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NEWSLETTER

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new technologies
and innovation policy

FINANCING INNOVATION IN SMEs

The European Council meeting in Brussels on 29-30 March 1985 underlined the priority to be given to the fight against unemployment and stressed the need for sustained employment-intensive growth.

It laid particular emphasis in this context on the creation and development of small and medium-sized businesses (SMEs). It also underlined the vital importance of stimulating innovation and enterprise in order to strengthen the Community's technological base and restore its industrial competitiveness.

While the New Community Instrument has from the outset contributed to the financing of infrastructure and energy projects, it was the decision of April 1982 (O. J. L 116 of 30. 4. 1982) to extend NCI financing to investment projects of small and medium-sized undertakings which led to a vigorous expansion of its activities.

Total loans signed so far plus applications declared eligible by the Commission have now exhausted the amount available under the first tranche of the NCI 3, released on 13 June 1983, and three quarters of the amount available under the second tranche, released on 23 July 1984. By mid-1985, the entire amount available under the Decision of 19 April 1983 (NCI 3) will have been committed, with the exception of the tranche of 100 million ECU for which the Commission has presented a proposal, the 'European Innovation Loan', still pending before the Council.

The Commission believes that the NCI's support of investment in small and medium-sized firms must be continued and reinforced. A consolidation of NCI financing in this field provides an immediate response to the policy initiatives taken by the European Council and to the sustained financing requirements at the level of the firms.

In a proposal for a Council Decision (NCI 4) empowering the Commission to borrow under the New Community Instrument for the purpose of promoting investment within the Community (COM (85) 250 final), that was recently approved by the Commission and presented to the Council, it proposes 1 500 million ECUs of borrowing which would be entirely reserved to contract loans enabling it to on-lend up to this amount for the financing of investment projects of small and medium-sized

businesses, and particularly projects involving the applications of new technology and innovation. This would apply, of course, to investments in the enlarged Community.

Among the projects eligible for financing under the Decision of 19 April 1983 were investment projects, mainly those of small and medium-sized enterprises in industry and other productive sectors. The Commission feels that the adjustment of industrial production structures should continue to be promoted through faster application of new technology and innovation. It therefore intends that the instrument should be used to finance investment by small and medium-sized firms in industry and other productive sectors, in particular investments involving the application of new technology and innovation, especially information technology, but also including investments to improve the rational use of energy.

Lending arrangements will be diversified and adapted to the features of the investment projects involving the application of new technology and innovation. It will be possible for the financing base for loans to be extended to cover such intangible assets as patents, licences, 'know-how', computersoftware and research and development expenditure directly related to industrialisation.

Account will also be taken of two other features:

- the fact that finance in the form of new share capital rather than in the form of debt is often more appropriate for small innovative businesses which tend to be undercapitalised;
- the fact that such projects often take some time before a positive cash flow is generated out of which dividends and interest can be paid.

For these reasons, loans will be made available to financial intermediaries under the tried and tested technique of 'global loans' for on-lending at the risk of the intermediaries to firms either as in the past in the form of loans or, with transformation of the proceeds, in the form of a capital contribution. Provision may also be made for deferring capital and interest payments on the global loans.

This Newsletter is issued by Directorate XIII — A, New Technologies and Innovation Policy, in Directorate-General "Information Market and Innovation" of the Commission of the European Communities. For more information about its contents please write, including the address label with all your correspondence, to:

Commission of the European Communities
DG XIII—A
2920 Luxembourg
call (352) 4301 2918

SEVENTH MEETING OF THE CONSULTATIVE COMMITTEE FOR INNOVATION AND TECHNOLOGY TRANSFER (CIT)

The seventh meeting of the CIT was held in Luxembourg on 6-7 June 1985. On the agenda was the first annual report now approved and adopted by the Commission on the actions carried out in the framework of the Plan for the Transnational Development of the Supporting Infrastructure for Innovation and Technology Transfer. The Committee expressed its satisfaction with the first encouraging results in the realisation of the plan.

Furthermore, the Commission presented a draft priority list of actions to be carried out with the support of the Community during the next two years, on which the Committee was asked to give an opinion. Unanimous approval was reached. After formal decision by the Commission, this priority list will be published in the Official Journal and this Newsletter.

Other topics of the meeting were

a) the evaluation of current actions

- the actions carried out by TII — Mr GLÖCKNER, secretary general of TII was invited to brief the CIT on his Association's activities, which include the organization of specialized seminars in the field of technology and innovation, professional ex-

- changes between industrial transfer agents and exploratory visits on a transnational level;
- the EuroTechAlert action, i.e. the creation of a Community-wide technology awareness scheme;
- the action ICONE, i.e. the establishment of a comparative index of national and European standards;
- access to scientific and technical information from limited-access technologies and markets;
- the action concerning the transnational cooperation between technology transfer and innovation advisory services for small and medium-sized enterprises (see NL 41);
- the europeanization of conferences on technology and innovation (see NL 41).

b) the presentation of new initiatives conceived by the Commission, which are as yet in a preparatory stage. Among those are the promotion of closer cooperation between universities and industry, as well as measures in the field of fiscal policy, whose scope comprises providing incentives to the process of innovation.

The next meeting is scheduled for September 1985.

EUROTRA

Introduction

On 4 November 1982 the Council of the European Communities adopted an EEC research and development programme for a machine translation system of advanced design, the Eurotra Project, which is intended to help overcome language barriers within the Community.

The Community's multilingual nature (at the moment there are seven official languages, increasing to nine from 1 January 1986 with the accession of Spain and Portugal) is undoubtedly a valuable cultural heritage. However, it is also an enormous obstacle to communication, since all languages have to be accorded equal status and, therefore, all documents have to be translated from the original into the other languages.

This requires highly qualified staff, since the texts for translation are often so specialized that linguists without additional technical, economic or legal training would, for the most part, find them extremely difficult to translate, and at the moment there are not enough translators available for all language pairs. In addition to the lack of personnel, there are, above all, economic reasons for developing a machine translation system, because translations by humans are very costly in terms of time and money.

Background

In 1976 the Commission acquired the property rights to the Systran system developed by Peter TOMA. This machine translation system, which has been used for several years now in the USA by NASA and the Air Force, was originally developed for the language pair Russian-English and then, later, for other language pairs.

In the meantime, the Commission has extended the system to the following five language pairs: E-F, E-I, E-GR, F-E, F-GR.

However, since the Systran system is based on linguistic theories which are partly outdated and covers only a limited number of Community language pairs, the Commission has been working since 1978 on preparing a research project of its own, the Eurotra Project, which was given a legal basis by the Council Decision of November 1982.

