Converted reading copy — not an official PDF

84/130/EEC: Council Decision of 28 February 1984 concerning a European programme for research and development in information technologies (ESPRIT)

Source: https://eur-lex.europa.eu/eli/dec/1984/130/oj/eng

Official HTML retrieved 2026-09-10. Converted 2026-09-10. The document text, tables and links are reproduced from the captured English HTML. Pagination and layout are newly generated; the decorative EU emblem is omitted. Consult the official source for the authentic publication and current status.

Avis juridique important

|

31984D0130

84/130/EEC: Council Decision of 28 February 1984 concerning a European programme for research and development in information technologies (ESPRIT)

Official Journal L 067 , 09/03/1984 P. 0054 - 0059
Spanish special edition: Chapter 16 Volume 1 P. 0185
Portuguese special edition Chapter 16 Volume 1 P. 0185

*****

COUNCIL DECISION

of 28 February 1984

concerning a European programme for research and development in information technologies (ESPRIT)

(84/130/EEC)

THE COUNCIL OF THE EUROPEAN

COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 235 thereof,

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

Having regard to the opinion of the European Parliament (2),

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

Whereas the Community has as its task, by establishing a common market and progressively approximating the economic policies of Member States, to promote throughout the Community a harmonious development of economic activity and closer relations between the States belonging to it;

Whereas the Council adopted a resolution on data processing on 15 July 1974 (4);

Whereas the Heads of State or of Government, meeting in Strasbourg on 21 and 22 June 1979, declared that the dynamic complex of information industries, based on the new electronic technologies, offered a major source of economic growth and social development;

Whereas the Commission has proposed to the Council a scientific and technical strategy and a framework programme for the period 1984 to 1987;

Whereas the proposed framework programme calls for an action programme of research and development in information technology;

Whereas the Council has adopted, by Decision 82/878/EEC (5), a series of pilot projects in the field of information technology;

Whereas the response of industry, universities and research institutions to the pilot projects phase has been of very high quality and shows a high degree of interest; whereas it would be necessary to provide adequate resources to assure continuity in the actions about to be launched, and to proceed to the implementation of a full-scale action programme;

Whereas a full-scale programme of research and development in information technology should have the broad goals indicated in the Annex hereto, but be capable of revision at various levels of detail to reflect changing industrial priorities;

Whereas this programme meets the absolute need for the constitution or consolidation of a specifically European industrial potential in the technologies concerned; whereas its beneficiaries must therefore be the undertakings, universities and research centres in the Community which are best suited to attain these objectives;

Whereas adequate dissemination of, and access to, results of projects of Community interest is essential to the pursuit of the aims of the Community;

Whereas it is necessary for the execution of the programme that the Commission be assisted by a consultative committee;

Whereas prospective continuity of actions is essential to the optimum planning and execution of cooperative research and development activities to preserve the strategic objectives of ESPRIT;

Whereas, since the Treaty has not made provision for specific powers for the adoption of this Decision, it is necessary to invoke Article 235 thereof,

HAS DECIDED AS FOLLOWS:

Article 1

1. The ESPRIT programme of research and development for the European Economic Community in the field of information technologies, as described in the Annex, hereinafter referred to as 'the programme', is hereby adopted for a period of five years, as from 1 January 1984.

2. The programme shall comprise pre-competitive research and development projects (hereinafter referred to as 'the projects'), carried out by means of contracts, to be concluded with companies, including small and medium-sized undertakings, universities and other bodies established in the Community, and the coordination of research and development activities carried out under the programmes of the Member States and of the Community.

3. The projects shall as a rule be submitted in reply to an open invitation published in the Official Journal of the European Communities and involve the participation of at least two independent industrial partners not all established in the same Member State. Each contractor will be expected to bring a significant contribution to the project.

The contractors will be expected to bear a substantial proportion of the costs, 50 % of which may normally be borne by the Community.

In exceptional cases as specified in Article 6 (2), different conditions from those laid down in this paragraph may be adopted in accordance with the procedure in Article 7.

Article 2

The Community shall contribute to the performance of the programme within the limits of the appropriations entered to this end in the budget of the European Communities.

The overall amount of the appropriations estimated to be necessary for the Community's contribution to the performance of the programme shall be 750 000 000 ECU over five years, including expenditure on staff whose cost shall not exceed 4,5 % of the Community contribution.

Up to a maximum of 25 % of the Community's total contribution to new projects launched under this programme may for the first year be allocated to new projects which fall below the threshold referred to in the third indent of Article 6 (2). This percentage figure will be annually revised in the framework of the preparation of the annual work programme referred to in Article 3.

Article 3

1. The Commission shall see that the programme is properly performed and establish the appropriate implementation measures and infrastructures. In particular, it shall establish each year and update as required, in accordance with the procedures laid down in Article 7, a draft work programme defining the detailed objectives, the type of projects to be undertaken and the corresponding financial plans.

