

G.D. XII.G.1.  
31.12.1987

DIAGRAM

COST COOPERATION

INVENTORY OF COST AGREEMENTS (CATEGORY II) AND PROJECTS IN FORCE IN EACH YEAR



Years

ND: For 1971 to 1986 agreements that were in force and projects that were under way for only a part of a year are reported for the whole of the year.  
In 1987, the diagram shows the number of agreements and projects in force at 31 December 1987.

.....

ANNEX 3

FORMS OF BILATERAL SCIENTIFIC AND TECHNICAL COOPERATION FOR THE PARTICIPATION  
OF EFTA COUNTRIES IN COMMUNITY PROGRAMMES

There are three forms of possible cooperation for any one programme\*:

- . Participation in a full programme or in one or more subprogrammes
- . Participation in the projects within a programme
- . Concertation

In the first form of cooperation (full or partial participation in a programme) the EFTA country concerned takes on the same rights and obligations as the Member States: it therefore contributes to the financing of the programme or subprogramme an amount calculated in principle on the basis of GDP. The country is also represented in the advisory bodies monitoring the management of the programme. It is therefore entitled to receive any information concerning the execution of the programme and its national bodies are eligible for research contracts under the same conditions as those of a Member State.

In the second form (participation in the projects within a programme), organizations or firms in the EFTA countries may participate in specific projects in association with bodies situated in the Member States. There is no transfer of funds to cover the research costs, but a modest financial contribution may be requested to cover a part of the costs incurred by the Commission in managing the research contracts. Transfer of information is very restricted and consists essentially of the information needed to carry out the project or information resulting from it. Representatives of the EFTA countries may not participate in the advisory and management bodies for the programmes.

The third form covers essentially the exchange of information and concertation between a Community programme and a national programme in an EFTA country. Non-confidential information is exchanged in order to increase the efficiency of both programmes; it may relate to the planning of programmes, the intended research proposals, current research contracts and the results obtained. This cooperation procedure is particularly suitable when a programme in an EFTA country is comparable to a Community programme in terms of objectives, content, scope, etc.; and it helps to avoid pointless duplication of effort.

\*See also Annex 4.

ANNEX 4

DIFFERENCES BETWEEN COST COOPERATION AND BILATERAL COOPERATION WITH EFTA COUNTRIES

<u>Parameter</u>	<u>COST cooperation</u>	<u>EFTA bilateral cooperation</u>
BASES OF COOPERATION	General Resolution of the Ministerial Conference of 22-23 November 1971 for European scientific and technical cooperation in research Council Decision of 18 July 1987 relating to COST cooperation.	Ministerial meeting of 9 April 1984 at Luxembourg to strengthen Community cooperation with EFTA countries. Bilateral framework agreements on scientific and technical cooperation.
GEOPOLITICAL FRAMEWORK	Community, Community countries, EFTA countries Yugoslavia and Turkey.	Community, EFTA countries
SCIENTIFIC AND TECHNICAL AREAS OF COOPERATION	1. Areas covered by Community research programmes that are precompetitive or in the public interest. 2. "A la carte" research projects.	Areas covered by Community precompetitive scientific and technological research programmes.
LEGAL INSTRUMENT FOR THE IMPLEMENTATION OF COOPERATION	1. Intergovernmental agreement with one or more third countries (COST categories I and II) 2. Memorandum of Understanding (COST categories III and IV)	1. Appropriate bilateral agreement 2. Programme decision authorizing undertakings in EFTA States to participate in research projects by way of contract. 3. Appropriate bilateral agreement.
FORMS OF COOPERATION	1. Participation in Community programmes of shared-cost and concerted projects. 2. "A la carte" participation in projects in the form of concerted-action projects.	1. Participation in the whole of a Community programme of direct-action, shared-cost and concerted-action. 2. Participation in projects under Community programmes. 3. Concertation between Community programmes and national programmes.
FINANCING OF COOPERATION	1. Financial contribution from third countries to Community programmes (projects in categories I and II). 2. Financing for category III and IV projects is provided at national level.	1. Financial contribution from third countries to Community programmes. 2. Financing by non-member countries of part of the costs of each project grouping the concerned partners. 3. The parties pay the management costs necessary for the concertation of programmes.
BODY FOR THE MANAGEMENT OF COOPERATION	COST Committee of Senior Officials.	Joint Research Committees.

