

Innovation+ Technology Transfer

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TOWARDS THE FOURTH FRAMEWORK PROGRAMME

The factors that will set the pace for European Community research over the next few years are falling into place.

On the financial side, the European Council at Edinburgh confirmed that Community R&D should continue to receive substantial funding, between half and two-thirds of the amount under the "internal policies" heading of the Community budget. This heading in particular covers measures aimed at giving complete efficacy to the internal market, and at improving the competitiveness of European industry. The Edinburgh Council also singled out improvement in the dissemination of results to small and medium-sized enterprises (SMEs) as a priority for Community action, to be taken into account in the preparation of the Fourth Framework Programme for research and technological development.

Continuing in the financial context, agreement has been reached on the amount of supplementary funding to be allocated to the current Third Framework Programme. As a result, 900 million ECU will be shared among the individual specific programmes and the centralized action for dissemination and exploitation (VALUE II).

The turn of the year also saw the departure from the Commission of Vice-President Pandolfi, who has been guiding the preparation of the Fourth Framework Programme, to run from 1994 to 1998. The Commission's working document outlining the activity areas of the programme was published at the end of September last year. Vice-President Pandolfi's portfolio covered three broad areas: science, research and development; telecommunications, information industries and innovation; and the Joint Research Centre (JRC). In future this portfolio will be partly covered by Vice-President Bangemann (information and telecommunications technologies, as well as industrial affairs) and partly by a new Member of the Commission, Professor Antonio Ruberti (science, research and development and the JRC, as well as human resources, education, vocational training, and youth). This change will add a new dimension to the continuing work on preparing the new framework programme, and on the process of getting it agreed by the European Parliament and the Council of Ministers.

The European Parliament is demonstrating its willingness to speed up this decision-making process. Although the procedure to be followed for discussing and approving the Fourth Framework Programme is dependant on ratification of the Maastricht Treaty, the Parliament is wasting no time in preparing its contribution to the debate. The Parliament has started to work on a "rapport d'initiative", which will examine the contents of the Commission's working document without waiting for ratification of Maastricht.

All these developments point to another busy year for Community research, with the efficient promotion and exploitation of research results being increasingly recognised as a crucial factor in the competitiveness of European industry.

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THE VALUE RELAY SERVICE

The VALUE Relay Service became operational on 1 January 1993.

The Service is a dedicated network of 27 Relay Centres throughout the Community, designed to encourage participation in Community RTD programmes and promote the use of the results of the programmes by industry, in particular SMEs.

DG XIII will act as coordinator of the Service, to which ECU 16 million has been allocated for 1992-94 (28% of the total allocation available for VALUE II). Further information from:

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The first few months of 1993 will see some reorganisation of the internal structure of the Commission, in particular involving the areas covered by Directorate-General I (External Affairs) and Directorate-General III (Internal Market and Industrial Affairs).

SPRINT: Technology Performance Financing

SPRINT has launched the Technology Performance Financing Scheme (TPF), which aims to promote the introduction of new technologies into traditional industrial sectors, with the dual objectives of strengthening the capacity of technology suppliers and improving the competitive position of companies introducing innovative equipment or processes. The Scheme will help companies to reduce the perceived and potential risks of investing in new technologies, products and processes by sharing the financial risk between the purchaser and the supplier.

TPF is a system through which financial institutions advance funds needed to acquire new industrial technology or services and are paid as a function of the results observed. TPF is based on the 'performance contracting' method, which is widely used in the U.S.A. by energy-intensive companies when buying energy-saving technology. The TPF scheme has extended this principle to include other industries where companies might be reluctant to take on new processes because of the perceived technology risk.

The European Commission, through the SPRINT programme, is supporting the scheme by underwriting a proportion of the risk. Typically, the financial institution will advance a large part of the cost of the project to the technology provider. The amount is usually within the range of ECU 40,000 to 200,000 and will be paid back by the technology purchaser in several installments over 2 to 3 years. Payment schedules will be negotiated as a function of predetermined targets proving the performance of the technology or services supplied. If the technology does not work as well as stipulated, users need not pay the full amount.

TPF funding is available both to traditional industries looking to incorporate new processes into their plants or systems and to high technology companies which have developed new techniques but are meeting resistance from prospective clients. Both the recipient and the supplier must be EC-based firms and at least one of them must be an SME.

For the user, the attraction lies in removing the potential risk associated with adopting innovative technologies. For the supplier, the main advantage is a powerful marketing tool for penetrating new markets resistant to change.

The following banks and financial institutions have already agreed to invest in at least 10 projects each in 1993-94: Générale de Banque (B), Finlombarda SpA (I) and National Westminster Bank plc (UK). Unibank A/S (DK) and Allied Irish Banks plc (IRL) are about to sign a similar agreement.

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SPRINT: Conference on Quality

The European Seminar on Quality Promotion, sponsored by SPRINT, will take place on April 27-29 in Aachen.

The Seminar will concentrate on critical issues in quality management in SMEs, such as the examination of the quality promotion scene in Europe, identifying the difficulties facing SMEs in keeping pace with developments in quality improvement and developing and proposing a list of actions for the future to efficiently bring SMEs into total quality management.

Since the promotion of quality is a factor of growth and success, and even of survival for European SMEs, it is being developed through support agencies and a variety of national and regional schemes and initiatives.

The Aachen Seminar is one of the activities of the Community Working Group on Quality, set up by SPRINT with a view to promoting the exchange of knowledge in this area, given the increasing use of quality services by SMEs throughout the Community. This Working Group gathers together all the relevant representative organisations established in the Member States and assists the Commission in promoting quality management through seminars, conferences and studies.

One of the objectives of the Aachen Seminar is the evaluation of the role of national and regional Quality Promotional Organisations in fostering quality in European SMEs. These organisations are concerned with general quality management issues and practices as well as with more specific topics such as certifications, quality control, non-destructive testing and interpretation of international quality standards. Quality Promotional Organisations provide quality-related services to groups of companies in the same sector or concerned with the same technology.

Other topics to be covered by the Seminar are:

- the identification of initiatives at a European level to promote quality;
- the establishment of quality standards and certifications;
- education and training;
- current and future trends in total quality management.

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SPRINT: 1994 European Community Design Prize

SPRINT has launched the 1994 European Community Design Prize (ECDP) to award those enterprises that have shown a consistent application of design concepts in all areas of the manufacturing process and therefore project an image of global quality.

With this action, SPRINT aims to increase the awareness of design in SMEs and the whole business community and to communicate the importance of design in improving competitiveness in the global market. The ECDP is a joint initiative between the Commission and the design promotion organisations of the Member States.

For 1992, prizes were awarded out of 41 nominations to Unicon (DK), s.s. Siedle & Söhne (D) and Laguiole (F), at a ceremony held during the World Trade Exhibition at Seville; Royal PTT N.V. Nederland and Aer Rianta (IRL) received mentions.

For the 1994 awards, a national selection of nominations will be carried out in each Member State before October 1993. The national organisers may nominate up to 5 companies from their country. Following this selection, the International Jury, comprising designers, industrialists and design promoters, will award three prizes and several mentions in the first half of 1994.

Eligible companies are European manufacturing firms with a maximum of 2,000 employees which have clearly shown excellent use of design as a management tool, with outstanding performance in product design, graphic communication or environmental design.

National organisers of the competition are: Institut Belge du Design (B), Dansk Design Center (DK), Rat für Formgebung (D), DDI (E), APCI (FR), EOMMEX/EKSP (GR), Design Ireland (IRL), ADI (I), O Dubbel D, R&O (NL), Centro Portugues de Design (P), Design Council (UK).

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SPRINT: 12 Specific Transnational Technology Transfer Projects

Twelve SPRINT Specific Transnational Technology Transfer projects, which commenced at the beginning of January, aim at the diffusion of new technologies in the Member States, particularly to SMEs, less developed regions and traditional industrial sectors.

The projects cover a range of technologies, regions and industry sectors; the following are examples:

- computer-based fashion design from Italy will be adapted and transferred to Spain and Portugal;
- improved leakage control strategies established in the U.K. will contribute to more efficient water distribution in Greek towns;
- preventive power station maintenance developed in the U.K. and Germany will be transferred to Spain, Portugal, France, Ireland and Finland.

