SCIENCE RESEARCH DEVELOPMENT

INFO RTD

News Roundup on EC Research and Technological Development Programmes

The Commission launches a "Green Paper" to stimulate innovation

ust before Christmas, the Commission presented its "Green Paper on Innovation" which comprises about 130 concrete proposals to stimulate innovation in Europe and hence the competitiveness of its industry. The document is an initiative of Edith Cresson, European Commissioner in charge of research, education and training and Martin Bangemann, Commissioner in charge of industrial affairs, telecommunications and information technology, in agreement with Christos Papoutsis, Commissioner responsible for energy and SMEs (Small and Medium-sized Enterprises).

The document is intended to stimulate a wide-ranging debate within the member states. The Commission wishes to receive the opinion of all the interested parties on the document by 10 May 1996.

WEAKNESSES

One of the great paradoxes of the European Union is that, despite its internationally acknowledged scientific excellence, it launches fewer new products, services and processes than its main competitors. In other words, it is innovating less - and less well - at a time when innovation is becoming a driving force in economic competitiveness. This state of affairs, which is the result of a number of structural obstacles (complex legal and administrative environment, inadequate R&D input, unsuitable financing systems etc.) is a serious handicap to European companies and hence to society (employment etc.).

WHAT IS INNOVATION?

Innovation involves the successful production and exploitation of novelty in both the economic and the social spheres. It therefore concerns not only the development of products and services but also the management and organisation of production, the business methods used and training. There is a wealth of recent examples of successful innovation - the development of medicines, safety in transport (ABS,

airbags, etc.), communications (mobile phones, video-conferencing, etc.), access to information (CD-ROM, multimedia, etc.), new marketing methods (home banking etc.), and many more.

PRIORITIES AND ACTIONS

The Green Paper identifies numerous obstacles to innovation - inadequate R&D financing, a complex legal and regulatory environment, insufficiency of investments devoted to high technology, unsuitability of training systems, excessive separation between research, industry and training, insufficient mobility of students and researchers in Europe, etc.

The document can be obtained from:

DG XIII/D Fax + 352 4301 34544

It is also available at the Cordis WWW site at: http://www.cordis.lu

Commission proposal will stimulate research in five priority areas

missioner Neil Kinnock (transport), technologies. presented a proposal for a Decision to the

n 31 January, Commissioners Parliament and the Council, identifying Edith Cresson (research, edu- five areas with an urgent need for addication and training) and Martin tional research work to stimulate Europe-Bangemann (industrial affairs and an competitiveness: aeronautics, multiinformation and telecommunications media educational software, clean cars, technologies), in agreement with Com- intermodal transport and environmental

To pay for the additional research, the Commission proposes to use the 700 MECU (million Ecu) of additional funding foreseen at the adoption of the Community and Euratom framework programmes in 1994, in accordance with the criteria laid down by the Council and the Parliament for such supplementary

For further information, contact: S. Gosden, Fax + 32 2 2958220

A new Director General for DG XII



t the end of last year, Professor Paolo Fasella, Director General of DG XII, retired after 14 years in this position. RTD Info and the staff of DG XII wish to express their gratitude and say a warm goodbye.

Following Professor Fasella's retirement, Professor Jorma Routti has been appointed Director General of DG XII, as of 1 January 1996.

Professor Routti was President of SITRA, the Finnish National Fund for R&D, from

1986 until his current appointment. SITRA is associated with the Finnish Parliament in bridging research to industry and to policy making. Professor Routti has considerable experience in building national and international networks in research management and technology transfer, and has played a key role in the organisation of Finland's successful innovation system.

Jorma Routti, born in Finland in 1938, studied at the Helsinki University of Technology and also has a Doctoral degree from the University of California in Berkeley where he was a Fullbright Fellow. He has worked as a scientist at the University of California (1964-1969), at CERN in Geneva (1970-1972), and as Professor and Dean at the Helsinki University of Technology. His scientific work covers energy studies, including fission and fusion, solar energy, energy systems and economics. He has published over 200 articles on physics, mathematics, computer science, energy research and innovation systems.

Professor Routti has received several honours and been Chairman of the Finnish Academy of Technology, Finnish Cultural Foundation and Finnish Institute of Management. He is married and has two daughters. In addition to his native Finnish he speaks English, Swedish, French and German.

DG XII joins the Web

ou want the latest news on the Fourth Framework Programme? Wondering who to contact for the Biotechnology programme? Now you need look no further than the World Wide Web.

DG XII has launched its own pages under the European Commission's EUROPA site. The objective of this DG XII service is to operate an up-todate and reliable source of information on the World Wide Web for all DG XII activities of relevance to outside users (journalists, researchers, contractors, intermediaries, public interest groups, politicians, etc.). At the same time, this will provide an on-line, user-friendly way for these groups to reach DG XII through the service's "feedback" facility.

What can a user expect from the service?

Currently the user will find general information on DG XII (its mission, list of contact persons, the organigram, etc.) as well as a series of news items and a few links to other interesting places.

The following types of information can be found:

- programme descriptions (synopsis)
- · press releases (can be down loaded)
- the model contract (can be downloaded)
- closing dates of calls
- Commission contact persons
- Mme Cresson's speeches
- · list of answers to frequently asked questions (What is precompetitive? How to deal with V.A.T.? How to calculate a budget? etc.).

The address (URL) of the DG XII Web site is:

http://www.cec.lu/en/comm/ dg12/dg12tst2.html

TASK FORCES AT WORK

Tailoring research to public concerns, and helping Europe's industry to do more to tackle them. This is the dual aim behind the setting up of the new Task Forces – a joint initiative by three members of the Commission: Mme Edith Cresson, responsible for research, education and training, Mr Martin Bangemann, responsible for industry. telecommunications and information technologies, and Mr Neil Kinnock, responsible for transport (see RTD Info N° 9). The initiative is designed to encourage the development of technologies which will help both to improve the quality of life in Europe and to increase our industrial competitiveness.

