

COMMISSION OF THE EUROPEAN COMMUNITIES

COM(83) 661 final

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COMMUNICATION FROM THE COMMISSION TO THE COUNCIL

Community programme for the development of the specialized information
market in Europe

Proposal for a COUNCIL DECISION

adopting a Community programme for the development of the specialized
information market in Europe

(submitted to the Council by the Commission)

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COMMUNICATION FROM THE COMMISSION TO THE COUNCIL

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specialized information market in Europe

1. Summary

The increasing importance of information for economic, social and cultural development is being recognized worldwide. Alongside this, the worldwide development of new information technologies together with the increasing awareness of the role and value of information offer a wide and growing range of new possibilities in the information market. On the other hand, the European countries reveal conspicuous weaknesses of their information markets which risk leading to a growing European dependence upon non-European suppliers. The need for Europe to establish its own strong position in this market on the basis of the common market principle, and the consequent obligation for the Community to stimulate and actively support such a process, are incontestable.

In response to this situation, the Commission considers two Community initiatives as necessary and appropriate in order to strengthen the European position in the information market:

- a) development of the specialized information market;
this programme is proposed now as an immediate follow-up of three successive Community plans of action (1975, 1978, 1981) and is intended to improve the market for specialized information (1) with regard to supply, distribution and demand, and at the same time to ensure continuity of Community action;
and
- b) Community Information Market Policy;
this will be the object of a separate communication to the Council later on to provide a long-term framework for addressing much broader policy aspects of information flows and the information market including a number of key issues both internal and external to the Community.

The present document sets out to the proposed programme for the development of the specialized information market. The objectives and content of the programme are outlined as well as the required means and the ways for its implementation. Moreover, it is appropriate to elucidate the general context and to illustrate the logical link with the planned Information Market Policy.

(1) specialized information is higher level information for professional use in sectors such as science and technology, social, cultural and economic development, trade and industry, business and finance, marketing etc, and has an international character.

2. General framework

2.1 The European situation

Information has become a key factor in the economic, social and cultural development of our society and is experiencing one of the highest growth rates which can currently be observed. The potential growth rates forecasted for information services for the next decade range from 15-30% annually. Information services increasingly contribute to the Gross Domestic Product of industrialized countries and belong to the few sectors which create new jobs. A recent study concludes that 80% out of 2 million new jobs which have lately been created in the U.S.A. were in the areas of information and information related activities. Although this figure may not be the same for Europe, it nevertheless indicates the general tendency. Information related initiatives are also increasingly being reflected in the work of international organizations such as UNESCO, OECD and the Council of Europe.

An increasing penetration of European markets by non-European information products and services is actually being observed. This trend tends to continue and will widen the gap between the EEC on the one hand, and the USA and perhaps later Japan on the other hand, which threatens to result in a dangerous technological and cultural dependence of the European countries. More than 50% of the European online market for specialized information is currently served by products and services of non-European origin. The USA-export of information has to be seen also as an export of unemployment which prevents possibilities for job creation to have an effect within the Community.

As recent events have shown only too clearly, it is of strategic importance for Europe to develop a sufficient independence by establishing its own strong position in the information market. One of our best potential assets in this respect is the optimum use of the economies of scale that the size of the European market offers. This is particularly important, because the new and more sophisticated information services do not only offer more possibilities than the traditional media, but require also larger market

sizes. One of the main reasons for Europe lagging behind is the lack of use of the size of the Community market. The actual market fragmentation as well as existing discrepancies in the level of development between different Member States in the information sector impede the balanced development throughout the Community of a more favourable information market.

2.2 Need for Community initiatives

In this situation the Community cannot remain passive, because the support to a better use of the economies of scale of the European market is a typical Community task. It is not only an integral part of the general Community objective of promoting the economic and social development of the EEC, but a special element of internal market developments, through removing obstacles to trade and improving market conditions and environment.

The Community has recently demonstrated its awareness of the crucial importance of the new information technologies and their role in support for the technology supply industry. But of ultimate consequence in this field is not just the supply of new equipment and technology but rather the best and most innovative use of it in terms of services offered and jobs created as well as in terms of economic viability.

In this regard, it is urgent to overcome the existing market fragmentation and to improve the conditions for the successful operation of European-based services and for the improvement of the transfer of knowledge in and throughout the Community.

Recent discussions with the Member States' representatives, with professional organizations and with private enterprises clearly indicate that the Community is expected to play a central role in improving the information environment in Europe, removing barriers to trade, creating more awareness at all levels, encouraging concertation amongst Member States in international forums and promoting European cooperation in relevant areas. It is also understood by most Europeans that the necessary improvements cannot be achieved on a national basis only. The national programmes which exist

in the specialized information area, do for instance not provide appropriate means for avoiding unnecessary duplication of effort. On the other hand, such programmes produce quite a number of very important developments which are considerably hampered by the limited size of national markets. Here, the Commission has to fulfil important tasks. The smaller Member States, in particular, expect the Community to play a very active role in these matters in cooperation with the national authorities. Such activity on a Community scale can lead to the inclusion in the developing market of regions not otherwise likely to be included.

2.3 The Community approach

Community initiatives in the information market area are to be seen in the context of a more general Community approach aimed at strengthening the European position in the areas of

- information technologies;
- telecommunications;
- education and training in the new technologies;
- information market.

These areas are quite different but are complementary; each of them is essential to the others and to the Community approach. In this sense, the information market initiatives correlate with Community programmes such as

- ESPRIT, the Community programme for the support of new information technology supply industries;
- CADDIA and INSIS, the projects for the development of interinstitutional information exchange systems;
- Vocational Training and New Information Technologies: New Community Initiatives during the period 1983-1987.

For the information market, both practical and political Community initiatives are required. It is appropriate to consider them under the two major headings of

- a) Specialized Information Market Development, covering the practical issues and recognized needs in specific areas of the information market;
- b) Information Market Policy, covering the more general aspects of the whole information market.

The present programme only addresses the first of these two subjects, for the reasons outlined below.

2.3.a Information Market Development

As a reaction to immediate needs and on the basis of the extensive experience built up in this area the Commission hereby proposes a

Community programme for the development of the specialized information market

with regard to supply, distribution and demand.

The Commission has been mandated for Information Market Development activities by the Council Decisions which led to the three successive three years Action Plans in the field of information and documentation. In executing these plans, the Commission has also acquired the necessary competence in this area. The proposed programme constitutes an immediate follow-up of these plans. It extends and reorientates the relevant activities in the light of the actual situation with a view to improving the environment for specialized information in Europe. The programme has been limited to the area of specialized information, because

- it represents the logical follow-up of the three successive Action Plans, which were limited to deal with the most urgent needs of specialized information only, whereas a more comprehensive approach is now becoming necessary taking into account the growing importance of this area and consequently the need for coherent developments;

- in the information field as a whole, it is the area that is most in need of public initiatives, because the private information industry in Europe has poorly developed in this area, and is not prepared to satisfy all requirements; Community initiatives are particularly appropriate here as have demonstrated the plans of action cited.

2.3.b Information Market Policy

Individual Community intervention programmes are necessary, but they cover only limited although important aspects of a wide and complex field of economic, social and cultural importance. Therefore, such programmes cannot address the much broader and more general policy aspects of information flows and the information market. Considering the increasing need for responding to a number of key and interrelated problems in this area, the mandate of the Community needs to be expanded accordingly. Therefore, the Commission is in the process of preparing an adequate framework for a coherent Community Information Market Policy which will be the object of a separate communication to the Council at a later stage. This framework should cover the whole spectrum of the information market. It can be foreseen that the formulation and implementation of such a policy will be an extremely complex exercise and will take several years.

However, the information market development programme which is now being proposed will provide important guidelines, albeit in a specialized area, and contribute to the development of the more general policy framework.

3. A new Community programme

3.1 Action plans

Between 1975 and 1983 the Commission, in close cooperation with the Member States' representatives in CIDST (Committee for Information and Documentation on Science and Technology) and with public and private institutions in the Member States, carried out three successive Three-Year Action Plans in the field of Information and Documentation.

The execution of these Action Plans, the last of which expires on 31st December 1983, has resulted in

- the implementation of the Community-wide telecommunication network, EURONET; in 1982 the network was used internationally by 2500 organizations in the EEC for 60000 hours of interrogation;
- the launching and operation of a network of information services, DIANE, offering more than 400 data bases through 40 hosts in all Member States;
- active support to the creation of some 50 information projects proposed by the European information industry;
- the development and exploitation, in collaboration with other Commission's services, of a number of sectoral information systems, in particular in the areas of agriculture, environment, biomedicine and health care.

The results which have been achieved with these projects are recognized not only within the Member States, but have also improved the awareness of European information activities beyond the EEC, in particular in the USA.

3.2 Need for reorientation

Despite the achievement of the three Action Plans, they are far from sufficient to resolve all existing and emerging problems in the areas of the supply, distribution and use of specialized information systems and services. So far, the European information industry did, for instance, not succeed in ensuring a complete, competitive and coordinated information supply and in avoiding duplication of effort on the one hand and the emergence of dangerous gaps on the other hand. Moreover, there is an obvious lack of the use of proven, but more advanced information technologies for the distribution and use of information, not to speak of new information technologies. For instance, there are many information suppliers in Europe who still apply time consuming, cost intensive and out of date procedures for the processing of information. Appropriate initiatives could considerably improve the quality and cost effectiveness of such operations.

A number of circumstances account for the present situation and for the need to reorientate previous initiatives. In particular,

- the short-term plans of action were designed to concentrate on a few and quite specific aspects of the specialized information market only, whereas there is now a need for a more comprehensive approach;
- the Action Plans were initially limited to deal with scientific and technical information, whereas the area of specialized information includes many other subject areas where appropriate initiatives are urgently required (see also point 4.2.1);
- many of the problems have only emerged or been noted during the execution of the Action Plan activities and could not appropriately be considered within the limited framework, whereas a broader framework would allow for due consideration of forthcoming needs covering the whole area of specialized information;

- the previous Action Plans were conceived in 1971, whereas the actual environment within which the corresponding initiatives must now be planned and to which they must respond, is changing much faster, and more flexibility must therefore be introduced for appropriate Community initiatives;
- the orientations of the Action Plans were based on experience made and on the situation of more than 10 years ago, whereas the rapid development of new information technologies during the last decade together with the increasing awareness of the importance of information for the economic development at regional, national and Community levels have produced an enormous range of new possibilities, needs and problems.

3.3 Programme objectives

In consultation with CIDST (Committee for Information and Documentation on Science and Technology) (see Doc. CIDST/565/83 and 566/83 final), the Commission therefore proposes a longer-term Community programme for the development of the specialized information market with the objectives of

- improving the information environment and the market conditions for the use of information products and services of European origin in order to ensure, as far as possible, their economic viability. This is to be achieved by taking appropriate action on existing technical, linguistic, commercial and other obstacles, thus resulting in more transparency for information supply and demand; however it is recognized that for some specialized services designed to serve particular needs or interests the criteria for viability might need to be widened beyond purely economic ones to take into consideration less tangible although equally valuable benefits;
- reinforcing the supply and quality of European information products and services in sectors of Community interest through support of innovative developments. The choice of such sectors will be determined by a knowledge of the market and by the information needs of the pro-

duction and R & D sectors, particularly in fast-developing areas; experience has shown that in some geographic areas with important needs for information exchange the necessary expertise and resources are lacking; this indicates the need for active counselling and support in order to encourage the improvement of the supply and quality of information in such areas.

The proposed programme is intended to reorientate and extend previous activities in the light of the present situation, rather than to simply continue the Action Plan programmes. The programme will also devote particular attention to the distribution of specialized information to the less-favoured regions of the Community where gaps in supply and demand are currently felt.

