COUNCIL DECISION

of 20 June 1989

on a specific research and technological development programme in the field of marine science and technology (MAST)

(89/413/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 130q (2) thereof,

Having regard to the proposal from the Commission (1),

In cooperation with the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee (3),

Whereas Article 130k of the Treaty states that the framework programme is to be implemented through specific programmes developed within each activity;

Whereas, by its Decision 87/516/Euratom, EEC (4), as amended by Decision 88/193/EEC, Euratom (5), the Council has adopted a framework programme for Community research and technological development (1987 to 1991), providing, *inter alia,* for activities in the exploitation of the sea bed and the use of marine resources;

Whereas Decision 87/516/Euratom, EEC stipulates that a particular aim of Community research must be to strengthen the scientific and technological basis of European industry, particularly in strategic sectors of advanced technology, and to encourage industry by making it more competitive at the international level, and whereas the same Decision also lays down that Community action is justified if it contributes, among other things, to strengthening the Community's economic and social cohesion and to promoting its overall harmonious development, while at the same time being consistent with the pursuit of scientific and technical excellence; whereas the MAST programme is planned to contribute to the pursuit of these objectives;

Whereas the European Parliament has stressed the need for cooperation, coordination and complementarity of national policies in the field of oceanography and marine technology and has recommended that the Commission should undertake a number of actions to that effect under the framework programme, including a specific programme for marine science and technology;

Whereas other Community programmes (e.g. environmental protection, climatology and natural hazards, fisheries, technological development in the hydrocarbons sector, non-nuclear energy and some activities of the Joint Research Centre (JRC) have a bearing on topics in marine science and technology, but none are directed specifically at marine research;

Whereas in the present context of expanding industrialization, increasing pressure is being placed on the marine and especially the coastal environment;

Whereas it is widely recognized that a good knowledge base and reliable predictive techniques are essential for long-term management and protection strategies for the marine environment; whereas to achieve these objectives much can be gained from effective coordination of the research programmes of the Member States and joint execution of European projects in marine science and technology would be beneficial;

Whereas participation by certain European third countries in a Community research and development programme in marine science and technology would be beneficial;

Whereas the Scientific and Technical Research Committee (CREST) has given its opinion,

HAS ADOPTED THIS DECISION:

Article 1

A specific research and technological development programme for the European Economic Community in the field of marine science and technology (MAST), as defined in Annex I, is hereby adopted for a period of three years, starting on 28 June 1989.

(1) OJ No C 298, 23. 11. 1988, p. 17.
(2) OJ No C 69, 20. 3. 1989, p. 85, and OJ No C 158, 26. 6. 1989.
(3) OJ No C 75, 23. 3. 1989, p. 11.
(4) OJ No L 302, 24. 10. 1987, p. 1.
(5) OJ No L 89, 6. 6. 1988, p. 35.

Article 2

The funds estimated as necessary for the Community contribution to the execution of the programme amount to ECU 50 million, including expenditure on a staff of 13.

An indicative breakdown of these funds is set out in Annex II.

Article 3

Detailed rules for the implementation of the programme are set out in Annex III.

Article 4

During the second year of implementation, the Commission shall review the programme and send a report on the results of its review to the European Parliament and the Council. This report shall be accompanied where necessary by proposals for the amendment or extension of the programme.

At the end of the programme, an evaluation of the results achieved shall be conducted by the Commission which shall report thereon to the European Parliament and the Council.

The abovementioned reports shall be established having regard to the objectives set out in Annex I to this Decision and in accordance with Article 2 (2) of Decision 87/516/Euratom, EEC.

Article 5

The Commission shall be responsible for the execution of the programme.

The Commission shall be assisted by a committee of an advisory nature, hereinafter referred to as 'the Committee' composed of the representatives of the Member States and chaired by the representative of the Commission.

Contracts concluded by the Commission shall govern the rights and obligations of each party, in particular arrangements for the dissemination, protection and exploitation or research results.

