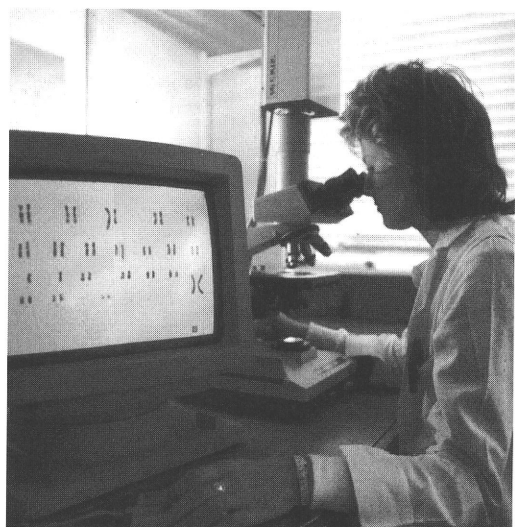


INNOVATION AND TECHNOLOGY TRANSFER



Innovating Research Programme Decisions

The first wave of specific research and technological development programmes within the Third Framework Programme has now been agreed by the Council of Ministers and the European Parliament. This follows a long drawn out debate in the Council, Member States and European Parliament, during which, at one stage, the European Commission withdrew its proposals.

The new programmes were finally adopted more than a year and a half after the approval of the Third Framework Programme itself, which runs from 1990 to 1994. Decisions on the majority of the remaining programme proposals are expected in September or October this year. Further delays are however anticipated for some programmes in the nuclear energy area.

This hold-up in the decision-making machinery will also have repercussions affecting the adoption of the proposed "centralized action" for the dissemination and exploitation of research results (see *Innovation and Technology Transfer*, 1/91). The centralized action, which will continue and further develop the work of the VALUE programme, is not now expected to complete the approval procedure until well into 1992.

Community research policy should be based on a long or medium term strategy arrived at by consensus among Member States and European researchers. That is why the Commission initiated the Framework Programme which is now written into the Single Act. The Framework Programme sets out the priority research and technological development (RTD) areas which are to receive Community support, and defines the overall budget.

In order that similar delays in the approval and implementation of the specific programmes making up the Framework Programme are avoided in the future, the Commission has proposed that the Community's treaties be revised, so that the Framework Programme alone should require approval at the level of the Council of Ministers and the European Parliament. Individual research programmes could then be implemented immediately. The other European institutions - the Council, Parliament and the Economic and Social Committee - would still be able to influence the overall direction of the priority areas in the Framework Programme. Strategic corrections and modifications, and changes to new sectors of research, would remain possible for each four-year period. Flexibility is also possible within certain limits in individual programmes.

This change would have immediate advantages for industry and researchers around Europe.

These proposals are currently being discussed by the Intergovernmental Conference that is considering plans for further European unity. Innovation is needed in the decision-making process for European research just as much as innovation is a prerequisite for the success of European industry.

Dr A.S. Strub
Director for Exploitation of
Research and Technological Development,
Technology Transfer and Innovation

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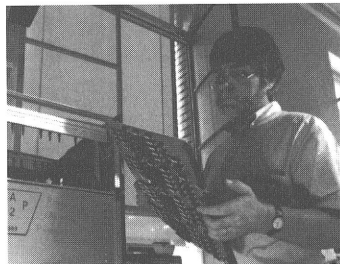
Editor: Commission of the European Communities, DG XIII-C-3 • JMO B4-080 • L-2920 Luxembourg • Tlx: 3423/3446 COMEUR LU • Fax: (+352) 43 01 20 84
Orders, changes of address etc. will only be accepted in writing (please include the address label, if possible); see also page 16

Third Framework Programme for EC research and technological development, 90-94 **New specific programmes announced**

Five new specific programmes have been agreed on 7 June 1991 by the Council of Ministers within the Framework Programme which covers all Community funded research and technological development. The Commission is launching Calls for Proposals in the areas outlined below. The new programmes are:

1. Communications technologies

The programme focuses on eight priority areas including the provision of verification techniques and facilities. It will concentrate on areas of work which require the collaboration of two or more telecommunications sector organisations in the common interests of the Community.



- Area 1: IBC (Integrated Broadband Communications) R&D
- Area 2: Intelligence in networks/flexible communications resource management
- Area 3: Mobile and personal communications
- Area 4: Image and data communications
- Area 5: Integrated services technologies
- Area 6: Information security technologies
- Area 7: Advanced communications experiments
- Area 8: Test infrastructures and interworking (horizontal R&D area supporting the other priority areas).

This specific programme will cover three main types of work, namely: development of implementation strategies for IBC systems, services and applications; advanced communications technologies; and validation of standards and equipment and services to address generic applications.

2. Telematic systems of general interest

This programme covers six areas:

Area 1. Support for the establishment of trans-European networks between administrations. The objective is to carry out studies and research to link national administrations in a single market and for the provision of services necessary for the free movement of persons, goods, services and capital. In the first instance the priority sub-areas will be customs, social security, frontier police, indirect taxation and statistics.

Area 2. Transport services. This area includes sub-areas in road transport which will lead to a global strategy for the use of technology and telematic systems for communications and traffic control. A second sub-area will concentrate on approaches to automating air traffic control and improving safety.

Area 3. Health care. Based on the exploratory work of AIM (Advanced Informatics in Medicine), work will be concentrated on strategies for the use of technologies, telematic systems and services and contribution to the definition of common functional specifications; the development of telematic technology applied to medicine; and verification and integration.

Area 4. Distance learning. Based on the experience gained from the DELTA (Informatics in education) and other programmes, this area will cover the drawing up of implementation strategies, development of technologies and systems and validation and integration of services.

Area 5. Libraries. The objective is to facilitate user access, by the optimum use and development of equipment and telematic systems, to the wealth of knowledge held in libraries, while reducing the handicaps caused by the present disparate infrastructures in the Community.

Area 6. Linguistic research and engineering. The aim is to develop a basic technology which can be incorporated into a large number of computer applications where natural language is an essential ingredient. This requires the creation of linguistic resources (grammars, dictionaries, terminology collections and corpora of text) for the nine official Community languages and the definition of standards for these data.

Area 7. Telematic systems for rural areas.

3. Marine science and technology

A number of activities will build on initiatives undertaken under the MAST pilot programme. These will include the establishment of a European ocean data and information system; the preparation of norms and standards for marine science and technology; a modelling coordination initiative; development of a pilot communication system for exchange of information on research cruises and research facilities; studies on the scientific and design requirements for new large scale facilities; and new approaches to mapping and bathymetric/hydrometric surveying. Three areas are covered in the programme:

- Area 1. Marine science
- Area 2. Coastal engineering
- Area 3. Marine technology



4. Environment

The aim of the programme is to respond rapidly to the scientific challenges which arise from global change and to provide continuity in the scientific support to the environmental policy of the Community. The four areas cover the following aspects:

Area 1. Participation in global change programmes. Research carried out will include natural climatic change, anthropogenic climate change, climate change impacts (with an emphasis on modelling), tropospheric physics and chemistry, biogeochemical cycles, ecosystem dynamics.

Area 2. Technologies and engineering for the environment. Assessment of environmental quality and monitoring, and technologies for protecting and rehabilitating the environment will be covered.

CALLS FOR PROPOSALS

Area 3. Research on economic and social aspects of environmental issues. Work will include assessment of the changing environment and the impact of environmental policies and research.

Area 4. Integrated research projects. Broad problems of transnational interest will be addressed. These could include natural risks, technological risks and the desertification of the Mediterranean region.

5. Life sciences and technologies for developing countries.

The areas covered are:

Area 1. Agriculture. Reduction of food shortages, agricultural production of high economic value.

Area 2. Medicine, health and nutrition. This includes prevention and treatment of the predominant diseases in the developing countries; health care systems appropriate to the rural or urban environment of the developing countries; and nutrition.

New phase of ESPRIT

On 8 July 1991 the Council adopted the Specific Programme of Research and Technology Development in the field of Information Technology. The Commission will issue shortly the first Call for Proposals for this new phase of ESPRIT. The total cost of the projects likely to result from the proposals selected is up to ECU 1.750 million, half of which will be financed by the Community. The call covers the following areas as described in the workprogramme:

- Microelectronics
- Software Engineering and Information Processing Systems
- Advanced Business and Home Systems - Peripherals
- Computer-Integrated Manufacturing and Engineering
- Basic Research

The call also includes the Open Microprocessor systems Initiative (OMI), an activity drawing on all above areas.