3.4 Legal basis

The need for Community action has repeatedly been recognized by the adoption of three successive short-term plans of action for this sector in 1975, 1978 and 1981 on the basis of the Council Resolution of 1971 (OJ N° C 122, 10.12.1971, p.7):

- first plan of action: Council Decision of 18 March 1975 (OJ N° L 100/18, 21.4.75)
- second plan of action: Council Decision of 9 October 1978 (OJ N° L 311/1, 4.11.78)
- third plan of action: Council Decision of 27 July 1981 (OJ N° L 220/29, 6.8.81)

The proposed Community programme is a logical consequence of the previous plans of action and an urgent necessity in the light of the present situation and in complement to Community programmes in related fields. The provisions of Article 235 of the Treaty are applicable.

4. Description of medium-term action lines

To foster the development of the European market for specialized information, three major aspects need to be considered in the drawing up of appropriate actions:

- the use of economies of scale in Europe;
- the competitiveness of European information products and services;
- the identification of specific sectors in which information products and services would provide social, cultural, strategic as well as economic benefits.

Based on previous experience and on the opinions of all parties involved in the specialized information market, the following action lines are considered most appropriate and effective for achieving the objectives of the proposed programme.

4.1 Improvement of the information environment and of the market conditions

This must primarily be initiated through the removal or reduction of obstacles existing in the various areas. These obstacles impede the expansion of existing small markets into wider and international dimensions and the exploitation of economies of scale. The interfacing between the various elements which constitute the information market needs to be made in more effective way with a view to increasing the transparency of the market, to improving market infrastructure in the Community, to achieving an information-rich environment, and to providing a wide range of services on the basis of

- ease of use;
- speed of access;
- quality of service;
- completeness of information;
- comprehensiveness of services;
- suitability for user category;
- low cost.

4.1.1 Technical aspects

The improvement of the technical environment is a priority, because Community initiatives are considered most appropriate and effective in this area. Moreover, activities in this field can provide a major contribution to reducing the gaps which exist between different Member States.

For medium-term developments the following areas are particularly important:

- extension of the Euronet-DIANE concept;
- application of advanced information technologies for the processing, distribution and use of information, but not including development of new technologies;
- achieving compatibility of procedures, software and equipment for advanced information services, which requires the definition, development and application of appropriate standards in this area;
- network extensions and developments in order to take due account of the adhesion of new Member States (e.g. Spain and Portugal).

4.1.2 Linguistic barriers

This is a classical area of Community responsibility and competence. Research and development programmes in this area (EUROTRA and plan of action for the improvement of transfer of information between the European languages) have already been started. In the context of the specialized information market, it is important to make use of the results of these developments which offer a considerable range of practical applications in the future. The programmes referred to above do however not provide for financing the development of multilingual products and services in the specialized information market area.

The multilingual environment is one of the most important factors requiring specific consideration in the development of an information market in Europe. The linguistic barriers which exist across the Community considerably hamper the

widespread use of specialized information systems and services, thereby impeding economically-viable developments and promoting duplication of effort.

It is therefore particularly important that appropriate developments be incorporated in the specialized information market development programme. The priorities for this programme are seen in the development of

- multilingual tools;
- services using machine translation facilities.

Services with extended multilingual capabilities could possibly be developed within the framework of intermediary and consultancy services.

4.1.3 Administrative aspects

In order to avoid the creation of additional barriers, the administrative procedures which have developed in parallel with the increasing use of information services and which tend to develop further with the rapidly growing use of new information technologies, need to be harmonized and to be limited to the necessary minimum in the interest of all parties involved. A number of practical problems are emerging for users of information service networks like DIANE which are operated by international groups of information services providers such as the European Host Operators Group (EHOG). Recent experience with DIANE operations demonstrate a need for facilitating a number of procedures thereby promoting the increased use of specialized information services. Such procedures include

- contractual arrangements;
- billing and payment systems;
- access procedures.

These efforts should also cover auxiliary functions such as fiscal and pricing policies. Since users of information services are increasingly dealing with international service suppliers, the Community is the competent authority to deal with such problems if market distortions, etc. are to be avoided.

4.1.4 Economic aspects

Presently, the European market for specialized information is characterized by a lack of transparency. Among other factors, the complex price structures of DIANE services delay the increased use of these services. Appropriate steps need to be undertaken in order to improve their user friendliness through better transparency of the tariff structures.

More reliable and updated market research is needed to identify sectors which are not appropriately covered and to design information products and services in a way which ensures better use and larger markets. The aspect of export of information should be further pursued in this context. The approach of creating the necessary economies of scale must be a fundamental principle for achieving market development.

4.1.5 Legal aspects

There are a number of legal problems involved in the area of specialized information market development which cannot be ignored. Some of them are urgent, such as the question of copyright in relation to projects in the field of electronic document delivery and electronic publishing. At a practical level, such legal issues will be taken into account in the relevant actions. A more systematic and formal investigation of legal aspects would, however, need to be undertaken within the Information Market Policy framework.

4.1.6 Policy aspects

The Commission is aware of a number of particularly important policy issues which have an impact on and are essential for the development of the specialized information market. These issues will carefully be taken into consideration in executing the programme. However, the present programme does not provide the appropriate basis for relevant initiatives. The policy issues would need to be tackled within the broader framework of Information Market Policy. Such issues concern, for example,

- public and private initiatives in the specialized information market, their interrelationship and interfaces;
- economic and political aspects of monopolies in the area of specialized information services;
- relations with developing countries (ACP-LOME);
- relations with, and harmonization of Community views vis-à-vis international organizations such as OECD and UNESCO.

4.1.7 Awareness and training

At a higher level and with particular emphasis on specialized information, appropriate training programmes and facilities are required, as well as the establishment of professional expertise in intermediary services, SMEs, universities and other public or private institutions.

The Commission should build upon its previous activities, particularly in the areas of training and raising awareness through publicity and promotion measures at Community level. Potential users and decision makers should be made aware of the value and importance of specialized information and of availability and opportunities. Appropriate initiatives should be supported and encouraged by the Community, notably within the framework of the Council Resolution of 2 June 1983 concerning measures of vocational training relating to the introduction of new information technologies. The role of the European Centre for the Development of Vocational Training (CEDEFOP) is also relevant here, particularly in connection with the various actions planned in its 1983-1985 guidelines.

Moreover, the encouragement of initiatives is all the more appropriate in those regions in which the Community's financial instruments operate to offset disparities and can be called upon to assist in the process.

4.2 Reinforcement of the supply and quality of European products and services

The improvement of market conditions is expected to prepare the ground for a number of entrepreneurial opportunities to create or improve specialized information products and services of European origin.

European information product and service providers must improve their competitiveness on the world market as well as their responsiveness to the needs of a wide range of potential users. This must not be achieved through duplication of non-European efforts, but through the development of products and services which are innovative and unique, and which offer added value. Such developments need to be actively encouraged and supported within the framework of the proposed programme.

4.2.1 Information projects in sectoral fields

These initially concern the traditional sectors where existing or emerging Community policies are supported by appropriate information system and service developments (agriculture, environment, energy, social sciences, industry, biomedicine and health care). These projects need to be continued or completed in order to safeguard previous efforts and investment. However, a careful reorientation of these activities should be envisaged with a view to integrating this work into the wider concept of providing complete and more user-oriented information systems and services, including all sectors of specialized information. Thus, initial activities in the area would include:

- the continuation of efforts in specific sectors of specialized information with a view to improving the supply and use of information systems and services through short- or medium-term support of appropriate private and public initiatives;
- the evaluation of the quality and usefulness of existing products and services with a view to improving their user-friendliness and their economic viability;

- the development of integrated information services which could provide complete information packages in support of the production sector;
- the identification of needs and appropriate methods of bringing specialized information to the interest of the general public and/or of specific user groups.
- the examination of gaps in the regional distribution of specialized information and the encouragement of appropriate steps to improve the situation.

On the basis of preliminary considerations, and with regard to their information market value and potential user interest, the previous information supply activities carried out within the framework of the plans of action, are proposed to be extended to the following areas of Community interest :

- business and finance
- law
- social sciences
- economics and econometrics
- general information

4.2.2 Added value information services

Community initiatives at this level will include support for research into, and direct encouragement of, the development of improved services, such as

- document delivery and electronic publishing services in the specialized information area;
- new intermediary and consultancy services to provide better information services to specific user groups such as SMEs;
- Videotex developments in such subject areas, in which end users or large groups of less educated users need to have direct access to specialized information;
- research into new methodologies for the processing, distribution and use of specialized information.

5. Ways and means of programme implementation

5.1 Programme procedure

A programme for the further development of the specialized information market must, on the one hand, be flexible enough to respond to the evolving nature of this market and the fast changing environment, and on the other hand must ensure continuity and provide a reliable and foreseeable framework for the participating parties in the medium and long term. These conditions can be fulfilled on the basis of a structured programme at two levels with different time scales, i.e.

- a five years programme defining the medium-term orientations and action lines;
- an annual work programme providing the practical basis for budget and project planning and for programme implementation.

Provision is made to review and update as necessary the five years programme after 30 months with regard to specific objectives and priorities.

There is a necessity to extend the three years period of the previous plans of action to a medium term of five years for the following reasons. Experience made within the framework of the short term plans of action proves that major Community objectives in the area of specialized information can only be achieved in the medium and long term. Accordingly, the preparation, implementation and consolidation of many projects undertaken in this area are not possible in the short term, but they require a more reliable, medium term framework. The realization of medium term projects within short term frameworks very often requires improvisation whereas more continuity is needed. Moreover, this approach does considerably delay the implementation and increase the cost of important developments. These aspects and the growing importance of information are also reflected by the medium term character of national programmes.

The programme will be implemented by means of appropriate information projects which shall be carried out within the framework of contracts between the Commission and competent experts, institutions, undertakings or other bodies. Such contracts shall cover the preparation, implementation and/or consolidation phases of these projects and shall be concluded on the basis of adequate procedures to include call for tenders and call for proposals.

5.2 Resources

The budget resources necessary for implementation of the proposed programme have been estimated on the basis of the resources available for the successive 3-year Action Plans and their growth pattern. It has been slightly increased in order to take account of the envisaged extension of activities as compared to the Action Plans and has been estimated at an average of 8 million ECU annually for the next five years. A more detailed breakdown of the estimated expenditure is given in the Financial Sheet attached hereto.

The Commission believes that it can execute the proposed programme ~~on the basis of the~~ staff resources which are presently available, provided that the proposed budget also covers expenditure for experts, related miscellaneous and secretarial services.

The Commission is convinced that economic recession and problems of unemployment are best tackled by encouraging investment in the development of such market sectors as are most promising to create employment and business opportunities. But it is conscious that investment requires a stable framework and partnership.

It has therefore taken as its primary priority in the present paper not the magnitude of the required resources, which is minimal and without major increase, as is only correct in the present economic situation, but rather the stability and continuity of programme which were the elements absent in the previous short-term plans of action for this sector.

In brief, the Commission considers the principle of a medium-term programme as an essential requirement, in view of

- the medium- and long-term objectives of the programme;
- the reliability of Community initiatives vis-à-vis the various parties involved;
- the necessary continuity for cooperation with Member States.

5.3 Management procedures

In implementing the three STID Action Plans, the Commission has been advised by CIDST which, within its mandate, has fulfilled a number of tasks which are similar to those of an Advisory Committee on Programme Management (ACPM). A constructive continuation of this cooperation within the framework of the proposed programme is necessary to ensure the coordination and consistency of Community and national activities.

Considering that the content and the objectives of the proposed programme are being extended in relation to the previous plans of action, the competences and responsibilities of the committee may develop accordingly.

6. Conclusions

- 6.1 The foregoing proposals, which represent a logical development of past activities and programmes, are a necessary complement to other existing or emerging Community programmes in the fields of advanced and information-related technologies. They will have a significant impact on the ability of Community-supported activities to "contribute to the attainment of the economic, social and other objectives of the Community and its Member States".

Moreover, Community efforts towards the creation of economies of scale and the strengthening of the European posi-

tion is an economic and strategic obligation, in view of the fact that information activities are exploding worldwide. Such efforts will bear fruit in the long term, just as the activities within the framework of the three Action Plans are now, after almost 9 years of continuous efforts, have come to fruition.

6.2 The Council is invited to approve the programme proposed in the present communication and, to this effect, to adopt the accompanying Decision.