Brochures concerning the various Task Forces are now available from the contacts listed below:

Multimedia educational software M. Richonnier DG XIII

Fax + 32 2 2968362

Car of tomorrow

E. Andreta DG XII Fax + 32 2 2966882

New-Generation aircraft Maritime systems of the future

P. Weissenberg DG III

Fax + 32 2 2961125

Trains and railway systems of the future

Intermodal transport

P. W. A. G. Blonk DG VII

Fax + 32 2 2968350

Vaccines and viral diseases

B. Hansen DG XII

Fax + 32 2 2991672

Environmentally friendly water technologies

J.-M. Martin JRC, Environment Institute, Ispra (I)

Fax + 39 332 789222

(Fax for information:

B. Schmitz + 32 2 2963193)

IRDAC: a new committee and new objectives

or some years now, IRDAC (the Industrial R&D Advisory Committee) has been advising the Commission on its industrial research policy. Following an initiative by Commissioners Edith Cresson and Martin Bangemann, the Commission has decided to revise IRDAC's mandate and list of members.

New mandate: IRDAC's brief to give opinions and advice on Community RTD policy will continue, but IRDAC will from now on give its attention more to industrial and strategic questions.

New list of members: The number of IRDAC members has risen from 18 to 24, all high-level figures with a wide experience of strategy work, research and development. IRDAC's President is Yves Farge, Vice President of Péchiney.

Another new aspect is the representation of SMEs (small and medium-sized enterprises), as IRDAC also includes a

representative of the European Union of Crafts and Small and Medium-sized Enterprises (UEAPME). Five other European organisations are also represented: Union of Industries of the European Commu-(UNIEC), European Centre for Public Enterprise (ECPE), European Assocciation of Contract Research Organisations (EACRO), Federation of European Industrial Cooperative Research Organisations (FEICRO) and the European Trade Union Confederation (ETUC).

The first plenary conference of the new IRDAC committee was on 1 February in Brussels, and was addressed by Commissioners Edith Cresson and Martin Bangemann.

The aim of the conference was to set out IRDAC's work-programme for 1996-1997; this will focus on the *Green Paper on Innovation*, the Fifth Framework Programme and questions of industrial property rights.

For more details about IRDAC, or to receive the quarterly "IRDAC News", please contact the IRDAC secretariat: Fax + 32 2 2954361.



ELSA: simulating the full effects of earth-quakes on buildings

ne of the biggest challenges facing construction companies today - one year after the Kobe earthquake in Japan - is to build buildings, bridges, viaducts, tunnels and other major structural projects to withstand earthquakes. Architects and designers are now receiving help from European Commission-funded research, on the shores of Lake Maggiore (Italy), the home of the Division of Applied Mechanics of the Institute for Safety Technology (IST), one of eight Institutes in Commission's Joint Research Centre (JRC).

Scientists at the centre are studying ways of constructing edifices able to withstand the most violent of seismic shocks, and have built an innovative new simulator – ELSA, the European Laboratory for Structural Assessment. ELSA uses some of the most exciting technologies available today, is 100% Euro-

pean and is unique in Europe.

At first sight, ELSA is a simple construction, a 16-metre high wall at the end of a 25-metre concrete floor. The concrete frame of a four- or five-storey building is first built by engineers - no sides, no windows, no doors - just the building's support beams and floors, and is then attached to ELSA's wall by a dozen electrically- and hydraulically-powered jacks, through which oil is delivered at 200 times atmospheric pressure from a 800 kW pump to vibrate, twist, stretch and deform the "building" (by as much as halfa-metre) with a force of up to 500,000 Newtons. The structure collapses under, or in some cases manages to withstand, the stresses and deformations induced by the simulated earthquake.

The total force applied is calculated to mirror precisely the same conditions the building

would be subjected to by a real tremor. When this huge pressure is wound down - and the "earthquake" is over - the analysis begins and conclusions are drawn from what's left of the structure. "The jewel in our crown is the control system we use to measure movements in the order of a micron (one thousandth of a millimetre)," says Jean Donea, ELSA's manager. "We have been able to integrate the latest technological developments in ELSA and we have total digitisation. We can develop models and ask the computer to decide which forces should be applied to reproduce such-and-such an earthquake or to change parameters as the building responds, depending on how many cracks have appeared, etc. ELSA is the only simulator that can do this today and the Americans and Japanese have shown interest in our control system."

Large-scale installation

ELSA, costing around 7 million ECU, was quickly elevated to the status of "large-scale scientific installation" under the European Commission's Human Capital and Mobility research programme. Young researchers from Europe can now familiarise themselves with the simulator and discover how several disciplines have been brought together to achieve significant progress. Currently, ELSA is also being used to assist in the development of strengthening and repair measures for historical buildings and monuments in Portugal and Sicily.

Despite early success, there are many years of challenges ahead for ELSA, notably how to study more complex movements than the simple longitudinal stresses it deals with at present.

For further information, contact Jean DONEA JRC - Ispra Applied Mechanics Division Safety Technology Institute I-21020 Ispra (Varese) Italy Tel + 39 332 789989 Fax + 39 332 789049

RTD Info encourages participants to RTD programmes to submit their own "success story". For more information contact: M.Claessens
Fax +32 2 2958220

ESPRIT

Call for proposals for the ESPRIT programme
OJ S 240/43 of 15.12.95
Deadline: 15 May 1996
Contact: IT Information Desk
Fax + 32 2 2968388
E-mail: esprit@dg3.cec.be

TELEMATICS 2C

Rolling call for proposals for support actions under the Telematics Applications programme

OJ C 240/11 of 15.9.95 Deadline: 15 June 1998 Contact: + 32 2 2952354 E-mail: telematics@dg13.cec.be

INNOVATION

Three calls for proposals OJ S 240 of 15.12.95

1) Call for proposals for RTD activities for the promotion of innovation management techniques

Deadline: 15 March 1996

2) Ongoing call for proposals in the area of European networks and services

Deadline:15 March 1996 and 13 September 1996

3) Call for proposals for regional development proects under the INNOVATION programme Deadline for accompaying measures: 15 March 1996

For further information contact, citing appropriate reference
1) Promotion of innovation management techniques
2) European networks and services

3) DG XVI Article 10 ERDF. DG XIII/D/4 INNOVATION

Programme

Fax + 352 4301 34544

Call for proposals for the setting up of a network of organizations for the promotion of energy technologies (in liaison with JOULE/THERMIE – nonnuclear energies) OJ C 240/15 of 15.9.95 Deadline: 15 March 1996

For further information contact, citing reference OPET Network DG XIII/D/4 INNOVATION Programme

Fax + 352 4301 34129

BRITE EURAM III

•RTD projects

The second call for proposals for RTD projects was launched on 15 December 1995 with a deadline of 17 April 1996. The 1994 edition of the information package is still valid but only with a corrigendum/add-endum – available upon request:

Fax + 32 2 2958046.