The closing date for the receipt of proposals is 14 October 1991

Energy technology and exchange with developing countries

Proposals are sought encouraging trade in, and transfer of, Community energy technology in non-Member developing countries, complementing actions under the THERMIE and EC International Investment Partners programmes. Projects must be presented by an industrial body (excluding universities and research institutes) and shall exclude research cooperation or commercial-level equipment supply. Areas include: rationalisation of energy use; improvement of industrial processes; improvement of electricity supply and systems; decentralized energy production; production and use of solid fossil fuels, distribution and use of natural gas.

Contact: Mr Hubert Nacfaire
Energy Planning Unit
CEC, DG XVII
200 rue de la Loi
B-1049 Brussels
Tel: +32 2 235 1485
Fax: +32 2 235 0150

Calls for Proposals

Programme	Published in	Deadline
Energy technology transfer	OJ C122; 8.5.91	23.8.91
Communications technologies	OJ C154; 12.6.91	16.9.91
Telematic systems	OJ C157; 15.6.91	16.9.91
• Libraries	OJ C184; 16.7.91	2.12.91
SPRINT		
(Innovation and technology transfer)		
• Science parks	expected	?
• Innovation diagnoses	expected	?
VALUE		
(Dissemination and utilisation of results)		
• Exploitation of results through SMEs	OJ C148; 7.6.91	open
• Exploitation of results, general	OJ C116; 30.4.91	31.8.91
• Security of computer networks	OJ C189; 20.7.91	8 weeks
Life sciences and technologies for developing countries		
• Area I	OJ C186; 18.7.91	16.9.91
• Area II		16.12.91
THERMIE		
(Innovative energie technologies)	OJ C.180; 11.7.91	31.10.91
Environment	OJ C.184; 16.7.91	various
Marine science and technology		
• North Atlantic project (expressions of interest)	OJ C.174; 5.7.91	30.9.91
• Other projects	OJ C.169; 28.6.91	15.11.91
ESPRIT	expected	14.10.91
	see OJ C.162; 21.6.91	
Industrial and materials technology	expected	?
	see OJ C.178; 9.7.91	

Opportunities under VALUE for SMEs to promote results of Community RTD projects

Within the framework of the VALUE programme for the dissemination and utilisation of scientific results, the Commission invites proposals, involving small and medium sized enterprises (SMEs), and aiming at the exploitation of the results of projects from Community RTD programmes. This announcement is addressed only to research contractors who are or have been participants in Community projects and their actual or potential licensees and/or partners. SMEs are defined as firms employing up to 500 people in total and based within the Community. Proposals should aim at increasing SMEs' access to new technologies so as to improve the competitive position.

Implementation of the supported activities will be based on:

- Exploratory awards (maximum 5,000 ECU) intended to cover travel and subsistence costs incurred by SMEs, by university departments or other non-profit organizations in meetings to establish whether the technology available will in fact be appropriate to the needs of the acquiring organization.

- Technology exchange awards (maximum 100,000 ECU) intended to cover up to 50% of the costs associated with establishing the feasibility of the technology transfer.

Proposals can be submitted at any time. Proposals for Exploratory Awards will be decided on continuously. For Technology Transfer Awards, a first selection will be made in October 1991 for proposals received before 15 September 1991. An information file and application forms can be obtained from:

CEC, DG XIII C-2
L-2920 Luxembourg
Tel: +352 4301 3610 or +352 4301 3453
Fax: +352 4301 412

Relay centres to promote EC research results

A working group has been set up under the VALUE Advisory Committee in order to define the principles and procedures for establishing a network of relay centres in Community Member States. Feasibility studies to examine the possibility of establishing pilot relay centres in Greece and Portugal are already under way as part of the VALUE programme. The centres are intended to publicise Community research programmes and to promote the dissemination and exploitation of programme results.

Support for a network of relay stations is one of the main features of the "centralized action" for dissemination and exploitation of research results, proposed by the Commission as a follow-up to the VALUE programme (see *Innovation and Technology Transfer*, 1/91, page 2). The intention is that the new working group will prepare the ground until such time as a centralized action advisory committee is in place.

Under the centralized action, it is envisaged that the relays will have special access to Community information, which they will tailor to suit the needs of the various potential users in the Member State or region covered by the centre. The provision of advice and assistance to small businesses, particularly those located in the more peripheral and remote areas of the Community, will be high on their agenda.

Big response to VALUE dissemination call

More than 170 proposals have been received by the Commission following the publication of a call for proposals dealing with the dissemination of the results of Community research and technological development activities. The call, which had 31 May as the deadline for submissions, falls under the VALUE programme which promotes the dissemination and utilisation of the results of Community-funded research programmes.

Altogether the proposals represent a total sum of more than 15 million ECU of financial support requested from the Commission.

Many of the proposals deal with the establishment of new information services or the upgrading of existing ones (about 40% of the total number of proposals) and with the publication of books and reports on Community research (25%). Other topics represented among the proposals include targeted dissemination activities (directed at specific groups of users of information on Community research programmes and their results), conferences and information days, audiovisual techniques for disseminating information, and support for science and technology communicators. There is however a considerable amount of overlap, with many proposals fitting into two or more of these different categories.

The call attracted strong interest in the United Kingdom (28% of proposals originated from the United Kingdom), as well as in France (13%), Belgium (12%), Spain (12%) and Greece (10%).

The Commission is currently evaluating the proposals in order to select those to receive support under the VALUE programme.

The European Commission provides a series of access points and offices for European citizens to obtain both general and specific information about EC activities including scientific and technical information. This is a brief guide.

European Commission Offices

These are official offices of representatives of the Commission and were formerly known as Press and Information Offices. Offices exist in all capital cities of Member States, plus some regional cities as well. Addresses and telephone numbers are available by telephone from Max, the conversing robot listed below, or by contacting the Commission.

Directorate DAD
CEC, DG IX
200 rue de la Loi
B-1049 Brussels
Tel: +32 2 235 1111

European Information Centres (Euroguichets)

There are now more than 200 European Information Centres in the European Community. They are particularly well suited to tackle questions from small and medium sized enterprises (SMEs) on matters of trading in the EC market. In particular, EICs provide general information on EC policies, assistance in preparation of documents relating to Community matters, consultancy and assistance with business strategies and cooperation through the Business Cooperation Network, BC-Net, which aims at identifying potential European partners.

Contact: Euro Info Centre Project
DG XXIII
CEC
80 rue d'Arlon
B-1040 Brussels
Tel: +32 2 235 9450
Fax: +32 2 235 9819

European Documentation Centres

These are mainly universities and research centres which have special depository libraries for official European Community publications. Documents are available in the language of the country and provide a valuable resource for scholarship and research in European affairs.

Contact: University and Higher Education Unit
DG X, CEC
200 rue de la Loi
B-1049 Brussels
Tel: +32 2 235 2585
Fax: +32 2 236 0752

Office for Official Publications of the European Communities

The official publications of the European Community can be obtained from the Office for Official Publications of the European Communities in Luxembourg or through its sales agents. The network of sales agents covers all the Member States as well as a large number of other countries. Publications include the Official Journal, published daily in all nine official languages of the European Community.

A new element of the sales network consists in the denomination of Euro bookshops, which are commercial bookshops, usually in city centres, which reserve window and presentation space for Community publications and offer prompt ordering and delivery. These shops receive official support from the Office.

Contact: OOPEC
2 rue Mercier
L-2985 Luxembourg
Tel: +352 499 28-1
Fax: +352 48 85 73

Info Point Europe



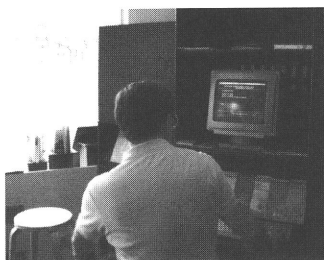
This is a new, still experimental, scheme established to provide wider access to European Community information and is based on close cooperation between the information services of the European institutions (Commission, Parliament, Council) and the Office for Official Publications of the EC, sales and documentation services.

Info Points will offer a wide range of leaflets, brochures and documents from the Institutions and provide such services as consultation of online databases, video cassettes and documentation. Info Points are usually installed either in the premises or in the immediate surroundings of Euro bookshops.

The first Info Points were opened this year in Luxembourg and Brussels. Other European cities will follow.