In particular, the Council is requested:

- to approve the proposed Community programme for the development of the specialized information market in Europe;
- to agree the estimate of 40 million ECU for the period of five years as the estimated requirement, as specified in the Financial Annex, in the form of differentiated appropriations, for the implementation of the programme;

Proposal for a
C O U N C I L D E C I S I O N

adopting a Community programme for the development of the
specialized information market in Europe

C O U N C I L D E C I S I O N

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of the specialized information market in Europe

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,

Having regard to the opinion of the European Parliament,

Having regard to the opinion of the Economic and Social Committee,

Whereas, under Article 2 of the Treaty, the Community shall have as one of its tasks that of promoting throughout the Community the harmonious development of economic activities and a continuous and balanced expansion;

Whereas information has worldwide become one of the prime factors in economic activity, and the effective use of information is one of the essential ingredients of economic growth and competitiveness;

Whereas the European integration process becomes increasingly dependent, among other factors, on the effective flow of and access to information within and between all Member States;

Whereas, given the growing complexity of information needs for business and political decisionmaking, for scientific and technical development, for the professional, cultural, social and economic choices of individuals and groups of people, it is necessary to develop advanced solutions for a flexible and transparent information market at Community level;

Whereas the development of the specialized information market in Europe aiming at better use of economies of scale and at adequate European independence in the specialized information area, is a challenge for the European Community calling for appropriate Community support; whereas the fast developments in this area require an appropriate programme which offers considerable flexibility of priorities;

Whereas Community efforts relating to the specialized information market and its development are a necessary complement to other related Community initiatives, in particular the ESPRIT programme to strengthen the European information technology industries through Commission support of cooperation among European manufacturers and R&D institutions in the development of advanced pre-competitive component technologies, the INSIS project for developing an advanced interinstitutional information and communication system for the institutions of the European Communities and those of the Member States, and the New Community Initiatives (1983-1987) on Vocational Training and New Information Technologies;

Whereas it is primarily a matter for the Member States to create the basis for an efficient information market by means of support programmes and policies; whereas such measures should be strengthened and supplemented through specific Community action in areas of common interest and value to initiate, accelerate and support developments in Europe which should lead to higher international competitiveness of the European information industries and to a more favourable information environment for the Community as a whole;

Whereas the results achieved and the experience built up in executing three successive Action Plans (1975-1983) in the field of scientific and technical information and documentation, and the need to strengthen and consolidate activities undertaken in this context and to provide for continuity of Community action, justify a Community programme of activities which are needed to help to attain the long-term objective of developing a common market for information in Europe; whereas it will be necessary, at the same time, steadily to evaluate the results obtained, and to coordinate actions in this field and in related fields at national and Community level;

Whereas the Treaty has not made provision for the specific powers which are required to attain these objectives;

Whereas the Scientific and Technical Information and Documentation Committee (STIDC) and the Scientific and Technical Research Committee (CREST) have both delivered their opinions on the Commission proposal,

HAS DECIDED AS FOLLOWS:

Article 1

A Community programme for the development of the specialized information market in Europe, as defined in Annex I, hereinafter referred to as 'the programme', is hereby adopted for a period of five years with effect from 1 January 1984.

Article 2

The appropriations needed for implementing the programme are estimated at 40,0 million ECU and shall be entered in the general budget of the European Communities.

Article 3

The Commission shall be responsible for the implementation of the programme. In particular, it shall decide on the definition of detailed activities and on the type of projects to be undertaken. It shall establish each year and update as required a working programme.

Article 4

The Commission shall be assisted by the STIDC, whose duties and method of operation are defined in Annex II ~~to this decision.~~

The STIDC shall be kept regularly informed by the Commission of the progress of the work in the field in question and in associated fields.

Article 5

The Commission shall ensure access to the knowledge resulting from the programme as well as its dissemination.

Article 6

1. In accordance with Article 228 of the Treaty, the Community may conclude cooperation agreements with third countries within the framework of the programme.

2. The Commission shall be authorized to negotiate the cooperation agreements referred to in paragraph 1 after having sought the opinion of the STIDC for this purpose in accordance with Annex II(3)(c).

Article 7

1. The Commission shall review the programme after 30 months.

The Council and the European Parliament shall be informed of the results of this review.

2. The programme may be extended for further periods of five years, following a proposal by the Commission to be transmitted to the Council.

3. Together with the proposal for the extension of the programme, the Commission, after consulting the Committee referred to in Article 4, shall submit to the Council and the European Parliament an evaluation report on the performance and results of the programme.

Done at Brussels

for the Council

ANNEX I TO COUNCIL DECISION ADOPTING
A COMMUNITY PROGRAMME FOR THE DEVELOPMENT
OF THE SPECIALIZED INFORMATION MARKET IN EUROPE

The first five years programme contains the following orientations and action lines:

1. Improvement of the information environment and market conditions

The main objective is to improve the use of information products and services of European origin in order to ensure, as far as possible, their economic viability. This is to be achieved by taking appropriate action on existing obstacles, thus resulting in increased user friendliness and more transparency for information supply and demand.

The activities to be pursued include:

a) Technical aspects

- extension of the Euronet-DIANE concept;
- application of advanced information technologies for the processing, distribution and use of information;
- achieving compatibility of procedures, software and equipment for advanced information services;
- network extensions and developments in connection with the adhesion of new Member States;
- removing discrepancies in the level of development between different Member States in the specialized information area;

b) Linguistic aspects

- multilingual directories and thesauri;
- multilingual manuals, referral services and information access procedures (CCL);
- development of services with machine translation capabilities;

c) Administrative aspects

- harmonization of contractual arrangements;
- development of user friendly billing and payment systems;
- standardization of access procedures;

d) Economic aspects

- increasing the transparency of tariff structures;
- market research for identifying existing and developing market requirements and gaps in the supply of information products and services;
- export of information;

e) Legal aspects

- copyright in relation to electronic publishing and document delivery in the specialized information area;
- restrictive royalty arrangements and territorial rights;

f) Policy aspects

- interrelationship between public and private initiatives in the specialized information market;
- economic and political aspects of monopolies in the area of specialized information services;
- relations with international organizations (OECD, UNESCO);
- relations with developing countries (ACP-LOME);

g) Awareness and training

- programmes and facilities for vocational training of users of specialized information;
- development of professional expertise;
- publicity, promotion and awareness measures;
- training programmes and facilities with particular regard to regional requirements.

2. Reinforcement of the supply and quality of European products and services

The objective is to create or develop specialized information products and services of European origin which are innovative and unique, and which offer added value with a view to improving the competitiveness of European suppliers on the European and the world markets, as well as their responsiveness to the needs of a wide range of users, thus creating a relative European independence. This is to be achieved through the encouragement of innovative and entrepreneurial initiatives to include

a) Information projects in sectoral fields

- improving the quality, user-friendliness and economic viability of existing products and services;
- improving the supply and use of information systems and services in specific, less developed sectors of specialized information which represent areas of growing importance and of Community interest;
- identifying the needs and methods of bringing specialized information to the interest of the general public and/or specific user groups;
- examining gaps in the regional distribution of specialized information and encouragement of appropriate initiatives to improve the situation;

b) Added value information services

- implementing document delivery and electronic publishing services in the specialized information area;
- encouraging new intermediary and consultancy services to provide better information services to specific user groups such as SMEs;
- developing Videotex applications in such subject areas in which end users or large groups of less educated users need to have direct access to specialized information;
- promoting research into new methodologies for the processing, distribution and use of specialized information.

ANNEX II

DUTIES AND METHOD OF OPERATION OF THE SCIENTIFIC AND TECHNICAL INFORMATION AND DOCUMENTATION COMMITTEE (STIDC)

1. Without prejudice to the responsibility taken on by the Commission in carrying out the first five years programme for the development of the specialized information market, the STIDC shall contribute by its opinions to the optimum execution of the programme.
2. Under this programme, the Commission shall consult the STIDC on all measures which it intends to take for:
 - (a) turning Euronet into a public operational on-line information network;
 - (b) the development of the market for specialized information within the Community;
 - (c) the promotion of technology and methodology in order to improve information services, in particular those of Euronet-DIANE.
3. The Commission shall also seek the opinion of the STIDC on:
 - (a) preparing for future work in this field;
 - (b) coordinating this programme with related programmes, and with the multilingual programme in particular;
 - (c) conducting negotiations with non-Community institutions, such as institutions in third countries.
4. The STIDC should also be asked to give an opinion on:
 - (a) the detailed working out of policies, and priorities;
 - (b) the annual preparation of budgets and allocation of approved appropriations;

- (c) the determination of the aims of, and the overall budgets for, projects;
 - (d) the specification of work to be done and the determination of criteria for the selection of contractors;
 - (e) the choice of contractors and the supervision of the projects.
5. The STIDC shall give opinions which shall be prepared by the secretariat and submitted for the approval of the Committee. Any member of the Committee may request that his point of view be recorded in these opinions. These opinions shall be forwarded to the Commission and a copy sent to the Council.
 6. The STIDC shall lay down, in agreement with the Commission, the procedure for examining the measures referred to under 2,3 and 4. This procedure should not interrupt the carrying out of the programme particularly in the case of emergencies. In order to provide for flexible management, certain tasks shall be delegated to working parties.
 7. The Commission shall periodically submit a report to the STIDC on the measures taken and the results obtained.
 8. The STIDC shall consist of two representatives from each Member State, appointed for three years. The Member States may also appoint two alternate members.
 9. The STIDC shall adopt its own rules of procedure.
 10. The Commission shall provide the secretariat of the STIDC.
 11. The provisions of this Annex shall neither modify the other tasks assigned to the STIDC in the resolution of 24 June 1971 nor its advisory relationship to CREST.

ANNEX 3

FINANCIAL SHEET

1. Relevant budget heading:

Item 7503: Community programme

Development of the specialized information market and
improvement of the information environment

2. Legal basis:

Draft Council decision on a Community programme for the development of the specialized information market (being prepared by the Commission).

3. Description of the action:

See the annexed draft decision of the Council.

4. Justification for the action:

See the annexed draft decision of the Council.

5. Financial consequences of the action on the intervention appropriations:

5.1 Expenditure borne entirely by the Community budget.

5.2 Schedule of appropriations needed

5.2.1. Differentiated appropriations

ECU in millions

Commitment appropriations	Payment appropriations				
	1984	1985	1986	1987	1988
1984 financial year 7,800	2,500	3,500	1,800	-	-
1985 financial year 8,000	-	3,000	2,500	2,500	-
1986 financial year 8,000	-	-	3,000	3,000	2,000
1987 financial year 8,000	-	-	-	3,000	3,000
1988 financial year 8,200	-	-	-	-	3,500
TOTAL 40,000	2,500	6,500	7,300	8,500	8,500

5.2.2 Method of calculation (see breakdown of appropriations on p.4)

The estimate of the appropriations necessary for financing the action programme is based on:

- the real costs of projects under the Third Action Plan;
- practical experience and the real costs of systems currently in operation, supplemented by details provided by national experts;
- estimates made by national experts or as part of detailed feasibility studies, concerned, in particular, with the development costs of top-quality services and of the European market for specialized information;
- the tariffs currently applicable to some contracts for studies and to documentation and computerization services;
- inflation rates calculated or predicted for the years following 1983.
- the programme also covers the payment of experts and related miscellaneous or secretarial services, expenses relating to the organization of symposia concerning the knowledge acquired as a result of the actions carried out, and expenses relating to the dissemination of the knowledge.

6. Financial consequence on appropriations for staff and day-to-day administration:

None.

7. Financing of intervention expenditure

Appropriations to be entered in future budgets.

8. Impact on resources

None.

9. Planned system of control

9.1 The implementation of the programme is subject to the prior approval of the Committee for Information and Documentation on Science and Technology (CIDST), and must meet the conditions laid down by the Council in its Decision.

9.2 The progress made and results obtained will be periodically assessed by Parliament and the Council when the Commission submits its activity report.