Objectives

The aim of this R&D programme is to create a machine translation system for all official languages. The programme should result in an operational system prototype which can be used in one specialized area and for limited categories of text, and which will form the basis for development on an industrial scale in the period following the programme.

Funding

The overall cost of the project is about 27 million ECU, covered partly by the Community (16 million ECU) and partly — on the basis of association agreements — by the Member States (approximately 11 million ECU), apportioned in line with the economic strength of each individual country. By the end of September 1985 the Commission is expected to have concluded association agreements with all the countries (8 of the 10 have signed so far), and these agreements lay down the exact breakdown of costs between the Commission and the Member States: the Commission's contribution to the project varies between a minimum of 20% and a maximum 80%. (Because the agreements were not signed on time — the deadline was 1 January 1985 — some delay has crept into the programme schedule, which will be made up as far as possible). Implementing the project would be considerably simpler without such co-funding, but this would, in the final analysis, place an even greater burden on the richer countries.

Assessment of economic viability and quality

The aim of the project is not to develop a fully operational system but rather to produce a **prototype**, i.e. to show that it is possible to produce a **multilingual** (at the moment 7 official languages = 42 language pairs, and from 1 January 1986 9 official languages = 72 language pairs) and **highquality** machine translation system. The economic viability of the system cannot be assessed at the present stage. It is only after the Eurotra Project has been completed that the system is to be expanded for practical applications within the Community and outside (industry, public administrations, etc.).

When the system later comes on line, 'perfect' translations must not be expected. The requisite high quality cannot be taken to mean the production of completely faultless and stylistically perfect translations. Machine translations — like those done by humans — require revision or post-editing. Therefore, in this context high quality means that as few corrections as possible need to be made during post-editing.

Another major factor in assessing the economic viability is the time factor, or more precisely the volume translated per unit of time, and here the computer is far superior to human translators. Its use in the language services would boost their productivity several times over.

Effects on the job market

As mentioned above, the demand for qualified translators cannot be met at the present time. The cost and time factors have a regulatory effect, meaning that only what can be translated is actually translated. Current forecasts thus indicate that the introduction of a machine translation system will not reduce the demand for translators, but there is no doubt that the job description of at least some translators will change: they will become revisers or editors of machine-translated texts.

Project organization

Since Eurotra is a cooperative project involving all Community countries, it was necessary to set up a rather complex organizational structure to ensure smooth coordination of all the individual activities. The most important bodies and their functions are described in brief below:

- **responsibility** for implementing the project lies with the Commission of the European Communities (CEC). The project leader is Sergei PERSCHKE (Directorate-General Information Market and Innovation DG XIII/B).
- The Commission is assisted by Management and Coordination Advisory Committee 12 (CGC 12), which not only advises on the Eurotra Project but is responsible for language problems as a whole. It comprises two or three representatives from the Member States plus two Commission representatives. It gives advice concerning Eurotra on policy, financial and management problems.
- Provision has also been made for a 'Common Steering Committee' as a sort of Board of Management to deal with technical management issues. The members of this Committee, still to be set up, will be delegated by the national ministries.
- In addition, two existing Committees are regularly informed of the progress made:

- **CREST** (Scientific and Technical Research Committee),
- **CIDST** (Committee for Scientific and Technical Information and Documentation).

The reason for this is that multilingualism problems are of great importance in the areas they cover.

Implementation of the project continues to require:

- a) **Research work within the individual Member States**
The programmes for the seven official languages are being developed in eight Member States, at 10 national research centres so far. Coordination is achieved via a **Liaison Group** consisting of the national project leaders, who meet once a month to coordinate matters and take binding decisions on project implementation in the national centres.
- b) **Central operations**
These are subdivided into three areas:
 - a Central Team, consisting of nine scientists, is developing the general scientific basis for the project, i.e. the linguistic specifications together with software and user language
 - the terminology is being compiled centrally in Ireland
 - Luxembourg provides a clearing house for collecting, sorting and processing research results.

Programme of work

The Eurotra Project is divided into three phases:

- a) **Preparatory phase (two years, 2 million ECU)**
This phase has been completed, with the following work having been carried out:
 - definition of working methods;
 - preparation of a detailed programme of linguistic work to be carried out by the participating centres, plus selection of the sectors and categories of text to be studied;
 - preparation of detailed specifications of the linguistic models and strategies for the various system components (analysis, transfer, generation);
 - preparation of detailed and binding specifications for the Eurotra basic software and data-processing programmes capable of carrying out the various processes such as analysis, transfer, generation, monitoring functions and text management;
 - preparation of detailed specifications for the lexical data base.
- b) **Linguistic research phase (basic and applied research, two years, 8.5 million ECU)**
This phase covers two fields of work:
 1. **Basic linguistic research**
 - Development of initial linguistic models for the analysis and generation of each of the official languages and for transfer between these languages. This work will be based on a corpus with a vocabulary of about 2 500 entries from a limited specialized field;
 - preparation of the lexical data base for the above-mentioned vocabulary, which will also be used for analysis and transfer purposes;
 - study of suitable linguistic strategies for machine-execution of the various processes.
 2. **Development of the basic software for Eurotra**
The aim of this work is to develop an initial software version for machine-testing the models defined by the participating centres when they are sufficiently advanced. Completion of this work is, therefore, a

prerequisite for validating the linguistic work under this programme.

c) Phase of stabilization of linguistic models and evaluation of results (18 months, 5.5 million ECU)

The work in this phase will concentrate on:

- adapting the linguistic models to produce linguistic modules which are as reliable as possible and fit for pre-operational use;
- progressive extension of the basis of the text corpus and vocabulary, as well as improvement or adaptation of the linguistic models, so that the system can also translate more complicated texts;
- revising and progressively extending the lexical bases to cover the chosen specialized field as ex-

haustively as possible (about 20 000 entries in each language);

- evaluating the system's technical and economic performance;
- preparing a proposal for the development of an operational system on an industrial scale and proceeding to the stage of commercial exploitation.

The project is due to be completed in 1988.

For further information contact:

Mrs Jacqueline LECLERQ
Commission of the European Communities
DG XIII-B-2
JMO B 4/004
L-2920 Luxembourg

CONTRIBUTION AU DOSSIER «TRADUCTION AUTOMATIQUE» SYSTRAN ET LA COMMUNAUTÉ EUROPÉENNE À LUXEMBOURG

In addition, it also analyses general implications of machine translation in comparison with human translation.