Consumer Information

European consumer agencies are being set up in a number of cities, often near internal EC borders. Their aim is to inform consumers of European legislation designed to protect them, of comparative tests and of national laws in force on either side of the border. The European Commission has helped set up such an agency in Lille in France and will back similar initiatives in Luxembourg and at the German Dutch border.



Eurobases

This is the database host of the European Community which offers services in a commercial way. Databases include Celex, on EC law, TED on Calls for Tender, SCAD on EC publications.

Contact: Eurobases
200 rue de la Loi
B-1049 Brussels
Tel: +32 2 235 0001
Fax: +322 236 0624

ECHO, European Commission Host Organization

ECHO is an experimental and pioneering host of the Directorate General Telecommunications, Information Industries and Innovation (DG XIII). Besides TED on tenders, it offers IM-guide, an inventory of European databases and the CORDIS research and development information service.

CORDIS is an easy-to-use, menu driven, database service providing a focal point for all scientific and technical information about EC programmes, projects, results and prototypes and applications from the research programmes (see page 11).

Contact: ECHO
PO Box 2373
L-1023 Luxembourg
Tel: +352 488041
Fax: +352 488040

Max the conversing robot

Max is a conversing robot on the ECHO system and is able to understand key words in German, English and French. By indicating a number, Max will read out information on EC programmes, the addresses of the Commission offices in Member States and telephone numbers, plus a wide variety of other information such as the ecu rates against other currencies. Freephone access will soon be available in most EC Member States, or he can be called directly in Luxembourg. For those who wish to speak to a human voice, the ECHO help desk is also available for information about databases, CORDIS and the libraries programme.

	ECHO help desk	----- M A X -----	
		German	English
Belgium	118456	118434	118435
Denmark	80010756	80010734	80010735
France	05906956	05906934	05906935
Germany	0130823456	0130823334	0130823335
Luxembourg	08003456	08003334	08003335
Netherlands	060223156	060223134	060223135
UK	0800899256	0800899234	0800899235

All other countries: call the ECHO help desk in Luxembourg: +352

CORINE: Environmental information seminar

Pollution and environmental problems do not recognize political frontiers but information and statistics are often collected on a national basis. How do European citizens get a complete picture of what is happening to the environment in the EC and beyond?

A seminar was held in Luxembourg on 28-30 May 1991 to analyze the results of the CORINE programme which has as an objective the setting up and functioning of a prototype information system and observation network for the European Environment Agency.

The main initial problem for the EEA may be summed up as "How can data be collected from numerous and diverse organizations, originally set up with different goals and objectives, often for regional or local purposes, be assembled and converted into information relevant to Community environment policy?"

The seminar covered:

The results so far of the CORINE programme and the use that is made of the information system for Community policy

A study of the information needs at different levels, regional, national, international, the responses given to these needs and the problems associated with the transfer of information and data,

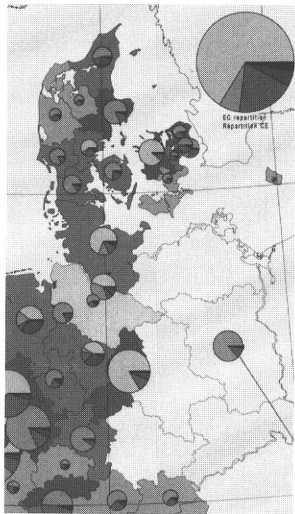
The requirements for the efficient running of the EEA and its network on the basis of this input and the final report of the CORINE programme 1985-90.

A series of similar technical events will take place inside and outside the EC to continue this process. A seminar is planned in cooperation with the Regional Centre for the Environment to be held in Budapest for the countries of central and eastern Europe.

Contact: DG Environment, Civil Protection and Nuclear Safety
200 rue de la Loi
B-1049 Brussels
Tel: +32 2 235 1111

EC-EFTA cooperation on economics and metrology

The European Community has approved two research agreements with EFTA, the European Free Trade Association: SPES and BCR. SPES is the European plan for the stimulation of economics and includes activities for the cooperation and exchange of top-ranking economists. Agreements have been concluded with Austria, Finland, Norway, Sweden and Switzerland. The BCR programme in applied metrology and chemical analysis is aimed at improving the reliability of chemical analysis and physical measurement so as to achieve concordant results in all Member States. The countries associated with this programme are Finland, Sweden and Switzerland.



COST research to be extended to Iceland, eastern Europe

The Committee of COST, Cooperation on Scientific and Technical Research, at its meeting on 27 February agreed to allow Iceland to be included among participating countries. The decision will be ratified at the Ministerial Meeting in November and Iceland will attend COST meetings until then as an observer. Poland and Hungary have submitted requests for membership; Czechoslovakia is also expected to submit a request. At present central and eastern European countries participate in research activities solely at the level of research institutes or centres.

Sweden and EC work together on R & D projects

Increasing cooperation in science and technology between Sweden and the European Communities was highlighted at a meeting in Brussels on 6 March 1991. It was the fifth meeting of the Joint Research Committee Sweden/European Communities and delegates confirmed that scientific and technical cooperation was likely to be even more extensive in the future. It would, though, be looked at in the context of an overall treaty between the European Community and the EFTA countries.

Contact: Mr. S Beston, DG XII,
CEC, 200 rue de la Loi,
B-1049, Brussels.
Tel: +32 2 236 28 46.

East-West concern about hydrogen in nuclear accidents

Concern about the dangers caused by the presence of hydrogen in nuclear accidents brought together East and West at an international meeting in Brussels. More than 80 experts from Europe, the USA, Canada, Japan and the USSR attended the meeting which was jointly organised by the European Commission, the International Atomic Energy Agency and the Kurchatov Atomic Energy Institute in Moscow.

The experts considered the Three Mile Island accident - where hydrogen generated by metal-water reaction subsequently ignited, causing considerable further damage - and Chernobyl, where the same phenomenon may have occurred. In cases where the hydrogen ignites and the container fails, it was alleged, extensive radioactivity can be released into the environment.

Discussion centred on how and why the hydrogen was produced, how it behaved, could be detected, and the effects mitigated. The areas for future research were outlined and it was agreed that major benefits could be gained by combining the fundamental work undertaken in the USSR with the more applications oriented approach of Western countries.

Contact: Mr. E Della Loggia,
DG XII, CEC,
200 rue de la Loi,
B-1049, Brussels.
Tel: +32 2 235 78 86.

SPECIFIC R & D PROGRAMMES UNDER THE
COMMUNITY 2nd FRAMEWORK PROGRAMME
(1987-1991)
IN WHICH THE EFTA COUNTRIES
DO OR MIGHT PARTICIPATE
(participation modes)

Framework Agreements between the EC and :