Estimation of budget required for the 5 years of the programme:

P U R P O S E	E C U
1. <u>Improvement of market conditions and of the information environment</u> =====	14.000.000 =====
1.1 <u>User-oriented developments</u>	6.150.000
. improvement of transparency)
. referral, information and training files) 3.600.000
. CCL development)
. automatic user guidance systems)
. ECHO services	2.550.000
1.2 <u>Market-oriented developments</u>	2.550.000
. administrative developments	
. new countries	
. fiscal and legal aspects	
. export of information	
1.3 <u>User support actions</u>	2.550.000
. promotion of user awareness and training	
. user aids	
1.4 <u>Multilingual developments</u>	2.750.000
. multilingual tools	
. translations of manual and referral files	
. machine translation applications	
2. <u>Reinforcement of the supply and quality of European products and services</u> =====	22.600.000 =====
2.1 <u>Sectoral information projects</u>	7.200.000
2.2 <u>Added-value information services</u>	15.400.000
. document delivery and electronic publishing	
. support for new intermediary services	
. videotex development	
. research into new methodologies	
3. <u>Assistance from experts, market evaluation, research</u>	3.400.000
T O T A L :	40.000.000

A N N E X 4

Committee for Information and Documentation
on Science and Technology

Title of document: Community Programme - Development of the
specialized Information Market and Information
Environment

Introduction

The attached document forms the background for a proposed Council decision on a programme of actions for the development of the specialized information market and information environment in the Community.

The document is structured as follows:

- I - Management Summary
- II - Development of the Specialized Information Market and Information Environment - policy paper
- III - Medium Term Action Lines and Procedures
- IV - Annual Work Programme and Budget.

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I. MANAGEMENT SUMMARY

A. Present Situation

Between 1975 and 1983 the Commission of the European Communities has in close cooperation with the Member States' representatives in CIDST (Committee for Information and Documentation on Science and Technology), carried out three successive Three-Year Action Plans in the field of Information and Documentation.

To follow-up these Action Plans, the Commission proposes a continuous Community programme of activities for the development of the market for specialized information with particular emphasis on user aspects. The need for such a programme of long-term Community effort arises from the following considerations:

- the previous Action Plans have been successful in many respects and have proven the growing need for and usefulness of Community actions; for the coming years more and longer-term efforts are required;
- the central role of information and the rapid increase in the use of new information technologies is transforming the existing social and economic structures, in particular the productive sector, and creating an information society;
- there is a shift in emphasis from the information intermediary towards the information consumer, and towards the application of economic values to information;
- the gap between the EC and the US in information products and between the EC and Japan in information technology developments must be redressed through the removal of market barriers and through creation of economies of scale; more favourable market conditions will stimulate innovative information products and services of European origin;
- the fast growth of new information technologies during the past decade has brought about an increase in transborder flows of information, which may be expected to continue in the coming years. This internationalisation of information will make it increasingly difficult to cope with the problems solely at a national level.
- information is not a commodity like other goods. The development of information services not only takes place on the basis of commercial considerations, but also with regard to the need for reducing Europe's cultural and economic dependence vis-à-vis external information sources.

B. The Information Market

The information market has, as most other conventional markets, three distinct sectors:

Supply Sector

Distribution Sector

Use Sector.

The distribution sector in the information market is, however, significantly different from other markets in that it contains a number of elements which not only transfer the product but may add value before passing it on to the user. It contains not only the classical infrastructural features such as the physical distribution functions of networks, but also includes a large variety of other functional elements, for example publishing, libraries and intermediary services in the processing of and adding value to information for professional users, or in bringing specialized information to the interest of the general public. The role of education and the public-private relationship also influences the distribution sector. Through the harmonized and coordinate functioning of all these elements, the transfer of knowledge could be realized in the most economic, efficient and convenient way. The improvement of the market conditions and environment is a priority concern and can best be achieved through supportive actions aiming at developing these functional elements (this is illustrated diagrammatically in Fig. 1). The developments and interrelationships of both national and international markets on the basis of different user target groups is another important aspect in this context.

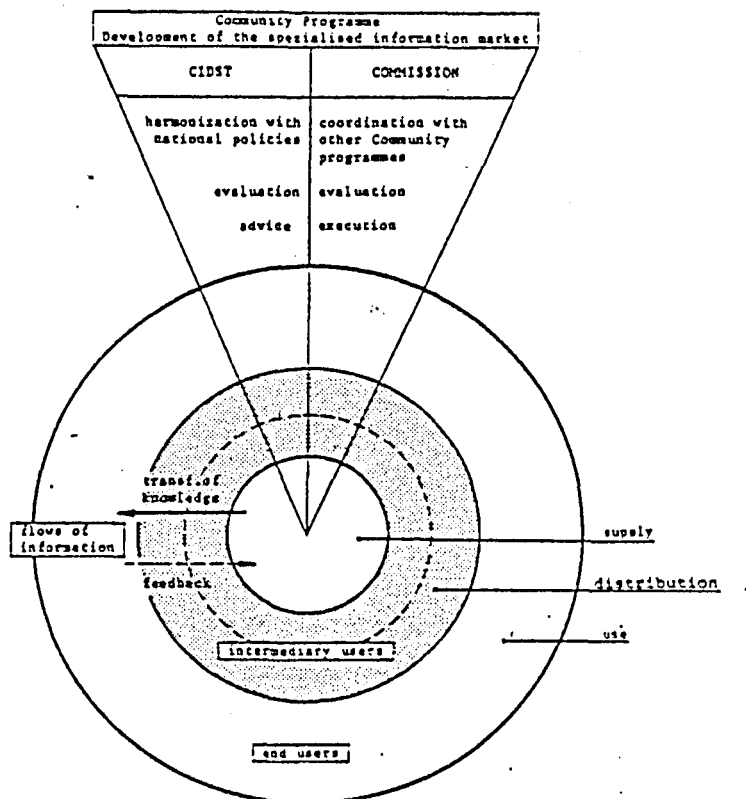


Fig. 1 Information Market Structure

C. A Community Programme

The proposed Community programme is primarily intended to improve the transfer of knowledge.

With this in mind, it is important

- to create a favorable environment for the use of information products and services of european origin in order to ensure, as far as possible, their economic viability. This is to be achieved by appropriate actions on existing technical, linguistic, commercial and other barriers, thus improving market conditions and the information environment, and resulting in more transparency for information supply and demand;
- to encourage and reinforce the supply and the quality of european information products and services in sectors of Community interest through the support of innovative developments. The choice of such sectors will be determined by a knowledge of the market and by the information needs of the productive and R & D sectors, particularly in fast developing areas.

D. Programme Structure

A programme for the development of the market for specialized information must correspond to the evolving nature of the subject. The flexibility of the programme is achieved through a hierarchical structure incorporating a wide range of initiatives with different time scales.

The present document accordingly consists of three parts relating to the 3-layer structure of the programme:

- the main document is a policy paper and provides the long-term basis for the programme itself which is intended to run for an initial period of some ten years;
- the Annex 1 provides a general framework and includes a hierarchical structure of the programme together with the definition of priorities and objectives and is intended to cover a medium-term programme period of 5 years; this medium-term programme provides the basis for the preparation and execution of the annual activities and budgets;
- the Annex 2 constitutes the practical basis for the execution of the programme and includes the annual activities within the programme framework together with the corresponding budget envelope; this part of the document has a validity of one year.

Thus a 5-year rolling programme is established which must be kept particularly flexible, because of rapidly moving developments in the information area. Therefore, regular review points at 2 ½ year intervals are incorporated into the programme structure, for reviewing the programme priorities and orientations as laid down in Annex 1 of the document (see Fig.2). Such review will jointly be carried out by the Commission and the CIDST on the basis of a dynamic evaluation of the actions executed and the results obtained during the previous programme period. On that basis, the framework and priorities for the forthcoming 5-year period will be developed (Annex 1), and all subsequent annual activity and budget plans will refer to the revised medium-term programme. The long-term policy document may be revised after 5-year periods, if appropriate.

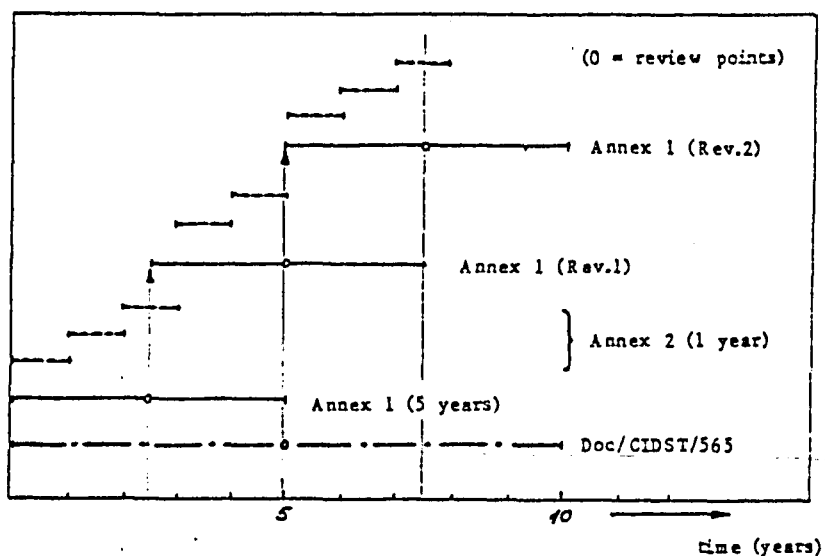


Fig. 2 Programme structure

E. Budget Envelope

The financial requirements for the execution of the programme have been established on the basis of experience obtained from the execution of the Action Plans and are estimated to amount at

1st year	-	7.8 MECU
2nd year	-	8.0 MECU
3rd year	-	8.0 MECU
4th year	-	8.2 MECU
5th year	-	8.2 MECU

Thus a total amount of 40.2 MECU will be required for the first 5-year period of the programme.

F. Principles for Community Action

A number of principles for Community actions are stressed, which result from both the existing environment within which the programme will be carried out and the general rules of Community policies:

- the proposed programme is based on a balance of activities between the Commission and the Member States, depending on where such activities are most appropriate;
- for the definition, execution and evaluation of its programme, the Commission is advised by the CIDST, which is also the responsible body for the coordination of the programme with national developments;
- the preservation and support of fair competition and equality of treatment for all parties involved in the specialized information market must remain a basic principle of any development;
- initiatives will be taken by the Commission within the programme to stimulate and launch developments to the pilot stage. In principle the Commission will not be directly involved in longer-term operations;
- the Commission ensures the coordination of the programme with other related or closely associated Community programmes such as ESPRIT, INSIS, EUROTRA, FAST etc.

G. Related Community Policy Development

Due to the increasing international dimension of the field of information and the convergence of activities through the application of new information technologies the Commission is in the process of preparing the ground for the elaboration of a more general Community Information Market Policy. This policy should cover in principle the whole spectrum from specialized professional information to information for the general public.

It can be foreseen that the formulation of such a policy will be an extremely complex and time-consuming exercise, which will take several years. The presently proposed programme in the specialized market can provide important guidelines for the more general policy.

II

Development of the Specialized Information Market
and Information Environment

Policy paper

1. BACKGROUND

On 24 June 1971 the Council of Ministers adopted a resolution with a view to promoting the provision and use of information through coordinated actions of the Community and the Member States. On the basis of that resolution, the Council agreed on three successive Community Action Plans in the field of information and documentation, each of 3 years' duration, starting in 1975 and scheduled to terminate at the end of 1983. These Action Plans were developed and executed in close cooperation with the corresponding authorities and institutions in the Member States. They were mainly oriented towards areas in which urgent needs had been identified, such as the removal of technical and commercial barriers impeding on-line access to information stores within the EEC, which could be satisfied by means of relatively short or medium term initiatives.

Although the adoption of short-term action plans has proved to be an appropriate means for initial Community activity in a new area, the recurrence of a number of specific actions in all three Action Plans demonstrates that there are many problem areas, such as the stimulation of information provision sector, which require constant action at both national and Community level. This requirement is already recognized by various Member States, in developing information policies which are supported by corresponding action programmes. The Community Action Plans were initially designed for short term Community intervention, but many areas have turned out to be so broad and important, that a permanent activity becomes necessary in the light of the increasingly dominant role of specialized information in the economic development of our society during the coming decades.