Content:

1. Introduction
2. Historique de la traduction automatique
3. Analyse fonctionnelle de la traduction humaine
4. Analyse fonctionnelle de la traduction automatique
5. Analyse de la langue source: résolutions des ambiguïtés
6. Analyse organique de la traduction automatique
7. Intervention du traducteur réviseur
8. Perspectives et conclusion

by Ch. D'HONDT
1985, 112 pp., EUR 9747 FR

In 1976, the Commission bought the property rights of 'Systran', an operational translation system developed in the United States. Since then a lot of research has been done within DG XIII of the Commission to improve the existing program for French-English and to add further programs for other language pairs.

This study describes the underlying linguistic theory of Systran and how the various programs and subprograms of Systran resolve the problems of structural analysis of the source language, and how transfer and the synthesis of the target language are performed.

PUBLICATIONS ON INNOVATION IN THE COMMISSION'S EUR SERIES

Publications available from private publishers

(for publications available from the Office for Official Publications of the European Community, see NL 41)

EUR 7528 Barriers to Innovation
A. PIATIER
EN, ISBN 0-86-1877-386-6

EUR 8252 Regional Industrial Information Transfer
EN, ISBN 3-88766-005-6

Published by: Frances PINTER, 5, Dryden Street
UK—LONDON WC2E 9NW

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EUR 6614 Patent Information and Documentation in
Western Europe
EN, ISBN 3-598-10158-9

Published by: K.G. SAUR Verlag KG
Pörschenbächerstraße 26
Postfach 71 1009
D-8000 MÜNCHEN 71

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EUR 7310 The Role of the Banker in Industrial Inno-
vation
DE, EN, FR, IT, ISBN 3-88766-001-3

EUR 7894 Inventory of Direct and Indirect Public Mea-
sures for Promoting Industrial Research, De-
velopment and Innovation
EN, ISBN 3-88766-007-2

EUR 8045 Financing More Innovation at Less Risk
DE, EN, FR, IT, ISBN 3-88766-005-6

EUR 8437 The Needs of New Technology-Based Enter-
prises
DE, EN, FR, IT, ISBN 3-88766-006-4

Published by: INFOBRIEF Luxembourg S.à.r.l.,
45, rue du Chemin de Fer
L-7726 WALFERDANGE/LUXEMBOURG

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EUR 8793 Incentives for Industrial Research, Develop-
ment and Innovation
EN, ISBN 1-85091-059-6

EUR 9756 Improving Venture Capital Opportunities in
Europe
EN, ISBN 1-85091-058-8

Published by: KOGAN PAGE
120 Pentonville Road
UK-LONDON N1

* * *

EUR 9153 Developing Capital Markets for the Rege-
neration of Industry
DE/EN/FR/EN, ISBN 0-444-87567-0

Published by: ELSEVIER SCIENCE PUBLISHERS BV
P.O. Box 1991
NL-1000 BZ AMSTERDAM

INNOVATIONS FROM COMMUNITY RESEARCH

Eddy current quality control of steel rod at high temperatures

Products derived from steel rod — by manufacturing processes which are quite often 'traumatic' from a metallurgical point of view — have to be made from good stock. This applies to steel for pneumatic tyres, springs, high-performance nuts and bolts, rollers for needle bearings, or products from cold stamping or drawing.

Steelmakers therefore face the problem of detecting physical defects such as splitting, seams, inclusions, laps, etc.

This device, designed and built jointly by the Institut de recherches de la sidérurgie française and the Sacilor and Hotchkiss-Brandt Sogeme companies, is located at the finishing train exit. This detects faults on line, at

high temperatures and at rod speeds of up to 100 metres per second.

Using the Eddy current principle, it detects poor rolling quality (roller breakage, misalignment, etc.) and makes immediate remedial action possible. This highly advanced method, which combines high-temperature detection with a data-processing facility, is a tremendous advance in quality control for rod manufacturers.

The system is produced and sold by:

Hotchkiss-Brandt Sogeme
3, rue de Tunis — BP 111
F-93203 Saint-Denis-Cedex 1
Tel.: 1/821 60 20
Telex: HBSPARO 611294 F

SELECTED STUDIES

1. Solar Energy R&D in the European Community — Series B, Volume 2 Thermo-Mechanical Solar Power Plants

In this book, the Commission of the European Communities presents the proceedings of the Workshop on Solar Central Receiver Projects, held in Varese, Italy, in June 1984. This Workshop was supported by all operators of solar tower power plants around the world and, as a result, these proceedings provide a comprehensive overview of the technology in its current state of development.

EUR 9766 EN ISBN 90-277-2049-5
pp.: 470
Published by: R. REIDEL PUBLISHING COMPANY
P.O. Box 17, 3300 AA Dordrecht (Holland)

2. Synthesis of the results of the second R&D programme within the energy R&D programme of the Commission of the European Communities (1979-1983)

In the framework of its R&D programme in the field of Energy, the Commission of the European Communities has funded research in the field of hydrogen, considered as an energy vector, for more than eight years. The present book contains the extended abstracts, longer than usual, of the final reports of the Commissions' Second R&D Programme on Hydrogen as an Energy Vector (1979-1983), compiled by the authors of the reports.

It comprises three main chapters:
— Hydrogen Production by Water Electrolysis
— Hydrogen Use, Storage and Transportation
— Thermochemical Production of Hydrogen.

Since it comes at the end of the eight year R&D period, this book gives in summary form a relatively complete picture of the achievements obtained during this time.

EUR 9782 EN ISBN 92-825-5270-5
pp.: 459 price: BFR 1.500,—
Published by: OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES,
L-2985 Luxembourg

3. Elastic-Plastic Fracture Mechanics

This book contains the texts of the lectures and workshops of the 4th Advanced Seminar on Fracture Mechanics (ASFM 4) held at the Joint Research Centre, Ispra, on 24-28 October 1983.

The lectures and workshops presented here have been revised and up-dated to make them better suited to book form.

Four workshops illustrate the four design methods discussed at ASFM 4: the R6 method of CEGB, the EPRI method, the EnJ method and the COD design curve method. Each workshop consists of a general presentation of the method followed by example problems (which the reader might try to solve himself as an exercise), and a discussion of the solutions. Fifteen lectures are presented. They cover experimental, theoretical and numerical aspects, micromechanisms and continuum mechanics and also the concept of damage and its use in local fracture criteria.