A key factor of all the projects is that there will be pilot implementations at end-user sites in several Community countries.

Some of the projects specifically aim at social or environmental objectives. The SUBSPRINT project promotes the accelerated substitution in the European printing industry of organic solvents by non-toxic degradable oils, with beneficial effects on working conditions and the environment.

The current projects follow a Call for Proposals launched in 1990 which attracted 103 applications. 17 projects were selected and a definition phase took place, ending with a series of presentations in Luxembourg last summer. Following detailed assessment and discussion, 12 projects were chosen.

The 12 projects will run for about two years and the results will be disseminated to other companies in different countries. Average funding for each project amounts to around ECU 700,000.

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SPRINT: 1993 Workplan

With a budget of 23 MECU, SPRINT has drawn up the main guidelines of its activities on innovation and technology transfer for 1993. These will centre principally on Technology Transfer Networks, Managing the Integration of New Technologies, the European Innovation Monitoring System, Working Groups and the follow-up and development of the 1992 calls.

Technology Transfer Networks remain one of the main action lines within SPRINT. The recent call for accompanying measures attracted 28 European organisations interested in preparing a new series of Investment Fora. Thanks to this initiative, several hundreds of European entrepreneurs will have a chance to seek financiers in the next ten Fora to be held in 1993 and 1994. The total Community contribution is ECU 460,000.

Seventeen Technology Transfer Days will be held to introduce companies located in a Member State or region to technology brokerage and liaison services located in different Member States. These meetings, with a Community contribution of ECU 585,000 will encourage technical cooperation between firms located in different Member States. SPRINT will coordinate these meetings to ensure a comprehensive and coherent overall programme with good geographic coverage, giving special attention to the new German Länder.

The action line on Best Practice Dissemination in network operation will result in a number of studies aimed at identifying, analysing and disseminating case studies of technology transfer through the networks. Seminars and workshops to disseminate cases of best practice will be held throughout the Member States during 1993 and 1994, with a total Community contribution of 1.2 MECU.

A conference on Research and Technology Organisations Networks is scheduled to be held in Brussels in November 1993. The conference will analyse general issues on the operation of these networks as well as the future role of SPRINT in supporting their activities.

Managing the Integration of New Technologies (MINT) is a new action line within SPRINT which has achieved wide acceptance through a global approach to the process of innovation in SMEs and the involvement of national organisations. Following the selection of the national organisations and the signature of contracts, a workshop on MINT activities will be held in Luxembourg on 24-25

March 1993. The implementation of MINT in the Member States will start shortly after with the selection of subcontractors and companies which will participate in this consultancy scheme.

The European Innovation Monitoring System (EIMS) is building a network of research teams and experts in the fields of analysis of innovation structures and services and innovation policies. A new call for tenders will be launched next February aimed at selecting experts in innovation to increase the EIMS network.

Twenty eight consultancy panels for science parks and related developments have been established following the last Science Park Consultancy Scheme call. In addition, eight exploratory missions have been set up to carry out an in situ examination of eight further developments.

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The European Investment Fund: Promoting Recovery in Europe

The Commission has approved the formal proposal to launch the European Investment Fund foreseen at the Edinburgh Summit in December 1992.

The Fund will be a key element in action at the Community level to promote economic recovery in Europe. With a subscribed capital of ECU 2 billion, contributed by the European Investment Bank, the Community and other financial institutions, the Fund will be able to extend financial guarantees of ECU 5-10 billion and so support investment projects of up to ECU 20 billion, vital to growth and employment.

It is hoped that the Fund will become operational during the second half of 1993.

G-24 Nuclear Safety Assistance to Central And Eastern Europe

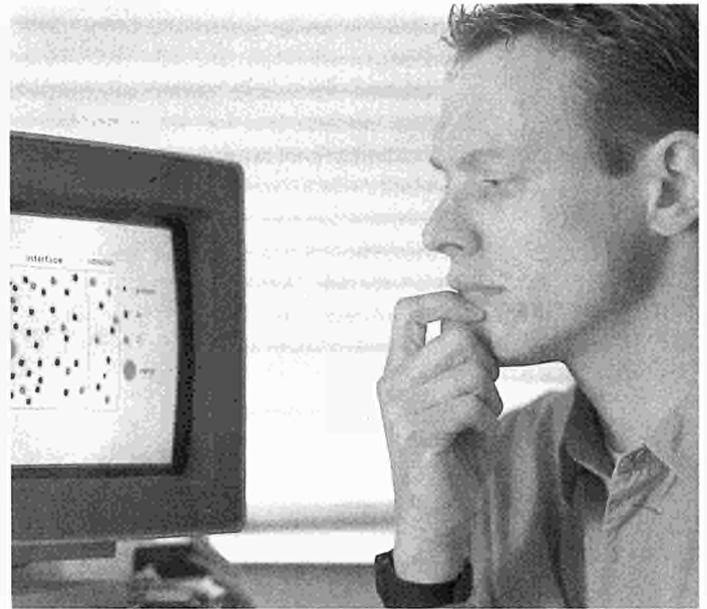
At the Steering Committee of the G-24 Nuclear Safety Group, meeting in Brussels on 7 and 8 December, it was reported that total financial aid to Central and Eastern Europe amounted to ECU 300 million, two-thirds provided by the Community. The main bulk is being spent on operational safety of nuclear power plants and short-term safety improvements.

A report was given on the progress of technical work at the Kozloduy NPP and the RBMK type nuclear reactors in Bulgaria, similar to those at Chernobyl, of which there are 15 in operation in Russia, Ukraine and Lithuania.

The Committee also initiated work on questions of civil liability in case of accidents for firms involved in engineering and other works in the nuclear sector.

The Committee called for more extensive analyses on assistance programmes to be presented at its next meeting in March 1993 so as to enable it to review progress, to eliminate any duplication and overlap and identify significant gaps in present and future activities. On the basis of these findings, the Committee will prepare its

future work plan and adopt a report for submission to the Tokyo Summit in July.



ENVIRONMENT: Soil Pollution Availability of Heavy Metals, Dept Soil Science and Plant Nutrition, Wageningen, Holland — Dr F. A. M. De Haan

Scientific and Technological Cooperation With Central and Eastern Europe

In the context of its pilot scheme for scientific and technological cooperation with the countries of Central and Eastern Europe, the Commission has selected those projects which will receive Community support.

This support consists principally of 2,531 study grants for researchers from Central and Eastern Europe, enabling them to spend 3 months on average in the Community's leading research laboratories so as to acquire know-how which they can use at home.

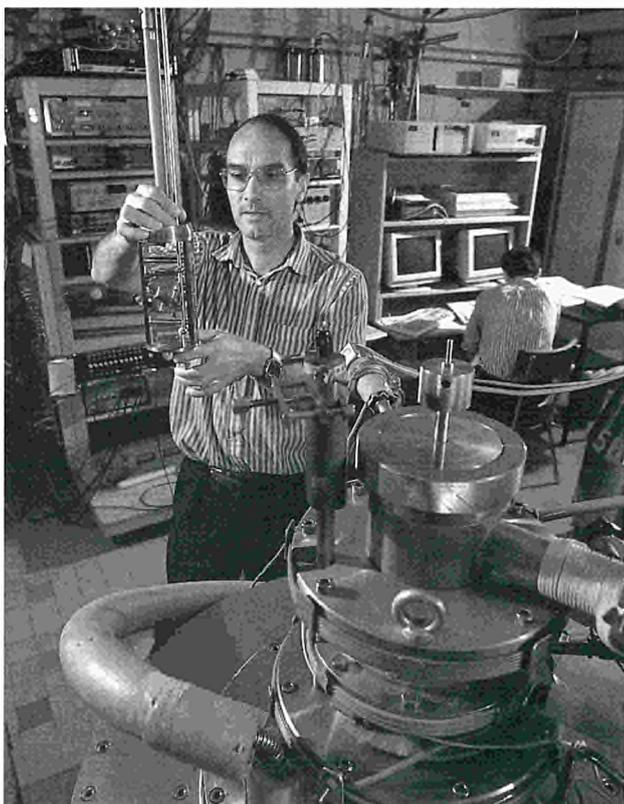
159 other projects concern scientific conferences, seminars and workshops as well as 43 projects for the development of pan-European scientific networks involving research institutes, universities and firms, mainly from Central and Eastern Europe. 30 joint research projects, involving public and private bodies and firms from Central and Eastern Europe and the Community, will also receive funding; they will contribute particularly to industrial conversion in Central and Eastern European countries.