2. ACHIEVEMENTS

The most important results of the Action Plans, which have only been possible through the cooperative efforts of authorities and institutions in the Member States, and the Commission of the European Communities, are

- the implementation and extension of the telecommunications network Euronet, built to international standards, in cooperation with the PTTs; in 1982 the network was used internationally by some 2.500 organizations for 60.000 hours of interrogation;
- the implementation and launching of a network of information services - DIANE - offering some 400 data bases through 40 hosts in the Member States, and the creation of the European Host Operators Group (EHOG);

- the successful development and operation of a number of sectoral information systems, most of which have been established on a cooperative basis;
- the encouragement given to the accelerated development of high quality information services in Europe through an effective financial support mechanism;
- the support of user interests through the development and implementation of standards, multilingual tools, referral and back-up services, awareness campaigns, and well established feed-back channels with users (User Forum, Newsletter); and
- the exploration and stimulation of the application of new technologies such as Videotex, electronic publishing etc. to the specialized information market.

The successes achieved so far have demonstrated that Community actions in this area are desirable and effective.

3. TRENDS

3.1 Economic and social developments

It can be expected that information will play a growing, if not predominant, role not only in areas like economic development, technology transfer and international trade relations, but also in the social restructuring of our society in areas such as employment, social needs and behaviour.

The information industry will be at the heart of the transformation of the Community's economic and social structure during the next decade. Its development requires action in all aspects of the production, processing, dissemination and use of information in the market place and will have an effect on the quality and cost effectiveness of information provision.

The development of the professional information market will have a basic and overall influence on the development of the Community, because

- information is essential to innovation and therefore is a motor for economic development; a dynamic information industry making full use of new information technologies, is now recognized as a major source of economic growth and employment;
- information and its management and use, and the Community's relative independence in this area are fundamental factors with regard to the competitive force of European science, research and industry, and therefore are objectives of substantial importance to future Community development.

In the light of the growing awareness of the information consumers with regard to the importance of information and the fast developing information technologies, the information marketplace now experiences a significant shift in the composition of its target group. This change is essentially a shift from intermediary information users to information consumers or end-users which implies an important widening of the market with significant effects on the distribution patterns.

3.2 Information market place

In a number of areas there exists an international imbalance of information power, because a gap has developed during the last decade between the Community and the United States and Japan not only in those advanced areas of the information industry where telecommunications and computer techniques exert a determining influence, but also in the non-traditional areas of trade, commerce, economics and finance information. This may lead to a dangerous weakening of the European position, and it can be expected that without a strong European Community role and initiative this gap will rapidly grow in future.

A relative weakening of European information strength would result in a decrease in the competitiveness and innovative strength of European industry and in increased technological dependence of the Community countries, resulting in fewer opportunities to sell technologies on the world market. It is of strategic importance for the Community to create a relative European independence in the information area.

Besides this competitive force from outside, internal market fragmentation and differences in the level of development of Member States, are other factors which hamper the development of a competitive information market in Europe. The development of a common market for information in the Community would create the necessary economies of scale which would permit competitive and profitable investments in this area. This should not prevent public investment to satisfy social, cultural or strategic needs.

Under the influence of new information technologies and due to differences in user target groups, parallel developments of national and international information markets will occur. Although the international market for specialized information will be a priority concern at Community level, due considerations should be given to these developments, in particular in the area of information for the general public. Community initiatives may help to coordinate parallel developments and to avoid duplication.

4. COMMUNITY ACTIONS

4.1 Framework and Structure

Future Community involvement in specialized information market developments must, on the one hand, be planned in the light of the opportunities and problems referred to above and, on the other hand, ensure continuity with a view to safeguarding the achievements of previous initiatives.

Up to now activities have centered upon transborder infrastructure for a common market of information and stimulation of the information supply sector. The importance and strengthening of these "promotional" activities and an increasing emphasis on the use of information, especially by emphasizing user support actions, should be a major subject of any future programme.

In order to develop a framework for these future activities it is appropriate to use the classical subdivision of a marketplace, namely

- supply sector
- distribution sector
- use sector

It must be realized however that in the information market place the distribution sector is quite different from other market places.

The required continuity on the one hand and the flexibility on the other hand must be ensured on the basis of a structured action programme. This contains long-term objectives, a medium-term programme with review points built in and annual work plans the results of which will be regularly evaluated.

4.2. Objectives

The long-term objectives of a Community programme are:

- the development of an economically viable market for specialized information in Europe; this implies a number of activities aimed at overcoming existing barriers, stimulating the information demand and speeding up standardization efforts;
- the encouragement of innovative developments in information supply to improve the competitiveness of European information on the European and international markets vis-à-vis the overseas challenge.

The ultimate goal is the optimization of the transfer of knowledge within the Community by improving the information environment and developing a common information market which can provide the required economies of scale. Within this concept the roles and interests of the various participants should be integrated in an optimal way, including technical, economic, linguistic, policy and other aspects.

4.3 Methods

The success of a future programme which is to be undertaken in follow-up of the Action Plans can best be ensured on the basis of continuity. The concept of three-year Action Plans has been found to work satisfactorily in reaching clearly-defined short-term objectives. For longer-term objectives requiring continuous action, funding through a permanent budget line would be more appropriate. Although the strategic objective of optimising the use and exploitation of information resources remains unchanged, the tactical activities required for its achievement must be steadily adapted to market conditions.

A continuous funding mechanism provides greater assurance of continuity of support for activities in cooperation with Member States than the subsequent action plans carried out previously. Activities would need to be reviewed regularly with regard to their content and their financial implications, as is the case in many other sectors of Community action. Although the programme provides for continuous activities, reasonable flexibility must be maintained allowing immediate reactions to a fast changing information environment. A consistent Community approach, which implies that a considerable part of the activities should be designed in complement to and in coordination with national programmes, where this is feasible and appropriate.

In executing the programme, such means and procedures should be applied as have proved in the course of the Action Plans to work satisfactorily and efficiently.

In addition to such proven procedures, new ones will become necessary and appropriate, and existing ones may need adjustment according to changing requirements and situations.

4.4 Principles

The international character of today's information market reveals an increasing number of issues of common interest and importance, for which national or bilateral approaches may be less effective. They are more appropriate for consideration within the enlarged framework of the Community on the basis of coordinated and joint approaches.

Basically, the principles for Community initiatives, which have to be recognized by all parties concerned, are the following:

- Community activities should be undertaken in support of and complementary to national activities, and in areas of common interest and value, as are more appropriate, more efficient or more economic at a Community level than individual initiatives at a national level;
- in the present economic situation it is important to avoid any duplication of effort and expenditure, through the support of cooperative activities both internationally and between the public and private sector; in monitoring and assessing the outcome of national efforts in the information market area, the Community can ensure that results and successes reached within

- the framework of national programmes can be applied beyond national boundaries;
- against the background of the increasing application of modern technologies and methods, the traditional media and methods such as printed information and library services must not be ignored; a complementary development of the traditional sector should therefore be ensured;
 - Community action is required in support of existing and emerging Community policies and programmes, and effective coordination must be established with these;
 - the Community should support Member States in which the information environment is less developed, with a view to reducing the gap vis-à-vis the more advanced countries;
 - in executing the programme the Commission's activities should be limited to the stimulation, encouragement, support and demonstration of the appropriate developments in a prototype or pilot way on small or full scale; operational involvement should remain an exception.

5. CIDST

Since its establishment as an advisory body to the Commission and CREST in 1972, the role of CIDST has shown a continuous growth. The cooperation between Commission and CIDST has become a major element for the successful preparation and implementation of the Action Plans, and the constructive continuation of this cooperation is necessary for ensuring coordination and coherence of Community and national activities.

As a consequence of this and in relation to the more permanent basis on which the Commission wishes to found its future information activities, it is essential that the CIDST, on the basis of its mandate, increasingly focuses its attention on the main lines of the policies that have to be developed and followed.

Within the framework of this Community programme, the CIDST has to fulfill a number of tasks which are particularly important and which are essential for the successful and effective implementation of the programme. These tasks mainly refer to:

- the harmonization with national policies and programmes;
- the implementation of specific parts of the programme at national level;
- the continuous and dynamic evaluation of the activities carried out and of the results obtained;
- the regular revision of the medium-term programme jointly with the Commission; and

- the advice and support to the Commission in the preparation and execution of the annual actions and budgets.

Against this background and in consideration of the Commission's increasing information activities, it would be appropriate that the committee's competences develop accordingly.

6. POLICY

The preceding chapters define the policy framework within which the permanent activities of the Commission further to develop and encourage the market for specialized information will be carried out. Quite apart from this however, the increasing importance of information for the economies of the Community, the rapid growth of the transborder flows of data, combined with the experience of the last ten years, have convinced the Commission that it should broaden its objectives and, in parallel to the permanent activities described, become more active at the general information market policy level.

The Commission is therefore in the preliminary phase of examining in a broad framework the numerous issues and complex implications of the general information market and information technologies in the Community, with a view to the definition of a coherent Community information market policy, thus complementing the existing policy in the telematics field. This work is essentially of a political nature and far-reaching in scope, covering the major aspects of Community responsibility (economic, fiscal, legal, etc.). The first phase in this work is an inventorization to set priorities and find parallels of interest through opinion gathering from leading authorities in the Member States. This will enable the Commission to create a solid basis for the development of the policy.

Clearly, the permanent activities in the specialized information market field are on a different though related plane; nevertheless some of these activities will ultimately have to be carried out within the framework of the wider policy and new ones may be added which originate from such a policy framework.

III

Medium-term Action Lines and Procedures

1. INFORMATION MARKET STRUCTURE

1.1 Market sectors

The information market covers a wide diversity of subject matter, disciplines and data content, and services are offered across virtually all industry sectors. A broad view of the market must therefore be taken, encompassing all services which offer specialized information. This requires the division of the information market into distinct sectors which is not a simple task, because there is an infinite number of categories by which a market can be segmented. As an initial approach it is proposed to apply a structure which is common to most of the major market studies which have been carried out in the course of the last 2-3 years. These sectors are:

- Science and Technology
- Economic and Econometric
- Business and Finance
- Legal
- Credit Reference
- Special Marketing Information
- General Information

The importance of specialized information is highlighted by the fact that most of the market studies referred to above forecast an annual growth rate for the various sectors between 20 and 30 percent for the next 6-8 years.

Some of these sectors are very well established, they are served on a purely commercial basis and have a considerable share of the whole market. Other areas are well developed in the sense that a great number of individual services are available although they may have individually only a relatively low market share.

The tendency towards the reduction of public support for the supply of information products and increased competition from outside Europe create a situation where wider international availability and utility of specialized files is a necessity for improving their economic prospects. In addition, the public-private relationship in the various sectors is an important aspect which deserves specific attention.

On the basis of strategic considerations, in particular with regard to economic development, the priorities in the supply and use of information must increasingly reflect the interests of the productive sector. This sector has a need for a balanced mixture of specialized information from all sectors with particular emphasis in the techno-economic area. The availability of and accessibility to specialized information in this sector must therefore be developed as a basis for the creation of complementary information services.

1.2 Distribution means

The distribution of information in the marketplace is ensured by both traditional and advanced (electronic) means. Although the forecast growth rates are related to the advanced sector, they indicate the general tendency in the information market, and the rapidly expanding online sector has a pull effect on other activities.

Previous developments in the distribution sector have tended to favour the advanced methodologies. In the light of the important role which traditional distribution means will continue to play in the future, such a priority may not be appropriate.

Any emphasis on the development of technologically advanced services needs to be balanced by the development of traditional services, since in the foreseeable future the latter will satisfy important needs, especially the need for personal and value added services, that the technologically advanced services cannot satisfy. The application of new technology to traditional services may be a suitable subject for EEC action, in particular in relation to the implementation of advanced document delivery services, but this is only part of the problem of ensuring that the network of European information services develops in a balanced way. The content, structure, staffing and financing of traditional services is equally important. In several countries these components need to be made stronger, more efficient and more productive, and EEC action can help to achieve this.