EUR 9830 EN ISBN 90-277-2017-7
pp.: 527
Published by: D. REIDEL PUBLISHING COMPANY
P.O. Box 17, 3300 AA Dordrecht (Holland)

4. Mass Spectrometry of Large Molecules

This volume includes the lectures given at a course on mass spectrometry of large molecules. The course, organized within the framework of the Training and Education programme of the Joint Research Centre of the European Communities, was held at the Ispra Establishment from 5th to 9th September 1983. Most of the lectures, however, were up-dated by the authors during 1984.

EUR 9421 EN ISBN 0-444-42456-3
pp.: 322
Published by: ELSEVIER SCIENCE PUBLISHERS B.V.
P.O. Box 211, 1000 AE Amsterdam
(Holland)

SELECTED NEW PUBLICATIONS IN THE COMMISSION'S EUR SERIES

All the following reports, books and proceedings are issued by the Commission of the European Communities' department for scientific and technical communication and published by the Office for Official Publications of the European Communities, L-2985 Luxembourg.

Abstracts of the publications listed below are available in 'euro abstracts, section I', March 1985, and online from the Commission's databank EABS, accessible via ECHO (European Community Host Organisation) on Euronet DIANE.

Energy

CHICHE, P. et al. EUR 9382 FR (MF)

- Influence de l'hydrogène et des catalyseurs spécifiques sur la production de combustibles liquides synthétiques.

MÖSER, W. et al. EUR 9481 EN (MF)

- Determination of the global radiation and of cloudiness from satellite data.

KASTEN, F. et al. EUR 9483 EN (MF)

- Frequency distributions of global radiation on horizontal surfaces for the region of the EC.

DUBBED, M. EUR 9225 EN (MF)

- Energy saving by using rolling shutters, reflective layer and edge seals and the effect of the window still.

VANLOOCK, W. et al. EUR 9558 EN (MF)

- Application of microwave heating for the production of construction materials.

THORNTON, R. EUR 9403 EN (MF)

- The evaporation of viscose process liquors.

KREBS, K. EUR 9414 EN (MF)

- Qualification test procedures for photovoltaic modules: specification no. 502 issue 1.

D'ALCANTARA, G. et al. EUR 9443 EN (MF)

- European project for a multinational macrosectorial model.

VAN GALEN, E. EUR 9145 EN (MF)

- Solar storage testing programme — format sheets for reporting.

VIGNAIS, P. M. et al. EUR 9440 EN (MF)

- Photoproduction of H₂ and NH₃ by the photosynthetic bacterium *Rhodospseudomonas capsulata*.

Nuclear Science and Technology

GOODARD, A. J. H. et al. EUR 9264 EN (FS)

- Trace element assessment of low-alloy and stainless steels with reference to gamma activity.

CHAPMAN, N. A. et al. EUR 9162 EN (FS)

- The geochemistry of high-level waste disposal in granitic rocks.

JANSSEN, L. G. J. et al. EUR 9205 EN (FS)

- The thermo-mechanical behaviour of a salt dome with a heat-generating waste repository.

GURBUTT, F. A. EUR 9401 EN (FS)

- Langrangian current measurements and large-scale long-term dispersion rates (Sofar float experiment).

CRUTZEN, S. EUR 9066 EN, Vol. I (MF); Vol. II (MF)

- Defect detection and sizing: Proceedings of a Specialist Meeting.

GAUTSCH, O. et al. EUR 9388 EN (MF)

- A description of an ultra high vacuum device for permeation measurements.

BICKNELL, J. et al. EUR 9380 EN (MF)

- Local area networks in advanced nuclear reactors.

CACCIABUE, P. C. et al. EUR 9422 EN/I (MF)

- ALMOD-JRC computer program. part 1: implementation of new models for the analysis of heat transfer during PWR accidental transients.

GIULIANI, S. et al. EUR 9448 EN (MF)

- The computer code CONDIF-01 (release 2) for transient convective-conductive heat transfer.

BAMBER, D. C. et al. EUR 9302 EN (FS)

- An experimental study of factors in the recovery of plutonium from combustible wastes treated by incineration, pyrolysis and other processes.

PATON, A. A. et al.

- Civil engineering design for decommissioning of nuclear installations.

Published by: Graham & Trotman Ltd, London, UK.

VANSANT, E. F. et al. EUR 9353 EN (FS)

- Occlusion and storage of krypton in solids.

KRISCHER, W. et al.

- Testing, evaluation and shallow land burial of low and medium radioactive waste forms.

Published by: Harwood Academic Publishers, Utrecht, The Netherlands.

FROM THE OFFICIAL JOURNAL

Community programme for the development of the specialized information market in Europe Call for declarations of interest Participation in the demonstrator programme on materials databanks

The Commission is establishing a plan for the development of a European system of materials data information services. As a first step towards the achievement of this system the Commission will implement, in cooperation with the Member States, a demonstrator programme in order to:

- investigate the requirements upon the European system,
- develop the market for materials databanks in the Community,
- conduct research on user needs,
- raise awareness of availability and potential of materials databanks.

For the purpose of the demonstrator programme, a number of materials databanks will be invited to cooperate in a 'demonstration network' to be set up on the basis of standard specifications. Such specifications will be developed in cooperation between the Commission and the interested databanks. The 'demonstration network' will provide a uniform on-line appearance to users on the basis of a user guidance system.

Organizations, public or private, who operate an online materials databank or are developing such a databank, and who are interested in participating in the demonstrator programme, are invited to send a declaration of interest to the following address by 15 July 1985:

Commission of the European Communities,
Directorate General Information Market and Innovation,
DG XIII/B, Office C4/011 (Mr G. Steven),
L-2920 Luxembourg.

Together with this declaration of interest, the organizations should provide the following information on their database:

- suitability of the scope and quantity of data available,
- technical development status,
- present or planned conditions of access,
- expected date of on-line availability,
- features of (planned) on-line user service.

(OJ No C 146 of 14. 6. 85)

**Community programme for the development
of the specialized information market in Europe
Call for proposals
Directory of materials data information sources**

The Commission, advised by the Committee for Information and Documentation on Science and Technology (CIDST), is establishing a plan for the development of a European system of materials data information services. An essential element in the implementation of this European system is the realization of a directory of information sources on materials data. The scope of this directory is limited to technically relevant properties of engineering materials. The Commission intends to co-finance the establishment of such a directory on the basis of corresponding proposals submitted by competent institutions such as publishers or other institutions which are knowledgeable in this area. The Commission's financial contribution will be limited to 50% of the actual cost.

Competent private or public institutions who are interested in submitting a proposal may receive more detailed information at the following address:

Commission of the European Communities,
Directorate General Information Market and Innovation,
DG XIII/B, Office C4/011 (Mr G. Steven),
L-2920 Luxembourg.

