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F O U R T H A N N U A L R E P O R T

STRATEGIC PROGRAMME FOR INNOVATION AND
TECHNOLOGY TRANSFER (SPRINT)

YEAR UNDER REVIEW :

- 1987 -

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PREFACE

1987 was both the year in which most of the actions started in the original "Plan for the transnational development of the supporting infrastructure for innovation and technology transfer" (Note 1) reached their cruising speed and the start-up year in the implementation of the SPRINT Programme (Note 2). The working procedures have been run in and the engine is now working smoothly.

This year also can be considered as a step forward in the drawing up and implementation of a Community policy to support innovation and technology transfer. Indeed, on the basis of work reported in the present document, the Commission has submitted to the Council and the Parliament a communication (Note 3) containing the proposals to step up the programme in a way commensurate with the key role it should play in the emergence of a European innovation policy.

The implementation of the SPRINT Programme during 1987 was based on three main ideas, developed in this report:

- .. Strengthening the European infrastructure for innovation services by the establishment of intra-community networks
- .. Monitoring innovation and concertation between the Member States and the Commission
- .. Specific actions for the less favoured regions

Through a Commission communication published in the Official Journal of the European Communities (OJ N° C196/2 of 25 July 1987) three calls for proposals and a call for expression of interest were launched within the context of the priority lines of actions established by the Council Decision that adopted the SPRINT Programme. The response (more than 530 proposals involving more than 1,000 organisations and a total financial demand of about 50 M.ECU) showed that it is fulfilling a need, even if the SPRINT Programme, in its first year, has still an experimental character and works on a modest budget.

Finally, various evaluations were started at the end of 1987 to establish clearly the limits, the merits and need for improvement of the SPRINT programme.

In particular they should make it possible not only to single out the main aspects on which to concentrate the SPRINT Programme during 1988, but also to identify the Community actions which would contribute to defining the next phase of the SPRINT Programme, with the purpose of playing a key role in the emergence of a Community innovation policy.

INTRODUCTION

The general intention of the programme is to speed up and simplify the process for transforming research results into new products, processes and services at both national and Community levels and to accelerate the spreading of innovatory activities throughout the Community.

During 1987 progress was made in all priority areas (Note 4). Special attention was given to the new priority action concerning the training of specialists in technology transfer and in innovation and financing, (Note 5).

The Commission is assisted in its work of implementing the SPRINT Programme by the Consultative Committee on Innovation and Technology Transfer (CIT). The Commission wishes to put on record its gratitude for the invaluable help provided by CIT during 1987. Special attention is given in the programme to small and medium-sized undertakings, which play such an important role in the economies of all the Member States of the Community.

During 1987 the programme continued to operate in three specific categories of activity:

- A. **Strengthening the European infrastructure for innovation services by the establishment of intra-community networks**
- B. **Monitoring innovation and concertation between the Member States and the Commission**
- C. **Specific actions for the less favoured regions**

Further details on the allocation of funds to the various activities are provided in Annex I.

The three areas of activity will now be discussed in more detail.

A. STRENGTHENING THE EUROPEAN INFRASTRUCTURE FOR INNOVATION SERVICES BY THE ESTABLISHMENT OF INTRA-COMMUNITY NETWORKS

Progress was made during 1987 towards achieving the objectives of this part of the programme:

- to improve the transnational integration of national innovation infrastructure networks, formed by technology and innovation management consultants;
- to establish transnational cooperation between industry-linked sectoral collective research centres.

In order to achieve full implementation of this service infrastructure for innovation, three specific additional measures were carried out:

- transnational cooperation in the field of venture capital;
- Transnational training in innovation management
- Europeanization of technology conferences

The SPRINT programme consolidated the work which had been carried out in previous years (Note 6), and encouraging results were achieved in certain areas of direct benefit to small and medium-sized undertakings. A supporting infrastructure for innovation now exists throughout the Community, even if it is still at an initial stage because of the complexity of the process.

A.1 Networks of technology transfer and innovation management consultants

One of the main objectives of the programme is the development of transnational cooperation between small and medium-sized undertakings, especially in the field of technology transfer, with the aim of achieving speedier introduction of new products and services throughout the Community market.

In order to attain this objective, the Community is continuing to encourage the establishment of transnational networks of technology transfer and innovation management advisory services (such as chambers of commerce, regional development authorities, private technology and innovation consultants, etc.). The idea is for these networks to foster and facilitate transnational collaboration, with significant technological content, between firms, notably those of great potential but limited size in their territory.

Given the complexity of the innovation process, it is useful for firms, whatever their size, to be able to rely on advisory bodies in these fields. These bodies must maintain certain links in order to be able to set up an infrastructure in line with the objectives to be achieved, hence the establishment of transnational innovation infrastructure networks.

As in the three previous years, a call for proposals (Note 7) was made offering partial financing for the implementation of transnational cooperation. The response, with more than 430 bodies involved in 159 applications for the creation of innovation networks (Note 8), shows that there is a need for a programme such as SPRINT in the Community.

The constraints imposed by the limited funds available meant that proposals were subjected to a rigorous selection procedure, and many viable projects were rejected for budgetary reasons. In the end 17 proposals were accepted, making a total of 95 technology cooperation networks accepted since the start of the programme, of which 46 projects were still being financed at the end of 1987.