The information package and workprogramme are now available on the Internet (http://www.cordis.lu)

Training

This measure is now being implemented jointly with the Training and Mobility of Researchers programme under an open call. It offers fellowships in the framework of Brite EuRam III research projects to graduates with no previous industrial work experience. 2 evaluations are envisaged in 1996; next deadlines for submission of applications are: 26 April and 6 September 1996.

Information: TMR
Fax + 32 2 2962133
E-mail: grants.tmr@mhsg.cec.be
Brite EuRam Helpline:
Fax + 32 2 2958046

•Thematic Networks

Thematic Networks are aimed at coordinating ongoing research, usually with a strong industrial "flavour". They are subject to an open call. 3 evaluations are envisaged in 1996; next deadlines for submission of proposals are 28 February and 26 June 1996.

Eight "exploratory phase" projects are being supported and 17 are expected to get under way soon.

For more information and guidance notes contact: Brite EuRam Helpline: Fax + 32 2 2958046

•Medium-term guidelines for the ECSC steel RTD programme of research and pilot/demonstration projects (1996 to 2002)

These guidelines were published on 9.11.1995 (OJ C 294/4) – applications to be submitted to the Commission by

15 September of each year to be effective the following year.

For further information contact: DG XII/C2 Fax + 32 2 2965987 targets areas 1, 4, 5 and 6 of the programme and up to 800 applications are expected. Evaluation will take place in Brussels in April with a shortlist to be ready by the end of July with projects commencing in early 1997.

The fourth call for proposals for the FAIR programme will be published in the OJ on 14 June 1996 with a closing date of 13 September. It is a targeted call for areas 2, 3 and demonstration proposals. Contracts should begin mid-1997.

Contact: C. Mangan Fax + 32 2 2964322

SMT

Call for proposals (OJ C337/51 of 15.12.1995) for RTD actions in the following areas:

2.1. Shared cost: RTD projects for the following themes: Theme I: measurements for quality European products, including written standards for industry

Theme II: research related to written standards and technical support to trade

Theme III: measurements related to the needs of society. This call is restricted to 33 RTD subjects identified by the Commission as necessary for the support of the development or implementation of Community policy, including European standardisation.

For a subject description and information package, contact: Fax + 32 2 2958072.

FAIR

The third call for the FAIR programme was published in the OJ in December and the closing date is 15 March 1996. The call

BIOMED

The second call for proposals in 1996 is split into two parts. In the first part the programme invites submission of proposals in the following areas:

- l Pharmaceuticals research
- Research on biomedical technology and engineering
- 3 Brain research
- 4.2 Research on AIDS, tuberculosis and other infectious diseases
- 5 Human genome research

Deadline for submission of proposals: 17 June 1996 at 12.00 hrs.

A second part of the call will be announced in the Official Journal on 17 September 1996, inviting submission of proposals in areas: 4.1, 4.3, 4.4, 4.5, 4.6 6.7, 8.1.

Deadline: 17 December 1996 at 12.00 hrs.

Proposals for shared cost demonstration projects (area 8.2) must be submitted within either of the two parts of the call for proposals in relation to the specific areas covered.

Contact: A. Vanvossel Fax + 32 2 295 53 65

ADVANCED COMMUNICATIONS TECHNOLOGIES **AND SERVICES - ACTS**

- Interactive digital multimedia services
- Photonic technologies
- · High-speed networking
- Mobility and personal communications networks
- Intelligence in networks and service engineering
- Quality, security and safety of communication services and systems
- Horizontal actions

Deadline for current call

• 1 March 96: Interactive digital multimedia services, photonic technologies, high-speed networks, personal communications technologies and networks, intelligence in networks

Contact Fax + 32 2 2950654

E-mail via Internet: aco@postman.dg13.cec.be

Exploratory Awards for SMEs see text opposite

TELEMATICS

Areas • Telematics for services

Administrations, Transport

Telematics for knowledge

Research, Education & Training, Libraries

• Telematics for improving employment and quality of life Urban & Rural Areas, Healthcare, Disabled & Elderly People, Environment, Exploratory Actions

 Horizontal RTD activities Telematics Engineering, Language Engineering, Information Engineering

Support actions

Deadline for current call

 15 June 98: Support actions (awareness, dissemination of results and promotion of telematics, international training, education)

Contacts Libraries, Language Engineering, Information Engineering Fax + 352 4301 34079 E-mail telematics@mhsg.cec.be Other sectors: Fax + 32 2 2952354

Exploratory Awards for SMEs see text opposite

INFORMATION TECHNOLOGIES (ESPRIT)

- **Domains** Software technologies
 - Technologies for components and subsystems
 - Multimedia systems
 - Long-term research
 - Open Microprocessor System Initiative (OMI)
 - High-performance computing and networking (HPCN)
 - Technologies for business processes
 - Integration in manufacturing

Deadlines for current calls

- 15 May 96: Continuous submission: open long term research, technology transfer and support actions
- 15 May 96: Continuous submission: IT project traineeships, Long Term Research, Technology Transfer and support actions
- 20 March 96: One-step evaluation: software technologies, technologies for components and subsystems, multimedia systems, long term research, open microprocessor systems initiative, technologies for business processes

IT Information Desk Fax + 32 2 2968388 E-mail esprit@dg3.cec.be World-Wide web: http://www.cordis.lu

Exploratory Awards and CRAFT for SMEs see text opposite

INDUSTRIAL AND MATERIALS TECHNOLOGIES (BRITE-EURAM III)