The proposal must be dispatched by registered post on or before 15 July 1985.

(OJ No C 146 of 14. 6. 85)

**Call for proposals for cooperative projects in basic
research on teleinformatics, artificial intelligence
and pattern recognition**

The Commission gives notice that under a programme to promote basic research in information technology calls for proposals for cooperative projects or offers to participate in such projects are available in the following fields:

- Teleinformatics, in particular:
 - distributed systems management,
 - human factors in teleinformatics systems,
 - group communication in distributed message systems,
- security mechanisms for teleinformatics systems,
- formal description techniques for protocols and services,
- distributed data bases,
- electronic signature techniques;
- Artificial intelligence and pattern recognition, in particular:
 - theory and basic techniques for AI,
 - design, use and impact of AI-based systems,
 - knowledge-based pattern recognition.

The financial support provided by the Commission is designed essentially to cover the costs incurred as a result of cooperation.

An information package may be requested from:

J. Desfosses,
Commission of the European Communities,
Task Force for Information Technologies and Telecommunications (A 25 9/2),
200, rue de la Loi,
B-1049 Brussels.

(OJ No C 137 of 5. 6. 85)

DU JOURNAL OFFICIEL

**Programme Communautaire pour le développement du
marché de l'information spécialisée en Europe
Appel de déclaration d'intérêt
Participation au programme de démonstration concernant
les banques de données sur les matériaux**

La Commission, est en train d'établir un programme pour le développement d'un système européen de services d'information sur les matériaux. Comme première étape de la réalisation de ce système, la Commission mettra en œuvre, en coopération avec les États membres, un programme de démonstration dans le but:

- d'évaluer les exigences du système européen,
- de développer le marché des banques de données sur les matériaux dans la Communauté,
- d'enquêter sur les besoins des utilisateurs,
- de faire prendre conscience de la disponibilité et du potentiel des banques de données sur les matériaux.

En ce qui concerne le programme de démonstration, un certain nombre de banques de données sur les matériaux seront invitées à coopérer à un «réseau de démonstration» qui devra être constitué sur la base de spécifications standards.

Les organisations publiques ou privées qui exploitent une banque de données sur les matériaux en ligne ou sont en train d'en constituer une, et qui désireraient participer au programme de démonstration, sont invitées à envoyer une déclaration d'intérêt à l'adresse suivante, au plus tard le 15 juillet 1985:

Commission des Communautés européennes:
Direction générale «Marché de l'information et innovation»,
DG XIII/B, bureau C4/011 (M. G. Steven),
L-2920 Luxembourg.

En même temps que cette déclaration d'intérêt, ces organisations devront fournir les informations suivantes sur leurs bases de données:

- pertinence du domaine couvert et quantité de données disponibles,
- stade de développement technique,
- conditions d'accès actuelles ou prévues,
- date prévue de disponibilité en ligne,
- caractéristiques du service utilisateurs en ligne (tels que prévu).

(J.O. No C 146 du 14. 6. 85)

Programme communautaire pour le développement du marché de l'information spécialisée en Europe

Appel de propositions

Répertoire des sources d'information sur les matériaux

La Commission, assistée par le Comité de l'information et de la documentation scientifique et technique (CIDST), est en train d'établir un programme pour le développement d'un système européen de services d'information sur les matériaux. Un des éléments essentiels de la mise en œuvre de ce système européen est la création d'un répertoire des sources d'information sur les matériaux, dont le contenu se limitera aux propriétés techniques des matériaux utilisés pour les constructions mécaniques. La Commission se propose de co-financer la constitution de ce répertoire sur la base de propositions adéquates adressées par des établissements compétents, tels que maisons d'édition, instituts, etc.. La contribution financière de la Commission sera limitée à 50% du coût réel.

Les établissements publics ou privés compétents désireux de soumettre une proposition peuvent obtenir de plus amples informations à l'adresse suivante:

Commission des Communautés européennes,
Direction générale «Marché de l'information et innovation»,
DG XIII/B, bureau C4/011 (M. G. Steven),
L-2920 Luxembourg.

La proposition, doit être envoyée sous pli recommandé au plus tard le 15 juillet 1985.

(J.O. No C 146 du 14. 6. 85)

Appel de propositions pour des actions de coopération en matière de recherche de base dans les domaines de la téléinformatique, de l'intelligence artificielle et de la reconnaissance des formes

La Commission communique que, dans le cadre d'une action de promotion de la recherche de base en matière

de technologies de l'information, des appels de propositions pour des actions de collaboration, ou offres de se joindre à de telles actions, sont disponibles, couvrant les domaines suivants:

- la téléinformatique, et plus particulièrement:
 - la gestion des systèmes distribués,
 - les facteurs humains dans les systèmes téléinformatiques,
 - les communications de groupes dans les systèmes distribués de messagerie,
 - les mécanismes de sécurité dans les systèmes téléinformatiques,
 - les techniques de description formelle des protocoles et des services,
 - les bases de données distribuées,
 - les techniques de signature électronique,
- l'intelligence artificielle et la reconnaissance des formes, notamment:
 - théorie et techniques de base de l'intelligence artificielle,
 - conception, utilisation et impact des systèmes basés sur l'intelligence artificielle,
 - reconnaissance de forme basée sur la connaissance.

Le soutien financier accordé par la Commission vise essentiellement à couvrir les frais entraînés par la collaboration.

Les intéressés sont invités à demander un dossier d'information à:

M. J. Desfosses,
Commission des Communautés européennes,
Task Force technologies de l'information et des télécommunications (A25 9/2),
rue de la Loi 200,
B-1049 Bruxelles.

(J.O. No C 137 du 5. 6. 85)

AUS DEM AMTSBLATT

**Gemeinschaftsprogramm zur Entwicklung des Fachinformationsmarkts in Europa
Aufruf zu Vorschlägen
Werkstoffdatenbanken-Quellenverzeichnis**

Die Kommission arbeitet zur Zeit einen Plan zur Entwicklung eines Europäischen Systems für Informationsdienste über Werkstoffdaten aus. Ein wesentlicher Faktor bei der Implementierung dieses europäischen Systems ist die Erstellung eines Verzeichnisses der Informationsquellen über Werkstoffdaten. Vom sachlichen Umfang her beschränkt sich dieses Verzeichnis auf technisch relevante Eigenschaften von Werkstoffen für die industrielle Technik. Die Kommission beabsichtigt eine Kofinanzierung bei der Erstellung eines derartigen Verzeichnisses auf der Grundlage entsprechender Vorschläge, die von einschlägigen Einrichtungen wie Verlegern oder sonstigen in diesem Bereich anerkannten Instituten unterbreitet werden. Die finanzielle Unterstützung der Kommission beschränkt sich auf 50% der tatsächlichen Kosten.