	AUSTRIA	FINLAND	ICELAND	NORWAY	SWEDEN	SWITZERLAND
	came into force 30.7.87	came into force 17.7.87	came into force 6.6.90	came into force 17.7.87	came into force 27.8.87	came into force 17.7.87
Medical and Health Research (A) 1987-1991 (L334/87)	(7) 11.3.91 (L74/90) (A)	(7) 22.8.90 (L74/90) (A)		(7) 9.3.90 (L74/90) (A)	(7) 27.4.90 (L74/90) (A)	(7) 31.7.90 (L74/90) (A)
Human Genome Analysis (A,B) 1990-1992 (L196/90)					(3) (A)	
Radiation Protection 1990-1991 # (under EURATOM Treaty) (L200/89)					(7) 25.9.90 (L228/90) (A)	
STEP 1989-1993 (L359/89) (A,B) (Environmental protection)	(3) (A)	(3) (A)	(3) (A)	(3) (A)	(3) (A)	
EPOCH 1989-1993 (L359/89) (A,B) (Climatology and natural hazards)			(3) (A)		(3) (A)	
ESPRIT II 1988-1992 (B,C) (Information technologies) (L118/88)	(B) y = 17	(B) y = 15		(B) y = 17	(B) y = 29	(B) y = 26
RACE 1987-1992 (L16/88) (B) (Telecommunications)	(B) y = 2	(B) y = 14		(B) y = 12	(B) y = 27	(B) y = 11
BRITE/EURAM 1989-1992 (L98/89) (B) (Industrial techn./advanced mater.)	(B) y = 6	(B) y = 10	(B) y = 1	(B) y = 5	(B) y = 13	(B) y = 13
Raw Materials(FOREST) (L159/86)(A,B) 1990-1992 (Forestry)		(3) (A)			(3) (A)	
Recycling Waste 1990-1992 (A,B) (L359/89)					(3) (A)	
BCR 1988-1992 (L206/88) (A) (Applied metrology)		(7) 10.4.91 (L61/91) (A)			(7) 8.5.91 (L61/91) (A)	(7) 8.5.91 (L61/91) (A)
BRIDGE (1990-1993) (L360/89) (A,B,C) (Biotechnology)	(2) c.a.p.= 3 (C)	(2) c.a.p.= 3 (C)		(2) c.a.p.= 4 (C)	(2) c.a.p.= 3 (C)	(2) c.a.p.= 4 (C)
FLAIR 1989-1993 (L200/89) (B,C) (Food technologies)		(2) c.a.p.= 3 (C)		(2) c.a.p.= 6 (C)	(2) c.a.p.= 8 (C)	(2) c.a.p.= 7 (C)
Radioactive Waste Management(L395/89 (1990-1994)(under EURATOM Treaty) #		(7) 1.3.89 (D)			(i) (iii) (D)	(ii) (D)
Controlled Thermonucl.Fusion(L222/88 (1988-1992)(under EURATOM Treaty) #					(7) 10.5.76 (L116/82) (A)	(7) 30.5.79 (L116/82) (A)
JOULE 1989-1992 (L98/89) (B) (Non-nuclear energy)		(B) y = 4		(B) y = 4	(B) y = 13	(B) y = 4
MAST 1989-1992 (L200/89) (A,B) (Marine Science)		(B) y = 1		(B) y = 3		
SCIENCE 1988-1992 (L206/88) (A) (Scientific coop. and mobility)	(7) 27.2.90 (L50/90) (A)	(7) 22.8.90 (L50/90) (A)	(5) 4.4.91 (L84/91) (A)	(7) 9.3.90 (L50/90) (A)	(7) 30.3.90 (L50/90) (A)	(7) 27.2.90 (L50/90) (A)
SPES 1989-1992 (L44/89) (A) (Economic science)	(7) 11.3.91 (L61/91) (A)	(7) 10.4.91 (L61/91) (A)		(5) 7.3.91 (L61/91) (A)	(5) 7.3.91 (L61/91) (A)	(5) 7.3.91 (L61/91) (A)

KEYS

Modes of non-EC countries participation in the Community Programmes :

- A (association with the programme)
- B (participation project by project)
- C (participation in concerted action projects)
- D (exchange of information)
- # (participation is not mentioned in the programme's Decision)

Cooperation under bilateral agreements (A:association / D:exch.inf) Cooperation under multilateral agreements (C : concerted actions)

- (1) Interest expressed for participation in this programme
- (2) Draft agreement under negotiation
- (3) Draft agreement under Community internal procedures
- (4) Date on which the Council of Ministers adopted the Decision for the conclusion of the Agreement
- (4bis) Date on which the Commission approved the Agreement on behalf of EURATOM
- (5) Date on which the Agreement was published in the Official Journal of the European Communities
- (6) Date on which the bilateral Agreement was signed
- (7) Date on which the bilateral Agreement came into force
- (6) Date on which this country signed the multilateral Agreement
- (7) Date on which this Agreement came into force for this country
- (c.a.p.) Number of concerted action projects in which this country participates or so wishes to do

Cooperation under specific contracts (B : project by project)

- (y) Number of projects in which organisations of this country participate
- (i) Cooperation Agreement between Euratom and the Swedish Nuclear Fuel and Waste Management Company (SKB) : (7) 15.2.85
- (ii) Coop. Agreement between Euratom and the Swiss National Cooperative for the Storage of Radioactive Waste (NAGRA) : (7) 17.10.90
- (iii) Agreement in the form of an exchange of letters between Euratom and the Swedish Nuclear Power Inspectorate (SKI) : (3)
- (L) Number of the EC Official Journal where the Agreement or the Programme's Decision were published

The SPRINT Management Committee gave its green light to a number of new activities, and the continuation of some older ones, at its 20 June meeting. Here is a summary of projects which received the go-ahead, and a reminder of some other important ongoing activities of the SPRINT programme.

Helping science park developers

A new call for proposals in the SPRINT science park consultancy scheme will be launched in the next few weeks, following the delivery of a favourable opinion on the proposed call by the SPRINT Committee.

It follows an earlier call which led to financial support being offered to some 30 promoters of science park developments, in order to help them obtain advice from a panel of expert consultants on matters such as the market orientation, design and viability of future developments. The call involved the setting up of a list of around 100 consultants with expertise in various aspects of the setting up and running of science parks, who would be willing to serve on the panel (see *Innovation and Technology Transfer*, 1/91, page 4).

Unlike the previous call, which was aimed at science park developers and at consultants, the new call will be directed at developers only. It is being launched in response to many requests received by SPRINT for a continuation of this activity of subsidising the provision of advice through panels of experts. The deadline for submissions under the call will be 31 October 1991.

The growth of science parks has been one of the key factors in changing the European economic landscape in the past decade. Regional and local authorities, acutely aware of the increasing importance of high-tech companies, of the surge towards innovation, and of the need to transfer technology between universities and industry, have set up science or technology parks, innovation centres or similar initiatives in their regions. There are now more than 100 throughout the Community and many new ones are currently being developed.

The SPRINT scheme offers support to promoters - particularly those in less advanced areas or where there is little knowledge of science park creation - giving them access to information on previous European experiences and the most advanced ideas from established independent experts.

Contact: Mr R. Miège
Commission of the European Communities
DG XIII/C-4 (SPRINT Programme)
L-2920 Luxembourg.
Fax: (352) 4301-4544

EUROTECH support continues

The SPRINT Management Committee gave a favourable opinion on the continuation of support for the EUROTECH project for a second year. EUROTECH is a network of twelve major R&D organisations including ANVAR (France), British Technology Group, Fraunhofer-Gesellschaft (Germany) and CDTI (Spain), set up with the object of concluding transnational licensing deals involving the results of public or semi-public research. One of the main targets during the second year will be to

achieve at least 24 such transnational licensing agreements. EUROTECH also serves as a network for identifying and exchanging best practice in transnational licensing.

Contact: Mr D. Janssens
Commission of the European Communities
DG XIII/C-4 (SPRINT Programme)
L-2920 Luxembourg.
Fax: (352) 4301-4544

Innovation monitoring scheme under way

The first surveys under the SPRINT European innovation monitoring scheme are to be launched soon. As a result of a call for tenders, 53 organisations and individuals with expertise in innovation research have already been selected in order to constitute a pool from which experts will be drawn in order to carry out work under the monitoring scheme (see *Innovation and Technology Transfer*, 1/91, page 4).

Possible priority areas for study include the legal and fiscal aspects of inward and outward licensing, and the compilation of a directory of engineering consultancies in Europe.

The scheme is intended to lead to a better understanding of current innovation practice, and of the persons and organisations involved in it, through extensive Europe-wide surveys. It will also provide a forum for consultation and exchange of experiences, in particular with a view to improving the effectiveness of Community policies on innovation.

Contact: Mr R. Miège
Commission of the European Communities
DG XIII/C-4 (SPRINT Programme)
L-2920 Luxembourg.
Fax: (352) 4301-4544

Innovation diagnoses for small firms

A new, experimental, scheme to provide innovation diagnoses for small and medium-sized enterprises (SMEs) received an in principle favourable opinion of the SPRINT Advisory Committee. The diagnoses will involve short-term consultancy assignments of 3-4 days, meant to provide a company's managers with a rapid, overall analysis of its situation, needs and possibilities as regards innovation and technology management. About 800 such diagnoses, spread over firms in all Community countries, are planned for in the scheme.

The first phase will be to select national organisations to operate the scheme in their countries, through a call for proposals which is expected to be published later this year. The national organisations will then themselves select consultants to perform the diagnoses.

The scheme is a new departure for SPRINT which up to now has concentrated on the supply of services through intermediaries rather than reacting to a specific demand for services from individual companies. The diagnoses will also provide a valuable body of information on the implementation of innovation and uptake of new technologies among SMEs across Europe, for analysis within the European innovation monitoring system.

Contact: Mr R. Miège
Commission of the European Communities
DG XIII/C-4 (SPRINT Programme)
L-2920 Luxembourg.
Fax: (352) 4301-4544

Technology performance financing

Some firms which wish to acquire profitable new technologies sometimes find difficulty in arranging the finance to implement such changes. SMEs are often slower than others to initiate such moves.