2. INFORMATION MARKET DEVELOPMENT PROGRAMME

Within the coming years the information market will experience a significant shift in the composition of its user groups. The penetration of new information technologies will increasingly move the information access operation from intermediaries to end-users. In parallel, an increasing tendency towards popularization of automated systems can be observed. These developments provide for a considerable widening of the market and create new opportunities for entrepreneurial initiatives in the marketplace. But they will also require a considerably improved efficiency, economy and user-friendliness for the supply and distribution of the information. Moreover, the tendency of attaching an economic value to information increasingly creates a new area for business, employment and competition. In this context the relationship between public and private involvement and intervention must be carefully examined.

The rate at which these changes take place will vary between the Member States, and therefore the various actions proposed need to take due account of these differences.

The information market, as most other markets, can be divided into three distinct sectors:

- Supply Sector
- Distribution Sector
- Use Sector

In the light of the existing problems and the forthcoming developments it is appropriate that the distribution sector which constitutes an interface between the supply and use of information and which has to fulfill a large variety of complex tasks, receives particular attention. The fact that the information market is expanding rapidly and has international dimensions justifies both appropriate initiatives at Community level and, within these, priority for the improvement of its distribution characteristics.

The distribution sector in the information market has a complex structure and many of its functional elements need to be improved with regard to their capabilities and effectiveness, and their integration into an efficient system with particular emphasis on user related issues. By developing this sector in a harmonized and coordinated way, and through cooperative efforts, the market conditions and environment will improve and a wide range of new opportunities will consequently be created in all sectors of the information market. Thus there will be a second area for Community action in supporting new and innovative initiatives and products which develop in the light of the widening market.

On the basis of these developments, a change of roles will take place for various participants in the marketplace. As an example, reference is made to the roles of

- public and private institutions, especially in the area of information supply, where public intervention should be balanced with public interests, in the light of strategic and economic considerations;
- intermediaries whose functions in the information environment will be enhanced becoming increasingly information consultants offering value added services while at the same time fulfilling the transfer function between suppliers and certain categories of users;
- national, regional or local agencies which transfer information to specific user groups in different sectors as required by local conditions.

2.1 Improvement of market conditions and information environment

This must primarily be initiated through the removal or reduction of barriers existing in the various areas of the information distribution sector. These barriers constitute the main obstacle to the expansion of existing small markets into wider and international dimensions and for the creation of economies of scale. For example, the European information market for online services is characterized by a large number of hosts providing many small, specialized infor-

mation services and operating in regional markets of limited size. Moreover, the interfacing between the various elements which constitute the distribution function of the market is not achieved in an efficient way.

For commercial and economic reasons, it is necessary to change this situation by bringing more transparency into the interfaces and in integrating the roles and the interests of the participants in an optimal way. This objective requires the solution of a number of technical, administrative, legal, economic and other problems which constitute barriers to the supply and use of information. The reduction or removal of these barriers will have the effect of transparency and openness of the information environment from the user's point of view.

Some of these barriers, in particular technical and administrative, may be more easily reduced or removed than others, such as legal and political. Moreover, some of these efforts are more appropriate at national level, such as legal and educational, whereas overriding Community interest exist for instance for linguistic aspects.

The common aim of the activities undertaken within this framework is the improvement of market conditions in the Community which will achieve an information-rich environment and provide multiple services on the basis of

- ease of use;
- speed of access;
- quality of service;
- completeness of information;
- comprehensiveness of services;
- suitability for user type;
- low cost.

This will certainly not be achievable in the same time scale in each area of the information chain, and economic or political factors may dictate whether it is ever achieved in some cases. But the main goal of an open system should be constantly pursued.

The validity of this approach may not be limited to international markets as in the field of specialized information. It may likewise apply to the structure of national markets, which are developing in particular in the area of general consumer information and practical professional information (e.g. agriculture and small companies); Community initiatives may help to support the coordinated development of those markets as well.

In this context, the information market is not interpreted in commercial terms only, but it is considered as a place where supply and demand come together on a commercial and on a non-commercial basis.

The various aspects which are to be considered in the development of appropriate initiatives are discussed hereafter. They constitute an initial inventory of areas in which barriers are apparent and it may be extended at a later stage, if this is appropriate and useful.

2.1.1 Technical aspects

It is mainly in the area of technical developments where continuity and follow-up of activities, carried out within the framework of the previous Action Plans, must be achieved. Through the continuation of previous activities and the launching of new developments the range of services can be extended and completed, and the basis for a better integration will be created. These technical developments should be initiated in a balanced way for the benefit of both advanced and traditional distribution means.

For medium-term developments the following areas are particularly important:

- extension of the Euronet-DIANE concept including
 - DIANE concentrator;
 - referral services;
 - automatic guidance systems;
 - integration of facilities;
- new information technologies, including
 - document delivery;
 - new media (videotex, teletext).
- achieving compatibility of procedures and equipment requiring the definition, application and extension of standards; this should not be limited to the distribution sector, but should also influence the supply side; examples here are
 - CCL extension;
 - common procedures development and implementation;
 - harmonization of data base structures.
- networking with particular attention to
 - the interconnection of different networks;
 - development and use of networks for new applications;
 - multipurpose networks.

2.1.2 Linguistic aspects

These have a high priority at Community level which is proved by the fact that two related development programmes with the commitment of considerable financial resources are carried out at Community level,

- the Action Plans for the improvement of the transfer of information between European languages; and
- the EEC research and development programme for a machine translation system of advanced design-EUROTRA.

The multilingual environment is one of the most important factors requiring specific consideration in the development of an

information market in Europe. The linguistic barriers which exist across the Community considerably hamper the widespread use of information systems and services and therefore impede economically viable developments and promote duplication.

It is therefore particularly important that, complementary to the programmes referred to above, appropriate developments will be also incorporated in the information market development programme. The priorities for this programme are seen in the development of

- multilingual tools; and
- machine translation services.

These need to be developed to such an extent which is technically feasible and economically justified. Very often it seems reasonable to limit multilingual developments for instance to

- CCL (common command language);
- directories and thesauri;
- manuals;
- referral services;
- translation of titles.

The integration into data base services of the availability of existing translations is another aspect which should be considered.

Services with extended multilingual capabilities could possibly be developed within the framework of intermediary and consultancy services.

It should be borne in mind that these initiatives are aimed at overcoming the linguistic barriers which exist between the EEC countries. Besides this, activities which refer to non-EEC languages may also be of importance.

2.1.3 Administrative aspects

The relationship between suppliers, distributors and users of information are in many respects determined by administrative procedures. The increasing commercialization of information tends to increase these procedures and may lead to undesirable bureaucratic developments. In order to avoid the creation of supplementary barriers the administrative procedures need to be harmonized in the interest of all parties involved. Such harmonization would include

- contractual arrangements;
- billing and payment systems;
- access procedures.

These efforts should also include some auxiliary functions such as fiscal and taxation policies. Although mainly national initiatives are required here, the Commission could play a coor-

dination role and prepare appropriate recommendations for application at national level.

Some administrative aspects strongly overlap with economic and legal aspects which should be kept in mind when the corresponding initiatives are implemented.

2.1.4 Economic aspects

With the increasing commercialization of information the economic problems which need to be solved increase accordingly. The lack of appropriate information budgets and consequently the inability of users to pay for information is an urgent problem. This particularly applies to small and medium size enterprises (SMEs) where the discrepancy between information needs and information budgets is developing into a critical situation.

In addition, existing price barriers impede considerably the increased use of information services and appropriate initiatives need to be undertaken with regard to the various cost elements, in particular for

- equipment,
- communications (PTT-tariffs), and
- services.

Moreover, more transparency of the tariff structures would be of help to the users.

More reliable and updated market research is needed to identify areas with promising economic opportunities and to design information products and services in a way which ensures better use and greater markets. The aspect of export of information should be further pursued in this context. The approach of creating the necessary economies of scale must be a fundamental principle for the market development.

The investment in information products and services is often unduly hampered by fiscal regulations, public pricing policies or interest rate policies. Efforts should be undertaken to improve these conditions.

2.1.5 Legal aspects

With the advent and application of new technologies the legal environment of the information market could become a key element in the near future, because it can considerably hamper technical and economic developments.

At a formal level, there are mainly the problems of

- copyright, and
- privacy/data protection laws.

These are either completely lacking or differ considerably in the Member States, and they are not developed to comply with the technical and economic conditions and requirements of the information market and its future prospects. Therefore, they sometimes favour unfair competition and unequal treatment, they do not take into account the needs of advanced technologies and inhibit the growth of the market. Here, appropriate recommendations at Community level may help to harmonize existing or forthcoming regulations.

At an informal level, existing royalty arrangements and restrictive territorial rights do not ensure the Community principle of equality of treatment. The Commission has an obligation to react on such disturbances on the basis of the provisions of the Treaty of Rome.

2.1.6 Policy aspects

Many of the problems to be dealt with have policy implications and a number of critical issues are involved here. A priority concern in this area is the public-private relationship. It is recognised that solely private initiatives will not lead to an optimal situation and that in a number of sectors public intervention is necessary. However, public sector involvement, in particular in the information supply and distribution sectors, and consequently the competition of subsidised products and services with private initiatives has led to some distortions in the marketplace. There is an economic necessity that the public sector withdraws from direct competitive subsidisation and directs its initiatives into such areas where public involvement is reasonable and appropriate. The need for and the role of public initiatives should be investigated with the appropriate parties with a view to achieving a better balance between both lines of action.

Other market distortions may be created through monopolies. The reasons and needs, economic and political, for such monopolies should be examined, and they should be removed, if this is economically justified or strategically important. If this cannot be achieved, the avoidance of misuse must be ensured and the adverse effects of monopolies must be overcome. In addition, the policy implications of monopolies existing outside the EEC have to be considered.

For strategic reasons and because of its contractual and political obligations to the less developed (ACP-LOME) countries, the Community should undertake serious efforts in this area. Competition with the US is extending on these markets and the Community should develop appropriate initiatives before these markets will completely be dominated by other competitors.

These initiatives need to be organized in close cooperation with other Commission's services, which are active in this field, such as DG I, DG VIII and the Statistical Office, and with international bodies such as UNESCO.

Within the framework of the relations with international organizations such as OECD or UNESCO, common Community views and positions should be developed and accordingly represented. If information is increasingly considered as an economic resource, it should also be included in the GATT negotiations, and the Commission would be required to provide an appropriate contribution.

2.1.7 Educational aspects

Although education is primarily a national task, there are many aspects involved for which initiatives at Community level may also be appropriate. Against the background of the development of an information society the development of a technical culture is required which implies appropriate education concepts at a very broad public level. General guidelines at Community level may help that such educational schemes develop in a coordinate way.

At a higher level and with particular emphasis on specialized information appropriate training programmes and facilities are required as well as the development of professional expertise in intermediary services, SMEs, universities and other public or private institutions.

In the long term these initiatives will lead to a broader awareness of the importance of information for both the professional user and the general public.

The Commission should build upon its previous activities, particularly in the areas of training and raising awareness through publicity and promotion initiatives at Community level. Potential users and decision makers should be sensitized to the value and importance of information and be made aware of availabilities and opportunities. Appropriate initiatives should be supported and stimulated by the Commission.

2.2 Encouragement of innovative initiatives

The improvement of the market conditions is expected to prepare the ground for a number of entrepreneurial opportunities to create or improve information products and services. Many of these initiatives will be private ones which do not require public support. Others, public and private, may require such a support. The need and the usefulness of such support has to be assessed on the basis of criteria such as

- widening the market;
- improving products, services and user acceptance;
- overcoming linguistic barriers;
- promoting cooperation;
- decreasing gaps in the level of development between Member States.

Another important aspect is the question of priorities. These should be developed on the basis of a market research programme which integrates ongoing efforts at national level and which also includes evaluation of the present situation of existing products and services. In the light of ongoing developments and on the basis of strategic considerations it is likely that emphasis in future will be on the provision of techno-economic information services in support of the productive sector and, in particular, for the benefit of SMEs.