Article 6

1. The representative of the Commission shall submit to the Committee a draft of the measures to be taken. The Committee shall deliver its opinion within a time limit which the chairman may lay down according to urgency of the matter, if necessary by taking a vote.

2. The opinion shall be recorded in the minutes of the Committee; in addition, each Member State shall have the right to have its opinion recorded in the minutes.

3. The Commission shall take the utmost account of the opinion delivered by the Committee. It shall inform the Committee of the manner in which its opinion has been taken into account.

Article 7

The procedures laid down in Article 6 shall apply in particular to:

— the contents for the call for proposals,

— the assessment of the proposed projects and the estimated amount of the Community's contribution to them,

— departures from the general rules governing Community participation set out in Annex III,

— the participation in any project by non-Community organizations and enterprises referred to in Article 8 (3),

— any adaptation of the indicative breakdown of funds set out in Annex II,

— the measures to be undertaken to evaluate the programme,

— arrangements for the dissemination, protection and exploitation of the results of research carried out under the programme.

Article 8

1. The Commission is hereby authorized to negotiate, in accordance with Article 130n of the Treaty, agreements with international organizations, those third States participating in European Cooperation in the field of Scientific and Technical Research (COST), and those European countries having concluded framework agreements in scientific and technical cooperation with the Community, with a view to associating them wholly or partly with the programme.

2. Before entering into the negotiations referred to in paragraph 1, the Commission shall consult the Council on the advisability and on the terms of reference of these negotiations and shall take full account of the Council's views.

3. Where framework agreements for scientific and technical cooperation between European third countries and

the European Communities have been concluded, organizations and enterprises established in those countries may, on the basis of the criterion of mutual advantage, become partners in a project undertaken within the programme.

No contractor established outside the Community who participates as a partner in a project undertaken within the programme shall be entitled to Community financing intended for the programme. The contractor will contribute to general administrative expenses.

Article 9

This Decision is addressed to the Member States.

Done at Luxembourg, 20 June 1989.

For the Council

The President

J. SOLANA MADARIAGA

ANNEX I

PROGRAMME OBJECTIVES

The objectives of the MAST programme are:

— to contribute to better knowledge of the marine environment in order to improve its management and protection and to predict change;

— to encourage the development of new technologies for the exploration, protection and exploitation of marine resources;

— to improve coordination and cooperation and the exchange of information amongst national marine R&D programmes in the Member States, and to help increase the effectiveness of these programmes through better use of research facilities;

— to strengthen industrial competitiveness in the relevant sectors;

— to contribute to the economic and social cohesion of the Community by encouraging the involvement of scientists from all Member States thereby stimulating technology transfer and the joint and more efficient use of facilities and simultaneously strengthening the scientific and technological base of the Community, whilst being consistent with the pursuit of scientific and technical excellence;

— to provide the technical basis for, and encourage the development of, common norms, standards and design guide lines, in view of the completion of the internal market in 1992;

— to facilitate training and exchange of personnel;

— to assist as far as possible Community participation in international ocean programmes.

ANNEX II

PROGRAMME CONTENTS AND INDICATIVE BREAKDOWN OF FUNDS

Indicative breakdown

PART I

Basic and applied marine science 30—35 %

Directed at the study of the structure, stability and dynamics of the marine environment with reference, *inter alia*, to the quality of sea water and fauna and flora. Emphasis will be on coastal waters and seas surrounding the Member States of the Community (Baltic, East Atlantic north of the Tropic of Cancer, Irish, Mediterranean and North).

1. **Modelling**

The main aim is to establish decision support systems for better management.

1.1. *Continental shelf and regional seas*

To develop three-dimensional physical models and fourth-generation management systems for shelf and regional seas.

1.2. *Coastal waters*

To compare and improve models of coastal waters and currents and integrate these with models of regional seas.

1.3. *Ecosystem models*

To upgrade models of marine ecosystems in order to understand biological processes and thereby achieve more realistic management schemes.