Areas

I: Production Technologies

II: Materials and Technologies for Product Innovation

III: Technologies for Transport Means

Deadlines for current calls

- 17 April 96: RTD projects (areas I, II, III except aeronautics technologies)
- 26 April 96 & 6 Sept. 96: Training (jointly with TMR programme)
- 28 Feb. 96 & 26 June 96: Thematic Networks (next deadlines for submission - open call until 17 Dec. 97)
- 12 June 96 & 16 Oct. 96: CRAFT (next deadlines for submission open call until 17 Dec. 97)
- 15 Sept. 96: ECSC Steel RTD programme

Contact Fax + 32 2 2967023 / 2958046

Exploratory Awards for SMEs see text opposite

STANDARDS, MEASUREMENTS AND TESTING (SMT)

- Themes I: Measurements for quality European products including written standards for industry
 - II: Research related to written standards and technical support to trade
 - III: Measurements related to the needs of society

Deadlines for current (.) and future (.) calls

- 15 March 96: 3rd Dedicated call in support of Community Policies including written standards
- 30 Nov. 96 (tentative): RTD projects (Theme I) and 4th Dedicated call in support of Community policies including written standards (Call expected: 15 June 96)
- 30 March 96: Thematic Networks (next deadline for submission open call until 17 Dec. 97)
- 12 June 96: Technology stimulation measures for SMEs (CRAFT) (next deadline for submission - open call until 17 Dec. 97)

Contact Fax + 32 2 2958072

ENVIRONMENT AND CLIMATE

- Themes 1: Research into the natural environment, environmental quality and global change
 - 2: Environmental technologies
 - 3: Space techniques applied to environmental monitoring and research
 - 4: Human dimensions of environmental change

Deadline for future call

Jan. or April 97: The areas of this call will be defined later (Call expected: Sept. or Dec. 96)

Contact Fax + 32 2 2963024

Exploratory Awards and CRAFT for SMES see text opposite

This chart can be pulled out and used as a wall poster for future reference. The information on calls and deadlines will be updated in further charts on a regular basis.

FOURTH FRAMEWORK PROGRAMME

(1994-1998)

MARINE SCIENCE AND TECHNOLOGY PROGRAMME (MAST-III)

Areas A: Marine Science B: Strategic Marine Research C: Marine Technology

Other: Dissemination and exploitation of results of MAST-I and MAST-II projects, including demonstration projects

• 15 Oct. 96: Research on marine systems, extreme marine environments, coastal processes, control, forecast and management of coastal areas, coastal engineering, marine technologies (Call expected: 15 March 96)

• 15 Jan. 97: Structure and dynamics of coastal ecosystems (Call expected: 15 Jan. 97)

Contact Fax + 32 2 2963024

Exploratory Awards for SMEs see text opposite

BIOTECHNOLOGY

Areas 1: Cell factories; 2: Genome analysis; 3: Plant and animal biotechnology; 4: Cell communication in neurosciences; 5: Immunology and transdisease vaccinology; 6: Structural biology; 7: Pre-normative research, biodiversity and social acceptance; 8: Infrastructures; Horizontal activities; Demonstration activities related to the above-mentioned subjects; Public perception

Deadlines for future calls

Oct. 96: Genome analysis (search for functions, comparative analyses), molecular and cellular biology of plants, somatic gene therapy, immunologic substances, relations structure/function, biologyelectronics, prenormative research (Call expected: 15 May 96)

Sept. 97: Cell factories, genome sequencing, animal biology, cell communication in neurosciences, vaccinology, structure/function, biosecurity, biodiversity, infrastructure, horizontal activities (Call expected: 15 May 97)

Contact Fax + 32 2 2955365 / 2991860

Exploratory Awards for SMEs see text opposite

BIOMEDICINE AND HEALTH

Areas 1: Pharmaceuticals research; 2: Research on biomedical technology and engineering; 3: Brain research; 4: Research on diseases with major social economic impact from basic research into clinical practice; 5: Human genome research; 6: Public health research, including Health Services Research; 7: Biomedical ethics; 8: Horizontal activities; Ethical, legal and social aspects (ELSA) and Demonstration.; Next call for proposals expected for March 96 (all areas)

Deadlines for current (•) and future calls (•)

• 17 June 96: Pharmaceutical research, biomedical technology and engineering, brain research, human genome, AIDS, tuberculosis and other infectious diseases. Demonstration projects (Call expected: 15 March 96)

● 17 Dec. 96: Diseases with important socio-economic impact (cancer, cardio-vascular diseases, ageing, work-related illnesses, rare diseases), public health, biomedical ethics. Ethical, legal and social aspects (ELSA)(*). Demonstration projects (Call expected: 17 Sept. 96) • 1 April 96: Grants in the following areas: pharmaceutical research, biomedical technology and engineering, brain research, human genome • 31 Dec. 96: Grants in the following areas: diseases with a major

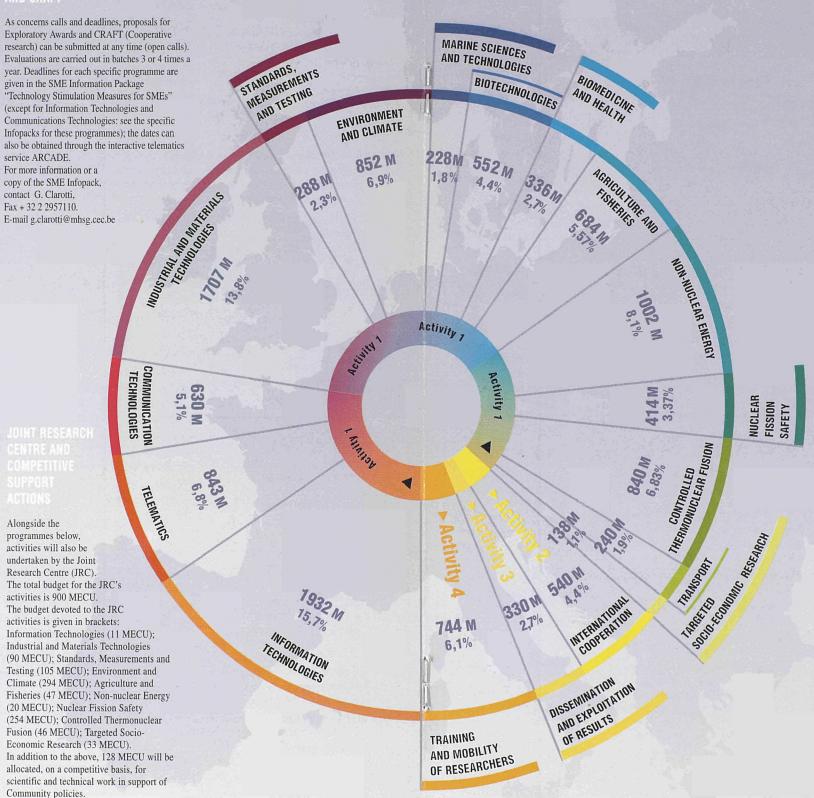
socio-economical impact, public health, biomedical ethics