129 projects for participation by organisations from Central and Eastern Europe in Community research programmes and 147 proposals for participation in projects already in progress under COST have also been approved.

The scheme was launched in 1992, with funding of ECU 55 million earmarked for that year, at the instigation of the European Parliament and is the largest programme of scientific cooperation and mobility undertaken so far between the Community and the Central and Eastern European countries.

IMPORTANT NOTICE

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SUPERCONDUCTIVITY: Fundamental Research on superconductor monocrystals at high temperature, Laboratoire Louis Neel, Grenoble, France — Prof. Michel Cyrot

TACIS: Technical Assistance to the CIS

On 9 December 1992, the EC Commission decided the forms of assistance which the Community will provide to the CIS and Georgia under the 1992 Technical Assistance Programme. 17 TACIS action programmes altogether have been prepared by the Commission in collaboration with the authorities of the beneficiary states.

The overall objective of the 1992 action programme is to develop the local skills and know-how required to accelerate economic reform and to encourage conditions favourable to private investment and the development of the private sector. The programmes therefore comprise a limited number of targeted and coordinated components in areas including government advice, support for enterprises, human resources development, food production and distribution, transport, energy, telecommunications and regional inter-state cooperation. For each component, specific activities have been defined and will be ready for implementation from the beginning of 1993.

Of the total financial allocation of ECU 450 million for 1992, ECU 270 million is dedicated to projects initiated directly on a national basis. In addition to the national programmes, all the beneficiary states will benefit from assistance under regional initiatives, based on inter-state cooperation on matters of shared concern; ECU 28.6 million has been set aside for this purpose.

In the field of nuclear safety, ECU 60 million has been earmarked for the Regional Nuclear Safety Programme and ECU 20

million for the International Science and Technology Centre, set up to redirect the skills of weapons scientists and engineers towards new advanced technologies with a peaceful application.

Further aid has been allocated for multilateral funding, the setting up of Coordination Units in each country to coordinate assistance and to cover the costs associated with assistance programming and project implementation.

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EUREKA Cooperation under the Proposed Fourth Framework Programme

Set up in 1985 to raise the productivity and competitiveness of Europe in the fields of advanced technologies through collaboration among enterprises and research institutes, EUREKA now includes 20 member countries plus the EC Commission.

The successful development and implementation of the results of EUREKA projects may require certain enabling conditions to be met which are beyond the capabilities and influence of the project participants themselves and which may require action by governments and international bodies.

In general, EUREKA projects concern 'close to the market' products, systems and services, whereas Community-sponsored research is essentially pre-competitive. However, many important projects involve the participation of the Community's specific RTD programmes as well as EUREKA. The JRC is also involved in a variety of EUREKA projects.

Under the proposed Fourth Framework Programme for Community activities in the field of RTD (1994-98), it is at present envisaged that, in addition to the conventional specific RTD programmes, a number of technological priority projects, proposed by businesses, will help stimulate the competitiveness of European industry. Cooperation between EUREKA and the Community is considered likely to play an important role in this area.

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ENVIRONMENT: Biomonitoring of human populations exposed to genotoxic environmental pollutants and mechanisms of mutagenesis and molecular dosimetry, School of Biological Sciences, University College of Swansea, UK — Prof J M Parry

BRIDGE Targeted Project: Biotechnology of Lactic Acid Bacteria

Lactic Acid Bacteria (LAB), so named because of their ability to convert sugars to lactic acid, are an industrially important group of bacteria.

They play essential roles in the manufacture and the ripening of fermented foods and beverages, such as cheeses, meats, bread, vegetables, fermented milks and wine.

The indigenous agri-food sector, which is of strategic importance throughout the Community, includes both the producers of agricultural materials and the manufacturing industries which use those raw materials, ranging from large scale multinational corporations to SMEs; the fermented food sector is a growth area worldwide due to consumer demands for natural, safe foods.

The on-going BRIDGE programme is implementing a number of targeted 'T' projects, whose aim is to eliminate barriers, in scale or in structure, to the exploitation by agriculture or industry of the data and materials or methods originating from modern biology.

The main objective of the T-project on LAB is to improve knowledge of the genetics, molecular biology, physiology and biochemistry of LAB and the identification and/or construction of improved strains which meet the requirements of the food and feed industries.

This initiative, which includes genetic, metabolic and protein engineering, is crucial for the future competitiveness of relevant Community industries.

The T-project on LAB functions as a single integrated transnational research group with 34 laboratories, including 16 universities, 13 research institutes and 5 industrial companies; the research tasks are distributed between the participants on the basis of their relevant expertise and facilities.

This form of organisation allows free movement of scientific material and personnel as well as research results throughout the 34 laboratories, and so facilitates rapid advancement of research while minimising duplication of effort.

The project also provides an interface for the exchange and transfer of information between research groups and industry.

The Lactic Acid Bacteria Industrial Platform has been set up to act as a forum for the exchange of views on LAB research and as

an instrument to create opportunities for technology transfer and for industrial exploitation of results emerging from the T-project. The Platform currently has a membership of 40 companies and industrial associations located in the EC and EFTA with specific interest in Community research on LAB biotechnology.

Some of the successes achieved in the first year of the project include: reliable food-grade integration systems for lactococci, efficient expression vectors for lactobacillus and controlled gene expression in lactococcus, manipulation of phage resistance mechanisms, isolation of LAB strains with new and broad spectrum of antimicrobial activity and major advances in the targeted screening and identification of LAB.

Further information from:

Dr Alfredo Aguilar
DG XII-E/1 (Biotechnology)
 200 Rue de la Loi
 B-1049 Brussels
 Tel: 32/2/296 1481
 Fax: 32/2/295 5365

Third R&TD Framework Programme: Additional Finance

The energy programmes will receive the largest proportion of the additional funds, namely 30.6%.

The remainder will be distributed equally amongst the remaining 12 categories, resulting in an increase over the previous amount of 13.3% in each case.

	MECU
Information Technology	180
Communication Technology	65
Telematic Networks and Systems of General Interest	50
Industrial and Materials Technologies	100
Measurement and Testing	19
Environment	55
Marine Science and Technology	14
Biotechnology	22
Agricultural and Agro-Industrial Research	44
Biomedical and Health Research	18
Life Sciences and Technologies: Developing Countries	15
Non-nuclear Energy	60
Nuclear Fission Safety	29
Controlled Thermonuclear Fusion	110
Human Resources and Mobility	69
TOTAL	900*

* 1% of the total is reserved for VALUE; MECU 50 are reserved for energy, with priority for non-nuclear energy

LIBCONTACT: Database of Library Contacts

LIBCONTACT is a contacts database enabling libraries to find partners to collaborate in European projects. It is designed in particular to help firms which seek to participate in the special programme for libraries under the Third Framework Programme although it will also help users to establish links with libraries or similar bodies and organisations for other purposes.

