COUNCIL DECISION

of 7 June 1991

adopting a specific programme of research and technological development in the field of telematic systems in areas of general interest (1990 to 1994)

(91/353/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 130a (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, by Decision 90/221/Euratom, EEC (4), the Council adopted a third framework programme for Community activities in the field of research and technological development (1990 to 1994), specifying *inter alia* the activities to be pursued for developing the scientific knowledge and technical know-how needed by the Community, in particular to carry out its role in the field of telematic systems in areas of general interest; whereas this Decision should be taken in the light of the grounds set out in the preamble to that Decision;

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

Whereas basic research must be encouraged as far as is necessary throughout the Community in each strategic sector of research in the framework programme;

Whereas in addition to the specific programme concerning human resources and mobility, it might be necessary to encourage the training of research workers in the context of this programme;

Whereas, in the context of this programme, an assessment should be made of economic and social impact as well as of any technological risks;

Whereas, pursuant to Article 4 of and Annex I to Directive 90/221/Euratom, EEC, the amount deemed necessary for the whole framework programme includes an amount of ECU 57 million for the centralized dissemination and exploitation of results, to be divided up in proportion to the amount envisaged for each specific programme;

Whereas Decision 90/221/Euratom, EEC provides 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 it to become more competitive at the international level; whereas it also provides that Community action is justified where research contributes, *inter alia,* to the strengthening of the economic and social cohesion of the Community and to the promotion of its overall harmonious development, while being consistent with the pursuit of scientific and technical excellence; whereas the programme of research in the field of telematic systems should contribute to the achievement of these objectives;

Whereas small and medium-sized enterprises should be involved to the maximum extent possible in this programme; whereas account should be taken of their special requirements without prejudice to the scientific and technical quality of the programme;

Whereas research/development in the field of telematic systems in areas of general interest will contribute to the successful completion of the internal market and at the same time improve the performance of large public services facing, throughout the Community, the new technological, social and economic challenges which are implied by European integration;

Whereas it is important, when projects are selected, to ensure that data are protected and confidentiality maintained;

Whereas the Scientific and Technical Research Committee (Crest) has been consulted,

HAS ADOPTED THIS DECISION:

Article 1

A specific research and technological development programme for the European Economic Community in the field of telematic systems in areas of general interest, as defined in Annex I, is hereby adopted for a period beginning on 7 June 1991 and ending on 31 December 1994.

(1) OJ No C 174, 16. 7. 1990, p. 19.
(2) OJ No C 324, 24. 12. 1990, p. 271; and OJ No C 158, 17. 6. 1991.
(3) OJ No C 41, 18. 2. 1991, p. 6.
(4) OJ No L 117, 8. 5. 1990, p. 28.

Article 2

1. The funds estimated as necessary for the execution of the programme amount to ECU 376,2 million, including expenditure on staff and administration amounting to ECU 41 million.

2. An indicative allocation of funds is set out in Annex II.

3. Should the Council take a decision in implementation of Article 1 (4) of Decision 90/221/Euratom, EEC, this Decision shall be adapted accordingly.

Article 3

Detailed rules for the implementation of the programme and the amount of the Community's financial contribution are set out in Annex III.

Article 4

1. In the second year of implementation of the programme, the Commission shall review it and send a report on the results of its review to the European Parliament and the Council; the report shall be accompanied, where necessary, by proposals for amendment of the programme.

2. At the end of the programme, an evaluation of the results achieved shall be conducted for the Commission by a group of independent experts. This group's report, together with any comments by the Commission, shall be submitted to the European Parliament and the Council.

3. The reports referred to in paragraphs 1 and 2 shall be established having regard to the objectives set out in Annex I to this Decision and in accordance with Article 2 (4) of Decision 90/221/Euratom, EEC.