As in previous years, a study was carried out at the end of the year to calculate the number of technology agreements actually signed between firms in the Member States as a result of the transnational networks funded under the SPRINT programme. No fewer than 121 contracts were recorded, and they covered a wide range of technologies throughout the Community (Annex II).

During 1987, the Commission again gave its backing to various support measures for the innovation infrastructure networks. As in previous years, the European Association for the Transfer of Technology, Innovation and Industrial Information - known as TII from the initials of its earlier name (Note 9) - continued to operate efficiently in its dual role:

- as an administrative intermediary for the Commission;
- as a European association to promote innovation and technology transfer.

In the former capacity TII continued in a satisfactory manner to encourage members of public and private innovation and technology management advisory services to get to know each other and to explore the possibilities for transnational cooperation. The activities in 1987 included four exploratory group visits (Lisbon, Valencia, Munich and Athens), involving about 20 participants in each visit. Support was also given to 19 guided visits by entrepreneurs and managers of one Member State to technology fairs in another Member State, and to about 20 short and medium-term secondments for members of advisory bodies throughout the Community.

In its role as the European association of the main organizations dealing with innovation and technology transfer, TII saw its membership increase significantly during 1987 and, by the end of the year, it had more than 250 member organizations. Its work of support and training for the innovation infrastructure was actively continued (Note 10). A business plan was also drawn up to outline the Association's intended development in 1988-89.

A.2 Transnational cooperation between industry-linked sectoral collective research centres

The objective of bringing new technologies to small and medium-sized undertakings continued to be pursued in 1987, and during the year there was noteworthy success in the two aspects of this part of the programme:

A.2.1 Cooperation between sectoral collective research centres (located throughout the Community but involved in the same sector).

The aim of these cooperation projects is to coordinate the technical knowledge of these centres so that active support for innovation and modernization can be given to the firms in their sector, thanks to the dissemination of relevant information on specific problems.

In 1987 the programme covered the 16 projects which had been selected in 1986. These involved 75 research centres from the whole Community in a wide range of "traditional" and "modern" sectors: ceramics, composites, construction, paint, engineering services, footwear, textile and wood industries, welding, etc. (Annex III.a).

The work plans of these 16 projects are very varied, even though they all deal with the dissemination of (technical) information and new technologies and cover aspects such as the creation of a European system of fast information using circulars and a European technological guidance service, the creation of "European innovation diagnosis", comparative studies of the cost-effectiveness of CAD programmes used in a specific industry, etc. (Annex III.a).

A call for proposals was issued in the middle of the year (Note 7) for the financing of new cooperation projects. The large number of applications received (63 involving 208 sectoral collective research centres) illustrates the excellent response to this SPRINT subprogramme). At the end of 1987, 6 new proposals had been accepted (see Annex III.b).

A.2.2 Modernization of traditional industries

The second aspect of this subprogramme is the modernization of traditional industries by means of a transnational pilot project launched in 1986. Three sectors were selected: textiles, footwear and traditional ceramics.

The sequence of the sectoral and trans-sectoral work which has been carried out is as follows: creation of networks of experts in the sector, identification of the sector's industrial needs, organisation of seminars, projects, reports etc. and diffusion to firms in the sector.

Lastly, and as an illustration of the close link between the two aspects of this subprogramme, a seminar entitled "Industrial innovation and the modernization of traditional industries" was held in Luxembourg on 12 and 13 November 1987. It was attended by around 150 participants. This seminar permitted an exchange of information on the technological cooperation and technical assistance provided to firms by more than 60 industrial advisory organizations representing a dozen industrial sectors in the Community.

The 40 presentations of the intensive two-day work programme highlighted the clear successes as well as remaining tasks after a year's pilot work. The seminar underlined, in particular, the importance of on-site technology demonstration, in order to improve the adoption of new and of proven existing technologies by firms in traditional sectors.

Accompanying actions: As an accompaniment to the above "infrastructure" networks the following actions were carried out:

A.3 Transnational cooperation in the field of venture capital - EVCA

In 1987, the European Venture Capital Association (EVCA) continued its work of promoting study and actions in connection with venture capital investment in the Community, with the aim of maintaining and developing a venture capital industry as a means of financing innovation in small and medium-sized undertakings (Note 11).

Thanks to the financial support of the SPRINT programme EVCA has been able to reach its cruising speed. There was a steady increase in the number of members - primarily venture capital firms and banks - which now (mid-1988) stands at 175. This membership increase will significantly contribute to a better developing of its activities mentioned above. The financial support of the SPRINT programme for the functioning of the EVCA was therefore discontinued. The Association can be considered as a success.

Among EVCA's many activities during the year, special mention should be made for two in particular : 1) The study of the venture capital in Europe (Note 12), which provides reliable statistics on sources and investments of venture capital, broken down by country and sector. 2) The training seminar which was held in Brussels in April 1987 and which was attended by representatives in this sector from the whole Community. This seminar was a pilot project which had been used according to the priorities of the Council Decision of 9th June 1987 (Note 4), as a pattern for the training seminars to be developed in 1988.

A.4 TRANSNATIONAL TRAINING IN INNOVATION MANAGEMENT

In 1987, there were various activities in connection with the transnational training of specialists in technology transfer and innovation management and financing*. A study which was published during the year (Note 13) reveals the current situation with regard to the various types of course available for the training of specialists in the management of new technologies in the Community. A short study was also launched to identify the training needs of intermediaries in this sector.