An information package is available from:

CEC - DG XIII/B/3
JMO C5/66, Plâteau du Kirchberg
L-2920 Luxembourg
Tel: 352/4301 2126 or 4301 3006
Fax: 352/4301 3530

For more information on the Community's action plan for libraries, reverse-charge lines are open to a Help-Desk in Luxembourg, operated by ECHO:

Belgium	11 84 56
Denmark	80 01 07 56
France	05 90 69 56
Germany	01 30 82 34 56
Ireland	18 00 55 52 56
Luxembourg	08 00 34 56
Netherlands	060 22 33 56
United Kingdom	08 00 89 92 56
Other Countries	352/48 80 41

The following National Focal Points can also be contacted:

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Science Policy Office
S.P.P./S/D.P.W.B.
Rue de la Science 8
B-1040 Brussels

Tel: 32/2/238 34 11
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 Mr J Wautrequin

DENMARK

Statens Bibliotekstjeneste
Nyhavn 31E
DK-1051 København

Tel: 45/33/93 46 33
 Fax: 45/33/93 60 93
 Mr Morten Hein or Mrs Olga Porotnikoff

FRANCE

CFPPA
Conseil Supérieur des Bibliothèques
BP 132
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Tel: 33/1/46 36 11 13
 Fax: 33/1/43 58 54 70
 Mme M D Nicolas

GERMANY

EUBIB
Deutsches Bibliotheksinstitut
Bundesallee 184/185
D-1000 Berlin

Tel: 49/30/8505 176
 Fax: 49/30/8505 100
 Mr K Reinhardt Tel: 49/30/8505 134

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Coordination Committee
Ministry of Education
15 Mitropoleos
GR-10185 Athens

Tel: 30/1/32 20 950
 Fax: 30/1/32 25 259
 Mrs Ekaterini Koutsoyanni

IRELAND

Euro-Focus on Libraries
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 Dr Francesca Di Cesare
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 Fax: 352/47 56 72
 Mr Jul Christophory

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NL-2585 BA Den Haag

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 Fax: 31/70/361 50 11
 Mr P J Th Schoots Tel: 31/70/433 82 40

PORTUGAL

Conselho Superior das Bibliotecas Portuguesas
Comissao Executiva
Rua Ivens 35
P-1200 Lisboa

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 Fax: 351/1/346 95 21
 Mrs Gabriela Lopes Da Silva
 Tel: 351/1/76 28 91

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 Mrs Araceli Sanchez-Pinol
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 Mrs Lucia Sagredo Tel: 34/1/580 78 43

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Department
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UK-London W1V 4BH
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 Fax: 44/71/323 72 51
 Ms R Cotton Tel: 44/71/323 70 49

Community Telecommunications: Council Resolution

A Council Resolution of 17 December 1992, on the assessment of the situation in the Community telecommunications sector, calls upon telecommunications organisations to introduce better cost orientation into tariffs, in particular for intra-Community telecommunications services and leased lines, and to work to secure a general lowering of accounting rates for intra-Community telecommunications traffic (OJ C 2 of 6.1.93). The Resolution encourages member States to move towards such cost orientation and lowering accounting rates.

The Resolution requests the Commission to consider, in consultation with interested parties, the political, economic, commercial and social implications of the options described in the Commission's Communication on the future of the Community telecommunications services market (SEC (92) 1048 of 21.10.92) and to set out, in close association with the Member States, a transparent approach plus a timetable for a regulatory framework in this area.

International Sugar Agreement: Research Clause

The International Sugar Agreement was approved by the EC Council on 13 November 1992 (OJ L 379 of 23.12.92).

The objectives of the Agreement are to ensure enhanced cooperation in connection with world sugar matters and related issues, to provide a forum for intergovernmental consultations on sugar and on ways to improve the world sugar economy and to facilitate trade by collecting and providing information on the world sugar market and other sweeteners. The Agreement also aims to encourage increased demand for sugar, particularly in the area of non-traditional uses.

To assist these objectives, the Council may assist the sugar econ-

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omy via scientific research and development and in the dissemination of results obtained in this field. To this end, the Council may cooperate with international organisations and research institutions, subject to the condition that it incurs no additional financial obligations.

Technical Standards and Regulations: Provision of Information

The Commission has proposed a second amendment to Directive 83/189, which lays down a procedure for the provision of information in the field of technical standards and regulations; major amendments to Articles 1, 2, 3, 4, 7, 8, 9, 10, 11 and 12 and to the Annex are proposed (COM (92) 491 of 27.11.92 and OJ C 340 of 23.12.92).

A list of European standardisation bodies as well as national standardisation bodies in the Member States is appended to the proposal.

International Scientific Film Festival

The town of Palaiseau, near Paris, hosted the 8th International Scientific Film Festival from 13 to 18 November. Numerous scientific fields were covered, including informatics, advanced technologies, environment, biology and medicine.

This year, VALUE II funded a European prize for one or several works dealing with a subject of major interest for European research. The prize took the form of support to produce other language versions of the work(s) to facilitate screening in as many Member States as possible.

26 films were presented to the jury and seven prizes were awarded, two non-prize winners receiving a special mention.

The first prize was won by Frédéric Tangy's film "*La danse interrompue or l'Eldorado des rétrovirus*", produced by the French National Centre for Scientific Research. The film deals with important biological, medical and human science themes against the dramatic and harrowing backdrop of a black community, descendants of Colombian slaves, who are struck by a terrible epidemic similar to AIDS. The film poses critical questions as to the relations between science and society and between science and economics.

The European prize was won by Vladimir Kolinko's film "*Nous vivons encore*", produced by the Davini Film Company. This moving work from the Ukraine was filmed in the "forbidden" zone around Chernobyl and in numerous scientific and medical institutions in the region. Produced in very difficult conditions, the film deals methodically with the biological consequences of a catastrophe caused by the improper industrial exploitation of science, conveying the message that it is essential to resolve environmental and nuclear safety problems at the international level.

Satellite Earth Station Equipment: Proposed Directive

The Commission has proposed a Directive to approximate the laws of the Member States on satellite earth station equipment (COM (92) 451 of 11.12.92 and OJ C 4 of 8.1.93), extending the scope of EC Council Directive 91/263. The proposal follows the



STD: Dynamics and Assessment of Kenyan Mangrove Ecosystems
Ecole en Anch / Fac Wetenschappen, Vrije Universiteit Brussel — Dr Polk

line of the Commission's Green Paper (COM (90) 490 of 14.1.92) in proposing the introduction of mutual recognition of type approval for such equipment as one of the major preconditions for a Community-wide market for this equipment.

The proposal applies to equipment which is capable of being used either for transmission and reception, or for reception only, of radiocommunication signals by means of satellites or other space-based systems. Purpose built satellite earth station equipment used within a Member State's public telecommunications network infrastructure is excluded from the scope of the proposal.

The proposal covers the placing on the market and free circulation of the specified equipment, conformity assessments, the application of the EC mark and inscriptions and the role of the Approvals Committee for Terminal Equipment.

KAROLUS Programme: Exchange of National Officials

On 22 December 1992, the Commission adopted a Decision establishing provisions to implement Council Decision 92/481 on the adoption of an action plan for the exchange by Member States administrations of national officials engaged in the implementation of Community legislation required to achieve the internal market — the KAROLUS Programme (OJ L 286 of 1.1.92 and OJ L 8 of 14.1.93).

These provisions relate to the organisation of the exchange of officials, the organisation of seminars, the financial procedures for payment by the Member States or the Commission of their respective contributions and the reimbursement of expenses incurred by exchanges and seminars.

Consumer Electronics Industry: Pilot Project

A pilot programme to help improve the competitiveness of the component supply infrastructure for the European consumer electronics industry is to be launched by the Commission for 1993-94.

The industry-led project has the support of both European affiliated and Japanese affiliated manufacturers in Europe. This collaboration is also endorsed and supported by the Japanese government and represents an important development in EC/Japan relations in the area of industrial cooperation.

The efficiency of the component supply infrastructure in Europe is vital for the competitiveness of European consumer electronics manufacturers. With the support of the Commission and the Japanese Ministry of International Trade and Industry, manufacturers cooperated during 1992 on a limited test project to see how the competitiveness of the plastic moulding sub-supply sector in Europe could be improved. The exercise was considered successful by the parties and agreement has been reached by the European user industry to repeat the project in other component areas.

The Commission and the MITI endorsed these conclusions and offered support for an extension of activities to include an exercise on printed circuit boards. If the project continues to be successful, it may serve as a model for cooperation in other industries.

The Commission will allocate ECU 3 million during 1993-94 to a pilot programme to assess the feasibility of this type of industrial cooperation for the consumer electronics industry. The appropriation will stem from existing budgetary provisions granted for Enterprise Policy and will support, inter alia, the participation of SMEs. The project is to be launched at an industry-wide seminar, planned for early 1993.