Article 5

1. The Commission shall be responsible for the implementation of the programme.

2. Contracts concluded by the Commission shall govern the rights and obligations of each party, in particular the arrangements for the dissemination, protection and exploitation of research results, in accordance with the provisions adopted pursuant to the second paragraph of Article 130k of the Treaty.

3. A work programme shall be drawn up in accordance with the aims set out in Annex I and updated where necessary. It shall set out the detailed objectives and types of projects to be undertaken, and the financial arrangements to be made for them. The Commission shall make calls for proposals for projects on the basis of the work programme.

Article 6

1. The Commission shall be assisted by a committee composed of representatives of the Member States and chaired by the representative of the Commission.

2. 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 the urgency of the matter. The opinion shall be delivered by the majority provided for in Article 148 (2) of the EEC Treaty as regards adoption of decisions which the Council is required to adopt on a proposal from the Commission. When the committee votes, the votes of the representatives of the Member States shall be weighted as laid down in the abovementioned Article. The chairman shall not vote.

3. The Commission shall adopt the proposed measures when they are in accordance with the committee's opinion.

4. When the proposed measures are not in accordance with the committee's opinion, or where no opinion is delivered, the Commission shall submit to the Council without delay a proposal concerning the measures to be taken. The Council shall act by a qualified majority.

5. If, on the expiry of a period of three months from referral of the matter to the Council, the latter has not acted, the proposed measures shall be adopted by the Commission.

Article 7

1. The procedure laid down in Article 6 shall apply to:

— the preparation and updating of the work programme referred to in Article 5 (3),

— the contents of the calls for proposals,

— the assessment of the projects provided for in Annex III and the estimated amount of the Community's contribution to them where this amount exceeds 1 % of the amount deemed necessary for each field referred to in Annex II,

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

— the participation in any project by non-Community organizations and enterprises referred to in Article 8 (1) and (2),

— any adaptation of the indicative allocation of the amount 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.

2. Where, pursuant to the third indent of paragraph one, the amount of the Community contribution is less than or equal to 1 % of the amount deemed necessary for the projects, the Commission shall inform the committee of the projects and of the outcome of their assessment.

The Commission shall also inform the committee of the implementation of the accompanying measures and the concerted actions referred to in Annex III.

Article 8

1. The Commission is authorized to negotiate, in accordance with Article 130n of the Treaty, international agreements with third countries which are members of COST, particularly the member countries of EFTA and the countries of Central and Eastern Europe, with a view to associating them with the whole programme or a part of it.

2. Where framework agreements for scientific and technical cooperation have been concluded between the Community and European non-member States, bodies and enterprises established in those countries may, in accordance with the procedure laid down in Article 6 and on the basis of the criterion of mutual benefit, be allowed to become partners in a project undertaken within the programme.

No contracting body based outside the Community and participating as a partner in a project undertaken under the programme may benefit from Community financing for this programme. The body concerned shall contribute to the general administrative costs.

Article 9

This Decision is addressed to the Member States.

Done at Luxembourg, 7 June 1991.

For the Council

The President

R. STEICHEN

ANNEX I

OBJECTIVES AND SCIENTIFIC AND TECHNICAL CONTENT

The guidelines, scientific and technical objectives and underlying purposes of the third framework programme form an integral part of this specific programme.

Paragraph I.1.C of Annex II to the framework programme forms an integral part of this specific programme.

On this basis and in the light of the above, there follows an analytical description of the contents of this specific programme.

Introduction

In pursuit of the objectives outlined in the technical Annex to the framework programme, special account will be taken of the needs for management and transmission of electronic information as a consequence of completion of the single European market. These needs will be identified in collaboration with users: public authorities, businesses in manufacturing or service industries, academic institutions and individuals.

The activities will be pre-competitive and pre-normative and will concentrate on providing opportunities for interoperability between national systems, for defining standards, architectures and functional specifications. The activities will address such issues as user acceptance, security and privacy.

Pilot projects and demonstrators will be included when it can be shown there is a need to verify technology, to demonstrate interoperation standards and where there is broad interest to all Member States.