Depending on the respective requirements, different means for support are needed, and supportive initiatives may be undertaken at both Community and national levels. The effectiveness and usefulness of such means has partly been proven already within the framework of the action plans. New ones may need to be developed to complement existing ones in such a way that a flexible and coherent programme is ensured in the short, medium and long term.

As a whole, Community initiatives in this area should be seen as complementary actions to other Community programmes such as ESPRIT or INSIS. It will therefore be necessary that due coordination is achieved and the interests of all these interconnected programmes are looked after. Moreover, the Commission must ensure the availability of information products and services which are needed in support of existing or developing Community policies such as agriculture, environment, energy and others.

2.2.1 Sectoral fields

One of the major problems in developing the information market is defining what sectors should be considered. It is therefore necessary to make a preliminary assessment of the various sectors identified with a view to defining those areas which may require particular Community interest. Although the difficulty of defining distinct and comprehensive market sectors is recognized, the following structure is proposed as a basis for discussion and further consideration.

2.2.1.1 Science and Technology

This is one of the most active sector in the advanced area of the information market. The Community concern in this sector needs to be maintained in support of corresponding Community policies, although a reorientation may be necessary with regard to market development priorities.

2.2.1.2 Economic and Econometric

There exists a problem in that a very specific market for a limited number of professional users has developed, whereas the availability and use of related general database services are lagging behind. This is mainly due to a considerable gap in the availability of sectoral statistical databases which need to be actively promoted in the light of the increasing demand, arising out of the need for diversification, especially for SMEs.

2.2.1.3 Business and Finance

The services in this area, which shows substantial activities, are not equally supplied to all interested users and it would be worthwhile to investigate how the existing information network and pattern of usage could provide more equitable access. The Community should give particular attention to this area with special emphasis on technologically based industry, and with a view to including specific market data.

2.2.1.4 Legal

An important aspect in this sector is the international significance of EC data as compared to the more regional applicability of national data. In particular, there is an increasing need for information on regulations and standards both at national and Community level as a basis for the increase of international trade. Appropriate initiatives for the development of such databases should be a priority concern.

2.2.1.5 Credit Reference Information

This is a long-established and well organized sector. The dominant position of a few non-European service suppliers could possibly be compensated through the creation of alternative services as a basis for better competition. Appropriate initiatives would however receive a lower priority. A related priority issue in this sector is the protection of the individual's privacy.

2.2.1.6 Special Marketing Information

This sector has a similar well-established structure. It is a quite specific area mainly of commercial interest. Although Community intervention would have a low priority in this sector, the lack of demographic databases in Europe for on-line access should deserve specific attention.

2.2.1.7 General Information

There are many databases which do not fall into any of the classifications previously discussed, e.g. fact data files such as in the area of education and environment, or databases on social sciences and humanities. This is a sector of general public interest with promising growth rates. Some attention should therefore be given to it within the framework of a Community programme for specialized information market development.

On the basis of these preliminary considerations, and with regard to their information market value, the following areas of Community interest are identified:

- Business and Finance
- Legal
- Science and Technology
- Economic and Econometric
- General Information

This is not intended to prejudge any priorities. These must be determined on the basis of an evaluative market sector analysis which should be undertaken as soon as possible and in advance of developing new initiatives with regard to specific sectors. The ongoing work within the present framework of sectoral activities needs to be integrated into a concept for new initiatives. This concept must consider the increasing need of industrial users for complete information integration in a number of sectors, as compared to previous developments with the tendency to provide specific information only. The developing efforts of bringing specialized information to the interest of the general public should be considered as well in this context.

For the encouragement of developments, the public-private relationship and the aspect of monopolies in various sectors are policy issues which require particular attention for the development of a sound and economically viable market. The competition between Community based products and services and those of non-Community origin should be carefully observed and existing and developing distortions should consequently be removed.

2.2.2 Added value services

With the direct accessibility by end-users of basic products and services, a change of role of intermediary services will occur. Complementary to basic products and services, there will be an increasing need for more sophisticated and value added services which the information supply sector does not provide. Therefore, there will be a logical shift of opportunities for information intermediaries being information providers only to becoming consultants and for publishers which provide value added information. This field offers considerable entrepreneurial opportunities not only for the information brokers but also for new SMEs to become active in the information area.

Community initiatives at this level may include the support of research into and the direct encouragement for the development of improved services, such as

- expert systems;
- computational services;
- electronic publishing;
- information consultancy to SMEs;
- fast technology transfer services;

- information processing developments;
- translation services.

This list is not exhaustive but may illustrate the level at which such services may eventually be developed.

3. STRUCTURES AND PROCEDURES

3.1 Programme structure

The proposed programme has been structured hierarchically in order to provide for the necessary flexibility and to allow for a dynamic evolution of the content of the programme; in parallel to ongoing developments and fast changing conditions in the marketplace. At the same time, the structure and the content of the programme ensure continuity of actions undertaken within the framework of the three Action Plans, and provide reliable and foreseeable framework conditions for the development of the information market in the medium and long term.

The different time scales incorporated at the different levels of the programme are correlated with the Commission's requirements and procedures for budget authorization. They also include periodical review points at reasonable intervals on the basis of an ongoing evaluation process with regard to the projects carried out within the framework of the programme and the results achieved.

3.2 Implementation structure

In executing specific tasks, existing and proven structures should be used which may be adapted or supplemented in accordance with future requirements.

3.2.1 CIDST and its working groups

In working at different levels of the programme, the CIDST and its working groups have to fulfil different functions. The role of CIDST should no longer be limited to the relatively narrow aspects to which the previous action plans referred, i.e. Science and Technology, but need to be widened in accordance with the wider approach which is taken in an information market development programme. In advising the Commission, emphasis should be put on aspects such as programme development and review, evaluation, preparation of policies and guidelines, preparation of annual activities and budgets, and coordination with national programmes. The inter-relationship between the CIDST and CREST should be reviewed as a consequence of the broadening of CIDST's area of activity.

Appropriate working groups of CIDST should continue to recommend and advise on programme and project implementation related to their specific interest as at present. They should to a certain extent enlarge their responsibilities to include in their programme activities the areas of user support, market research and promotion and marketing of services. They should also seek to support initiatives aimed at increasing market transparency.

3.2.2 Expert consultancy

In the course of the Action plans, the Commission has quite successfully involved external experts in specific subject fields for the preparation and execution of projects. With regard to the limited staff resources available to the Commission, the possibility of employing such experts in the execution of its programmes is of particular value.

Such external experts should be recruited from all areas, i.e. private, public and academic, particularly for research type projects.

The Launch Team is an expert group which had initially been established to fulfil a specific, temporary task in providing technical and promotional support to Euronet DIANE during its launch period. This team has built up a unique body of expertise in the management of information resources and their marketing and has wide support amongst users and suppliers. Within the framework of the new programme, the present Launch Team should be reconstituted as the "European focus for information transfer". Its principle objective should be the achievement of the open system proposed as the overall goal of the Community actions.

3.3 Working procedures

A programme for continuous actions requires a large variety of activities including many projects with various subjects and objectives. Consequently different procedures are needed for their implementation. On the basis of experience made hitherto, the following procedures, methods and instruments are appropriate for application in the information area:

- feasibility-, market-, implementation-studies, reviews, surveys, etc.;
- workshops, conferences, exhibitions and other means to involve a wide range of the participants in the marketplace;
- invitation to tender for the support of systems, services, demonstrations and pilot schemes which are developed on the basis of Community initiatives; and
- call for proposals for supporting the development of commercial systems, services, technologies, methods and pilot projects.

In view of the long-term nature of the tasks and with regard to changing requirements, new or alternative procedures may develop and be implemented. This applies for instance to alternative financing schemes, which allow the attraction of risk capital to investments in the information sector.

IV

Annual work programme and budget - 1st year

1. Context with Action Plans

The annual work programme and budget is developed on the basis of the medium-term action lines and refer to the various aspects of

- the improvement of market conditions and information environment; and
- the encouragement of innovative initiatives.

For the first year of the programme for the development of the specialized information market, this work programme contains mainly activities which are intended to complete or to continue previous initiatives carried out within the framework of the three Action Plans. These will however be reoriented in the light of the new programme wherever this is possible and necessary.

New initiatives should respond to identified needs based on market research. This market research should therefore be undertaken as soon as possible as a permanent action, and a part of the annual budget should accordingly be earmarked therefore.

The budget figures are valid for the first year of the programme for continuous actions and will be a guideline for the years thereafter. They have been established on the basis of

- experience made in the execution of the 3rd Action Plan;
- the budget envelope for the 3rd Action Plan;
- 1983-prices for studies, supplies and manpower.

The distribution of the budget to the various areas of activity is only indicative.

2. Work programme for 1st year

2.1 Actions for improving market conditions and information environment

Since the new programme must initially provide for follow-up and continuity of the previous Action Plans, the activities in the 1st year concentrate on such elements which have already been dealt with previously, i.e. mainly technical, administrative and linguistic aspects. The related actions should increasingly reflect the following major aspects of

- user related issues,
- market oriented developments, and
- multilingual aspects.

2.1.1 User oriented developments

Actions here are of fundamental importance and include:

- development of DIANE concentrators as a follow-up of the NETSERV-2 study, with regard to the improvement of transparency;
- creation and improvement of referral, information and training files;
- further implementation of Common Command Language (CCL), and development of simple information retrieval and query processing methods;
- automated procedures to include improved identification of and access to information systems and services; automatic user guidance systems;
- follow-up of Euronet/PTT relationship and correlation with ESPRIT and INSIS programmes;
- operation of ECHO services including enquiry services, Community data bases and user support files.

2.1.2 Market oriented developments

In the area of administrative developments recent research has identified various problems in this area which need to be solved, e.g. :

- the development and implementation of improved billing and payment systems;
- the harmonization of contractual arrangements;
- the improvement of access procedures; and
- the development of appropriate user aids.

Further research will be initiated to identify other problems which can be barriers to wider usage. Priority initiatives would accordingly be allocated.

Fiscal and legal aspects are relatively new areas as compared to previous activities, although some of the problems involved have been touched upon under the Action Plans. A more systematic approach is necessary in future and it may be appropriate to launch a few initiatives quite soon on the basis of an inventory of the problems involved.

In the case of an enlargement of the Community to Spain and Portugal, the extension of Euronet-DIANE to these new countries will need to be prepared and eventually be implemented.

Furthermore, there may be a need for following-up previous projects, i.e. the export of information to North America (BRIDGE) which may further be developed or alternatively be extended to other markets.

2.1.3 User support actions

Corresponding activities have been carried out within the framework of the Action Plans. These should be continued with a view to increasing the general awareness of users and to improving the ability of users to access information systems and services through

- development of training and self-teaching packages for use by service suppliers, universities, training centres and end-users;
- continuous publicity actions and promotion, including the preparation of the Euronet-Newsletter, participation in exhibitions and conferences, organization of press conferences, continuing contact with journalists, market researchers, national administrations, commercial operators and users, and the execution of general awareness campaigns such as the travelling workshop;
- appropriate initiatives with regard to providing effective user aids, direct or indirect ones, on the basis of regional requirements.

In parallel, initiatives should be started for working out recommendations for the development and implementation of educational programmes to be carried out at national level in order to create a satisfactory level of information consciousness at school level and to raise the awareness of the general public.

In the third place, initiatives at Community level and at national level should be stimulated and supported to improve the vocational training of professional information personnel.

Many of the activities mentioned above should be carried out on a cooperative and cost-sharing basis between the Commission and other parties. This should lead to more coherence in the presentation and use of information services to reach the ultimate goal of an open market.

2.1.4 Multilingual developments

The particular Community competence in this area should result not only in continuation of previous activities such as the

- development, implementation and maintenance of multilingual directories and thesauri,

but should also prepare extension of multilingual services to the areas of

- CCL, host and data base manuals, referral services, access methods;
- identification of existing translations of documents;
- automatic translation services;
- widening of markets for existing products through the inclusion of multilingual features such as translation of titles.

The development of such multilingual products and services need to be coordinated with the other multilingual programmes of the Community.