Einschlägige private oder öffentliche Einrichtungen, die daran interessiert sind, einen Vorschlag einzureichen, erhalten nähere Auskünfte unter folgender Anschrift:

Kommission der Europäischen Gemeinschaften,
Generaldirektion Informationsmarkt und Innovation,
GD XIII/B, Büro C4/011 (z. Hd. Herrn G. Steven),
L-2920 Luxemburg.

Die Vorschläge sind bis spätestens 15. Juli 1985 per Einschreiben einzusenden.

(Abl. Nr. C 146 vom 14. 6. 85)

**Gemeinschaftsprogramm zur Entwicklung des Fachinformationsmarkts in Europa
Aufruf zur Interessenbekundung
Beteiligung am Demonstrationsprogramm
über Werkstoffdatenbanken**

Die Kommission arbeitet zur Zeit einen Plan zur Entwicklung eines Europäischen Systems für Informationsdienste über Werkstoffdaten aus. Als ersten Schritt zur Realisierung dieses Systems wird die Kommission in Zusammenarbeit mit den Mitgliedstaaten ein Demonstrationsprogramm implementieren, um

- die Erfordernisse eines solchen europäischen Systems zu untersuchen,
- den Markt für Werkstoffdatenbanken in der Gemeinschaft zu entwickeln,
- die Benutzerbedürfnisse zu erforschen,
- den Bekanntheitsgrad verfügbarer Werkstoffdatenbanken und ihrer potentiellen Möglichkeiten zu vergrößern.

Zum Zwecke des Demonstrationsprogramms werden eine Reihe von Werkstoffdatenbank-Betreibern aufgefordert, im

Rahmen eines auf der Grundlage von Standardspezifikationen zu errichtenden „Demonstrationsnetzes“ zusammenzuarbeiten.

Öffentliche oder privatrechtliche Körperschaften, die online eine Werkstoffdatenbank betreiben bzw. eine solche Datenbank entwickeln und an einer Beteiligung am Demonstrationsprogramm interessiert sind, werden gebeten, ihre Interessenbekundung bis spätestens 15. Juli 1985 an folgende Anschrift zu senden:

Kommission der Europäischen Gemeinschaften,
Generaldirektion Informationsmarkt und Innovation,
GD XIII/B (z. Hd. Herrn Günter Steven),
L-2920 Luxemburg.

Mit ihrer Interessenbekundung sollten die Interessenten folgende Angaben über ihre Datenbank unterbreiten:

- Eignung des sachlichen Umfangs und des Volumens der verfügbaren Daten,
- technischer Entwicklungsstand,
- derzeitige bzw. geplante Zugangsbedingungen,
- veranschlagter Zeitpunkt, an dem die Daten online verfügbar sind,
- Merkmale des (geplanten) Online-Benutzerdienstes.

(Abl. Nr. C 146 vom 14. 6. 85)

**Aufforderung zur Einreichung von Vorschlägen für
Zusammenarbeitsaktionen auf dem Gebiet der
Grundlagenforschung in den Bereichen Datenfern-
verarbeitung, künstliche Intelligenz und Mustererkennung**

Die Kommission teilt mit, daß im Rahmen einer Förderungsmaßnahme der Grundlagenforschung auf dem Gebiet der Informationstechnologien Aufforderungen zur Einreichung von

Vorschlägen für Zusammenarbeitsaktionen oder Angebote zur Teilnahme an solchen Aktionen in folgenden Bereichen vorliegen:

- Datenfernverarbeitung, insbesondere
 - Bewirtschaftung dezentraler Systeme,
 - menschliche Faktoren in Datenfernverarbeitungssystemen,
 - Gruppenkommunikation in dezentralen Meldesystemen,
 - Sicherheitsmechanismen in Datenfernverarbeitungssystemen,
 - formale Beschreibungstechniken für Protokolle und Dienstleistungen,
 - dezentrale Datenbanken,
 - Techniken der elektronischen Unterzeichnung.
- Künstliche Intelligenz und Mustererkennung, vor allem
 - Theorie und Grundlagentechnik der künstlichen Intelligenz,
 - Konzeption, Einsatz und Wirkung der Systeme auf der Grundlage der künstlichen Intelligenz,
 - wissensverarbeitende Mustererkennung.

Mit der von der Kommission gewährten finanziellen Unterstützung sollen vor allem die Kosten für die Zusammenarbeit abgedeckt werden.

Interessenten können eine Informationsbroschüre anfordern bei:

J. Desfosses,
Kommission der Europäischen Gemeinschaften,
Task Force Informationstechnologien und Telekommunikation (A25 9/2),
200, rue de la Loi,
B-1049 Brüssel.

(Abl. Nr. C 137 vom 5. 6. 85)

DALLA GAZZETTA UFFICIALE

**Programma comunitario per lo sviluppo del mercato
dell'informazione specializzata in Europa
Richiesta di dichiarazioni di interesse
Partecipazione al programma dimostrativo relativo alle
banche di dati sui materiali**

La Commissione sta elaborando un piano per lo sviluppo di un sistema europeo dei servizi di informazione sui materiali. Come primo passo verso la realizzazione di detto sistema, la Commissione attuerà, di concerto con gli Stati membri, un programma dimostrativo volto a:

- determinare le esigenze del sistema europeo,
- sviluppare il mercato per le banche di dati sui materiali nella Comunità,
- effettuare ricerche sulle esigenze degli utenti,
- migliorare la disponibilità e il potenziale delle banche di dati sui materiali.

Ai fini del programma dimostrativo, talune banche di dati sui materiali saranno invitate a collaborare nel quadro di una «rete dimostrativa» da realizzare sulla base di specificazioni standard.

Le organizzazioni, pubbliche o private, che gestiscano una banca di dati su materiali on line, o abbiano in fase di sviluppo una siffatta banca, e siano interessate a partecipare al programma dimostrativo, sono invitate a far pervenire, entro e non oltre il 15 luglio 1985, una dichiarazione di interesse al seguente indirizzo:

Commissione delle Comunità europee,
Direzione generale del mercato dell'informazione e innovazione,

DG XIII/B, ufficio C 4/011, Sig. Günter Steven,
L-2920 Lussemburgo.