Close coordination will take place between these activities and those within lines 1.A and 1.B of the third framework programme as well as those outside the framework programme such as Eureka projects.

AREA 1: SUPPORT FOR THE ESTABLISHMENT OF TRANSEUROPEAN NETWORKS BETWEEN ADMINISTRATIONS

The objective of this area is to define common requirements for electronic information exchange and to examine the need for interoperability between electronic information networks within Member States; to carry out studies and pre-normative research for the definition and subsequent establishment of the trans-European telematic services networks essential to national administrations for the completion of the single market, for the provision of the services necessary to the free movement of persons, goods, services and capital and for increasing economic and social cohesion in the Community.

The priority subareas are those most closely linked to the completion of the internal market. In the first instance, work may concern such areas as customs, social services, emergency services and statistics. Several examples are given below.

With the elimination of frontiers within the Community as a result of the completion of the internal market, it will no longer be possible to monitor goods in transit at national frontier posts. Monitoring of goods in transit will require information to be exchanged between the customs of the country in which the goods enter or leave Community territory and the country of destination or origin of the goods. Consideration should therefore be given to whether, and how far, this will create a new need which new IT and telecommunication tools can help to satisfy.

Free movement of goods within the Community requires means of controlling their movements. Furthermore, the problems due to the incompatibility of existing national systems and to relations with non-Community countries, legal constraints and differing procedures and methods must be surmounted. Freedom of movement for persons cannot be achieved without a sustained, two-way flow of information between the various administrative establishments with responsibility for social services. Telecommunications interconnection between these administrations should help to provide social services for people. The setting-up of trans-European telematic services could help to do this, by ensuring rapid and secure information exchange, guaranteeing the compatibility of operational procedures while respecting citizens' rights, and promoting international coordination.

The interconnection and interoperability of existing statistical tools will allow the implementation of a European system of statistical information.

Identification of needs and implementation strategies

Selected areas closely linked to the completion of the single market will be examined in an exploratory action. This will comprise an assessment of the exchange of electronic information brought about by the completion of the single European market, an assessment of the needs of the users of this information to accommodate these changes and an assessment of the role of research and development in meeting these needs. The results of this work will enable the relevant administrations of the Member States and the Commission, with the help of hardware and software producers, telecommunications operators, and possibly service providers, to seek a consensus on the functional and technical specifications of the services required and strategies for setting up the transeuropean networks to provide these services.

The comparison of these descriptions with needs should enable the work remaining to be done to be identified by mutual agreement; this may involve some or all of the following tasks: description of the information desired, precise description of the types of messages required (free text, statistical tables or highly structured administrative messages), their format, the functional specifications and standards to be used, adapted or developed, as appropriate, and the protocols to be developed or converted.

Preference will be given to systems which are designed to intercommunicate using key elements, particularly those which have been standardized at European or world level. The standards relating to database access, storage and access protocols, languages, etc., will be identified and adapted where necessary. Arrangements must be made to ensure secure services.

Development of the technologies relating to telematic services and validation of common functional specifications

In order to take account of the complexity of these networks of services, the number of parties involved, the variety of information, real-time or batch processing, and capacity requirements, the architectures and the management of these trans-European networks will have to be thoroughly studied and researched in order to achieve the performance and reliability required to satisfy the specific needs of each administration. These studies and research will have to be carried out jointly by users of specialized networks, manufacturers of information and communications equipment, telecommunications operators and possibly service providers.

The work will concentrate initially on interoperability, common standards, architectures and functional specifications, user acceptability, data integrity and confidentiality. As a result of this work, a common reference model should be developed for the implementation or the adaptation of the telematic systems which are proposed. The results of the exploratory activities in a few subareas will be taken into account as work in this area is subsequently broadened.

This work will complement that conducted in the specific programmes on IT and communications.