Further information from:

Mr G Johnson
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 200 rue de la Loi
 B-1049 Brussels
 Tel: 32/2/296 2342

Computerised Link-up of Community Islands

From 31 November to 5 December, the Isle of Wight Development Board played host to and trained over 20 technicians and database managers from other islands in the Community. This initiative forms part of the Community's EURISLES programme, involving the EC Commission, the Isle of Wight, the Azores, Canaries, Corsica, Madeira, Martinique, Reunion and Vorio Aigaio.

The project aims to set up a computerised network linking these islands, with a view to increasing their development by improving access to information. EURISLES will create data banks with reference to sectors of special importance to the islands, enabling them to pool their common experiences and knowledge to offset the constraints of insularity.

The programme included presentations by Isle of Wight firms, notably on oil pollution containment, a major concern for all these islands, and on rotary atomisers for agricultural crop protection.

European Parliament: Agenda for 18-22 January 1993

The Agenda of the European Parliament for the 18-22 January session covered the following RTD topics:

- a report from the Economic and Monetary Affairs and Industrial Policy Committee on satellite communications, urging the

Commission to present appropriate legislation to enable the EC to exploit fully the potential of this sector (COM (92) 360 of 23.2.92);

- a report from the Energy and Research Committee encouraging the Community to recommit itself to the promotion of renewable forms of energy, such as wind and wave power, thus enabling the energy sector to develop along environmentally sound lines;
- a report from the Environment Committee on the North Sea and oil pollution with regard to the Commission's proposed amendments to widen the scope of the 1983 Bonn international agreement on North Sea Pollution (COM (92) 133);
- a report from the Environment Committee advocating urgent international action to prevent further increases in salt levels and man-made pollution in the Baltic Sea and a motion urging EC and Nordic countries to aid Poland, the Baltic states and Russia with anti-pollution measures;
- a report from the Environment Committee supporting the Commission's proposal to introduce a voluntary eco-audit logo so as to encourage companies to examine their environmental impact in terms of energy consumption, etc. (COM (91) 459 of 6.3.92), as well as a motion for active encouragement of companies to participate in this initiative and for the scheme to be extended to cover not only the industrial sector but all economic activity;
- a report from the Youth Committee supporting the Commission's HDTV programme (COM (92) 154 of 5.5.92 and SEC (92) 1085 of 29.9.92), arguing that the production costs of 16:9 format programmes justify a large subsidy from the budget;
- a report from the Environment Committee to ensure that full account is taken of environmental needs when Community finance is allocated to development projects, in particular in the context of the revisions to be made to the regulations governing the use of the Structural Funds;
- adoption of recommendations by Parliament on reforming the Community's institutional structures to take account of future enlargement; given that association agreements with potential Member States can provide a transitional period for cooperation while adaptation to Community procedures and policies takes place, states preparing for EC membership could usefully benefit from certain Community research-related programmes, such as SPRINT;
- a motion from the Transport Committee calling on the Commission to prepare a ten-year action plan to promote the use of electric vehicles in towns, including incentives in the form of subsidies and tax relief;
- a report from the External Economic Relations Committee on the conclusion of a five-year cooperation agreement with Mongolia, which aims to encourage trade and closer cooperation in areas including energy, science and technology, agriculture and the environment (COM (92) 50 of 21.2.92).

Human Capital and Mobility

The Community's Human Capital and Mobility Programme aims to boost the quantity and quality of human resources available for RTD needed by the Member States to meet the scientific challenges presented by the Single European Market.

The programme promotes the transnational mobility of young researchers, mainly at post-doctoral level, so as to contribute to the creation of a truly European scientific and technical community and to help establish long-lasting European research cooperation

networks.

The programme's budget of ECU 488 million covers four main activities: research fellowship awards, development of scientific and technical networks, opening up access to large-scale scientific and technical facilities and organisation of high-level conferences.

An information brochure and complementary information can be obtained from:

Human Capital and Mobility Programme

DG XII

EC Commission

200 Rue de la Loi

B-1049 Brussels

Fellowships: Mrs Irmela Brach Tel: 32/2/296 6316

Networks: Mrs Manuela Soares Tel: 32/2/296 2148

Large-scale Facilities: Mr Marco Malacarne Tel: 32/2/295 5277

Euroconferences: Mrs Jane Shiel Tel: 32/2/296 2984

Fax (all activities): 32/2/296 3307

Industrial and Materials Technologies

Brite-EuRam II is a four-year (1991-94) Community RTD programme, designed to help the European manufacturing industry to become more competitive. The programme promotes multi-sectoral and multidisciplinary collaboration in basic technical research and implementation of new technologies by end users.

The budget amounts to some ECU 670 million and awards shared-cost grants to innovative, collaborative, pre-competitive research projects involving partners from at least two EC Member States. There are three main technical areas: materials (raw materials, recycling, structural materials, functional materials, mass commodity materials), design and manufacturing (design of products and processes, manufacturing, strategies for engineering and management) and aeronautics (environment related technologies, aircraft operation technologies, aerodynamics, aerothermodynamics).

An information brochure and complementary information can be obtained from:

Brite-EuRam II

DG XII

EC Commission

200 Rue de la Loi

B-1049 Brussels

Helpline: Tel. 32/2/295 2345 or 296 5151

Helpline: Fax. 32/2/295 8046 or 296 5987

Other Contact Points:

Diensten voor Programmatie van het Wetenschapsbeleid

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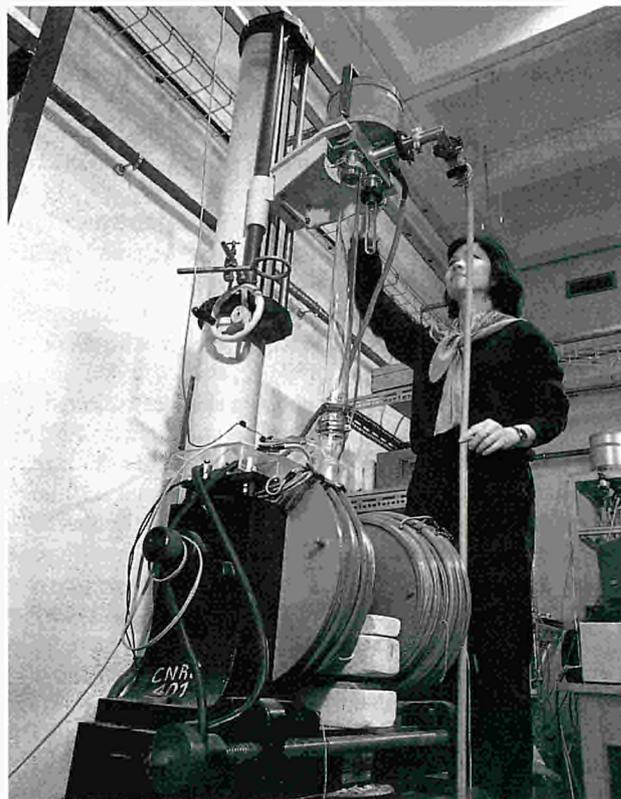
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Mrs Cecilia Fernandez Rodriguez



SUPERCONDUCTIVITY: Research on new high TCR superconducting materials, Laboratoire de Cristallographie Chimie Physique Solide, Caen, France — Professeur Bernard Raveau

Department of Trade and Industry

151 Buckingham Palace Road
UK-London SW1 9SS
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Mr G A Gadge

Joint Research Centre: New European Chemicals Bureau

The EC Commission has established, within the JRC's Environment Institute, a European Chemicals Bureau to undertake a number of the scientific/technical tasks required of the Commission in the context of certain pieces of Community legislation relating to the control of chemicals, often involving work of a highly specialised and technical nature.

The JRC has already provided scientific and technical support for many of the key pieces of legislation and, over the next few years, the workload associated with the implementation of Community chemicals legislation is expected to increase significantly. The Commission has therefore decided to reinforce the capacities of the JRC in this field. The importance of the chemicals sector also requires that the scientific and technical support activities dedicated to this work within the Commission are commensurate with the importance of the chemicals industry as well as with the potential environmental impact of the industry.

The establishment and functioning of the Bureau will necessitate a significant reallocation of resources within the JRC and this will be achieved within existing budgetary provisions on the budget line dedicated to support for other Commission departments.