ANNEX 5

DIFFERENCES BETWEEN COST COOPERATION AND EUREKA COOPERATION

	<u>COST</u>	<u>EUREKA</u>
- <u>origin of cooperation proposals</u> :	countries' representatives on the COST Committee	firms and research organizations
- <u>accession</u> :	agreement open to participation by all COST countries	the proposers may reject applications from others to participate in a project
- <u>number and type of participants</u> :	number of signatories generally higher for COST; more research institutes, laboratories and bodies than firms	mostly firms
- <u>scale of projects</u> :	modest or medium-sized depending on circumstances	larger projects
- <u>financing of research</u> :	national level	financing essentially a matter for the participating firms or bodies
- <u>purpose</u> :	pre-competitive research	in most cases, directly market-oriented

ANNEX 6

COOPERATION PROCEDURES FOR COST AGREEMENTS AND PROJECTS  
IN CATEGORIES I AND II

In the light of certain Community decisions, in particular that of 29 June 1984 on "structures and procedures for the management and coordination of Community research, development and demonstration activities" (84/338/EURATOM, ECSC, EEC), the procedures for cooperation are as follows for categories I and II :

Category I  
-----

The Commission may, if it deems fit, propose that the Council open up the research programmes to third States within the COST framework (category I) and/or bilaterally with the EFTA countries. If a programme is open to COST States, the programme decision contains an article providing for such cooperation for all or part of the programme. An agreement between the Community and the non-member COST countries concerned is negotiated by the Commission and concluded by the Council. This agreement may be concluded between the Community and one or more non-member countries and covers either shared-cost projects and/or concerted-action projects. This agreement defines the financial contribution to be made to Community programmes by third countries and the arrangements for the participation of their representatives in the advisory management and coordination committees (CGC) in their plenary or specialized configurations.

Category II  
-----

For category II COST agreements, a research proposal originating in the COST framework may give rise to a Community research programme or may be incorporated in a Community programme covering a more extensive area of research. The decision to incorporate a COST proposal in a Community programme - like the decision to open it up to third countries - is taken by the Council on a proposal from the Commission, after obtaining the opinion of CREST as the Commission's advisory body.

For these category II agreements or projects, the preamble to the Council decision must, where appropriate, mention the COST origin of the Community programme.

Since the advisory management and coordination committees (CGC) are the Commission's main advisory bodies for specific Community research programmes, no new "Community-COST" Concertation Committees (CCCC) will be set up. However, in order to ensure efficient continuity in the management of certain concerted-action projects on the environment, the CGC on "Environment and Climatology" considers that the relevant Concertation Committees should continue their functions in the form of ad hoc working parties of the CGC as referred to in Article 5 of the abovementioned Council decision\*. The Commission intends to act on the CGC's opinion.

\* 29 June 1984 (OJ L 177, 4 July 1984).