Contact Fax + 32 2 2955365 (*) + 32 2 2957287

Exploratory Awards and CRAFT for SMEs see text opposite

MEASURES FOR SMES

Overview of specific programmes Deadlines for current and future calls *



Budget Breakdown M = MECU (Million ECU)

* Status of programmes and activities at 15 February 1996

AGRICULTURE AND FISHERIES (FAIR)

Areas 1: Integrated production and processing chains; 3: Generic science and advanced technologies for nutritious foods;

4: Agriculture, forestry and rural development;

5: Fisheries and aquaculture; 6: Objectives addressed by concertation; Demonstration (Areas 4 & 5); Ethical, legal and social aspects - ELSA; Research training and mobility grants

Deadlines for current(a) and future (a) calls

• March 96: R&D: integrated production and processing chains (*), agriculture, sylviculture, rural development (**), fisheries and aquaculture (***), ethical, legal and social aspects. Demonstration: agriculture, sylviculture and rural development, fisheries and

Sept. 96: R&D: Scaling-up, food. Demonstration: integrated production and processing chains, scaling-up, food (Call expected:

• March 97: R&D: integrated production and processing chains, agriculture, sylviculture, rural development, fisheries and aquaculture, ethical, legal and social aspects. Demonstration: all the areas (Call expected: Dec. 96)

• Sept. 97: R&D: scaling-up, agriculture, rural development, fisheries and aquaculture (Call expected: June 97)

Contact Fax + 32 2 2965365 (*) + 32 2 2964322 (**) + 32 2 2963029 (***) + 32 2 2957862

Exploratory Awards and CRAFT for SMEs see text opposite

NON NUCLEAR ENERGY (JOULE-THERMIE)

Areas 1: Energy R&D and Demonstration Strategy; 2: Rational Use of Energy; 3: Renewable Energies; 4: Fossil Fuels

Deadlines for current (.) and future (.) calls

• 15 March 96: THERMIE (Demonstration component).

Additional call on integrated quality targeted projects in the field of 1. rational use of energy in buildings and integration of renewable energies in buildings; 2. rational use of energy in transport and urban infrastructure

• 14 May 96: JOULE (R&D component). Additional call targeted on renewable energies (specific topics in the field of solar photovoltaic energy, wind energy and energy from biomass) • 31 Jan. 97: JOULE and THERMIE. The areas of this call will be defined later (Call expected: 15 Sept. 96)

• 17 Dec. 97: JOULE and THERMIE. Continously open call: Energy Technology Dissemination, Concerted Actions and Concertation Networks, Preparatory, Accompanying and Supporting Activities

Contacts JOULE (DG XII): Fax + 32 2 2950656 THERMIE (DG XVII): Fax + 32 2 2950577

Exploratory Awards and CRAFT for SMEs see text opposite

NUCLEAR FISSION SAFETY

Areas 1: Exploring Innovative Approaches

2: Reactor Safety

3: Radioactive Waste Management and Disposal and Decommissioning

4: Radiological Impact on Man and the Environment

5: Mastering Events of the Past

Deadlines for current calls

• 28 Feb. 96: Proposals for cost-shared actions targeted on a restricted range of topics in the above areas

• 1 Nov. 97: Continously open call: Proposals for concerted actions and support to thematic networks

Areas 1-3: Fax + 32 2 2954991 Areas 4+5: Fax + 32 2 2966256

CONTROLLED THERMONUCLEAR FUSION

Areas

- 1: Next step activities
- 2: Concept improvements
- 3: Long-term technology

Implementation

Projects are covered by shared-cost RTD contracts within the framework of:

- Association contracts with Member States (+ Switzerland) or MS organizations
- JET (Joint European Torus) Joint Undertaking
- NET (Next European Torus) Agreement (including the Euratom participation in the ITER - EDA)
- JRC (Joint Research Centre)
- Limited duration contracts and industrial contracts

Contact Fax + 32 2 2964252

TRANSPORT

Areas

- 1: Strategic research
- 2: Rail transport
- 3: Integrated transport chains
- 4: Air transport
- 5: Urban transport
- 6: Waterborne transport
- 7: Road transport

Deadlines for current (a) and future (a) call

- 15 March 96: Strategic research, rail transport, integrated transport chains, air transport, urban transport, waterbore transport, road
- 15 March 97: Strategic research, rail transport, integrated transport chains, air transport, urban transport, waterbore transport, road transport (Call expected: 15 Sept. 96)

Contact Fax + 32 2 298356

Exploratory Awards for SMEs see text opposite

Areas

- Evaluation of Science and Technology Policy options
- Research on Education and Training II:
- III: Research into Social exclusion and Social integration in Europe

Deadlines for future calls

- o 15 Sept 96: Science and technology policy options, research into education and training, research into social integration and exclusion in Europe (only in certain areas) (Call expected: 15 May 96)
- 15 June 97: Science and technology policy options, research into education and training, research into social integration and exclusion in Europe (only in certain areas) (Call expected: 15 March 97)

Fax + 32 2 2962137

E-mail: d.corpakis@mhsg.cec.be

INTERNATIONAL COOPERATION (INCO)