The Bureau will have the status of a Unit at the Environment

see JRC, page 18 >>

SAST: Project Reports Published

Strategic Analysis in Science and Technology activities form part of the Monitor programme, designed to identify new directions and priorities for Community RTD policy and to indicate more clearly the relationship between RTD policy and other Community policies.

SAST's role is to examine specific areas of RTD which have immediate significance for the Community. Nine projects have been launched so far, each involving consideration of the scientific and technological issues in the broader context of industrial competitiveness and societal needs. Eight of these projects have been published:

1. The needs and possibilities for cooperation between selected advanced developing countries and the Community in the field of science and technology (EUR 14701 EN, EUR 14140 to 46 EN)
2. Standards, technical regulations and quality assurance: what will change? What implications for Community S&T policy? (EUR 14702 to 03 EN, EUR 14704 to 09 EN)
3. Research and technology to help overcome environmental problems in relation to transport (EUR 14710 EN, EUR 14711 to 15 EN)
4. Innovation in agro-biotechnology (EUR 14716 to 21 EN)
5. The identification of technology priorities for European RTD - a review of technology mapping and related techniques (EUR 14722 EN)
6. Research and technological development for the supply and use of freshwater resources (EUR 14723 to 24, EUR 14725 to 30 EN)
7. Technological innovation in the plastics industry and its influence on the environmental problems of plastic waste (EUR 14731 to 32 EN, EUR 14733 to 37 EN)
9. European priorities in science and technology with reference to freight logistics (EUR 14738 EN)

Project No 8, which covers research and technology management in enterprises - issues for Community policy, is due to be published in mid-1993.

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AVAILABLE	2 Rue Mercier
FROM	L-2985 Luxembourg
	Tel: 352/499281
	Fax: 352/488573

INFO	H Allgeier
	DG XII/H
	MO 75 06/25
	EC Commission
	200 Rue de la Loi
	B-1049 Brussels
	Tel: 32/2/296 0687

Research and Technological Development for the Supply and Use of Fresh Water Resources: Strategic Dossier

Monitor - SAST Activity, DG XII
H Williams and D Musco - Ecotec
EUR 14723 EN
140 pages

The background of the project to which this report contributes is the increasing need for freshwater adequacy and availability in the Community. The project takes in the range of hydrologic, geogra-

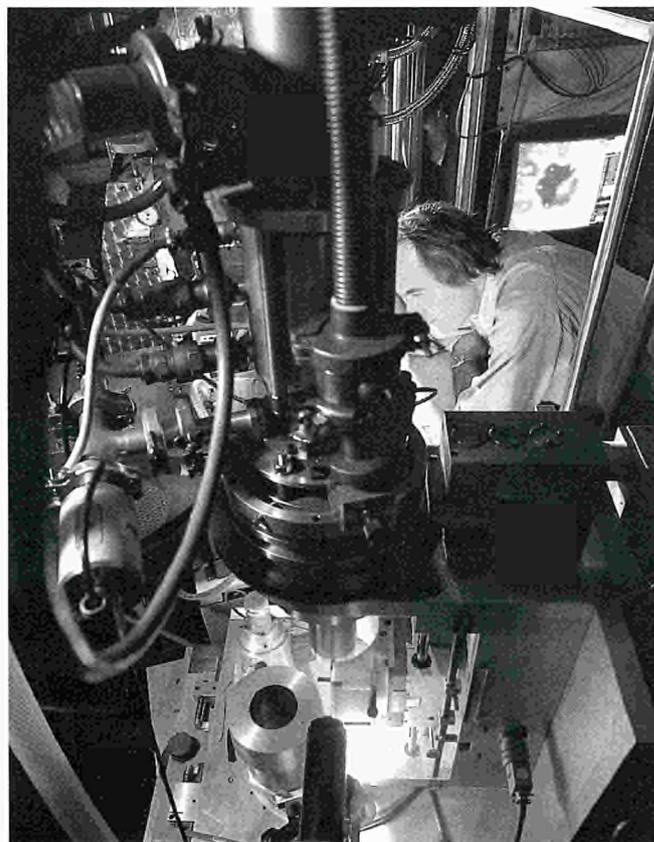
phic, topographic and climatic conditions in the Community, of infrastructures, of industrial, agricultural and domestic use of fresh water and of general socio-economic development.

The report follows from a set of expert reports on new sources and better use of existing sources, treatment, storage and distribution, demand and use, monitoring and modelling and an overall analysis of the area. The report highlights key findings and issues sought during the overall investigation with a view to suggesting orientations and priorities for future RTD policy on freshwater supply and use. It also provides S&T perspectives and highlights potential S&T responses to problems and goals set out in other areas of Community policy.

In addition, the following reports are also available:

- Overview Report: general description of the problem area for the Community and the world (EUR 14724 EN)
- Expert Reports: Demand and Use (EUR 14278 EN), New Sources and Better Use of Existing Sources (EUR 14727 EN), Regional Dimension of Water RTD (EUR 14726 EN), Monitoring and Modelling (EUR 14725 EN), Treatment, Storage and Distribution (EUR 14729 EN)
- Memorandum: outcome of the Lisbon workshop (EUR 14730 EN)

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SUPERCONDUCTIVITY: Preparation of materials and study of their properties, Laboratoire de Physique des Solides, Université de Paris-Sud, Orsay, France — Prof. J Joffin

Evaluation of the Impact of EC Research Programmes Upon the Competitiveness of European Industry – Concepts and Approaches

Monitor - SPEAR, DGXII

J S Metcalfe, L Georghiou, P Cunningham, H M Cameron

EUR 14198

ISBN 92-826-3818-9

44 pages, ECU 6

During the 1980s, R&D programmes at national and Community level encouraged collaboration between firms and between firms and academic institutions as a device for improving the competitive performance of European industry. The programmes were described as pre-competitive, to emphasise that they were not interfering with market behaviour, being concerned with areas of research which would have market significance in the longer term but within which, in the short term, firms could collaborate to create common knowledge which they could later exploit separately in competition with each other and with outsiders.

The objectives of the report are to clarify the meaning of the concept of competitiveness and to suggest practical guidelines for evaluating Community R&D programmes in terms of their impact on competitiveness.

The report begins with a review of recent literature on the nature, measurement and sources of competitiveness in order to investigate what is generally understood by the term. It then explores the consistency of the various concepts of competitiveness through presentation of a dynamic perspective and discusses which measures provide the best indication of competitive advantage in particular circumstances. Guidelines are set out for the evaluation of the impact of Community programmes on competitive performance and some future lines of research are suggested.

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AVAILABLE
FROM

Guide to the Community's Scientific and Technical Programmes

Nearly 300 scientific and technical programmes managed by the Community are detailed in this new multimedia guide, available on CD-ROM. For each programme, its aims, legal base, duration, methods of implementation, budget, main publications and links with other programmes are given.

The Guide covers the RTD Framework Programme as well as connected programmes dealing with technology transfer, information sciences, energy, environment, education, regional development, etc. The Guide also explains more than 2000 acronyms and lists publications and video cassettes available.

Mr Christian Guittet or
Mrs Christine Bidinger
DG XIII/D/2
EC Commission
B4/075, Bâtiment JMO
L-2920 Luxembourg
Tel: 352/4301 32375 or 4301 33238
Fax: 352/4301 32084

INFO

ESPRIT: Results and Progress 1991/92

DG XIII

EUR 14451 EN

ISBN 92-826-4695-5

187 pages

ESPRIT was set up in 1984 to coordinate and focus pre-competitive IT research in Europe in order to strengthen the competitiveness of European firms on world markets.

More than 225 new results were registered in the twelve months covered by this year book, mainly stemming from projects launched in 1989 at the start of ESPRIT's second phase.

The report includes an introduction by Mr J-M Cadiou, Director of ESPRIT. Reports are given on the following:

- microelectronics
- information processing systems and software
- advanced business and home systems - peripherals
- computer-integrated manufacturing and engineering
- basic research
- the open microprocessor systems initiative
- the information exchange system - research networking
- awareness activities

Useful contacts are listed, including special interest groups and ESPRIT clubs, together with a bibliography of recent publications and lists of projects and participants are included in the appendices.