Unitamente alla suddetta dichiarazione, le organizzazioni forniranno le informazioni seguenti sulla rispettiva base di dati:

- conformità allo scopo e quantità di dati disponibili,
- stato di sviluppo tecnico,
- condizioni di accesso presenti o future,
- data prevista per la disponibilità on line,
- caratteristiche del servizio on line (progettato) per gli utenti.

(GU n. C 146 del 14. 6. 85)

**Programma comunitario per lo sviluppo del mercato
dell'informazione specializzata in Europa
Richiesta di proposte
Repertorio delle fonti di informazione concernenti
dati sui materiali**

La Commissione sta elaborando un piano per lo sviluppo di un sistema europeo di servizi di informazione sui dati concernenti i materiali. Elemento essenziale per l'attuazione di tale sistema è la realizzazione di un repertorio in parola limitato alle caratteristiche tecniche dei materiali di ingegneria. La Commissione intende cofinanziare la realizzazione di un siffatto catalogo sulla base di proposte presentate da enti competenti, ad esempio, case editrici, o altri enti che dispongano di ampia informazione nel settore. Il contributo finanziario da parte della Commissione sarà limitato al 50% del costo effettivo.

Gli enti competenti, privati o pubblici, interessati a presentare proposte potranno ottenere più ampi dettagli rivolgendosi alla:

*Commissione delle Comunità europee,
Direzione generale mercato dell'informazione e innovazione,
DG XIII/B, ufficio C4/011 (Sig. G. Steven),
L-2920 Lussemburgo.*

Le proposte, vanno inoltrate, a mezzo raccomandata, entro e non oltre il 15 luglio 1985.

(GU n. C 146 del 14. 6. 85)

Invito per la presentazione di proposte riguardanti azioni di cooperazione in materia di ricerca di base nei settori della telematica, dell'intelligenza artificiale e del riconoscimento delle forme

La Commissione informa che, nel quadro di un'azione di promozione della ricerca di base in materia di tecnologie dell'informazioni, sono disponibili proposte per azioni di collaborazione o richieste di partecipazione a tali azioni riguardanti i settori seguenti:

- Telematica, e in particolare:*
 - gestione dei sistemi distribuiti*
 - fattori umani nei sistemi di telematica*
 - comunicazioni per gruppi specifici nei sistemi distribuiti di trasmissione dei messaggi*

- meccanismi di sicurezza per sistemi di telematica*
- tecniche di descrizione formale per protocolli e servizi*
- basi di dati distribuiti*
- tecniche per la firma elettronica.*
- Intelligenza artificiale e il riconoscimento delle forme, e in particolare:*
 - teoria e tecniche di base dell'intelligenza artificiale*
 - progettazione, impiego e impatto dei sistemi basati sull'intelligenza artificiale*
 - riconoscimento delle forme basato sul processo conoscitivo.*

Il sostegno finanziario concesso dalla Commissione comprende essenzialmente la copertura delle spese derivanti dalla collaborazione.

Gli interessati sono invitati a chiedere la documentazione informativa a:

*J. Desfosses
Commissione delle Comunità europee,
Task Force Tecnologie dell'informazione e delle telecomunicazioni (A25 9/2)
rue de la Loi 200
B-1049 Bruxelles.*

(GU n. C 137 del 5. 6. 85)

REMINDER

From 4 to 6 September 1985
at the Palais des Congrès et de la Musique
Lille (France)
will be held the

**EUROPEAN SYMPOSIUM
ON INNOVATION AND
TECHNOLOGY TRANSFER**

»AGIR 85» (ACTION FOR THE GROWTH OF
INNOVATION AND RESEARCH)

organized by:

Commission of the European Communities
Délégation régionale à la recherche
et à la technologie
Conseil régional Nord-Pas-de-Calais

A brochure containing the programme, the registration forms and other useful information on this event is available at the addresses below:

A. DORAT

«AGIR 85»

Délégation régionale à la recherche et à la technologie

Bâtiment C5 — Cité scientifique
F-59655 Villeneuve-d'Ascq Cedex

Tel.: (20) 470062

Telex: euror 131 339/300 C5

J. M. GIBB

Commission of the European Communities
Directorate-General 'Information Market and Innovation'

L-2920 Luxembourg

Tel.: 4301-2918

Telex: 3422 or 3446 comeur lu

RAPPEL

Du 4 au 6 septembre 1985
au Palais des Congrès et de la Musique
à Lille (France)
se tiendra le

**COLLOQUE EUROPÉEN
SUR L'INNOVATION ET
LE TRANSFERT DE
TECHNOLOGIE**

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et à la technologie
Conseil régional Nord-Pas-de-Calais

Une brochure contenant le programme, les bulletins d'inscription et toutes autres informations utiles est disponible aux adresses suivantes:

D. DORAT

«AGIR 85»

Délégation régionale à la recherche et à la technologie

Bâtiment C5 — Cité scientifique
F-59655 Villeneuve-d'Ascq Cedex

Tél.: (20) 47 00 62

Télex: euror 131 339/300 C5

J. M. GIBB

Commission des Communautés européennes
Direction générale «Marché de l'information et innovation»

L-2920 Luxembourg

Tél.: 4301-2918

Télex: 3422 ou 3446 comeur lu

EUROPEAN CONFERENCE: 'TECHNICAL INNOVATION FOR RETAIL BUSINESS AND TRADE; THE EUREGIO MAAS-RIJN AS A MODEL'

Stadsschouwburg Heerlen, the Netherlands, 4 and 5 November 1985.

Organized by:
European Study- and Information Center, Brusselsestraat 51, 6211 PB Maastricht, the Netherlands.

Supported by the Commission of the European Communities under the plan for the transnational development of the supporting infrastructure for innovation and technology transfer.

Participation fee: 150 DFL.

Aims of the conference:

- to stimulate the application of new technologies and innovations among small and medium-sized enterprises in the Euregio Maas-Rijn
The Euregio Maas-Rijn includes the region Aachen in the Federal Republic of Germany, the provinces Limburg and Liège in Belgium and the southern part of the Dutch province Limburg
- to improve the competitive position of these enterprises by introducing advanced computerized systems for administration, production and communication.
 - What are the technical possibilities?
 - In what way the concerned entrepreneurs can get used to it?
 - what are the tasks herewith of national, regional and local government?
- to see how new technologies can be exchanged on a Community-wide basis, using the Euregio Maas-Rijn as a model.