2. The work programme shall be adopted by decision of the Council acting by a qualified majority. To this end, the Commission shall submit the draft annual work programme to the Council in good time and not later than 31 October of each year.

3. By way of derogation from paragraphs 1 and 2 of this Article and from Article 6 (2), the first work programme shall be adopted by the Council acting by a qualified majority on the basis of a draft submitted by the Commission.

Article 4

1. The Commission shall be assisted in the performance of the tasks referred to in Article 3 by a Committee.

The Committee, consisting of two representatives of each Member State, shall be set up by the Commission on the basis of nominations by the Member States.

Members of the Committee may be assisted by experts or advisers depending on the nature of the issue under consideration.

The Committee shall be chaired by a Commission representative.

2. The proceedings of the Committee shall be confidential.

3. The Committee shall adopt its own rules of procedure.

4. Secretarial services for the Committee shall be provided by the Commission. Article 5

With regard to coordination activities, the Member States and the Community shall exchange all appropriate information to which they have access and which they are free to disclose concerning research and development activities in the areas covered by this Decision, whether or not planned or carried out under their authority.

Information shall be exchanged in accordance with a procedure to be defined by the Commission after consulting the Committee, and will be treated as confidential at the supplier's request.

Article 6

1. The Commission may consult the Committee on any matter falling within the scope of this decision.

The Commission shall inform the Committee regularly in advance of projects falling below the threshold referred to in paragraph 2.

2. The Commission shall consult the Committee, in accordance with the procedure laid down in Article 7, on:

- the definition and updating of the draft work programme,

- any departure from the general rules laid down in Article 1 (3),

- the assessment of proposed projects as well as the Community's financial contribution to their execution when this contribution requires more than 5 000 000 ECU (in 1 January 1984 value).

Article 7

1. Where the procedure laid down in this Article is to be followed, the chairman shall refer the matter to the Committee, either on his own initiative or at the request of one of its members.

2. The Commission representative shall submit to the Committee a proposal for the measures to be taken. The Committee shall deliver its opinion on the proposal within a period that may be decided by the chairman in the light of the urgency of the matter and which shall normally be one month and shall in no case exceed two months. The opinion shall be adopted by a qualified majority. Within the Committee, the votes of the Member States shall be weighted in accordance with Article 148 (2) of the Treaty. The chairman shall not vote.

3. Except for the annual work programme, which shall be adopted by the Council according to the procedures laid down in Article 3 (2), the Commission shall implement the measures where its proposal is in accordance with the opinion of the Committee. Where the proposal is not in accordance with the opinion, or where no such opinion is issued, the Commission shall forthwith submit to the Council a proposal in the form of a draft Decision. The Council shall act by a qualified majority.

If the Council has not acted within a period which shall normally be one month and shall in no case exceed two months from the date on which the matter was referred to it:

- the Commission proposal shall be deemed to be rejected if it concerns matters falling under the second indent of Article 6 (2),

- the Commission may take a decision corresponding to its proposal if it concerns matters falling under the third indent of Article 6 (2).

Article 8

1. The programme shall be reviewed in consultation with the Committee either after 30 months or as soon as 60 % of the amount has been committed, on the basis of a report drawn up by the Commission, which shall be forwarded to the Council and the European Parliament. This review will assess the initial results of the programme as compared with the stated objectives. On this basis the Commission will, where appropriate, make suggestions. These suggestions will be examined in conjunction with the 1987 work programme and the Council will take decisions thereon in accordance with the same procedure.

2. At the end of the five-year period of the programme, the Commission, after consulting the Committee, shall send the Member States and the European Parliament a report on the performance and results of the programme.

Done at Brussels, 28 February 1984.

For the Council

The President

L. FABIUS

(1) OJ No C 321, 26. 11. 1983, p. 1.

(2) OJ No C 307, 14. 11. 1983, p. 127.

(3) OJ No C 341, 19. 12. 1983, p. 33.

(4) OJ No C 86, 20. 7. 1974, p. 37.

(5) OJ No L 369, 29. 12. 1982, p. 37.

ANNEX

AREAS OF ACTIVITY

The programme contains areas of research and development activity and infrastructure actions.

The envisaged areas of research and development activity include:

1. Advanced microelectronics capability

The main objective is to provide the technological capability to design, manufacture and test very high-speed and very large-scale integrated circuits (VLSICs), that will be needed in the next two decades.

A concurrent objective is to stimulate research and development on novel materials and devices for special applications. The activities to be pursued include:

- computer-aided design, manufacture and test for very large-scale integrated circuits (VLSICs),

- process steps for submicron feature sizes in silicon and other semiconductor materials, and their integration into complete technologies,

- computer controlled VLSIC fabrication and equipment for design, manufacture and test of VLSICs,

- techniques for interfacing ICs to their environment, including high-speed, high-density interconnect between chips,

- research into optical information processing and transmission, notably integrated opto-electronics, optical switching and storage,

- novel information and image display technologies,

- novel organic and inorganic materials for electronics and optical technologies,

- allowance for educational activities related to industrial research.