A2: Central and Eastern Europe; B: Non-European

industrialized countries; C: Developing countries

Deadlines for current (a) and future (b) calls

- 1 March 96: Grants (Japan, Korea)
- 1 March 97: Grants (Japan, Korea)
- 1 March 98: Grants (Japan, Korea)
- 29 Feb. 96: Cooperation with Central and Eastern European countries and the New Independent States (INCO Copernicus) (*)
- 12 Sept. 96: Scientific and technological cooperation with developing countries (**) (Call expected: 15 March 96)
- 15 June 97: Cooperation with Central and Eastern European countries and the New Independent States (*) (Call expected: 15 March 97)
- 15 Sept.97: Scientific and technological cooperation with developing countries (**) (Call expected: 15 March 97)

Contacts Fax + 32 2 2969824

(*) Fax + 32 2 2963308

(**) Fax + 32 2 2966252

Work covers the promotion of innovation in local industry and Community RTD programmes and their results

Deadlines for current (.) and future (.) calls

- 15 Dec. 96: Training and dissemination activities (*)
- 15 March 96: Promotion of management and innovation techniques
- . 15 March 96: OPET Network Organisations for the promotion of energy technologies (**)
- 15 March 96 / 13 Sept 96: European networks and services of technology transfer and innovation support
- 15 June 96: Financial actions (Call expected: 15 March 96)
- 15 Dec. 96: Technology transfer and technology validation projects (**) (Call expected: 15 Sept. 96)
- 16 March 96 / 18 Sept. 97: European networks and services of technology transfer and innovation support (Call expected: 15 Dec. 96)
- 1997: Network of innovation relay centres (complementary action) (**) (Call expected: end 96)
- 1997: Technology transfer and technology validation projects (**) (Call expected: 97)

Contact Fax + 352 4301 34544

(*) Fax + 352 4301 34989

(**) Fax + 352 4301 34129

TRAINING AND MOBILITY OF RESEARCHERS (TMR)

Activities 1: Research Training Networks; 2: Access to large-scale facilities; 3: Research Training Grants; 4: Euroconferences, summer schools and practical training courses

Deadlines for current (a) and future (b) calls

- 1 April 96: Euroconferences, summer schools and practical training courses
- 17 June 96: Research Training Grants (Call expected: 15 March 96)
- . 30 Sept. 96: Euroconferences, summer schools and practical training courses (Call expected: 17 June 96)
- 16 Dec. 96: Research Training Grants (Call expected: 16 Sept. 96)
- 3 Feb. 97; Research Training Networks (Call expected; 16 Sept. 96)
- 1 April 97: Euroconferences, summer schools and practical training courses (Call expected: 16 Dec. 96)
- 16 June 97; Access to large-scale facilities (Call expected: 17 March 97)
- 16 June 97: Research Training Grants (Call expected: 17 March 97)
- 30 Sept. 97: Euroconferences, summer schools and practical training courses (Call expected: 16 June 97)
- 15 Dec. 97: Research Training Grants (Call expected: 15 Sept. 97)
- 31 March 98: Euroconferences, summer schools and practical training courses (Call expected: 15 Dec. 97)

Contact

Website URL: http://www.cordis.lu/tmr/home.html Fax + 32 2 2956995

NOTE: All dates and deadlines for future calls are indicative and may change.

FAIR

Contracts for the second FAIR call for areas 2, 3, and demonstration should commence in Summer 1996. Around 50 R&D projects will be funded from this call.

All 109 projects selected from the first FAIR call will begin early 1996. Average EU contribution is 1 MECU with an average of 7 participants per project.

So far the FAIR SME technology stimulation awards have resulted in 95 exploratory award proposals (EA) and 5 cooperative research proposals (CR). Seven EA and two CR have so far been funded but further selections from these proposals will be made in early 1996.

Within the FAIR programme there have been to date 182 applications for training grants across the different areas and up to 40% of these applications will be funded.

Open calls for these activities will continue to be operational in 1996.

For further information contact: C. Mangan Fax + 32 2 2964322

BIOTECHNOLOGY



The second call for proposals which closed on 10 January, 1996 received a total of 786 proposals which are currently undergoing evaluation.

BIOMED

The first call for proposals was launched on 17 January 1995 with a deadline of 31 March 1995. A total of 1,709 proposals was submitted by 6,000 organisations requesting 1.7 billion ECU.

586 research proposals, i.e. 34%, were ranked as being between high and outstanding proposals, thus deserving Community support. 307 of these proposals have been selected for an EC financial contribution totalling 140 million ECU (9% of the total EC requested financial contribution). Another 116 proposals are listed on the reserve list with only a minor chance of funding.

INTERNATIONAL COOPERATION (INCO) PART C

S&T Cooperation with Developing Countries

Following the first phase of the first call for proposals, 26 contracts have been signed for a total EU contribution of 12 MECU.

The selection process of the second phase of the first call is still underway, but it is likely that around 100 projects in the sectors renewable natural resources, agriculture/agroindustry and health will be supported with an EU contribution of about 48 MECU. In addition 18 projects in information and communication technologies have been approved for a total EU contribution of 6 MECU.

The next call for proposals is scheduled for publication on 15 March and will close in September 1996. The 1996 Information package will be available after 15 March and will be available for consultation on:

www Cordis: http://www.cordis.lu E-mail: inco-de@dg12.cec.be or Fax + 32 2 2966252

THERMO NUCLEAR FUSION

Following the transmission in July 1995 from the ITER Council to the ITER Parties of the Interim Design Report (IDR) Package, a European Domestic Assessment has been completed.

The Research Council, at its meeting on October 30, expressed a positive view about the IDR Package: in particular the management, the design and the supporting R&D of ITER were considered to be on the right track. The Council further considered it appropriate for the Community to participate in the exploration of the interrelated issues of siting, licensing and host support for ITER.

On December 15, the Commission launched a new procedure for European firms and/or groupings of firms to express their interest in participating in the qualification in the "15 Technologies" (over a period of 3 years) specific to the Next Step (in particular the ITER-EDA).