LIST AND TITLES OF ALL COST AGREEMENTS AND ACTIONS FROM 1971 :  
SITUATION AT 31.12.1987

- 1                    INFORMATICS
- 11                   EUROPEAN INFORMATICS NETWORK
- 11 BIS               TELE-INFORMATICS
- 11 TER               TELE-INFORMATICS
- 13                   ARTIFICIAL INTELLIGENCE AND PATTERN RECOGNITION
- 2                    TELECOMMUNICATIONS
- 25:1                 AERIAL NETWORK WITH PHASE CONTROL
- 25:2                 AERIALS WITH REDUCED FIRST SIDE-LOBES AND MAXIMUM G/T YIELD
- 25:4                 INFLUENCE OF ATMOSPHERIC CONDITIONS ON ELECTROMAGNETIC WAVE  
PROPAGATION AT FREQUENCIES ABOVE 10 GHz.
- 201                  METHODS FOR PLANNING AND OPTIMISATION OF TELECOMMUNICATIONS  
NETWORKS
- 202                  DIGITAL LOCAL TELECOMMUNICATIONS NETWORKS
- 202 BIS              WIDEBAND LOCAL DIGITAL TELECOMMUNICATIONS NETWORKS
- 204                  PHASED ARRAY ANTENNAS AND THEIR NOVEL APPLICATIONS
- 205                  INFLUENCE OF THE ATMOSPHERE ON RADIO-PROPAGATION ON SATELLITE-  
EARTH PATHS AT FREQUENCIES ABOVE 10 GHz.
- 206                  CODING AND TRANSMISSION OF HIGH DEFINITION TELEVISION SIGNALS
- 207                  DIGITAL LAND MOBILE RADIO-COMMUNICATIONS
- 208                  OPTICAL FIBRE COMMUNICATION SYSTEMS
- 209                  MAN-MACHINE COMMUNICATION BY MEANS OF SPEECH SIGNALS
- 210                  INFLUENCE OF THE ATMOSPHERE ON INTERFERENCE BETWEEN RADIO  
COMMUNICATION SYSTEMS AT FREQUENCIES ABOVE 1 GHz.
- 211                  REDUNDANCY REDUCTION TECHNIQUES FOR VISUAL TELEPHONE SIGNALS
- 211 BIS              REDUNDANCY REDUCTION TECHNIQUES FOR CODING OF BROADBAND VIDEO  
SIGNALS
- 212                  HUMAN FACTORS IN INFORMATION SERVICES

- 213 ELECTRONICALLY STEERED ANTENNAS FOR FUTURE SATELLITE AND TERRESTRIAL COMMUNICATIONS IN THE 90s.
- 214 METHODS FOR THE DESIGN AND EVALUATION OF MULTI-SERVICE TELECOMMUNICATION NETWORKS
- 215 HIGH BIT OPTICAL FIBRE SYSTEMS
- 216 OPTICAL SWITCHING AND ROUTING DEVICES
- 217 OPTICAL MEASUREMENT TECHNIQUES FOR ADVANCED OPTICAL FIBRES DEVICE AND SYSTEMS
- 218 MATERIAL SCIENCE AND RELIABILITY OF OPTICAL FIBRES AND CABLES
- 219 FUTURE TELECOMMUNICATIONS AND TELE-INFORMATICS FACILITIES FOR DISABLED PERSONS
- 220 COMMUNICATION PROTOCOLS AND USER INTERFACES FOR KEYBOARD AND DISPLAY EQUIPMENT INTENDED FOR TELECOMMUNICATIONS USED BY DISABLED PERSONS (Project)
- 221 THE FORMULATION OF A RECOMMENDATION ON THE AMPLIFICATION AND COUPLING BETWEEN HEARING AIDS AND TELEPHONE CAPSULES (Project)
- 222 THEORY OF WAVE GUIDE FOR INTEGRATED OPTICS (Project)
- 223 ACTIVE PHASED ARRAY ANTENNAS (Project)
- 224 METHODS FOR THE PLANNING AND EVALUATION OF SYNCHRONOUS AND UNSYNCHRONOUS TIME DOMAIN MULTI-SERVICE NETWORKS (Project)
- 3 TRANSPORT
- 30 ELECTRONIC TRAFFIC AIDS ON MAJOR ROADS
- 30 BIS ELECTRONIC TRAFFIC AIDS ON MAJOR ROADS
- 33 FORWARD STUDY OF PASSENGER TRANSPORT BETWEEN LARGE CONURBATIONS
- 301 SHORE-BASED MARINE NAVIGATION AID SYSTEMS
- 302 RESEARCH INTO TECHNICAL AND ECONOMIC CONDITIONS FOR THE USE OF ELECTRIC ROAD VEHICLES
- 303 TECHNICAL AND ECONOMIC EVALUATION OF DUAL-MODE TROLLEYBUS PROGRAMMES
- 304 USE OF ALTERNATIVE MOTOR FUELS FOR THE PROPULSION OF ROAD VEHICLES
- 305 DATA SYSTEM FOR THE STUDY OF DEMAND FOR INTERREGIONAL PASSENGER TRANSPORT