Technology performance financing is a SPRINT initiative that encourages such innovation through a tripartite collaboration between the supplier of the new technology, the innovating company and a source of finance. The perceived risks in acquiring the new technology can be overcome by making payment at least partially contingent on the technology producing the benefits claimed for it.

The supplier installs the new technology and then receives payment over a two or three year period, according to how the technology has performed against predefined targets. A financial institution provides advance funding to the supplier firm for bridging the gap between the installation of the equipment and the reception of payments.

SPRINT is seeking the active participation of a limited number of major European financial institutions to provide short to medium-term credit. Support for the technical appraisal of projects and the administration of the scheme as well as a safety net against certain types of loss form part of the project.

Contact: Mr R. Miège or Mr D. Janssens
Commission of the European Communities
DG XIII/C-4 (SPRINT Programme)
L-2920 Luxembourg.
Fax: (352) 4301-4544

Transnational investment fora

SPRINT has initiated measures to aid innovative firms find the right capital to lead to successful company growth. Sources of investment capital, although often abundant in Europe, nevertheless find it difficult to identify good quality, well presented and mature projects. The problems become greater when transnational projects are involved.

A series of transnational investment fora are therefore being organised by SPRINT to bring together European investors and innovative firms. Implemented by organisations such as the European Venture Capital Association (EVCA) and national innovation agencies such as ANVAR (France) and ENEA (Italy), these fora will allow innovative high growth SMEs from all over Europe to meet venture capitalists, growth financiers and other investors to create European ventures.

Over the next three years, 12 transnational investment fora will be organised in various cities, such as Biella (Italy) in November 1991, Madrid, Edinburgh, Munich, Copenhagen and Jena. Among these fora, a special series of four will have a clear focus on the chemical industry to help diversify the sector into high growth areas such as fine chemicals, biochemistry and advanced materials.

Contact: Mr D. Janssens
Commission of the European Communities
DG XIII/C-4 (SPRINT Programme)
L-2920 Luxembourg.
Fax: (352) 4301-4544

Technology transfer days

The "technology transfer days" scheme, intended to help firms in a particular region to establish contact with technology

brokers from other Community countries, is now under way, with the first of these "days" being held in Ghent (Belgium) on 4-5 June. Sixty-five firms, mostly from the north of Belgium, had the opportunity to meet 25 technology brokers from Denmark, France, Germany, Ireland the Netherlands and the United Kingdom.

Over a two-year period, 24 SPRINT technology transfer days are to be held with a wide geographical spread across the Community. Each event is being coordinated by an experienced technology transfer organisation, such as TII (the European Association for the Transfer of Technologies, Innovation and Industrial Information), ANVAR and ARD (Agence Régionale de Développement Nord-Pas de Calais) from France, CEA from Spain, and SOGES from Italy.

Contact: Mr D. Janssens or Mr J.R. Tiscar
Commission of the European Communities
DG XIII/C-4 (SPRINT Programme)
L-2920 Luxembourg.
Fax: (352) 4301-4544

Encouraging cooperation among research and technology organisations (RTO networks)

Substantial interest has been shown in a SPRINT call for proposals covering transnational cooperation between research and technology organisations in the areas of quality management methods and advanced manufacturing (deadline: 19 July).

The call is aimed at organisations such as sectoral research centres, contract research organisations, engineering consultancies, and public and private organisations concerned with the dissemination of technological information to groups of firms.

SPRINT has been supporting networks of these organisations since 1987, since they can be an effective route for making firms aware of new technological opportunities and for providing advice. An important aim of this SPRINT activity is to promote the diffusion of innovation and new technologies into less favoured regions of the Community, and among SMEs in the more traditional industrial sectors.

A booklet giving details of 34 networks of research and technological organisations at present being supported by SPRINT is available free-of-charge from the contact address given below. These existing networks involve 149 organisations and cover a wide range of industrial and technology sectors, for example, shoe manufacture, welding, the building industry, and composite materials.

Contact: Mr J.R. Tiscar
Commission of the European Communities
DG XIII/C-4 (SPRINT Programme)
L-2920 Luxembourg.
Fax: (352) 4301-4544

Major SPRINT conference planned for January 1992

Innovation and technology transfer in the 1990s will be the theme of a conference to be organised by SPRINT in January next year. For more details, see the Forthcoming Conferences section on page 15.

Action on high tech skills shortage

IRDAC, the Industrial R&D Advisory Committee of the European Commission, in two complementary reports, says that there is evidence that higher investment in research may not produce the expected economic benefits unless the lack of qualified people to develop and exploit advanced and innovative processes is urgently resolved.

The two papers deal with *Skills shortages in Europe* and *School and industry*. In the latter, IRDAC recommends the raising of technological literacy through clearer focus on teacher awareness and training, better interface between schools and industry and promoting contact with young people. On the skills shortage, IRDAC calls for an increase of continuing education of the workforce (this requires a change in attitudes of all actors with major investments and efforts required). Specific measures are needed to increase supply of adequately trained young people, implying increased educational attainment. Other recommendations include improving educational productivity, looking at issues in a European context and improving the understanding of our skills requirements.

Contact: IRDAC
CEC
200 rue de la Loi
B-1049 Brussels
Tel: +32 2 235 3966

BRITE/EURAM Aeronautics programme covers key technologies

The results in the Aeronautics section of the European Community's BRITE/EURAM programme were reviewed at a special conference on 16-17 April 1991. Work in this part of the programme covers the key technologies for the future of Europe's aeronautics industry and the Brussels meeting was seen as a major event.

Speakers included M. Curien, Minister of Research in France, and highly placed executives from leading European companies.

Contact: Michel André
DG XII, CEC
200 rue de la Loi
B-1049, Brussels
Tel: +32 2 236 07 81

Biotechnology electronically and on paper

EBIS - European Biotechnology Information Service - is a newsletter established as a communication channel between key researchers and policy makers in Member States. An electronic bulletin board is accessible on the Telecom Gold Service: Microbial Strain Data Network, MSDN. The MSDN service offers a number of bulletin boards, such as the British Bio-industry Association Biotechnology Information Service, electronic mail and gateways to other databases.

Contact: MSDN or Dr Maurice Lex
Biotechnology Centre
Cambridge University
307 Huntingdon Road
UK-Cambridge CB3 0JX
CUBE-EBIS
SDME 2/65
CEC
200 rue de la Loi
B-1049 Brussels
Tel: +32 2 235 6736
Fax: +32 2 235 5365

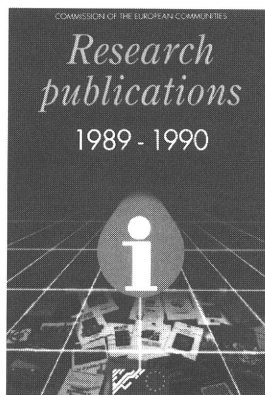
New society formed at biomedical congress

A new organisation designed to bring together engineers and the medical profession was formed at the first European Congress on Biomedical Engineering held in Nice on 17-20 February 1991. The aim of the European Society of Engineers and Medicine is to promote interchange and clinical information networks, and to improve the training of all those working in the field.

The new society will also help to promote the Community's own relevant programmes and produce a journal and newsletter giving updates on the latest medical engineering technology. Among the topics discussed in Nice was equipment for the handicapped - one of the areas in which the link between engineers and medicine is an important one. The second European Congress, which is being organised by the newly formed body, will be held in Stuttgart in 1993.

Contact: V Thevenin,
DG XII, CEC,
200 rue de la Loi,
B-1049, Brussels.
Tel: +32 2 235 00 24.

Catalogue of Community research reports



A new catalogue of reports resulting from the research and technological development programmes of the European Community will be published shortly. *Research publications 1989-1990* includes scientific and technical studies, monographs, proceedings of conferences, workshops and contractors' meetings organised by the Commission, and various reports resulting from research activities.

The catalogue provides the title in the original language, followed where appropriate by an English translation, the names of authors or editors, the EUR catalogue number, year of publication and price. Where several language versions are published, each is treated as a separate entry.

Subject headings include: industry and technology, energy, physical and exact sciences, agricultural and marine resources and products, measurements and standards, environmental protection, social and economic concerns and RTD horizontal activities.

Please send me copies of
Research publications 1989-1990.