For further information contact: R. Saison Fax + 32 2 2964252

CONFERENCES AND WORKSHOPS

ACTS

Multimedia applications, services and techniques, ECMAST '96 Bordeaux (F), 20-24 May 1996 Contact: ECMAST Fax + 32 2 2961786

E-mail:

ecmast@postman.dg13.cec.be

INNOVATION

PATLIB '96 – European Patent Information Conference Aberdeen (UK), 29-31 May 1996

Contact: N. Clarke Fax + 43 1 521263292 E-mail: clarke@epo.mail.com

Innovation Measurement and Policies

Luxembourg (L), 20-21 May 1996

Contact: Conference secretariat Fax + 352 4301 34149

BRITE EURAM III

Euromaintenance '96: Brite EuRam Workshop "Thematic research action on monitoring and maintenance" organised by Brite EuRam III Copenhagen (DK), 21-23 May

Contact: A. Hansen Fax + 45 45932150

H. Hartmann Pedersen Fax + 32 2 2958046

Second European Forum on Laminar Flow Technology. Bordeaux (F), 10-12 June

EC contact: D. Knörzer, Fax + 32 2 2963307

SMT

Presentation of the SM&T programme in the following conferences:

Symposium on Analytical Methods for Environmental Analysis,

Bilbao (E), 27-28 March

26th Intl Conference on Environmental Analytical Chemistry

Vienna (A), 9-12 April

Analytical Days

Stockholm (SV), 11-13 June

Contact: Ph. Quevauviller Fax + 32 2 2958072

7èmes Entretiens de la Villette: La Mesure,

Centre des Congrès de la Villette, Paris (F), 28-30 March,

Contact: M.H. Frisch Fax + 33 1 40 05 79 76

15th Intl. Trade Fair for Biochemical & Instrumental Analysis, Diagnostics and Laboratory Technology and Analytical Conference

Munich (D), 23-26 April

IXth Intl. IUPAC Symposium on Mycotoxins and Phycotoxins Rome (I), 27-31 May

10th Intl. Cereal and Bread

Congress

Porto Carras, Chalkidi (GR) 9-12 June

Contact: A. Boenke Fax + 32 2 2958072

European Symposium on Lasers, Optics and Vision for Productivity in Manufacturing

Micropolis

Besançon (F), 10-14 June Contact: P Salieri Fax + 32 2 2958072

ENVIRONMENT & CLIMATE

European Commission Research Workshop: Origins, Mechanisms and Effects of Salt on Degradation of Monuments in Marine and Continental Environments Bari (I), 25-27 March Restoration '96 Participation of the European Commisssion in this important event related to the protection of culture heritage.

Baltimore (USA), 17-19 March

Contact: J. Acevedo Fax + 32 2 2963024

pollutant stress"

6th Annual Congress, Society of Environmental Toxicology and Chemistry (SETAC-Europe), "Environmental thresholds and

Taormina, Sicily (I), 19-22 May Contact: Meeting – Bureau of SETAC-Europe '96

 $Fax + 39 \ 2 \ 7382610$

Symposium on the Global Atmospheric Effects of Aviation Virginia Beach, Virginia (USA), 15-19 April

Contact: G. Angeletti and G. Amanatidis Fax + 32 2 2963024

Conference on Adriatic Sea Ancona (I), 23-27 April Contact: C. Nolan Fax + 32 2 2963024

Seminar on Evaluation of Models for Gas Explosions London (UK), 18-19 April Contact: C.A. Selby Fax + 44 1344 22944



MAST

3rd European Conference on Underwater Acoustics Heraklion, Crete (GR) 24-28 June Contact: M. Weydert Fax + 32 2 2963024

BIOTECHNOLOGY

BAGECO 5: Symposium on Bacterial Genetics and Ecology Nafplion (GR), 25-29 May

Contact: 1. Economidis Fax + 32 2 2991860

International Congress on Extremophiles

Organised in conjunction with the Biotechnology programme's Extremophiles project. Estoril (P), 1-6 June

Contact: A. Aguilar Fax + 32 2 2991860

FAIR

Funded by DG XII Agroindustrial research

International conference on life cycle assessment in Agriculture and Forestry

Brussels (B), 4-5 April

Contact: A. Arabatzis Fax + 32 2 2964322

Third European Symposium on Industrial crops and Products Reims (F), 22-24 April

Contact: B. Kerckow Fax + 32 2 2964322

NON-NUCLEAR ENERGY JOULE Component

4th European Conference on Solar Energy in Architecture and Urban Planning

Berlin (D), 26-29 March

Contact: G. Deschamps Fax + 32 2 296 06 21

European Union Wind energy Conference and Exhibition Göteborg (SV), 20-24 May

Mediterranean Conference on Renewable Energy Sources for Water Production

Santorini (GR), 10-12 June

Contact: K. Diamantaras Fax + 32 2 2960621

9th European Bioenergy Conference and 1st European Energy from Biomass Technology Exhibition Copenhagen (DK), 24-27 June Contact: J. Greif Fax + 32 2 2960621

NUCLEAR FISSION SAFETY



Computer-Based Training Course on Off-Site Emergency Response to Nuclear Accidents Karlsruhe (D), 22-26 April

Contact: G.N. Kelly Fax + 32 2 2966256

Training Course on the Use of the Radiation Transport Code MCNP in Radiation Protection and Dosimetry

Bologna (I), 13-16 May

Contact: H. Menzel Fax + 32 2 2966256

INCO

Sustainable aquaculture in inland and costal ecosystems Can Tho (Vietnam), 18-22 March Contact: T.Viegas Fax + 32 2 2966252

Recherche Appliquée Interdisciplinaire – Utilisation et Perception des Systèmes de Santé par les Enfants et leur Famille

Paris (F), 20-22 March

Contact: M. De Bruycker Fax + 32 2 2966252

EUCARPIA meeting on Tropical Crops Breeding Montpellier (F), 11-15 March

"Colloque sur le riz d'altitude" Antananarivo (Madagascar), 1-5 April Contact: A. Darthenucq Fax + 32 2 2966252



Research and Technology: the Fourth Framework Programme (1994-1998)

EUR 16618

This new booklet is an introduction to the EU's research programmes and gives useful advice on how to participate in them. In a handy, easy-to-use format, it covers all aspects of the 4th FP, including the new Task Forces, and gives examples of projects and lists of contact persons in the research programmes, as well as reference points for further information.