- 306 AUTOMATIC TRANSMISSION OF TRANSPORT DATA
- 307 RATIONAL USE OF ENERGY IN TRANSPORT
- 308 MAINTENANCE OF SHIPS
- 309 ROAD METEOROLOGY AND MAINTENANCE CONDITIONS
- 310 FREIGHT TRANSPORT LOGISTICS (Project)
- 311 MARITIME TRAFFIC SIMULATION (Project)

4 OCEANOGRAPHY

- 43 EXPERIMENTAL EUROPEAN NETWORK OF OCEAN STATIONS
- 43 BIS EXPERIMENTAL EUROPEAN NETWORK OF OCEAN STATIONS (Cont.)
- 46 MARICULTURE
- 47 BENTHIC COASTAL ECOLOGY
- 48 MARINE PRIMARY BIOMASS

5 METALLURGY AND MATERIALS SCIENCE

- 50 MATERIALS FOR GAS TURBINES
- 51 MATERIALS FOR GAS TURBINES
- 52 MATERIALS FOR GAS TURBINES
- 53 MATERIALS FOR DESALINATION PLANTS
- 56 MATERIALS FOR SUPERCONDUCTING ELECTRICAL MACHINES
- 501 HIGH TEMPERATURE MATERIALS FOR CONVENTIONAL SYSTEMS OF ENERGY GENERATION AND CONVERSION USING FOSSIL FUELS
- 502 CORROSION IN THE CONSTRUCTION INDUSTRY
- 503 POWDERMETALLURGY
- 504 ADVANCED CASTING AND SOLIDIFICATION TECHNOLOGY
- 505 MATERIALS FOR STEAM TURBINES
- 506 INDUSTRIAL APPLICATIONS OF LIGHT ALLOYS

507 . DEFINITION OF A THERMODYNAMIC METHODOLOGY AND DATABASE FOR THE DEVELOPMENT OF NEW LIGHT ALLOYS (Project)

COMMUNITY PROGRAM OF RESEARCH "RAW MATERIALS"  
(1982 - 1985) CATEGORY I

- METALS AND MINERALS SUBSTANCES
- RECYCLING OF URBAN AND INDUSTRIAL WASTE
- WOOD AS RENEWABLE RAW MATERIAL (2 AGREEMENTS)

6 ENVIRONMENTAL PROTECTION

- 61 A PHYSICO-CHEMICAL BEHAVIOUR OF SO<sub>2</sub> IN THE ATMOSPHERE
- 61A BIS PHYSICO-CHEMICAL BEHAVIOUR OF ATMOSPHERIC POLLUTANTS
- 611 PHYSICO-CHEMICAL BEHAVIOUR OF ATMOSPHERIC POLLUTANTS (Cont.)
- 612 AIR POLLUTION EFFECTS ON TERRESTRIAL AND AQUATIC ECOSYSTEMS
- 64 B ANALYSIS OF ORGANIC MICRO-POLLUTANTS IN WATER
- 64B BIS ANALYSIS OF ORGANIC MICRO-POLLUTANTS IN WATER (Cont.)
- 641 ORGANIC MICRO-POLLUTANTS IN THE AQUATIC ENVIRONMENT
- 647 BENTHIC COASTAL ECOSYSTEMS
- 68 SEWAGE SLUDGE PROCESSING
- 68 BIS TREATMENT AND USE OF SEWAGE SLUDGE (Cont.)
- 68 TER TREATMENT AND USE OF SEWAGE SLUDGE (Cont.)
- 681 TREATMENT AND USE OF ORGANIC SLUDGES AND LIQUID AGRICULTURAL WASTES
- EFFECTS OF ATMOSPHERIC POLLUTION ON HEALTH (Project)