Dissemination of Scientific and Technical Knowledge Unit
CEC, DG XIII-C-3
L-2920 Luxembourg

Name

Organisation

Address

CORDIS users top 1,200

More than 1,200 users have signed up for access to CORDIS, the new information service covering Community research and technological development (RTD) work.

CORDIS offers a comprehensive set of electronically accessed databases providing information on Community RTD programmes and projects, from their preparatory stages to their execution and finally the publication of their results (see *Innovation and Technology Transfer*, 1/91, page 7).

From its launch in December 1990, CORDIS has attracted a steady month-by-month increase in the numbers of users registering for access to it, from 100 users in December to a total of 1,200 by the end of May. Statistics show that the use being made of the CORDIS databases is increasing at the same rate. Users come from all Community Member States, and from several EFTA countries. Access to CORDIS is through ECHO - the European Community host organisation based in Luxembourg.

The databases which currently make up the CORDIS information service are:

RTD-Programmes, providing information on all Community research and related programmes;

RTD-Projects, giving details of individual contracts and studies, and the organisations involved, within the various programmes;

RTD-Publications (also known as the EABS database), which provides bibliographic information and abstracts on publications, reports and scientific papers arising from Community research activities;

RTD-Results (also known as the PROTEAS database), providing information on specific results and prototypes. It also includes information from European R&D projects outside the European Community programmes, supplied to the database on a voluntary basis.



CORDIS was present at the Hanover '91 Fair with a brand new stand in the Forschung-Halle. During the Fair, a second release of CORDIS was launched. The CORDIS team (from left to right, Mr Vassilios Laopodis from the CEC, DG XIII-C, Mrs Charlotte Harsforth and Mr Roy McMahon from the CORDIS operations) made a large number of online demonstrations. CORDIS was also present at the VALUE awareness seminars, organised in the Hague, Edinburgh and Athens.



RTD-ComDocuments: "Com Documents" are Commission communications to the Council of Ministers and the European Parliament. This database gives details of Com Documents on or related to RTD activities, and is a valuable source of information on programmes still in their preparatory stages.

RTD-Acronyms - a dictionary of acronyms and abbreviations to do with Community research programmes and projects.

RTD-News, contains announcements, such as Calls for Proposals and Calls for Tenders, and other news items from Commission departments involved in RTD activities.

By the end of the year it is intended to enhance the RTD-News service and to add two further databases to CORDIS:

RTD-Infopoints, which will give details of organisations in Member States offering assistance in connection with Community RTD activities, for example, to potential participants in Community programmes.

RTD-Partners, for identifying suitable partners for the submission of proposals for projects to be supported under Community funds, and for the exploitation of RTD results.

This will complete the initial, experimental, phase of CORDIS. New directions to be explored in the next phase will include the addition of further databases and services, new means of making CORDIS available to users (such as CD-ROM, and diskettes for subsets of CORDIS data), the introduction of intelligent interfaces for some categories of users, and connections to national and international network services.

CORDIS actively seeks feedback from users. To this end, and to promote CORDIS at the national and regional level, a number of organisations in the Member States have been nominated as "CORDIS Correspondents". In addition, a user survey is planned for autumn 1991.

To discuss how to contribute RTD results to CORDIS, and to obtain registration forms in order to apply for CORDIS access, please contact:

*ECHO-CORDIS Customer Service, B.P. 2373, L-1023 Luxembourg,
Tel.: (352) 48 80 41, Fax: (352) 48 80 40*

Name

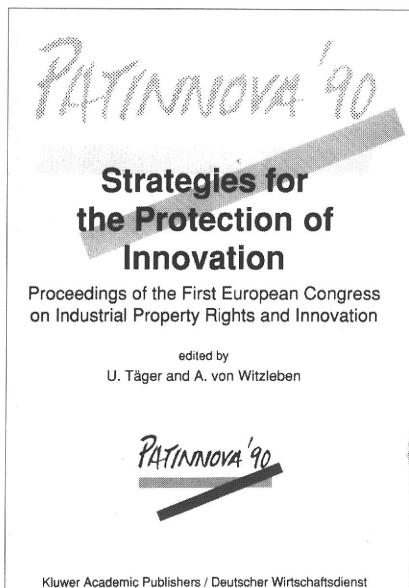
Organisation

Address

If you are already an ECHO user, please indicate your customer number.

PUBLICATIONS

A selection of recent publications issued by the Unit for the Dissemination of Scientific and Technical Knowledge of DG XIII



PATTINOVA '90

Strategies for the Protection of Innovation • Proceedings of the First European Congress on Industrial Property Rights and Innovation

Edited by U. Täger, A. von Witzleben
EUR 13217 EN xiv + 337 pp
Dfl 125 ISBN 0-7923-1062-4 (Kluwer)
ISBN 3-87156-129-0
(Deutscher Wirtschaftsdienst)

English

The thirty contributions, written by leading experts in the field of patents and innovation, address the following issues: protection and filing policies, the role of patent attorneys and other patent consultants in filing and protection strategies, patent-assisted marketing of inventions from research institutions, patent disputes and litigations, etc. The volume is based on a conference organised by DG XIII in cooperation with the IFO-Institute for Economic Research, Munich.

Copublished for DG XIII by:
Kluwer Academic Publishers,
P.O. Box 322,
3300 AH Dordrecht,
The Netherlands
(ISBN 0-7923-1062-4)

and

Deutscher Wirtschaftsdienst,
Marienburger Strasse 22,
D-5000 Köln 51,
Germany
(ISBN 3-87156-129-0)

TÉLÉCOMMUNICATIONS EN LIBERTÉ SURVEILLÉE

M. Carpentier, S. Farnoux-Toporkoff, C. Garric
xiv + 174 p.
FF 175 ISBN 2-85206-670-X
Français

Les télécommunications subissent de plein fouet les bouleversements apportés à la fois par les progrès technologiques et la mondialisation des activités économiques. Elles sont capables désormais d'offrir une multitude de nouveaux services multi-média. Elles voient leurs monopoles être écornés ou disparaître, leurs structures et leurs statuts profondément modifiés. Ces transformations affectent également les entreprises d'équipement et de services au niveau mondial.

Aux Etats-Unis, les télécommunications, organisées dès 1934 par le "Communication Act" connaissent, depuis la fin des années 1960, des changements de plus en plus profonds. Leur restructuration n'est pas encore terminée

Comment les Etats-Unis ont-ils vécu cette mutation? Ont-ils purement laissé faire les forces du marché ou sont-ils intervenus puissamment par le "Department of Justice" et la "FCC"?

Que signifie le démantèlement de l'AT&T, la plus grande entreprise privée du monde par son chiffre d'affaires, ses effectifs et sa puissance d'innovation?

Comment ce séisme américain a-t-il touché l'Europe?

La Communauté européenne, à l'initiative de la Commission, a su, en six

années seulement, réaliser des restructurations et ajustements considérables en réponse à cette situation. Quelles suites ont donné les Etats membres de la Communauté? Comment peut-on voir l'avenir?

Dans cet ouvrage, l'un des principaux acteurs, Michel Carpentier, Directeur général des Télécommunications, industries de l'information et innovation (DG XIII) à la Commission, Christian Garric, Conseiller à la Direction Politique des télécommunications à la DG XIII, et une économiste spécialiste du secteur, Sylviane Farnoux-Toporkoff, répondent à ces questions.

Ils y évoquent les problèmes fondamentaux qui sous-tendent l'ordonnance des mutations réglementaires: où doit s'établir l'équilibre entre la libéralisation, qui élargit le choix de l'utilisateur, et l'harmonisation, qui permet les services transeuropéens? Comment sauvegarder l'impératif du service public? Comment faire en sorte que l'Europe capte le meilleur des bénéfices économiques et sociaux de cette évolution?

Cet ouvrage apporte de précieuses informations à tous ceux qui participent à l'évolution des télécommunications, aux décideurs, aux personnels, aux syndicalistes, aux usagers de la télématique mais aussi à ceux qui souhaitent comprendre l'utilité des initiatives communautaires dans la métamorphose actuelle de notre société.