This topic was approached, in particular, by launching together with the COMETT programme a pilot project of innovation training and management, through an intensive seminar on "Technology Auditing" organised by TII which took place in November 1987 in Luxembourg and which was attended by representatives of Chambers of Commerce, Regional Development Authorities, private technology and management consultants, etc.

Throughout 1987 a great deal of effort was put into the preparation of a conference, scheduled for Paris in April 1988, which would bring together the main experts from the Member States in training in innovation management.

Considerable practical experience has been accumulated within the Community and considerable efforts are now being made to formalize this know how. A number of projects in this area will be launched during 1988 following the acceptance of suitable applications in this field (Note 7).

A.5 EUROPEANIZATION OF TECHNOLOGY CONFERENCES

This heading covers financing for the organization of conferences on a variety of topics in the field of new technology, which thus take on a European dimension instead of remaining as events of purely national or regional interest. Aid is given to bring speakers from other Member States, to provide simultaneous interpretation and to translate and circulate the proceedings throughout the Community. Thirteen conferences were selected for support of this kind - which may be logistic and promotional as well as financial - in 1987, bringing to 78 the number of conferences which have received support since the start of the programme. Thirty of these conferences took place in 1987.

* (according to priority n° 3 as set in Annex III of Council Decision 87/307/EEC, Note 5)

B. MONITORING INNOVATION AND CONCERTATION BETWEEN THE MEMBER STATES AND THE COMMISSION

The intention of this part of the programme is to improve the efficiency of national innovation promotion policies by increasing the degree of coordination between them and to add complementary transnational components where possible. The various recognizable dimensions to this problem focus on:

1. improvement in links between industrial and/or intellectual property systems and innovation;
2. promotion of the role of design in the innovation process;
3. survey on utilisation of R & D results in Member States;
4. promotion of certain organizations specializing in the innovation process (such as science parks);
5. Creation of better environment for the dissemination of technological opportunities:
 - . Eurotechalert
 - . Icone

B.1 PATENTS AND INNOVATION

In 1986, a CIT subgroup was set up to accomplish a range of tasks to improve the impact of the patent system on innovation.

Throughout 1987, the Commission collaborated closely with national and international bodies involved with industrial property and innovation. The activities launched included the following:

- preparation of an inventory of measures in the Member States for the support of innovation through the patent system;
- actions to increase awareness among researchers of the role of patents in the innovation process;
- reduction of regional differences in the field of infrastructure for industrial property rights within the community.

In connection with the last of these activities, the Commission is subsidizing two projects to modernize the patent offices in Athens and Lisbon (see point C).

B.2 DESIGN AND INNOVATION

Nowadays the need for industry not to be left behind in respect of design is widely admitted. Bearing in mind the work undertaken in this field in the Member States, the SPRINT Programme continued with the activities which had started at the end of 1985, in order to add a European Dimension to the activities to promote Design in the Community:

- to provide industry, and especially small and medium-sized undertakings, with practical information on design;
- to promote transnational collaboration between the various organizations in the Member States which are involved in design-related activities.

A CIT subgroup on Design and Innovation advises the Commission on the main lines of action. The wide range of activities undertaken in 1987 included:

- publications;
- creation of transnational exchange programme for designers, with the aim of improving their knowledge;
- formulation of a plan to encourage direct transnational collaboration between small and medium-sized undertakings in the Member States in the fields of design and product development;
- creation of the first European Design Prize.

Further details of these activities are given in Annex IV.

B.3 SURVEY ON UTILISATION OF R & D RESULTS IN MEMBER STATES

This project came to an end in 1987 and its results will be available in 1988. To recap, it was the objective of this action to obtain a comprehensive picture of the ways in which the various Member States utilise the results of their publicly funded R&D. This overview was regarded as being necessary to form recommendations to improve both the utilisation of publicly funded R&D at national and European level.

By the end of 1987 the studies for each Member State (one study for Spain/Portugal) had been completed, so that they will be published by mid 1988. They form a valuable source of knowledge for people involved in R&D and innovation matters. A systematic summary study will be published too, which contains policy recommendations to improve the utilisation of publicly funded R&D-Results at national and European level.

Last but not least, the proceedings of the symposium on the utilisation of the results of public and publicly funded R&D which was organised by the Commission in late 1986 have been published (Note 14).

B.4 SCIENCE PARKS AND INNOVATION PROMOTION

In view of the spread of science parks and technopoles throughout the Community, they have been given special attention in the SPRINT Programme. One of the programme's aims has been to promote the transfer of technology between the host institution and firms on science parks. Another aim has been to facilitate a transnational exchange on the lessons which can be learned from the operation of some of the longer established and more successful European science parks.

In recognition of the evident advantage for science parks to belong to innovation infrastructure networks, the SPRINT Programme supported during 1987 several transnational networks between science parks or between science parks and other organisations to promote transnational technological cooperation between companies (Note 15).

Evidence of this interest is shown by the participation in the first meeting of the Advisory Group on Science Parks in October 1987. Also, a number of pilot projects in this area will be launched at the beginning of 1988, following the acceptance of suitable applications in this field (Note 7).

B.5 CREATION OF BETTER ENVIRONMENT FOR THE DISSEMINATION OF TECHNOLOGICAL OPPORTUNITIES

The SPRINT programme has opened up a number of channels to improve the dissemination of knowledge and technological opportunities europewide. These channels encourage the dismantling of technical barriers, which is vital if a single market for innovation and technology is to be achieved.