1.4. *Modelling coordination within the Community*

2. **Oceanography**

With emphasis on multidisciplinary studies of processes which contribute to a better understanding of marine systems.

2.1. *Circulation and exchange of water masses*

To determine the prevailing physical forces, the fate of inputs, and to evaluate exchange at the shelf/ocean interface.

2.2. *Biogeochemical cycles and fluxes*

To establish the major pathways and reservoirs in biogeochemical processes.

2.3. *Interface and boundary processes*

To understand the mechanisms governing exchange of matter and energy at the boundaries of the marine system.

2.4. *Biological processes*

To improve understanding of biological processes in the marine environment, particularly in relation to physical and chemical determinants.

2.5. *Sedimentary processes*

To obtain better information on sedimentary processes, for the balanced development of resources and uses of the sea-floor and the coast.

Indicative breakdown

PART II

Coastal zone science and engineering 15—20 %

Concerned with coastal problems and processes (including coastal protection), and with the development of better design criteria for coastal engineering.

1. **Coastal morphodynamics**

   To understand and predict changes in coastal morphology.

2. **Coastal ecosystems**

   To improve knowledge of the predominant physical, chemical and biological processes in coastal waters.

3. **Meteomarine predictions**

   To provide the basis for improved modelling and forecasting of waves, particularly for coastal engineering design requirements.

4. **Coastal engineering**

   To study coastal protection problems (breakwaters and beach nourishment, etc.) and to prepare for the impact of the anticipated rise in sea level.

Indicative breakdown

PART III

Marine technology 30—35 %

Focused mainly on encouraging the development of new instrumentation and generic enabling technology necessary for the advancement of marine science.

1. **Instrumentation for science**

   To promote the development of new sensors, instrument packages and systems, especially for long-term *in situ* and remote measurements.

2. **Generic enabling technologies**

   To assist R&D in critical areas of underwater communication, imaging and robotics.

3. **Design aspects of large facilities**

   To carry out studies on the design of specialized facilities, e.g. research vessels and manned or unmanned long-range submersibles.

4. **Studies on the outlook for the 1990s (technology and resources)**

   To carry out technical-economic feasibility studies assessing the benefits of future strategic initiatives.

	Indicative breakdown
PART IV	
Supporting initiatives	10—15 %

Aimed at improving coordination, avoiding duplication of work, achieving more cost effective-use of facilities, improving specialized training, assisting technology transfer, and contributing to pre-standardization.

1. **European ocean data and information network**

   To establish a common system linking existing ocean data centres in Europe.

2. **Research vessel coordination**

   To set up a communication system for the coordination of research cruises and the shared use of equipment.

3. **Advanced training**

   To establish advanced courses and encourage training and exchange of personnel.

4. **Surveying for resource evaluation**

   To encourage cooperative new approaches to mapping, bathymetric and hydrographic surveying.

5. **Preparation of norms and standards**

   To promote comparative testing and calibration of oceanographic instruments and systems, taking into account the requirements for environmental protection.

6. **Marine polar and marine lithospheric research**

   To support planning and possible coordination of European efforts.

Staff and administration costs included in the implementation of the programme amount to 8,25 %.

ANNEX III

IMPLEMENTATION OF THE PROGRAMME

The programme consists of activities carried out by means of shared-cost research contracts to be awarded following a selection procedure based on a call for proposals published in the *Official Journal of the European Communities*. The programme may also be carried out by means of study contracts, coordination projects, awards for training and mobility grants and dissemination activities, taking into account the necessary rules of protection.

The participants may be industrial companies — including small and medium-sized enterprises — research institutions, universities, individuals or any combination thereof established in the Community.

Shared-cost research projects involving research centres (and/or universities) and industry are particularly welcome and mandatory for Part III, Marine Technology. These projects should, in general, be carried out by participants from more than one Member State.

For shared-cost contracts, the Community participation will be up to 50 % of the total expenditure. Alternatively, in respect of universities and research institutes carrying out projects, the Community may bear up to 100 % of the additional expenditure involved.