2. Software technologies

Software technology aims at providing the basic engineering, the methods and tools that are needed in the software development process, the management principles for information technology as well as the scientific knowledge underlying them, and aims to integrate them into a consistent technology. It is founded on traditional mathematics, economics and engineering practices.

Three complementary research approaches will have to be combined.

A. The first approach stresses the scientific foundations and covers such areas as formal mathematical techniques, taxonomy and metrics, including empirical techniques and modelling. This would entail essentially theoretical research work aimed at a better scientific understanding of the field with a view to establishing effective theories and methods for software development.

B. The second approach focuses on the software production process.

Work in this area would have to relate to all parts of the software life cycle and may address activities such as requirements analysis, specification, design, implementation, verification and validation, maintenance and enhancement. The full integration of methods and tools and phase-to-phase continuity will be of particular importance. Research and development activity in this area would mainly concentrate on methods and tools in software engineering and on their integration into complete systems for software production. The aim is the mastery of the technical production process of software goods.

C. The third approach is concerned with the software development process as an economic activity in its own right. It focuses on software as a product, investigating the mutual dependencies between commercial goals of an enterprise and the technical characteristics and performance requirements of the software product. It also addresses the problem of producing application-specific software, and the way in which the knowledge about the field of application may influence the tools and methods for software development. This would entail research and development in the economics of industrial software production.

The aim of this approach is to provide the techniques and criteria for organizing, managing and optimizing all elements of software application technology and the software industrial production process.

3. Advanced information processing (AIP)

The objective is to create an industrial exploitation basis for the transition from data processing to knowledge processing systems that is the key to the next computer generation.

Objectives include the provision of more user-friendly interfaces to non-expert users, intelligent sensors and utilization of VLSICS.

The main thrust of research and development will be in the following topics:

- information and knowledge engineering involving considerable basic research or expert systems, knowledge representation, inference and learning techniques,

- external interfaces, including signal analysis, signal synthesis, pattern recognition, signal understanding, human factors and human perception,

- information and knowledge storage, novel hardware technologies, advanced software techniques,

- computer architectures for AIP. Some of these will be radically different from the classic von-Neumann, and some will seek to exploit parallelism,

- design and system aspects, covering conventions, standards, specification, verification, design methods and general system methodology.

4. Office systems

The objective is to carry out research on the information systems that will support the wide range of non-routine tasks performed by humans in the office environment. The research and development activities to be pursued include:

- office system science, as prerequisite and support to the structural and functional analysis and description of office procedures, definition of standards and the design of office products and systems adapted to a variety of needs,

- office work-stations, document description languages, document creation and distribution, man/machine interfaces,

- office communication systems, including local area networks and their interconnection, integrated text-voice-image communication and value-added functions,

- office filing and retrieval systems that provide easy and reliable access to mixed-mode data files, supporting the high-level functions performed in the office, e.g. retrieval of 'knowledge', content- and structure-addressable data bases, office document languages,

- human factors, encompassing all aspects of the interactions between man and information handling systems and aspects of information handling systems as media of communication between people.

5. Computer integrated manufacture (CIM)

The objective is to establish the technology base for progressive introduction of IT (information technologies) to all phases of the manufacturing cycle leading ultimately to fully integrated production systems.

The main emphasis is placed on manufacturing elements as they are needed for discrete batch manufacturing, as this is technologically the most demanding problem.

The main thrust of the research and development will concentrate on:

- system architectures for CIM systems and the infrastructure required to support them,

- computer-aided design and engineering (CAD and CAE) systems,

- computer-aided manufacture, test and repair systems, - real-time control of machines and systems, including automated assembly, robots, numerically-controlled machine tools, and entire FMS's (flexible manufacturing systems),

- sub-systems and components, including real-time imaging and control systems, micro-electronic sub-systems, sensor systems,

- demonstration models of CIM sub-systems leading to complete CIM demonstrators for experiments in real-live situations.

In all areas, AIP concepts and developments will be exploited where appropriate.

6. Infrastructure actions

The infrastructure actions consist of a number of specific measures aimed at establishing the conditions required for successful execution of cooperative research and development on a Community level and for drawing the maximum benefit from ESPRIT as a whole.

These infrastructure activities include in particular:

- coordination of Community and Member States' research and development programmes, acquisition of information, both within the ESPRIT programme and from the world at large, and its appropriate dissemination,

- coordination and documentation of standards within the ESPRIT programme and their relationship with national and international standards,

- an information exchange system (IES) to ensure ease of communication to serve the good technical execution of research and development projects as well as their management and the appropriate dissemination of their results. Progressive implementation and upgrading would have to enable direct computer communication and distributed software development.