Available in English, French, German, Italian and Spanish from:

Office for Official Publications of the EC
2 Rue Mercier
L-2985 Luxembourg
Tel: 352/499281
Fax: 352/488573

AVAILABLE
FROM

ESPRIT: Synopses 1992

New ESPRIT publications include a series of synopses, published in seven volumes, of current projects, actions, working groups and other activities under the programme.

Listings cover all activities and include a keyword index, an index of acronyms, project numbers and titles, synopses of completed and ongoing work, synopses of new projects and activities and information on related publications. Each project is summarised in terms of its aims, approach, methods, progress, results, potential, related publications and information dissemination activities. The start date, duration, organisations involved and contact points are also given.

- Volume 1: Basic Research (ISBN 92-826-4812-5, 546 pages)
- Volume 2: Microelectronics (ISBN 92-826-4813-3, 376 pages)
- Volume 3: Information Processing Systems and Software (ISBN 92-826-4814-1, 571 pages)
- Volume 4: Advanced Business and Home Systems/Peripherals (ISBN 92-826-4815-X, 398 pages)
- Volume 5: Computer-integrated Manufacturing and Engineering (ISBN 92-826-4816-8, 410 pages)
- Volume 6: Open Microprocessor Initiative (ISBN 92-826-4817-6, 47 pages)
- Volume 7: Information Exchange System – Research Networking for Europe (ISBN 92-826-4818-4, 27 pages)

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Tel: 32/2/296 8012 or 8596
Fax: 32/2/296 8597 or 8388

ESPRIT: Artificial and Biological Vision Systems

DG XIII
G Orban and H-H Nagel - Editors
EUR 14600 EN
ISBN 3-540-56012-2 and 0-3856012-2
389 pages

This volume is a collection of reports on work in computer and biological vision. The work is supported by the ESPRIT Basic Research Project INSIGHT, in which an interdisciplinary group of scientists are integrating techniques and results from computer science, mathematics, neuroscience and psychophysics into a coherent framework to study general purpose vision systems.

The methods used in the chapters range from anatomical and physiological studies to psychophysical algorithmic, mathematical and simulation techniques. Particular topics treated include optic flow, texture, 3D surfaces, cue convergence, segmentation, corner detection and multiscale representations.

The volume is interdisciplinary in nature and includes an approximately equal number of contributions from biological and computer sciences, where biology is taken to include neuroscience, psychophysics and perceptual studies.

AVAILABLE FROM Springer-Verlag

Clean Air at Work: New Trends in Assessment and Measurement for the 1990s

R H Brown, M Curtis, K J Saunders, S Vandendriessche - Editors
EUR 14214
ISBN 0-85186-217-9
507 pages

This is a volume covering the proceedings of the International Symposium on Clean Air at Work held in Luxembourg on 9-13 September 1991, organised jointly by DG V, the Health and Safety Directorate, and by DG XII, the Community Bureau of Reference, in collaboration with the Analytical Division of the Automatic Methods Group of the U.K. Royal Society of Chemistry and with the cooperation of six national health and safety organisations from a number of Member States and of the WHO.

The papers outline the latest developments in regulations, stan-

dards, methods of assessment and measurement in both the industrial and non-industrial working environment and in quality assurance for laboratory techniques.

The aim of the symposium in each of these events was to review the state of the art, predict future needs in assessment and measurement relating to occupational hygiene and indoor air quality and, in particular, to promote European cooperation in the establishment of agreed performance targets, common methodology and consistent reporting and information management.

AVAILABLE FROM The Royal Society of Chemistry
Thomas Graham House - Science Park
Milton Road
UK-Cambridge CB4 4WF
(Quote: Royal Society Special Publication No. 108)

European Directory of Research Centres in the Fisheries Sector

DG XIII and DG XIV
EUR 14340 EN
ISBN 0-7923-1875-7
433 pages

The future of the Common Fisheries Policy depends on progress in the relevant areas of research. This applies to the whole range of management decisions, where precise, reliable and complete data are essential to inform those who must decide on the pursuit of existing activities, especially in the area of maritime fisheries and the development of new activities, such as aquaculture.

This Directory is published by the Commission with the objective of fostering closer contacts between laboratories and research organisations in the Community.

The Directory gives a brief synthesis for each Member State describing how research is organised and lists the institutions involved, together with brief details of their activities, research projects, facilities, staff numbers, budget.

AVAILABLE FROM Kluwer Academic Publishers Group
P.O. Box 322
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The Reference Materials of the European Communities: Results of Hemocompatibility Tests

W Lemm - Editor

ISBN 0-7923-2002-6
248 pages

This report forms part of the publications issued by the European Concerted Action research programme - EUROBIOMAT/Replacement of Body Parts and Functions - supported since 1988 by

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ECLAIR: Soil Pollution and Effects of Agricultural Practices
Department of Soil Science and Geology, Agricultural University of Wageningen, Wageningen, Holland — Dr J Bouma

the Community to promote collaboration on science and technology in the field of hemocompatible biomaterials. Around 50 European centres are collaborating on this project.

The demand for hemocompatibility is one of the basic factors for a safe and sufficient application of artificial surfaces in contact with blood, either permanently or temporarily. Thrombus formation and infractions of the capillary vascular system following blood material interaction as well as the activation of the complement system and the phenomenon of biodegradation remain unsolved problems.

The most serious obstacle to the development of improved hemocompatible biomaterials is the absence of standardised in-vitro, ex-vivo and in-vivo test methods and of generally accepted procedures for testing biocompatibility; this situation impedes the useful comparison of test results by different laboratories.

Against this background, the EUROBIOMAT project provided for reference materials to be distributed to several research centres, enabling a variety of test procedures to be performed on identical surfaces.

This publication stems from a workshop held in Copenhagen from 31 January to 2 February 1992 and presents the results of the tests performed. The findings are subdivided into two principal sections in the volume:

- Surface and bulk characterisation by physical, physico-chemical and chemical methods;
- Biological tests such as toxicity tests and hemocompatibility tests (in-vitro, ex-vivo and in-vivo).

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The Technological Specialisation of Advanced Countries: a Report to the EEC on International Science and Technology Activities

D Archibugi and M Pianta
Italian National Research Council
ISBN 0-7923-1750-5
164 pages

The report presents the findings of a research project carried out by the Institute for Studies on Scientific Research and Documentation of the Italian National Research Council, which funded the project jointly with the Monitor Programme.

The project is part of a series of actions designed to help develop R&D evaluation methodologies and also aims to define quantitative indicators and to assess the impact of science and technology on industrial competitiveness and regional development.

The report moves beyond aggregate patterns and examines the sectoral structure of technological activities, the process of specialisation and the impact on national performance. Indicators of technology and of scientific activity are examined together with other economic and R&D data, providing a wealth of empirical evidence on the activities and areas of strength and weakness of individual countries. The amount of disaggregated data provided and the assessment offered on the state of the art in science and technology indicators make this an important reference work.

A description of the fields of national effort is provided and a special study is devoted to the fields of greater innovative dynamism where patenting has grown most rapidly.

The authors conclude that national efforts on science and technology policy should be combined with growing international integration. They also stress that the aims of maintaining established areas of strength and of developing new specialisations in emerging fields should be balanced while a more selective policy at the sectoral level is needed.

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SPRINT: Surveys on Value Analysis

DG XIII

The European Market for Value Analysis
D G Conseil (France) - team leader of consortium
EUR 14326 EN
ISBN 92-826-4130-9
139 pages
ECU 15

Survey on Training Activities in Value Analysis
Krehl & Partner (Karlsruhe)
EUR 14325 EN
ISBN-92-826-4126-0
190 pages
ECU 19.50

A major feature of the Community's strategic programme for innovation and technology transfer -SPRINT- is the identification, development and assessment of best practice in those management techniques which encourage innovation.

Value analysis is a management technique which analyses, through a systematic approach, how to improve existing or future products at reduced cost while taking into account customer requirements. Value management concentrates on identifying real company problems from visible symptoms; it brings together the appropriate mix of company personnel with various disciplines and encourages creativity.