Work continued in 1987 on the following activities:

1. European project for technological awareness (EuroTechAlert);
2. Community-wide dissemination of information on technical standards and regulations (ICONE data base).

EUROTECHALERT

This project is based on the British TechAlert system and aims to provide industry in Europe with information abstracted from the many technical reports which are produced as a result of public research. This information is selected, then compiled and published in the form of summaries by specialist journals which reach a wide national readership.

Belgium, France, Ireland, Italy, Luxembourg and the Netherlands are currently participating in the project with the United Kingdom. It is expected that other countries will gradually join the project, once their TechAlert schemes have been finalized.

ICONE

In order to help small and medium-sized undertakings cope with the variety of technical standards in the Member States, the Commission initiated the ICONE data base, a comparative index linking and comparing national standards with international and European pivotal standards. The work is being carried out under contract to the Commission by the European Committee for Standardization (CEN).

Particularly encouraging progress was made by ICONE in 1987. The first phase was completed towards the end of the year and consisted of comparing some 33,000 national standards with about 11,000 key European or international standards. All the Community and EFTA countries took part in this phase and provided information on their national standards without charge.

The complete data base on magnetic tape was sent to each national standards office, each of which has the rights for the operation of ICONE in its own country. Further details are given in Note 16.

A survey of European industry in 1987 revealed that the project has aroused great interest. Each standards office is currently supplying the results of the first phase of the project in its own country.

Lastly, with the aim of harmonizing procedures and achieving economies of scale, it was decided to combine the two complementary Community projects in this field: ICONE (which treats existing standards) and DG III's INFOPRO (information procedure on standards in the process of adoption).

C. SPECIFIC ACTIONS FOR THE LESS FAVOURED REGIONS

Work continued in 1987 on the three projects which were started in 1986, and a new project was added. These programmes were carefully selected because they involve a one-way transfer of technology, experience and information. The aim is for certain areas of the Community which do not play an active role in innovation activities to improve parts of their infrastructure to encourage innovation and technology transfer. This part of the programme comprises four projects:

C.1 ROBOTICS IN IRELAND

The three phases of this project (started late in 1986) progressed smoothly as planned during 1987:

- efforts to increase awareness of industrial robots in Irish industry;
- seminars for specific industrial sectors on the advantages of robotics;
- case studies for the application of robotics (feasibility studies conducted by experts from other Member States).

This project on robotics for Irish industry helped to increase the number of industrial robots in use in the country in 1987. Once the final phase (feasibility studies) is complete, it is expected that there will be a further increase in the use of robots in Ireland.

C.2 MODERNIZATION OF THE GREEK PATENT OFFICE TO IMPROVE TECHNOLOGY INFORMATION

Efforts to improve the training of staff and users of the Greek Patent Office achieved the planned objectives. The activities outlined in the work plan will continue in 1988:

- supply of data through on-line links with international data banks (patent information and documentation);
- equipment for the patent office.

C.3 MODERNIZATION OF THE PORTUGUESE PATENT OFFICE

A project similar to the one in Greece was adopted in late 1987 to encourage the use in Portugal of patents as a source of technological information. The efforts in this direction should begin to show results in 1989. They are concentrated initially on the training of patent office staff abroad and on the training of users of the Portuguese Patent Office.

C.4 ESTABLISHMENT OF "ACTIVE INFORMATION CENTRES" FOR KEY GREEK INDUSTRIES

Work was undertaken in 1987 which will lead to the operation of Active Information Centres for three key sectors in Greece (textiles, iron and steel and marine technology). The purpose of these centres will be to ensure the supply of the technical information which is needed to make these sectors competitive. This being done by the staff of the centres who have received special training.

Two of the planned centres (iron and steel and marine technology) are proceeding according to the work plan, while the third (textiles) is scheduled to start in 1988 after delays in being set up (Note 17).

* * *

Explanatory Notes

- (1) This fourth annual report has been prepared for submission to the Commission, the European Parliament and the Economic and Social Committee in accordance with Article 6 of Council Decision 83/624/EEC of November 25th, 1983 (OJ L 353 of December 15th, 1983) concerning a plan for the transnational development of the supporting infrastructure for innovation and technology transfer (1983 to 1985).
- (2) Council Decision 87/307/EEC of June 9th, 1987 (OJ L 153 of June 13th, 1987) amended Council Decision 83/624/EEC (Note 1) and introduced the new name of Strategic Programme for Innovation and Technology Transfer (SPRINT).
- (3) COM(88) 426 final, July 20th, 1988.
- (4) The list of priority actions to be carried out under the SPRINT programme is given in Annex III to Council Decision 87/307/EEC of June 9th, 1987:

"Priority actions for the period covered by the revised Programme

1. Support for the establishment and initial activities of liaison mechanism between advisory bodies for technology and management, particularly for small and medium-sized enterprises (SMEs).
2. Organization of transnational activities and dissemination on a Community-wide scale of information concerning innovation and technology transfer, in particular:
 - a) use of the results from research and development carried out in the public sector or financed by the public sector;
 - b) collecting information on technology developed in certain regions of the world where access to information is difficult;
 - c) initiatives to develop opportunities for cooperation between firms, particularly SMEs;
 - d) supply and demand of transferable technologies, for example by means of databases, technology marts and technology fairs;
 - e) impact of problems connected with industrial property on innovation;
 - f) improvement of access to knowledge on technical standards and regulations;
 - g) analyses of future needs in the context of the assessment of new technologies;
 - h) research/industry interface;
 - i) promotion of the role of innovation in the modernization of traditional industries.
3. Organization of pilot activities, transnational in aim or in nature, relating to the training of technology transfer specialists on the management and financing of innovation and related fields in firms, in particular, small and medium-sized enterprises;
4. Establishment of liaison mechanisms between local authorities as agents in the innovation process, as regards both the possibility of fostering innovation through cooperation on procurement and their role, or that of equivalent bodies responsible for innovation, in the creation of a favourable environment for innovation on a local level.