To obtain the interoperability of computerized service networks, used by the administrations and end-users, it is important to verify common functional specifications. Special attention will be paid to the quality, reliability, security and ease of use of these services. To this end, a limited number of pilot projects will be carried out where there is a need to verify functional specifications and technology, where there is a general interest to all Member States and where this is in keeping with rules on personal data protection.

Where appropriate these experimental development activities will be carried out in cooperation with the work carried out under the Insis, Caddia and Tedis programmes and certain parts of the Esprit and RACE programmes.

AREA 2: TRANSPORT SERVICES

The activities aim to contribute to the development, in the field of transport, of integrated trans-European services using advanced IT and communications to improve the performance (safety and efficiency) of passenger and goods transport services, and at the same time reduce the impact of transport on the environment. (See under 'road transport'.)

Account will have to be taken of the peculiarities and specific needs of the various parties involved, notably private and business users and administrations. Safety and ease of access for all users will be given special attention.

Road transport (Drive)

The objective is to contribute to development of a framework in which advanced IT and communications can be harnessed to improve the efficiency and safety of passenger and goods transport and reduce their impact on the environment. The work will build on the exploratory research in Drive under the second framework programme. There will be close liaison with relevant Eureka projects.

Work in this area should cover the interface between road and rail transport as well as that between road and sea transport.

The work will concentrate on the needs of users, those concerned with safety, provision and maintenance of infrastructure and provision of transport services.

The activities will be divided into three interactive parts: the definition of functional specifications in the context of a strategy for the use of technology and telematic systems for communication and traffic control, the development of new technologies and experimental systems, and validation work.

Strategies for the use of technologies, telematic services and systems and contribution to the definition of common functional specifications

The results of the work carried out so far under the Drive and relevant Eureka projects have enabled the needs specific to road transport and the technologies and systems available for communications and traffic control to be identified and evaluated. On the basis of these results, a strategy for using these technologies and systems will be sought in cooperation with transport users, business, providers of transport-related services and the administrations concerned.

Systems engineering work will continue on an integrated transport environment, addressing development and implementation strategies. It will help to draw up the functional specifications in terms of equipment, services and operating procedures, and to make recommendations to standard setting authorities such as CEN/Cenelec and ETSI for traffic control, transport management, driver support, road safety.

Technologies and experimental development of systems

The work will take account of the technologies emerging within information and communications, the results of research carried out under Drive and in other activities both in the Community and Member States.

Technologies and experimental systems for managing transport and controlling road traffic will be developed and evaluated for both passenger and goods transport.

Safety and communications systems will concentrate on helping drivers on long journeys. The research will focus on on-board safety systems and equipment able to detect warnings and incidents and communicate with the new fixed infrastructure equipment.

Research and technological development work specific to goods transport, including dangerous goods transport, will also be undertaken. It will cover the software, hardware and telematic systems needed to improve goods traffic management. This work will concern real-time monitoring of the various forms related to transactions, the goods themselves and vehicles; management systems for all kinds of vehicle fleets will also be developed.

In the field of public transport, work on monitoring and control will continue, to evaluate the cost-effectiveness of opportunities for on-line monitoring, scheduling and control for users and providers of services and to establish the necessary functional specifications.

The technological solutions will have to ensure that the telecommunications equipment to be introduced is suited, in terms of size, cost and performance, to the intended specific uses and the needs identified.

Special attention will be given to existing and emerging systems namely those related with satellites and digital cellular communication networks. Of particular importance is the potential of new systems to provide incident detection and provide usable information to network managers and road users through effective road-vehicle communications.

Validation and pilot projects

In order for the new systems and devices to be accepted by both the general public and the relevant authorities, they must be of proven performance and reliability and their potential impact on the environment must be assessed. This will require full-scale pilot experimentation to establish whether technologies serve market needs, contribute significant gains in efficiency (with existing and new infrastructure) safety and environmental benefits are cost effective and provide satisfactory system security and interoperability. These will be oriented towards the integration of multiple subsystems, functions and services which requires strong pre-standardization efforts. The sector actors should be closely associated with the work.