Publié par:

Tec & Doc - Lavoisier,
11, rue Lavoisier,
F-75384 Paris Cedex 08

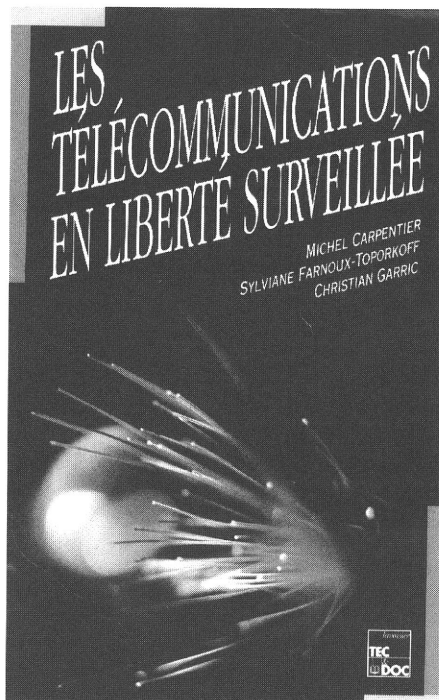
ADVANCED TELEMATICS IN ROAD TRANSPORT

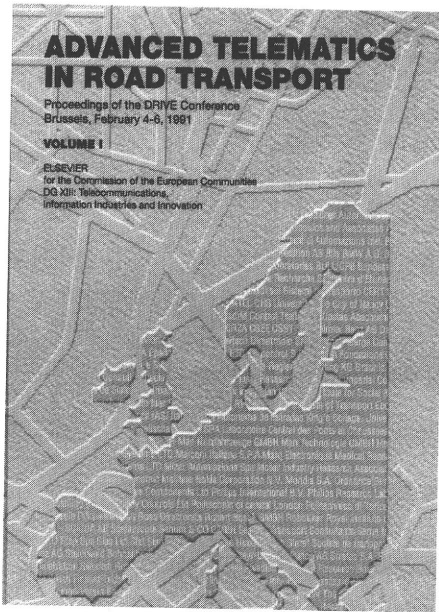
Proceedings of the DRIVE Conference, Brussels, February 4-6, 1991

EUR 13283 EN xxvi + 1542 pp (in 2 vols.)
Dfl 450 ISBN 0-444-89043-2
English

These two volumes present the papers delivered at a major conference on the European Community's DRIVE programme, which has as its aims the development of information technologies to improve the efficiency and safety of road transport, and to reduce its environmental impact. The papers are classified under the following headings:

Volume I: RTI Infrastructure and System Architecture; Route Guidance and Variable Message Signs; Short Range Communication; Driver Support; Evaluation and Implementation; Field Trials; Strategic Issues; Urban Traffic Management and Control.





Volume II: Databases, Dataflows and Expert Systems; Cooperative Driving; Transport Modelling and Traffic Simulation; Freight Operation and Public Transport Management; Weather and Pollution Monitoring; Performance Standards; Tunnel Management and Communications in Tunnels; Processor and Terminal Development; Road User Behaviour; Index of Projects.

Published for DG XIII by:

Elsevier Science Publishers B.V.,
Sara Burgerhartsstraat 25,
P.O. Box 211,
1000 AE Amsterdam,
The Netherlands

RADIATION PROTECTION RESEARCH AND TRAINING PROGRAMME 90-91

Catalogue of contracts

EUR 13387 EN xxii + 311 pp
ECU 27.50 ISBN 92-826-2525-7
English

The 1990-91 programme comprises three large sectors which are further subdivided:

- A) Human exposure to radiation and radioactivity
 - 1) Measurement of radiation dose and its interpretation
 - 2) Transfer and behaviour of radionuclides in the environment
- B) Consequences of radiation exposure to man; assessment, prevention and treatment
 - 1) Stochastic effects of radiation
 - 2) Non-stochastic effects of radiation

3) Radiation effects on the developing organism

C) Risks and management of radiation exposure

1) Assessment of human exposure and risks

2) Optimization and management of radiation protection.

This report contains details of more than 80 research contracts, including full descriptions of the research work to be undertaken, names and addresses of the scientists involved (most of the projects involve several partners in different countries), and information on the Commission's financial contribution.

Available from:

Office for Official Publications of the European Communities,
2, rue Mercier,
L-2985 Luxembourg

MAJOR ACCIDENT REPORTING SYSTEM

Lessons Learned from Accidents Notified

G. Drogaris 162 pp
EUR 13385 EN ISBN 92-826-2289-4
ECU 12.50 English

The Council Directive 82/501/EEC (Seveso Directive) requires the competent authorities of the Member States to notify the Commission of major accidents involving dangerous substances. Details of these accident notifications are stored in the MARS (Major Accident Reporting System) database at the Institute for Systems Engineering and Informatics of the Commission's Joint Research Centre (Ispra, Italy). This report presents an analysis of the 97 accidents which had been included in MARS by October 1990. In most cases the causative factors have been identified, so that useful lessons can be drawn from the accidents. These lessons learned are classified under the four headings: (1) design/construction-related, (2) operation/maintenance-related, (3) emergency handling, (4) mobilization after emergency. Case histories of each of the 97 accidents are included as an appendix.

Available from:

Office for Official Publications of the European Communities,
2, rue Mercier,
L-2985 Luxembourg

CATALOGUE OF EUROPEAN EARTH-QUAKES WITH INTENSITIES HIGHER THAN 4

J.M. Van Gils, G. Leydecker v + 353 pp
EUR 13406 EN ISBN 92-826-2506-0
ECU 30 English

The catalogue lists some 20,000 seismic events occurring in Member States of the European Communities and in Switzerland and Austria, from historical times up to the early 1980s. The first event in the catalogue is dated 479 B.C. All the historical data are harmonised as far as possible to the same intensity scale. The catalogue was compiled as part of the work of the CEC working group on the safety of thermal reactors, in order to provide data for the assessment of seismic risks to nuclear power plants.

Available from:

Office for Official Publications of the European Communities,
2, rue Mercier,
L-2985 Luxembourg

INDOOR AIR POLLUTION BY FORMALDEHYDE IN EUROPEAN COUNTRIES

H. Knoepfel et al. v + 23 pp
EUR 13216 EN
ECU 5 English

This report summarises information on indoor air pollution by formaldehyde in European countries participating in the concerted action "Indoor air quality and its impact on man" (COST project 613). The aim is to provide information, in a concise form, to persons involved in research planning, policy making and regulatory activities, and to help identify a European view of the issue. The report includes a short review of the health effects of formaldehyde, of existing air quality guidelines and standards, and of indoor sources of formaldehyde. For those countries for which information has been made available, indoor concentrations and national policies are presented. Preventive measures are briefly discussed.

Available from:

Office for Official Publications of the European Communities,
2, rue Mercier,
L-2985 Luxembourg

JOULE PROGRAMME 1989-1992

Catalogue of contracts

EUR 13685 xli + 431 pp
English

Details of the more than 200 contracts concluded so far under the 122 million ECU JOULE energy programme are listed in this catalogue. For each contract, a brief description is given of the research to be carried out, the names and address of the scientific coordinators, and a list of the other major participants. The catalogue is divided into sections covering

- energy systems modelling, with special emphasis on energy-environment and energy-economy interactions,
- improving efficiency of energy generation and use in buildings, industry and transport,
- fossil fuels: optimum and "clean" use of fossil fuels, improvement in hydro-carbon exploration and exploitation techniques,
- continued development of renewable energy sources (wind, photovoltaics, biomass) and geothermal energy.

Available from:

Joule Programme,
DG XII,
Commission of the European Communities,
200 rue de la Loi,
B-1049 Brussels

MARINE SCIENCE AND TECHNOLOGY (MAST) R&D PROGRAMME 89-92

Research contracts

EUR 13437 EN xii + 53 pp
ECU 6.25 ISBN 92-826-0591-4
English

Forty-seven contracts concluded so far under the MAST marine science and technology programme are listed in this catalogue which gives, for each contract, a brief description of the work to be undertaken, the names and addresses of the project leaders, and a list of the other major participants. Areas covered by the catalogue are:

- marine science, directed at the study of the structure, stability and dynamics of the marine environment, with special emphasis on the coastal waters and seas

surrounding the Member States of the Community,

- coastal zone science and engineering, concerned with coastal problems and processes and with the development of better design criteria for coastal engineering,
- marine technology, focused mainly on the development of new instrumentation and enabling technologies necessary for the advancement of the science.