5. Within the framework of the Advisory Committee for Innovation and Technology Transfer, and with a view to concertation between Member States, exchanges of information, experience and opinions on national and Community measures designed to promote innovation and technology transfer, their effects and their efficiency. In this context, identification of new opportunities for transnational action and proposals for their realization."
- (5) Paragraph 3 of Article 1 of Council Decision 87/307/EEC of June 9th, 1987 added to Chapter 2 of Council Decision 87/624/EEC of November 25th, 1983 the following point describing actions to reinforce structures for the promotion of innovation in the Member States: "Development of pilot basic and further training programmes, transnational in aim or in nature, for specialists in technology transfer and innovation management and financing".
- (6) Communication (COM(86)483 final) of October 14th, 1986 from the Commission to the Council on the extension and the revision of the Plan for the Transnational Development of the Supporting Infrastructure for Innovation and Technology Transfer (SPRINT programme).
- (7) OJ C 196/2 of July 25th, 1987.
- (8) Results of the calls for proposals under the SPRINT programme in 1987:

	Applications received	Organizations represented	Amount (million ECU) requested
<u>Part A</u>			
Transnational networks of technology transfer and innovation management advisory services	159	430	15.0
<u>Part B</u>			
Networks of industrial research associations	63	208	8.8
<u>Part C</u>			
Technological conferences	71	127	3.1
<u>Part D</u>			
Pilot projects for other priority actions	230	250	25.0
Totals	523	1,015	51.9

(9) Mr. M. Duhamel, Secretary General
TII, European Association for the Transfer of Technologies, Innovation
and Industrial Information
3, rue des Capucins
L-1313 Luxembourg
Tel. 00352/463035

(10) Support and training activities for innovation infrastructure networks included:

- organization of three methodological seminars, two on the potential of technology auditing (Paris and Luxembourg) and a third on the marketing of information services for industry (Strasbourg);
- publication of a new yearbook providing useful information on the 224 members of TII in mid-1987;
- regular information on TII activities (quarterly bulletin entitled "Focus" and bi-monthly information publication entitled "TII-News").

(11) Mr. R. Ceurvorst, Secretary General
EVCA, European Venture Capital Association
Clos du Parnasse, 11F
B-1040 Bruxelles
Tel. 02/5137439

(12) "Venture Capital in Europe 1987"
EVCA Yearbook
Peat Marwick McLintock
1 Puddle Dock
Blackfriars
London EC4V 3PD

(13) Training in innovation management in the European Community Member States
1987.EUR 11024 EN/FR
This is the outcome of a survey in the EEC Member States on the programmes, both public and private, for training in innovation management which are offered on the market.

This survey has provided for the first time a list of 206 organizations which between them offer 368 programmes. It refers to each organization and gives an analysis country by country.

These programmes are at a university level and are intended for engineers, managers and heads of firms. The content of these programmes and their different level of implementation are very heterogeneous and differ from country to country. The Federal Republic of Germany seems to be in the lead. There are fewer programmes in southern Europe.

The demand from small and medium-sized enterprises for these programmes is still largely rather weak, because they are not aware of what is at stake.

- (14) "Utilization of the results of public research and development", Office for Official Publications of the European Communities. (EUR 11243 EN) (1988) (also available in French and German).
- (15) List of transnational networks between science parks or between science parks and other organisations supported within SPRINT Programme during 1987:
1. PROMOTECH (F) - SOCRAN (B) - B.T.C.-Twente (NL) - Metropolitan Council of Calderdale (UK)
 2. Heriot-Watt University Research Park (UK) - N.V. REDE (NL) - Technologiezentrum Dortmund (D) - LIFE (Lanarkshire Industrial Field Executive) UK
 3. CSATA-BARI (I) - HOMMEH (GR)
 4. SOCRAN (B) - IMPI (E)
 5. VILA SUD (I) - NEWTECH (UK) - Danish Invention Centre (DK) - Erfinderzentrum Norddeutschland (D)
- (16) The contract between the Commission and the European Committee for Standardization (CEN) was signed at the end of 1985, and work on setting up the ICON data base began in 1986. On May 27th, 1986 a contract was signed with the International Standards Organization (ISO) for the supply of magnetic tapes with the most important ISO standards and for their quarterly updating. Similar agreement has been reached with the International Electrotechnical Commission (IEC) regarding electrical standards.
- (17) With the aim of increasing the competitiveness of three key sectors of Greek industry (textiles, iron and steel and marine technology), the Greek Government has set up an R&D company for each sector. These companies are to provide various service functions for the benefit of firms in their particular sectors. With the help of the Commission, each of these three companies will also host an Active Information Centre to provide information and counselling in its own sector. These centres are:
- Mirtec (Metallurgical Industrial Research and Technological Development Centre);
 - Clothing, Textile and Fibre Technological Development Company;
 - Martedec (Marine Technology Development Company).