These experiments will cover areas including integrated urban traffic control; monitoring of air pollution; integrated motorway traffic control; vehicle roadside communications; driver information; transport demand management; public transport; freight transport and trip planning.

The need for rigorous evaluation should be a prime requirement in selection and design of pilot projects which may mean that pilot projects are established on an incremental basis. Projects should also evaluate technologies and systems of wide applicability.

AREA 3: HEALTH CARE (AIM)

The objective of this area is that of stimulating the development of harmonized applications of information and communication technologies in health care and the development of an European health-care information infrastructure taking into account the needs of users and technological opportunities.

The activities will depend on the needs of users and on the requirements of transnational exchange of electronic information. They will concentrate on interoperability of national systems, the establishment of standards, user acceptability, data integrity and confidentiality. The selection of activities will depend on strategic options within both the European health-care sector and European telematics sector.

Work in this area will be carried out along three main lines, making use of the exploratory work of the AIM programme (advanced informatics in medicine) and in close cooperation with other Community programmes.

Strategies for the use of technologies, telematic systems and services and contribution to the definition of common functional specifications

The nature of research and technological development activities will depend to a large extent on user needs and the general constraints associated with the transnational nature of the information infrastructure required. This transnational aspect requires compliance with three principles: integration (notably the emergence of standards); modularity, to facilitate adaptation to different types of needs, and data security. The research and technological development activities will depend on the assessment of technological needs in the light of the main factors affecting the development of health care. They will also depend on the strategic options for European telematic services in the sector. Essential problems such as confidentiality and data protection will be given high priority.

Development of telematic technology applied to medicine

Activities are expected to fall into one or more of the following domains:

— alphanumeric data and text coding standards,

— images and biosignals with coding standards,

— integrated medical instrumentation and devices,

— knowledge based and decision support systems,

— medical use of multi-media workstations,

— health-care communication systems,

— telemedical systems and archiving systems,

— modularity and integration of medical and health information systems,

— regulatory tools and incentives (medical, legal, ethical, economic and social),

— technologies and services for the handicapped and elderly,

— inter-hospital telematics for increased security in distance care and improved management of staff and specialized equipment.

Validation and integration

Pilot applications will be set up to demonstrate and evaluate the innovative nature of using IT and communications in this area. Tests of the applicability of the research and development results and the interoperability of telemedicine services will be conducted.

AREA 4: FLEXIBLE AND DISTANCE LEARNING (Delta)

On the basis of the exploratory work of the Delta programme and in close cooperation with other Community activities such as Comett and Eurotecnet, the work in this area will be carried out in three interdependent parts: drawing-up of implementation strategies, development of technologies and systems, and validation and integration of services.

Strategies for the use of technologies, telematic systems and services and contribution to the definition of common functional specifications

In the light of the interests of the various categories of users and taking account of the technological potentials, the various possible options to satisfy these needs will be identified. The measures needed to overcome the difficulties of implementing educational technologies will be determined.

Systems engineering work will be carried out: it will consist of identifying user needs and then reaching a consensus on specifications and functional standards which satisfy the needs of the various categories of users, producers of educational materials and providers of flexible and distance learning services.

The work will centre on the development of production methods for multimedia educational materials which are portable and transferable between various systems with the prospect of transnational use, including remote assistance and help procedures for the various categories of users.

Development of systems and technologies

The work will relate to the technologies required to obtain a telematic service for local and distance learning which is flexible, effective, modular and interoperable.

It will be necessary to integrate and adapt the information and communications technologies, hardware configurations and protocols for educational and training applications and ensure compatibility and portability of the various systems developed for the potential users, whether they be students, authors, tutors, producers or simply people requesting information on education services.