COMMUNITY PROGRAM OF RESEARCH "ENVIRONMENTAL PROTECTION AND CLIMATOLOGY" (1981 - 1985) CATEGORY I

- CLIMATOLOGY

7            METEOROLOGY

70           EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS

72           MEASUREMENT OF PRECIPITATION BY RADAR

73           WEATHER RADAR NETWORKING

74           UTILISATION OF VHF/UHF RADAR WIND PROFILER NETWORKS FOR  
IMPROVING WEATHER FORECASTING IN EUROPE

8            AGRICULTURE (AND BIOTECHNOLOGY)

82           MAIZE AS A BASIC FEED FOR BEEF PRODUCTION

83           PRODUCTION AND FEEDING OF SINGLE CELL PROTEIN

84           PRODUCTION AND FEEDING OF SINGLE CELL PROTEIN

84 BIS       USE OF LIGNOCELLULOSE-CONTAINING BY-PRODUCTS AND OTHER PLANT  
RESIDUES FOR ANIMAL FEEDING

85           EARLY WEANING OF PIGLETS

86           MINERAL NUTRITION OF BASIC FIELD CROPS

87           IN-VITRO CULTURES FOR THE PURIFICATION AND PROPAGATION OF PLANTS

88           METHODS OF EARLY DETECTION AND IDENTIFICATION OF PLANT DISEASES

-            IMPORTANCE OF VESICULAR-ARBUSCULAR (VA) MYCORRHIZAE IN THE  
CIRCULATION OF MATTER IN SOIL AND IN PLANT NUTRITION (Project)

89           DEVELOPMENT OF VACCINES AGAINST COCCIDIOSIS THROUGH  
BIOTECHNOLOGY (Project)

9            FOOD TECHNOLOGY

90           EFFECTS OF PROCESSING ON THE PHYSICAL PROPERTIES OF FOODSTUFFS

90 BIS       EFFECTS OF PROCESSING ON THE PHYSICAL PROPERTIES OF FOODSTUFFS

91           EFFECTS OF THERMAL PROCESSING AND DISTRIBUTION ON THE QUALITY  
AND NUTRITIVE VALUE OF FOOD

91 BIS       EFFECTS OF PROCESSING AND OF DISTRIBUTION ON THE QUALITY AND  
NUTRITIVE VALUE OF FOODSTUFFS

A            SOCIO-TECHNOLOGIES

A1           SYSTEMS OF SOCIO-TECHNOLOGIES AND INDUSTRIAL SAFETY

B            MEDICAL RESEARCH

B1           CRITERIA FOR THE CHOICE AND DEFINITION OF HEALTHY VOLUNTEERS  
AND/OR PATIENTS FOR PHASE I AND PHASE II STUDIES IN DRUG  
DEVELOPMENT

B2           NUCLEAR MEDICINE SOFTWARE

COMMUNITY RESEARCH PROGRAM "MEDICAL RESEARCH AND PUBLIC  
HEALTH (1982 - 1986) CATEGORY I

(Some concerted Community actions having already put into effect  
before this Program 1982-1986, several agreements have been  
consequently concluded before 1982)

REGISTRATION OF CONGENITAL ABNORMALITIES

DETECTION OF THE TENDENCY TO THROMBOSIS (2 AGREEMENTS)

AUTOMATED AND ANALYTICAL CYTOLOGY

CELLULAR AGEING

HEARING IMPAIRMENT

NUTRITION