Annex I

COMMITMENTS OF THE SPRINT PROGRAMME IN 1987

(In the Council Decision 87/307/EEC, the amount deemed necessary was set at 8.6 Mio ECU for the implementation of the SPRINT Programme)

<u>Activity</u>	<u>Amount (ECU)</u>
A. STRENGTHENING THE EUROPEAN INFRASTRUCTURES FOR INNOVATION SERVICES	
- Networks of technology transfer and innovation management consultants	1,698,364
- Support measures for innovation infrastructure networks	409,500
- Transnational cooperation between industry-linked sectoral collective research centres	469,576
- Transnational training in innovation management	30,000
- Europeanization of conferences	<u>194,000</u>
	2,801,440
B. MONITORING INNOVATION AND CONCERTATION BETWEEN THE MEMBER STATES AND THE COMMISSION	
	(nil)
C. SPECIFIC ACTIONS FOR THE LESS FAVOURED REGIONS	
- Modernisation of the Greek Patent Office	150,000
D. PUBLIC RELATIONS	
	24,000
	<hr/>
TOTAL :	2,975,440

The budgetary appropriation remaining is being committed in 1988.

Annex II

EVALUATION OF ACTIONS**"TRANSNATIONAL NETWORKS OF TECHNOLOGY TRANSFER AND INNOVATION MANAGEMENT CONSULTANTS"**

A major aspect of the SPRINT Programme is the development of transnational cooperation between small and medium-sized enterprises (SMEs). Part A of the programme attempts to facilitate this by concentrating on the technology transfer and innovation management advisory services, (such as Chambers of Commerce, Regional Development Authorities, private technology and management consultants), which serve the SMEs in the different Member States, and has endeavoured to establish transnational networks of such advisory services. The intention is for these networks to form lasting information exchange systems which will foster transnational collaboration between the small and medium-sized enterprises.

In order to assess the results of this action (the oldest SPRINT action and the largest in terms of share of SPRINT resources) the Commission repeated in December 1987 the survey of micro-networks first conducted in March of that year. All micro-networks were surveyed which had been in operation for at least eight months (including those which, for various reasons, had ceased to receive Commission support but which had existed for this minimum period).

The survey focussed on a single quantitative criterion, viz. the number of agreements between firms in different countries achieved by the individual micro-networks. Material proof was required for each inter-firm agreement claimed by a network, viz. copy of the agreement, confirmatory letters from the companies involved. Where such material proof could not be provided, other means of verification were to be provided (e.g. name and telephone number of the firms concerned).

NUMBER OF INTERFIRM AGREEMENTS

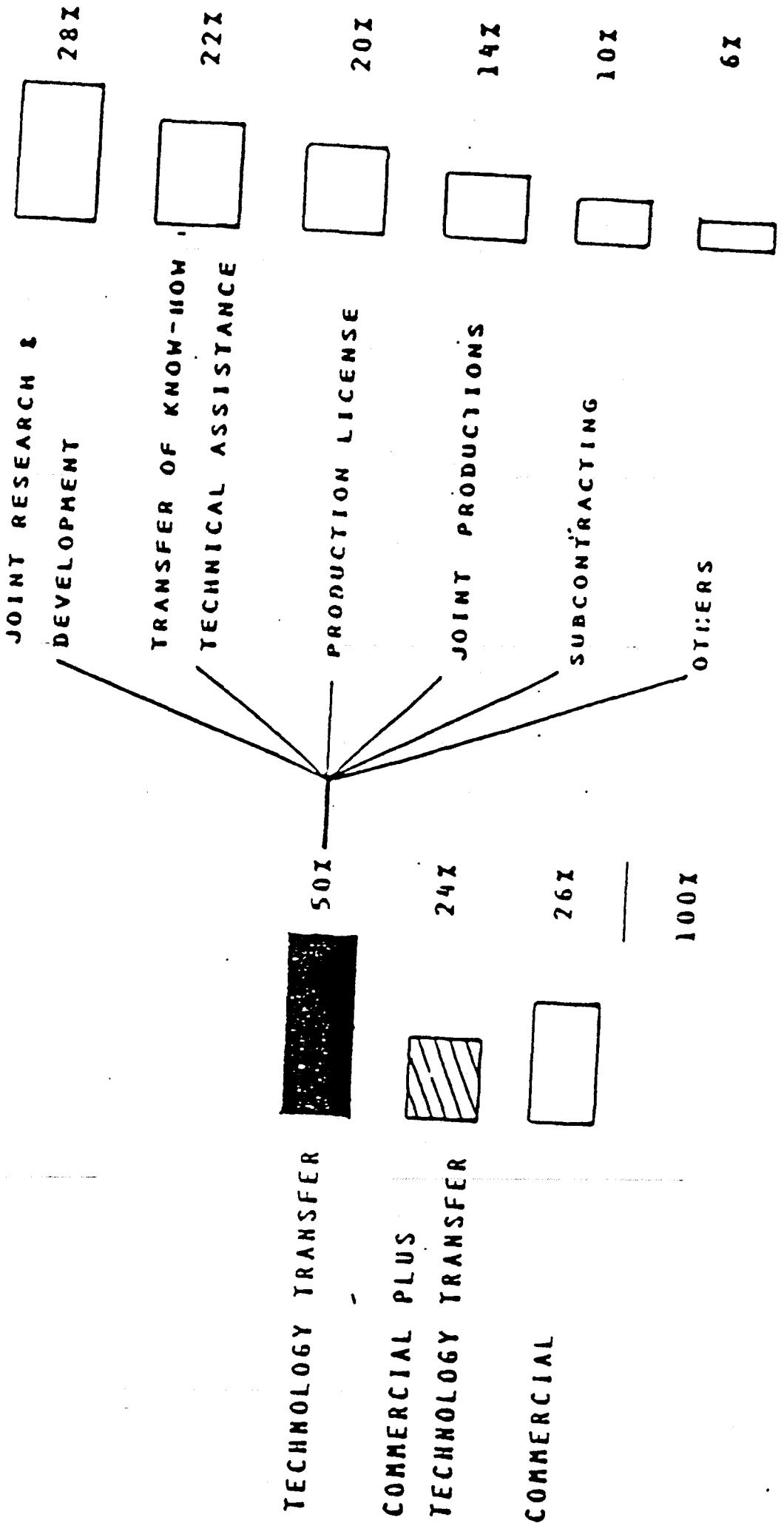
180 inter-firm agreements were claimed by the various micro-networks, but only 121 were accepted by the Commission as adequately established.