Experiments on the validation and integration of services

The performance of the various possible services and technical configurations must be evaluated. Experiments in the real environment will allow testing of the value added by interconnecting the various systems using new technologies for education, information and user assistance. The experiments will establish the comparative advantages and the performance, in relation to their cost, of these various configurations of flexible distance learning systems for different categories of users.

AREA 5: LIBRARIES

The objective is to facilitate user access, by optimum use and development of equipment and telematic systems, to the wealth of knowledge held in libraries while reducing the handicaps caused by the present disparate infrastructutres in the Community.

To this end, the work will have to help develop modern library services all over the Community by promoting faster, but orderly and cost-effective penetration of new technologies into libraries.

Initial Community activity in this area must be selective, concentrating on urgent problems which can catalyse change in a concrete and practical way. Applied research and development will therefore be used to support the development of appropriate tools, methods and resources which will be able to stimulate modernization of the operational infrastructure and services provided, and facilitate cooperation and resource sharing at national and European levels.

This activity will consist of setting up computerized bibliographies where these are lacking, and helping to improve computerized bibliographies or collective catalogues. Support will also be given to retrospective conversion of catalogues of important collections at international level, by developing the necessary tools and methods.

Projects will be set up to facilitate the international interconnection of the systems managing these basic data for particular functions (shared cataloguing, inter-library loans, etc.) and thus help to prepare and apply a range of international or European standards.

The provision of new library services using IT and communications in small units will be stimulated. Initial support will be given to the creation of a range of innovative experimental services for library users, taking account of the different levels of development of library services in the Member States.

Finally, projects will be set up to encourage the development of a European market in telematic products and services specific to libraries. Interaction between libraries and IT industries will be stimulated by improving the definition of libraries' needs which new IT and communications can satisfy. Limited initial support will be given to experimental demonstrations of products (such as software) and services.

AREA 6: LINGUISTIC RESEARCH AND ENGINEERING

The aim of this area is to develop a basic linguistic technology which can be incorporated into a large number of computer applications where natural language is an essential ingredient, with a view to accommodating or overcoming limitations and inefficiencies within the Community brought about by different natural languages. This requires the creation of linguistic resources (grammars, dictionaries, terminology collections and corpora of text) for the nine official Community languages, and the definition of standards for these data. A number of pilot applications and demonstration projects will be undertaken to show how the technology will be used and demonstrate the technical and economic feasibility of the solutions adopted.

The area is divided into three parts: research, development of resources and pilot applications. It is based on the results and experience drawn from Eurotra and certain specific projects conducted under Esprit and national research programmes.

The research work will concentrate on the development of a common computer-based linguistic model for text representation in different languages and on the pursuit of automated techniques for reducing the number of possible interpretations of a given text. The development of advanced computational technologies will encourage the application, for linguistics, of progress made in the field of advanced expert systems, database technologies, speech processing and computer architectures. It is also intended to create methods, tools and linguistic resources, especially portable software tools, grammars, dictionaries, domain specific terminological collections, as well as large, high/quality corpora and the stimulation of standards work. Pilot applications and demonstration projects will help to test the progress of research work and to demonstrate the technical and economic feasibility of tools, methods and resources in an operational environment.

AREA 7: TELEMATICS SYSTEMS FOR RURAL AREAS

Half the European population still lives outside major cities and towns, and rural areas need comparable telematic service infrastructures to those in urban centres if they are to develop more balanced economic activities with a greater diversity of employment. The introduction of such services in rural areas will be a gradual process, the investments required will be large, and the infrastructures installed will have a lifetime of some decades. It is therefore essential that the right choices are made on technologies and system configurations. There is a need for pre-normative actions to harmonize the Community markets for equipment and services adapted to the needs of rural areas; for development and stimulation of specialised services and for the impacts of telematics in rural areas to be consistently assessed.

Community action in this area will contribute to completion of the single market, to strengthening the socio-economic cohesion of Europe, to improvements in the quality of life in rural areas, to industrial innovation (in particular for small and medium-sized enterprises) and to rural development. The actions will be part of a wider programme of actions strengthening rural development in the Community.