Available from:

Office for Official Publications of the European Communities,
2, rue Mercier,
L-2985 Luxembourg

SURVEY ON EDUCATION AND TRAINING OF MEDICAL PHYSICISTS IN THE MEMBER STATES OF THE EUROPEAN COMMUNITY WITH REFERENCE TO THE PATIENT DIRECTIVE (84/466/EURATOM)

A. Schmitt-Hannig
EUR 13298 EN v + 79 pp
ECU 7.50 ISBN 92-826-2478-1
English

Article 5 of Directive 84/466/EURATOM, which sets out basic measures for the radiation protection of persons undergoing medical examination or treatment (the "Patient Directive"), states that a qualified expert in radiophysics shall be available to sophisticated departments of

radiotherapy and nuclear medicine. This report, which aims to evaluate the application of this article, shows that in several Member States the concept of the qualified expert in radiophysics has already been introduced into national law, although there is a need for further harmonization in the terminology used. On the availability of training facilities, the situation in the Community is positive, but the formal recognition of training and education of medical physicists by government bodies is still at the developmental stage.

Available from:

Office for Official Publications of the European Communities,
2, rue Mercier,
L-2985 Luxembourg

Science books at London book fair

Publications from Community research programmes were on show at the 1991 London International Book Fair. Held on 24-26 March, the fair is primarily a trade show taking up four floors of London's Olympia 2 exhibition centre, with stands for about 800 exhibitors,

For the second successive year, DG XIII and the Office for Official Publications of the European Communities ran a joint stand at the fair, featuring scientific and technical reports and books together with publications of general European interest. Visitors to the stand, located close to the special academic/scientific and technical section of the fair, and adjacent to the stand of HMSO Books - the UK sales agent of the Office for Official Publications - included a wide range of librarians, academics, booksellers, publishers and distributors.



FORTHCOMING CONFERENCES OF THE EC

9-13 September 1991

Clean Air at Work **New trends in assessment and measurement for the 1990s**

Luxembourg

An international conference to discuss the latest developments in regulations, in standards, in methods of assessment and measurements in both the industrial and non-industrial working environment, and in quality assurance for laboratory techniques. There will also be a poster session and a manufacturers' exhibition of measurement and analytical equipment.

Contact: Mr D. Nicolay
Commission of the European Communities
DG XIII/C-3, JMO B4/087
L-2920 Luxembourg
Fax: (352) 4301-4544

14-15 November 1991

Technology Cooperation to Match Global Competition **Second European EACRO-SPRINT conference**

Seville

With the support of the SPRINT programme, the second European conference of EACRO (European Association of Contract Research Organisations) will be held at the Palacio de Exposiciones y Congresos in Seville, Spain.

Speakers from industry, the Commission of the European Communities and EACRO will examine technology opportunities and how these can be effectively exploited and transferred into practical applications by industry. Particular attention will be given to the way in which research funding can be directed to equip industry to meet the market opportunities of the current decade, with particular emphasis on the small and medium-sized enterprise.

The conference will be of interest to administrators at European and national level, to industrialists, and to all involved in translating research into development.

Contact: Carol Jopling
Conference Organiser
ERA Technology Ltd
Cleeve Road
Leatherhead
Surrey KT22 7SA
England
Tel.: (44) 372 374151
Fax: (44) 372 374496

30-31 January 1992

Innovation and Technology Transfer in the 1990s

Brussels

A major conference organised by the SPRINT programme to discuss the issues involved in innovation and technology transfer through to the end of the century, and to present some of the achievements of SPRINT. The conference will be of interest to decision makers and to all participants in the innovation and technology transfer process.

Contact: Mr R. Miège or Mr J.R. Tiscar
Commission of the European Communities
DG XIII/C-4
(SPRINT Programme)
L-2920 Luxembourg
Fax: (352) 4301-4544

29-31 January 1992

Advanced Technologies for Road Traction **Options for energy efficient and clean transportation systems**

Rome

Co-sponsored by the US Department of Energy and by ENEA (Italy), this international conference will give an overview of the state-of-the-art and of the future of advanced technologies for road traction in private cars, vans, buses, lorries, etc. which can contribute to a cleaner environment and more efficient use of energy. The technologies which could be considered by the conference include:

- Different types of petrol and diesel engines, including more advanced concepts, control of engines and catalytic converters;
- Internal combustion engines using alternative fuels;
- Gas turbines;
- Hybrid vehicles using different types of internal combustion engines or gas turbines combined with electrical, mechanical or hydraulic transmission systems;
- Battery driven electrical vehicles;
- Fuel cell driven electrical vehicles.

It is intended to organise an exhibition and demonstration of vehicles, materials, films, etc. in parallel with the conference.

Contact: Mr G. Hoyaux
DG XII/E-5
SDME 3/30
200 rue de la Loi
B-1049-Brussels.
Fax: (32) 2 2363024

18-20 May 1992

Patinnova '92

Lisbon

Following the success of the Patinova '90 conference on the relationship between industrial property rights and the innovation process (for details of the availability of the Patinova '90 proceedings, see page 12), DG XIII is organising a second conference on the same theme. Special attention will be given to factors of particular concern to small and medium-sized companies. The conference will be of interest not only to industrial property experts, but to all involved in the innovation process, bearing in mind that the protection of innovation will be of increasing importance in the highly competitive markets of the future.

Contact: Mr F. Liisberg
Commission of the European Communities
DG XIII/C-1
L-2920 Luxembourg.
Fax: (352) 4301-4182

14-17 September 1992

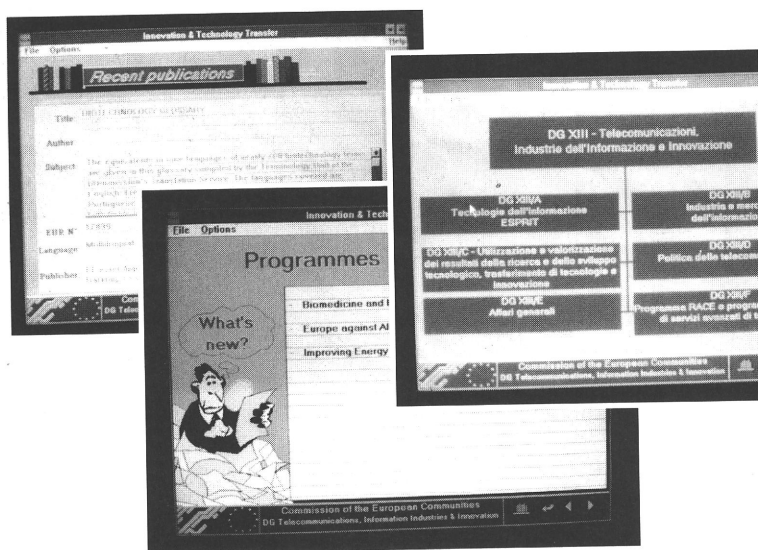
Underwater Acoustics

Luxembourg

Lectures, papers and posters on: acoustical oceanography, propagation, imaging, acquisition and processing of data, wideband signal processing, noise, reverberation, scattering, Arctic and Antarctic acoustics, large scale models, shipboard noise reduction, use of sonar in fisheries, acoustics in marine geology and geophysics, transducers and instrumentation, etc.

Contact: Commission of the European Communities
DG XII/E (MAST Programme),
Conference Secretariat
SDME 3/46
200 rue de la Loi
B-1049 Brussels

ELECTRONIC BULLETIN



Electronic Bulletin: already a success

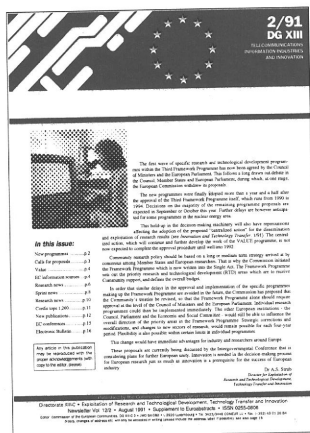
More than 200 readers have already responded to the last issue of *Innovation and Technology Transfer* announcing the launch of Electronic Bulletin, a hypertext version on diskette. Although this pilot project for the dissemination of scientific and technical information is confined to readers who have a personal computer with Windows 3, the large number of readers who have already shown interest makes the operation a success.

The electronic version allows readers to click on specific sections like programmes, publications and addresses, to find the latest information. We have been able to provide many more features than the paper version of *Innovation and Technology Transfer*, such as the staff list of the Directorate General. Readers can now find out which section is responsible for their interests. Some photographs are also inserted so you know who you are telephoning or faxing.

Subscribers should have now received their personal copy of the Bulletin and apparently have encountered no difficulty in using it. An evaluation form, which gives readers a chance to interact with the experience by providing comments will help us improve the product.

Issue 2 is now in preparation, with increased coverage and features; it has also been possible to improve performance.

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