The results of the survey are shown in the accompanying two tables:

1. Type of agreement
2. Sectors/technologies

Comments:

The Commission is aware of the limited and simplified nature of the single criterion chosen (number of transnational inter-firm agreements), which ignores other objectives of the action and is subject to several limitations. However, it is apparent that this analysis offers a tangible indication of the success of such networks.

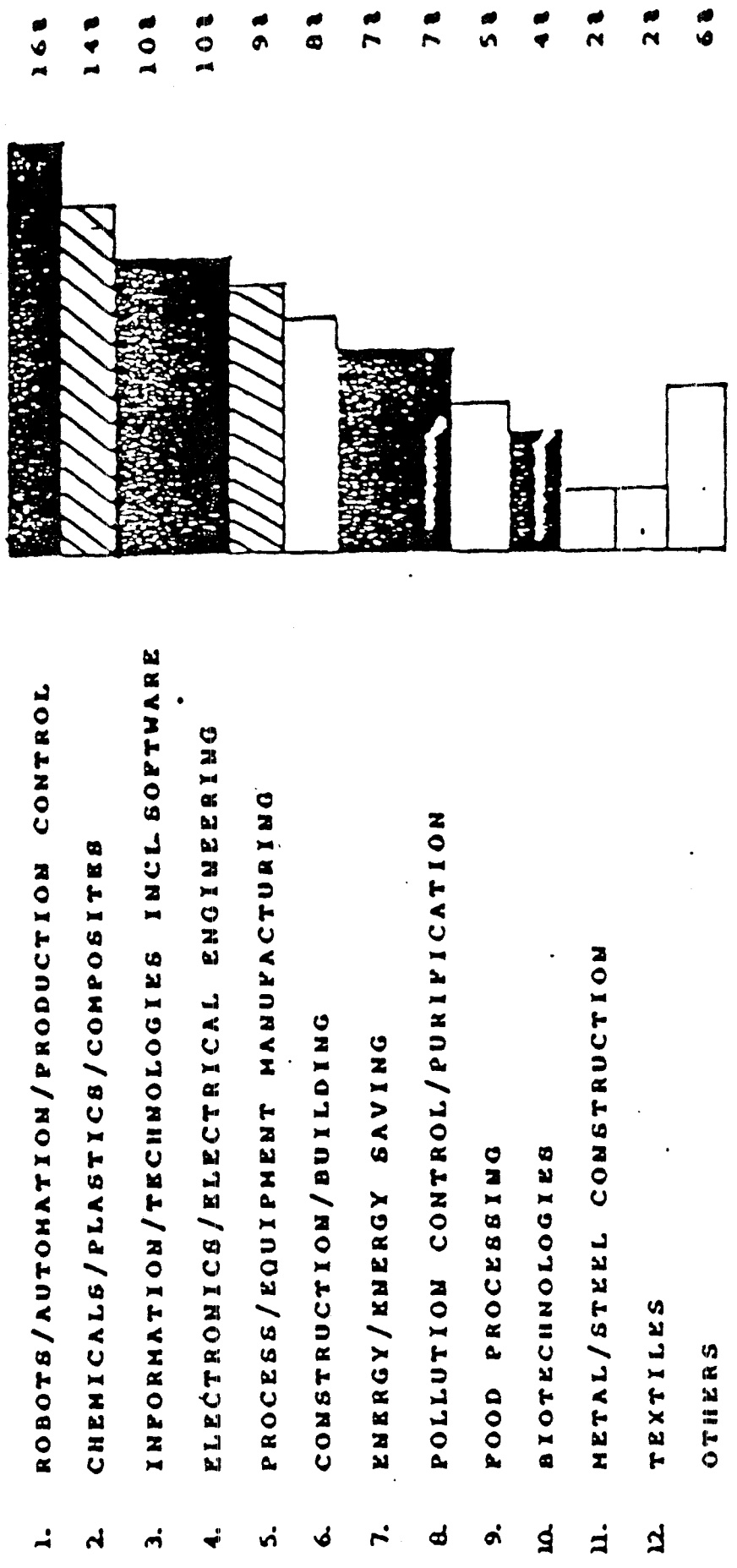


SECTORS / TECHNOLOGIES

(viii)