The goal is to create the conditions for geographically dispersed small businesses to provide more diverse employment opportunities and a more balanced economic activity in rural areas; to establish a basis for provision of improved services to dispersed and isolated populations, to raise the level of awareness of the potential of information and communication technologies in rural areas; to encourage manufacturers and service providers to make equipment and services easier to use by rural communities, and to ensure that applications of information and communication technologies in rural areas do not contribute to a further centralization of business and administrative activities and a loss of the cultural and economic diversity of rural areas in Europe.

The specific objectives are to develop a better understanding of the common needs and opportunities for telematic services and of the impacts of such services on rural life; to establish a common understanding of network configuration requirements and options and a common understanding of service requirements for telematic services, and to prepare the way for the harmonized planning and introduction of telematic service infrastructures in rural areas.

In order to achieve these objectives, the actions will involve consensus development with industry and rural development agencies; identification of needs and opportunities for telematics services and assessment of their impacts; specification of service and technology requirements; development of telematic systems, some pilot applications and research on infrastructure planning and implementation strategies.

ANNEX II

INDICATIVE BREAKDOWN OF THE AMOUNT DEEMED NECESSARY

(in million ecus)

Area	Breakdown
1. Administrations	41,3
2. Transport	124,4
3. Health care (including the handicapped and elderly)	97
4. Flexible and distance learning	54,5
5. Libraries	22,5
6. Linguistics	22,5
7. Rural areas	14
	Total 376,2 (1) (2)

(1) Including expenditure on staff which comes to ECU 30 million and administrative expenditure totalling ECU 11 million.
(2) An amount of ECU 3,8 million, not included in the ECU 376,2 million will be earmarked as the contribution from the specific programme in the field of telematic systems in areas of general interest to the centralized scheme for the dissemination and exploitation of results.

The breakdown between different headings does not exclude the possibility that projects could come under several headings.

ANNEX III

RULES FOR IMPLEMENTING THE PROGRAMME

1. The Commission will implement the programme on the basis of the scientific and technical content described in Annex I.

2. The rules for implementing the programme, referred to in Article 3, comprise research and technological development projects, accompanying measures and concerted actions:

— **Research projects**

The projects will be the subject of shared-cost research and technological development contracts. Selection of projects must take account of the criteria listed in Annex III to Decision 90/221/Euratom, EEC and of the objectives set out in Annex I to this programme.

For shared-cost projects Community financial participation will not normally be more than 50 %. Universities and other research centres participating in shared-cost projects will have the option of requesting, for each project, either 50 % funding of total expenditure or 100 % funding of the additional marginal costs.

Shared-cost research projects must, as a general rule, be carried out by participants established within the Community. Projects in which, for example, universities, research organizations and industrial firms, including small and medium-sized enterprises, may take part must provide, as a general rule, for the participation of at least two partners, independent of each other and established in different Member States. Contracts relating to shared-cost research projects must as a general rule be concluded following a selection procedure based on calls for proposals published in the *Official Journal of the European Communities*.

The Commission will publish a vade-mecum setting out all the rules applying to the selection of projects, in order to guarantee full transparency.

— **Accompanying measures**

the accompanying measures referred to in Article 7 will consist of:

— the organization of seminars, workshops and scientific conferences,

— internal coordination through the creation of integrating groups,

— advanced technology training programmes, with emphasis being placed on multidisciplinarity,

— promotion of the exploitation of results.

— independent scientific and strategic evaluation of the operation of the projects and the programme.

— **Concerted actions**

Concerted actions consist of action by the Community to coordinate the individual research activities carried out in the Member States. They may benefit from funding of up to 100 % of coordinating expenditure.

3. The knowledge acquired in the course of the projects will be disseminated both within the specific programme and by means of a centralized activity, pursuant to the Decision referred to in the third subparagraph of Article 4 of Decision 90/221/Euratom, EEC.