This management technique is still underutilised in the Community. To overcome this problem and promote a better understanding and use of value analysis methodology, SPRINT launched the two surveys now available as the third and fourth reports published by SPRINT in this field.

The Survey on the European Market for Value Analysis aims to provide a view of the size, characteristics and range of value analysis activities and perspectives of the value analysis market in the Community. The survey indicates that the present value analysis market demand in the Community is 20,000 market assignments per annum while the supply market (consultancy fees) is estimated at ECU 50 million per annum and full-time VA consultants number over 440. An overview of the main obstacles to the development of value analysis is provided, together with a comprehensive summary and suggestions for further action.

The Survey on Training Activities in Value Analysis reviews and takes stock of existing training programmes and related activities carried out in the Community Member States, the U.S.A. and Japan. On the basis of the needs identified by the survey, the authors suggest possible guidelines for future training activities in this field at Community level.

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Directory of European Community Trade and Professional Associations

DG XIII
EUR 14389-EN
ISBN 2-8029-0106-0 and 2-8029-0106-0
516 pages, ECU 79

The Directory lists trade and professional organisations which are representative of European interest groups.

JRC

continued from page 13

Institute with its own head.

The capacities of the Bureau will be built up over several years and should reach full capacity by 1995/96, with approximately 50 staff. It is anticipated that, by that time, the Bureau will be a substantial centre of excellence, capable of undertaking an extensive range of scientific and technical activities.

Irish Researchers: Research Contract Awards

90 research contracts, valued at €IRL 44 million, have been awarded to Irish researchers under the Community's Third Framework Programme in the field of Information Technology and Tele-

This new 1992 tri-lingual edition, in English, French and German, includes 568 associations and, for each, indicates the official name in each language, the year of its creation, the names of the Chairman and General Secretary, the address, telephone and telefax numbers and a list of national member organisations with their addresses and telephone/telefax numbers. 6,000 associations are therefore covered.

The associations are classified according to their sectors of activity: chambers of commerce, industry, crafts, SMEs, trade, transport, professions, other activities, trade unions, consumer and other organisations. Three indexes are provided: an index of acronyms/abbreviations, an analytical subject index and an index of names.

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Euro Courses: Recent Publications

This series is devoted to the publication of courses and education seminars organised by the Joint Research Centre, Ispra, as part of its education and training programme.

- *Chemical, Microbiological, Health and Comfort Aspects of Indoor Air Quality - State of the Art in Sick Building Syndrome* (EUR 14289 ISBN 0-7923-1703-3)
- *Environmental Impact Assessment* (EUR 14206 ISBN 0-7923-1589-8)
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communications; the Community is funding 50% of the value.

The projects are being carried out under the ESPRIT, RACE and TELEMATICS programmes by consortia involving industry and universities throughout the Community.

The Irish Science and Technology Agency - EOLAS - assisted the researchers in winning participation and has published a set of booklets describing the experiences of some of the participants in the programmes. The Information Technology and Telecommunications industry now accounts for a quarter of Ireland's exports and a third of its manufacturing exports.



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MARCH

The Use of ERS-1 Synthetic Aperture Radar Imagery

IRSA in collaboration with the European Space Agency
 Scientific Coordinator: A Sieber
 15-17 March 1993, Ispra

APRIL

Remote Sensing Applied to Agricultural Statistics

IRSA
 Scientific Coordinators: J H H Delince, F Gallego
 19-23 April 1993, Athens

Safety in Tritium Handling Technology

IST
 Scientific Coordinator: F Mannone
 28-30 April 1993, Ispra

MAY

Quality of Environmental Measurements

EI in collaboration with DG XII-BCR
 Scientific Coordinators: H W Muntau, B Griepink
 3-7 May 1993, Ispra

Decommissioning of Nuclear Installations

DG XII/D
 Scientific Coordinator: R Wampach (DG XII/D2)
 17-19 May 1993, Ispra

JUNE

Information Technology and Disability: the Assistive Technology Approach

DG XIII/D1 in collaboration with ISEI
 Scientific Coordinators: R Puig de la Bellacasa (DG XIII/D1) and G Pirelli (ISEI)
 7-11 June 1993, Ispra

Environmental Informatics Applications

EI in collaboration with the University of Athens
 Scientific Coordinators: F Argentesi, N Avouris
 21-25 June 1993, Athens

SEPTEMBER

Technologies for Environmental Clean-up: Toxic and Hazardous Waste Management

EI in collaboration with LLNL, CA., USA
 Scientific Coordinators: A Avogadro (EI) and R C Ragaini (LLNL)
 13-17 September 1993, Ispra

Chemistry of Aquatic Systems: Local and Global Perspectives

EI in collaboration with the Swiss Federal Institute of Technology ETH, Zurich
 Scientific Coordinators: G Bidoglio (EI), W Stumm (ETH)
 27 September - 1 October 1993, Ispra

OCTOBER

Applying Multicriteria Decision Aid for Environmental Management

ISEI
 Scientific Coordinators: M Paruccini and A Zenie
 Date to be confirmed, 7-8 or 14-15 October 1993, Ispra

Qualification of Inspection Procedures

IAM in collaboration with the European Network for Inspection Qualification
 Scientific Coordinator: S Crutzen
 18-22 October 1993, Ispra

NOVEMBER

Business and the Environment

IPTS
 Scientific Coordinator: M Rogers
 8-12 November 1993, Seville

Advances in the Use of AVHRR Data for Land Applications

IRSA
 Scientific Coordinator: A Belward
 22-26 November 1993, Ispra

Further information available from the scientific coordinators

Joint Research Centre
 I-21020 Ispra
 Tel: 39/332/789819
 Fax: 39/332/789839

JRC institutions:

- CBNM: Central Bureau for Nuclear Measurements (Geel)
- ITE: Institute for Transuranium Elements (Karlsruhe)
- IAM: Institute for Advanced Materials (Petten and Ispra)
- ISEI: Institute for Systems Engineering and Information Technology (Ispra)
- EI: Institute for the Environment (Ispra)
- IRSA: Institute for Remote-Sensing Applications (Ispra)
- IST: Institute for Safety Technology (Ispra)
- IPTS: Institute for Prospective Technological Studies (Ispra)



Waste Management: Third NETT International Conference

Under the auspices of the European Community, the Network for Environmental Technology Transfer (NETT) held its third International Conference in Brussels on 21-22 January 1993, in cooperation with the European Federation of Waste Activities (FEAD).

NETT is an international non-profit making association established by the EC to provide a European information system for environmental matters. Its services include online databases, communication facilities and personalised RTD information.

The theme of the third international conference was "future trends in legislation and technology" and sessions included:

- environmental technology
- will landfill cease to be available?
- is 100% recycling realistic?
- clean incineration and energy recovered while reducing waste and pollution.

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NETT
 Boîte 10
 207 Avenue Louise
 B-1050 Brussels
 Tel: 32/2/353 1908
 Fax: 32/2/646 4266

European Research Conferences 1993

A series of European Research Conferences sponsored by the EC Commission and the European Scientific Foundation will take place during April-May 1993:

Biophysics of cytoskeleton
 3-8 April, Giens, France

Protein folding and stability
 3-8 April, Sitges, Spain

Molecular basis of biological membrane protein structure and function
 17-22 April, Acquafredda di Maratea, Italy

Molecular neurobiology
 23-28 April, Aghia Pelaghia, Crete, Greece

Membrane dynamics in endocytosis
 8-13 May, Il Ciocco (Pisa), Italy

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 Dr Josip Hendekovic
 Office of European Research Conferences
 European Science Foundation
 1 quai Lezay-Marnesia
 F-67080 Strasbourg
 Tel: 33/88/76 71 00
 Fax: 33/88/37 05 32

Tender: ESPRIT

A call for proposals under the ESPRIT Programme is due to be launched in the first quarter of 1993. This will be published in the Official Journal of the European Communities.

In order to inform Community industry and science in advance of the call, an information day was held in Brussels on Friday, 5 February. For those who were unable to attend this function, an information package to help tenderers prepare proposals is available from:

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 Rue de la Loi
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