2nd table

- WIDE SPECTRUM OF TECHNOLOGIES / SECTORS INVOLVED
- EMPHASIS ON NEW TECHNOLOGY / SECTORS



Annex III.a

SUMMARY OF PROJECTS ON TRANSNATIONAL COOPERATION BETWEEN INDUSTRY-LINKED
SECTORAL COLLECTIVE RESEARCH CENTRES

a) Projects started in 1986 (2nd half)

Sector	Project Number	Aims of the Project (16 different projects)
Footwear industry	1.	To promote the introduction and application of new technologies (in particular CAD/CAM) by SMEs in the footwear industry
Welding	2.	To enhance the exploitation, especially by SMEs, of recent advances in welding technology
Building/ construction	3.	To improve technology transfer in the building/construction sector
	4.	Definition of a unified system for evaluating of the fire performance of building materials, in particular wall coverings
	5.	To increase the number and improve the quality of research institutions producing expert systems for the engineering service sector of the construction industry
	6.	To establish more homogeneous certification methods for composite construction floor systems
Composites/ plastics	7.	Improvement of quality control procedures for SMEs in the plastics sector
Wood	8.	Promotion of awareness and application of new wood-drying technologies by, among other things establishing a "European Kiln Drying Club" (EKDC)
Textiles	9.	To foster the application of new technologies in the wood sector
	10.	Evaluation of newly developed methods of bleaching and depigmentation for wool and other Keratin fibres
	11.	Establishing a method to evaluate the productivity of "straight line" weaving looms
Smelting works/ Foundry Ceramics	12.	Harmonisation of tests and procedures to determine the fire resistance of safety clothing
	13.	To advance the industrial applications of non-destructive tests in iron foundries
	14.	To improve the understanding of the behaviour of industrial ceramics under thermal "fatigue" and thermal shock conditions with a view to establishing norms for thermal shock testing
	15.	Investigation of the parameters that control the behaviour and resistance to mechanical impact of glazed floor tiles
Paint	16.	To develop and promote an expert system which will assist non-specialists in selecting the most appropriate coating for their manufactured components

(x)

Annex III.b

SUMMARY OF PROJECTS ON TRANSNATIONAL COOPERATION BETWEEN
INDUSTRY-LINKED SECTORAL COLLECTIVE RESEARCH CENTRES

b) Projects started in 1987 (2nd half)

Sector	Project Number	Aims of the Project (6 different projects)
Electricity	1.	To assist European industry to minimize electrostatic problems by developing a European Code of Practice and by developing ways to select materials and products in order to minimize nuisance to electronic components and products.
Textiles/Wool	2.	To evaluate the end-use properties of textile materials on the basis of objective measurements and to initiate a technology transfer process on objective measurement techniques and testing instruments among participating laboratories and the textile and clothing industries.
	3.	To establish the advantages, disadvantages and comparative costs of new wool cleaning processes and of the processes for the recuperation of the by-products of those processes.
Food	4.	To establish best practice to promote adoption of new technology among SMEs in the food sector.
Ship-Building	5.	To foster transnational cooperation between the participants in order to promote international exchanges of technology between firms in the industries concerned.
Welding	6.	To facilitate the adoption of laser based material processing technology by small and medium sized enterprises in a number of industrial sectors (e.g. metals, plastics, fabrics, ceramics ..)

ANNEX IV

Action on Design

Activities in 1987

- Publications

- . two specialised books published in 1987 ("Design Management in Practice", "The Corporate Design Programme")
- . one book due beginning of 1988 ("The Design-Based Enterprise")

all in multilingual editions (English, Danish, Spanish) with an average printing of 5.000 copies, distributed through the design promotion organisations

- . Development of a promotion package called "Design: WHY?" consisting of a booklet, a travelling exhibition and a series of seminars to take place in the Member States targeted to managers in SMEs and designers (in hand)

- Establishment of a transnational staff exchange programme, to improve skills of staff (subcontracted to Kilkenny Design - Ireland)

- . During 1987 a total of 23 exchanges took place, with an average length of 4 days, involving staff from the UK, Ireland, Denmark, Spain and Greece.

- Establishment of a scheme to encourage direct transnational cooperation between SMEs in different Member States in the field of design and product development

- . collaboration between the British Design Council (London) and the Association pour la Promotion de la Création Industrielle (Paris) leading to direct contacts between French and British firms
- . collaboration between the Fundacion Barcelona Centro de Diseño (Spain) and Centre de Design Midi-Pyrennées (Toulouse, France) to establish a consultancy scheme on communication design for companies that wish to export and adapt their product lines to the markets across the border.

- Launching of the first European Community Design Prize.

- . selection of nominees:

done nationally by the design promotion organisations in the nine participating Member States;

resulting in the nomination of thirty-two companies from Belgium, Germany, Denmark, Spain, France, Italy, Ireland, Netherlands and UK (see below for list). Publicity and press conferences were organised nationally in each Member State to announce national entries in the competition.

ANNEX IV(cont.)

. selection of winners:

an international jury, nominated by the Member States, and consisting of representatives from all the Member States (except Portugal) and the Commission was established and met in Copenhagen in June 1987;

out of the 32 nominees, the jury selected three winners (Lamy from Germany, L. Goof from Denmark and Tecno from Italy) and awarded two honourable mentions (Gori from Denmark and Italdesign from Italy)

. related activities

an exhibition featuring the candidatures (shown in Rotterdam (Netherlands) in September 1987 and Copenhagen (Denmark) in December 1987)

publication of a multilingual catalogue (English and mother-tongue of nominees) to be distributed by the national design promotion organisations.