Themes of the conference:

- consequences for the Euregio Maas-Rijn of the stimulation policy in the field of technical innovation among small and medium-sized enterprises by the national government in Belgium, the Federal Republic of Germany and in the Netherlands
- practical application of new technologies and innovations among small and medium-sized enterprises
- developments for small and medium-sized enterprises in the near future
- research in the field of technical innovation for the use of small and medium-sized enterprises
- profile of the entrepreneurs in the future
- transferpoints as a pivot with technical renewal.

Target group:

- entrepreneurs from small and medium-sized enterprises
- organisations of entrepreneurs
- Chambers of Commerce
- suppliers of new technologies
- services industries
- local government in the Euregio Maas-Rijn.

The participants will come from the E.C. in general and from the Euregio Maas-Rijn in particular.

For further information please contact the conference secretariat, with the European Study- and Information Center, Brusselsestraat 51, 6211 PB Maastricht, phone 043 -50245, Mr. A. Houppelrichs.

REMINDER: TRANSNATIONAL COOPERATION BETWEEN TECHNOLOGY TRANSFER AND INNOVATION ADVISORY SERVICES AND SIMILAR PRIVATE AND PUBLIC BODIES FOR SMALL AND MEDIUM-SIZED ENTERPRISES (O.J. No C 125 of 22. 5. 85)

Call for proposals

In August 1984, the Commission of the European Communities issued a first call for technology transfer and innovation advisory services and similar private and public bodies to submit proposals for the establishment of transnational links between such services. The aim was transnational collaboration between small and medium-sized enterprises, since they are at a disadvantage compared with large companies when adjusting to technological change or introducing innovations. Under this scheme, the Commission is granting financial aid — initially limited to one year — from Community resources to 44 public and private bodies in a number of countries and of a wide variety of types (universities, chambers of commerce, private firms, local development agencies, specialist technical centres, business confederations, etc.).

Due to the success of this scheme, the Commission is repeating the exercise.

It is therefore again calling on technology transfer and innovation advisory services and similar private and

public bodies to submit proposals for transnational cooperation with other comparable services operating within the European Community. These proposals must contain details of partners in other Member States with which the applicants wish to collaborate or details of existing partnerships in which they wish to be included.

Financial aid will be granted as lump sum to cover up to 50% of the expenditure incurred in such collaboration (e.g. additional manpower costs, travel expenses and the cost of meetings).

Applications should be submitted on the appropriate form not later than **7 September 1985**. The form and further information (in all official languages) may be obtained from the following address:

The Commission of the European Communities
Directorate-General
Information Market and Innovation
DG XIII-A-2 — Office JMO B4/100
L-2920 Luxembourg

CALENDAR

1. 8th International Conference 'Structural Mechanics in Reactor Technology — SMIRT
Brussels, 19-23 August 1985
Contact person: Mr J. M. GIBB, CEC, Luxembourg,
tel. (352) 4301 2918
2. Colloque Européen sur l'innovation et le transfert technologique
'AGIR 85' (Action for the Growth of Innovation and Research)
Lille, 4 au 6 septembre 1985
Contact person: Mr F. WALLART,
Cité Scientifique
F-58655 Villeneuve d'Ascq
3. EC European Textile Research Symposium, Competitiveness through Innovation
Luxembourg, 18-19 September 1985
Contact person: Miss J. CANDRIES,
COMITEXTIL, 24, rue Montoyer
B-1040 Brussels
4. International Symposium on Coupled Processes Affecting the Performance of a Nuclear Waste Repository
Berkeley, California
September, 18-20, 1985
Contact person: Dr C. T. TANG,
Lawrence Berkely Laboratory,
University of California, 94720, USA
tel. (415) 486 5782
5. Séminaire:
L'informatique juridique dans votre bureau
Bruxelles, 23-27 septembre 1985
Contact person: Mrs H. BAUER-BERNET, ULB
Secrétariat 'Info-doc' C.P.
50, ave. Franklin-D. Roosevelt
B-1050 Bruxelles
tél. (02) 235 7618
6. «BIO + 85»
Deuxièmes rencontres internationales de bioindustries
Nancy, 25-27 septembre 1985
Contact person: Mr B. LE TOURNEAU
Chambre de Commerce et d'Industrie de Meurthe-et-Moselle
40, rue H. Poincaré
F-54042 Nancy Cedex
tél. (8) 336.46.43
7. BIOTECHNICA '85
International Congress and Exhibition for Biotechnology
Hannover, 8-10 October 1985
Contact person: Mr. Diederichs
Deutsche Messe- und Ausstellungs-A.G.
Messegelände
D-3000 HANNOVER 82
8. Conference 'Ergonomics in the ECSC Industries (1980-1985)'
Luxembourg, 28-30 October 1985
Contact person: Dr J. G. FOX, CEC, Luxembourg
tel. (352) 4301 2783
9. European Conference 'Technical Innovation for Retail Business and Trade:
The Euregio Maas-Rijn as a Model', Heerlen (NL), 4-5 November 1985
Contact person: Mr A. Houpperichs, European Study- and Information Center
Brusselsestraat 51,
6211 PB Maastricht
tel. 043-50245
10. International Seminar, 'The Dual Trolleybus'
Brussels, 5-6 November 1985
Contact: SDR ASSOCIATED, Rue Villain XII, 17a,
B-1050 Brussels
tel. (02) 647 87 80-647 35 26
11. Conference on Technology transfer and licensing opportunities in the energy sector
Copenhagen, 11-13 November 1985
Contact person: Mr H. MØLLER ANDERSON
DK-Copenhagen
tel. (01) 87 26 90
12. Afvaltech 85 — International Trade Exhibition for Waste Disposal and Recycling
Utrecht, 12-15 November 1985
Contact person: Mr CH. VAN RAVESTEYN
Flat Zuidplein 347
NL-3083 CT Rotterdam
tel. (010) 855 281
13. NOVOTECH, 3rd European Forum of Operators of the Transfer of Technology
Lyon, 19-22 November 1985
Contact person: Mr A. CARRISSIMOUX, Brussels,
tel. (02) 478 48 60
14. The Contribution of Credit Institutions to the Renewal of the Economy
Luxembourg, 28-29 November 1985
Contact person: Mr J. M. GIBB, CEC, Luxembourg,
tel. (352) 4301 2918
15. Information Symposium 'New Methods and Techniques of Coal Winning in the Coal Mines of the European Community'
Luxembourg, 23-25 April 1986
Contact person: Mr F. W. KINDERMANN, CEC, Brussels
tel. (02) 2354 394
16. IFIP Congress '86
10th World Computer Congress,
Dublin 1-5 September 1986
Contact: Congress Secretariat
IFIP Congress '86
44 Northumberland Road
IR-Dublin 4,
tel. (01) 688 244