2.2 Encouragement of innovative initiatives

Previous activities, in particular within the framework of sectoral working groups in the fields of agriculture, environment, energy, biomedicine and health care, and in relation to the call for proposals projects, need to be reoriented into coordinated activities for the stimulation and support of innovative initiatives. These should effectively contribute to the overall aim of developing an open, user oriented market. Public and private initiatives should be balanced in the light of economic and strategic considerations.

2.2.1 Information projects in sectoral fields

These are initially the traditional working groups activities which need to be continued and completed in order to safeguard previous efforts and investments. However, a careful reorientation of these activities should be envisaged with a view to integrating this work into the wider concept of providing complete and more user-oriented information systems and services including all sectors of specialized information. Thus initial activities in this area would include:

- the continuation of sectoral activities with a view to improving the supply and use of specialized information through short- or medium-term support of private and public initiatives (call for proposals - call for tenders);
- the evaluation of the quality and usefulness of existing products and services with a view to improving their user-friendliness and their economic viability.

- the development of integrated information services which could provide complete information packages in support of the productive sector;
- the identification of needs and appropriate methods of bringing specialized information to the interest of the general public and/or of specific user-groups at practical level in various sectors of economic activities.

2.2.2 Document delivery and electronic publishing

The document delivery action plan which has recently been endorsed by the CIDST, needs to be further developed and implemented. Initially, this will be achieved by following-up the previous call for proposals in this area. On that basis, appropriate services should be developed and further actions be prepared.

2.2.3 New intermediary services support

With regard to new opportunities on the basis of existing or forthcoming needs and of changing roles, appropriate initiatives seem to be useful in this area.

It will therefore be important to undertake some preparatory work and possibly to launch a well prepared call for proposals with a view to supporting the setting-up or improvement of value added intermediary services by consultants, SMEs, publishers, etc.

Much more opportunities for Community initiatives in this area are expected to develop in parallel with the ongoing programme in the medium-term.

2.2.4 Videotex developments

Preparatory work has been started within the framework of the 3rd Action Plan for the application of Videotex in the field of agricultural information. This should be followed by the implementation of this pilot project as soon as possible, and extensions to other countries should be considered. Moreover, similar projects in other sectors or subject fields may be of interest.

2.2.5 Research into new methodologies

The active promotion of the research into new and improved methodologies for information production and use needs to be reinforced. In particular, research projects which are suited to improve the performance and user friendliness of information

products and services, such as data base structure development or information retrieval software, should be considered in this context.

2.3 Expert assistance, market evaluation, research

In consideration of the future requirements for improving the competitiveness of the information market, some new initiatives should be prepared and started as soon as possible. These refer to market research, to include a wide range of market sectors in order to avoid unnecessary overlapping and duplication, to identify gaps and needs and to define priority areas for Community initiatives; such a research programme should take account of previous results and be coordinated with national programmes and developments in this area.

In addition, expert assistance to the Commission will be needed in some specific areas, in order to assure that the various aspects and the quite heterogeneous interests which exist in this complex field of the information market, are duly taken into account.

3. BUDGET PROPOSALS

3.1 Project cost

The proposed budget which is specified in the table hereafter refers to annual expenditure. It is at the same level as the budget of the last two years of the 3rd Action plan, because

- a number of ongoing activities out of the 3rd Action plan need to be continued;
- new orientations and developments need to be prepared; and
- the ECHO services have now been included in the information market development programme.

The distribution of the budget to the various areas of activity can at this stage only be indicative. Flexibility should be maintained here in order to allow for reallocation of priorities in accordance with emerging needs.

In addition to the budget figures for the first year, estimates for medium term budget requirements are included.

3.2 Infrastructural cost

The Commission is increasingly confronted with the situation of managing an increasing number of programmes and projects without incurring the corresponding manpower allocation. This situation has very severely affected the work within the framework of the Action plans and is unlikely to change in the near future. It is therefore necessary to provide in the budget estimates for the recruitment of external experts in support of the proposed programme. In addition to the Commission's staff available, at least the following additional manpower support is required:

A c t i o n l i n e	A-level	B-level
improvement of market conditions and information environment	5	2
encouragement of innovative initiatives	3	1
t o t a l :	8	3

These requirements for external staff do not include the cost of the Launch Team. These are included in all related items of the action lines and shall remain at the same level as in the previous Action Plans.

3.3 Budget figures

3.3.1 Budget plan for the first year

A c t i o n - l i n e	E C U
1. Improvement of information environment and market conditions	2.750.000
1.1 <u>User oriented developments</u>	1.200.000
- improvement of transparency)
- referral, information, training files)
- CCL development) 700.000
- automatic user guidance systems)
- Launch team activities)
- ECHO services) 500.000
1.2 <u>Market oriented developments</u>	500.000
- administrative developments	
- new countries	
- fiscal and legal aspects	
- export of information	
1.3 <u>User support actions</u>	500.000
- education and awareness	
- user aids	
1.4 <u>Multilingual developments</u>	550.000
- multilingual dictionaries	
- translation of manuals, referral files, CCL	
- machine translation applications	
- studies	

A c t i o n - l i n e	E C U
2. Encouragement of innovative initiatives	4.400.000
- information projects in sectoral fields	1.400.000
- document delivery and electronic publishing)
- new intermediary services support)
- Videotex developments) 3.000.000
- research into new methodologies (e.g. data base structure))
)
3. Expert assistance, market evaluation, research	650.000
T O T A L :	7.800.000

3.3.2 Medium term budget estimates

programme period	1st year	2nd year	3rd year	4th year	5th year
Mio ECU	7,8	8,0	8,0	8,2	8,2

Comments by the French delegation on Doc. 565/83 - Rev. 1

- 1) The French delegation has reservations concerning Paragraph 4.2 of Doc. 565/83, and Paragraphs 3, 3.1 and 3.2 of Annex I.

- 2) It is considered that the amendments to the "Management Summary", approved by CIDST, are not followed up in the text of the Policy Paper
 - in its title, "Development of the specialized Information Market and Information Environment"; (Comment by the translator: this refers only to the French version)

 - in Paragraph 4.2; the long-term objectives are:
 1. to create a favourable environment for the use of information products and services of European origin in order to ensure, as far as possible, their economic viability. This is to be achieved by appropriate actions on existing technical, linguistic, commercial and other barriers, thus improving market conditions and the information environment, and resulting in more transparency for information supply and demand;
 2. to encourage and reinforce the supply and the quality of European information products and services in sectors of Community interest through the support of innovative developments. The choice of such sectors will be determined by a knowledge of the market and by the information needs of the productive and R & D sectors, particularly in fast developing areas.

 - in the medium-term action lines and procedures
 - 2-1 to create a favourable environment for the use of information products and services of European origin
 - 2-2 to encourage and reinforce the supply and the quality of European information products and services in sectors of Community interest.

 - in the Annual work programme and Budget: the first year budget plan should use the categories used throughout the document (see above).

- 3) The effort to harmonize Management Summary, Policy Paper and Annual work programme and Budget should in all logic be applied to both the headings and texts of the paragraphs concerned.

- 4) The French delegation believes that the Commission has woodenly incorporated an amendment in the Management Summary without applying it to the rest of the document.

ANNEX 5

Opinion of CIDST
on the Community programme of continuous activities
to develop the market for specialized information
and the information environment

The Committee for Information and Documentation on Science and
Technology (CIDST)

Referring to point 3a) of Annex II to the Council Decision of
9 October 1978;

Whereas the actions started under the three 3-year Action Plans for
(scientific and technical) Information and Documentation have pro-
ved successful, but in view of the growing importance of informa-
tion for the economic and social development of the Community and
of the increasingly rapid development of new information technolo-
gies, greater and longer term efforts will be needed to develop the
information market and to improve the information environment
within the Community;

As a result of examining, at its 42nd meeting, the proposals of the
Commission for a continuous and longer term Community programme of
activities in this field:

- 1) Considers that greater and continuous efforts are necessary
 - to improve the market conditions and structures through the
removal or diminution of existing barriers and to create a
user friendly information market in the Community; and
 - to promote and support innovative initiatives
 - . in those information areas for which an interest of the
Community is evident and
 - . in the fields of the development, supply and distribu-
tion of value-added information services by intermedia-
ries and entrepreneurial initiatives, especially by
small and medium-sized enterprises;
 - to cover adequately also those sectors of the information
market which hitherto were not fully covered by the fields
of scientific and technical information and not adequately
served by the information industry.

- 2) Considers that in view of the importance of information for the cultural, economic and social development of the Community the proposed transition from limited-term action plans to a flexible programme of continuous activities, with permanent financing out of the Commission's budget, is the most suited course of action to cope with existing and forthcoming needs and developments in this complex area;
- 3) Recommends that the Commission propose to the Council, in accordance with document CIDST 565/83 final, a Community programme of continuous activities for the development of the specialized information market and of the information environment;
- 4) Will advise the Commission, within the framework of its terms of reference, with regard to the implementation of this programme and the evaluation of its results, and to the coordination of the actions with other related Community programmes;
- 5) Is of the opinion that permanent budgetary funds are required to implement the Community programme; indicatively these funds may be estimated at up to 8,000 000 ECU per annum, to ensure appropriately over the next years the continuation of developments and activities launched under the first three Action Plans, and to complement these by new actions directed specifically to the development of the specialized information market and of the information environment;
- 6) Advises the Commission to make the necessary staff support available for the preparation and implementation of activities and projects within this programme; in view of the growing activities stemming from the broadened scope of fields to be covered and from the widened tasks to be accomplished, the actually available manpower will need a considerable reinforcement;
- 7) Welcomes that the Commission is preparing the ground for a comprehensive information market policy, in order to establish the appropriate framework conditions for this market in relation to existing Community policies in the telematics field. The Committee is prepared to advise the Commission on the connected policy aspects;
- 8) Calls on the Commission to keep the Committee fully and regularly informed on the progress of this programme and on activities in related Community programmes.

The Belgian and French delegations made the attached statements.

The Secretariat of CIDST is requested to forward this opinion to the Commission and CREST, with a copy to the Council.

Statement by the Belgian delegation

"The Belgian delegation wishes to express the following reservations regarding Points 6 and 7 of the CIDST Opinion on the Community programme of continuous activities to develop the market for specialized information.

Point 6:

The Belgian delegation is unable to agree to the need for an increase in staff until DG XIII provides a detailed account of the needs and requirements which will stem from adopting the Community programme in question. The Council is being asked to adopt a permanent budget line of credit (Point 2) with a view, inter alia, to reducing the procedures required to implement the necessary actions. The impact of such a measure and the increased work-load should be carefully examined before proceeding with any increase in staff.

Point 7:

The Belgian delegation continues to hold the view which it defended at the meetings preparatory to the adoption of this Opinion. Whilst approving the Commission's desire to establish a common European policy on information, the Belgian delegation considers that the question is eminently political, long-term and within the remit of several Directorates-General, and that CIDST is therefore only one of several forums for its discussion. In consequence, the Belgian delegation cannot give its support to the second sentence of Point 7, reading: "The Committee is prepared to advise the Commission on the connected policy aspects".

Statement by the French delegation

Point 1:

"The French delegation proposes reverting to the text approved by CIDST on 10 June 1983 (Doc. CIDST 565/83 - Rev. 1) concerning the Programme, and redrafting Point 1 of the CIDST Opinion (Doc. CIDST 566/83 - Rev. 1) as follows:

1) considers that greater and continuous efforts are necessary:

- 1) to create a favourable environment for the use of information products and services of European origin in order to ensure, as far as possible, their economic viability. This is to be achieved by appropriate actions on existing technical, linguistic, commercial and other barriers, thus improving market conditions and the information environment, and resulting in more transparency for information supply and demand;
- 2) to encourage and reinforce the supply and the quality of European information products and services in sectors of Community interest through the support of innovative developments. The choice of such sectors will be determined by a knowledge of the market and by the information needs of the productive and R & D sectors, particularly in fast developing areas.

Point 2:

The French delegation has no instruction regarding the new procedures proposed by the Commission, in particular permanent financing. The system of Action Plans can be applied to the proposed Community programme.