Copies can be obtained from the Office for Official Publications of the European Communities: Fax + 352 290828

TELEMATICS 2C, ESPRIT 4

Multimedia educational software: "First elements for reflection". Preliminary conclusions following consultations with manufacturers and users of multimedia educational software. Copies may be obtained, free of

charge, from:
Telematics Applications
Programme

Fax + 32 2 2962392 E-mail: telet@dg13.cec.be

ESPRIT 4

ESPRIT IT research and development – International cooperation, summaries of projects, working groups and networks

EUR 15375 EN/9

Copies, in English only, may be

obtained, free of charge, from; DG III IT Information Desk Fax + 32 2 2968388 E-mail: esprit@dg3.cec.be

ESPRIT 4, INFO 2000

Launch of PROSOMA-Esprit service.

Aimed at converting promotional and descriptive material from participating contractors into market orientated audio-visual presentation via CD-ROM and the Internet.

Contact: DG III Industry Fax + 32 2 2969229 WWW:

http://www.cordis.lu/esprit/home .html

ESPRIT 4

Applying information technology – 101 success stories from the ESPRIT programme.
Price ECU 13.5

Contact: OPOCE (Eur-OP) Fax + 352 290828 WWW:

http://www.cordis.lu/esprit.src/ results.htm

INNOVATION

The INNOVATION programme was created to encourage the exchange of information on research, technology and successful commercial use of research results. It aims to encourage the absorption of new technologies, by European companies, in particular SMEs, and to ensure a continued supply of information in areas such as best practice, commercial innovations and partnerships.

The INNOVATION programme – dissemination and optimization of the results of research activities.

(available in English, French)



Innovating in Europe: a guide to the services of the INNOVATION programme Available in English, French, and German (and shortly in all EU languages). Both publications can be obtained, free of charge, from: PTD Halp Desk

RTD Help Desk Fax + 352 4301 32084

BRITE EURAM III

Summaries of the 209 RTD projects selected the first call for proposals will be soon available on the Internet (http://www.cordis.lu)



Synopsis of Current Aeronautics
Projects

(Projects apprint incl. projects

(Revised reprint incl. projects started in 1994)

Hydrogen and Other Alternative Fuels for Air and Ground Transportation

(Revised proceedings of a Workshop initiated by the EC) Published by John Wiley & Sons.

EC contact: D. Knörzer Fax + 32 2 2963307

Advances in Acoustics Technology

Published by John Wiley & Sons. *EC contact: J.M. Hernandez* Fax + 32 2 2963307

Advances in Techniques for Engine Applications Published by John Wiley & Sons.

Advances in Optronics and Avionics technologies Published by John Wiley & Sons.

EC contact: R. Dunker Fax + 32 2 2966757

AERONOX – The impact of NOx Emissions from Aircraft Upon the Atmosphere at Flight Altitudes 8 – 15 km Published by DLR.

EC contact: G. Angeletti – DG XII-D1 Fax + 32 2 2963024





Quevauviller Ph., Maier E.A. & Griepink B., Eds. (1995)
Quality Assurance for Environmental Analysis. Method Evaluation within the Measurements and Testing Programme (BCR). Elsevier Publ., Amsterdam, ISBN: 0-444-89955-3, EUR 15968 EN

Quevauviller Ph., Ed. (1995) Quality Assurance in Environmental Monitoring. Sampling and Sample Pretreatment. VCH Publ., Weinheim, ISBN: 3-527-28724-8, EUR 16611 EN

BCR Information — Chemical Analysis "Sea Water Microbiology — performance of methods for the microbiological examination of bathing water — part I, statistical analysis"

Report EUR 16601 EN

BCR Information – Chemical Analysis "Sea Water Microbiology – performance of methods for the microbiological examination of bathing water -Part II, statistical analysis" Report EUR 16613 EN

Contact: E. Maier Fax + 32 2 2958072

A complete list of publications published in 1995 within the SM&T programme will be available in the forthcoming issue of the Measurements and Testing Newsletter (to be published in April/May 1996). Contact: Ph. Quevauviller Fax + 32 2 2958072

ENVIRONMENT & CLIMATE

Environment and Climate



This 8-page booklet gives a concise description of the Environment and Climate Programme (1994-1998).

Contact: M. Claessens Fax + 32 2 2958220

Interactive physical weathering and bioreceptivity study on building stones, monitoring by computerised x-ray tomography as a potential non-destructive research tool". Protection and Conservation of the European Cultural heritage

Report Series Nº 2

"New Conservation Methods for Outdoor Bronze Sculptures". Protection and Conservation of the European Cultural heritage Report Series N° 3, EUR 16637

Contact: J. Acevedo Fax + 32 2 2963024

Halogen Oxides: radicals, sources and reservoirs in the laboratory and in the atmos-

Air pollution Report Series N° 55

Contact: G. Amanatidis Fax + 32 2 2963024

BIOTECHNOLOGY

Biotechnology of Extremophiles This 32 page brochure is available from:

A. Aguilar

Fax + 32 2 2991860

Biotechnology & Ecology of Microbial inoculants (IMPACT on European Crop production and quality)

A 30 page brochure available from:

I. Economidis

Fax + 32 2 2991860

Socio-economic impact studies

The first such study entitled "Public Participation in Science" has recently been published and is available from the Science Museum of London.

For more information contact: A. Klepsch

Fax + 32 2 2991860

NON-NUCLEAR ENERGY JOULE Component

ExternE: Externalities of Energy 6 volumes (EUR 16520 - 16525) The ExternE Project started in 1991 as the European part of a collaborative study between the European Commission and the US Department of Energy. It aims to be the first systematic approach to the evaluation of external costs of a wide range of different fuel cycles.

Contact: P. Valette Fax + 32 2 2994991

E3ME An Energy-Environment-Economy Model for Europe EUR 16715

The PRIMES Project EUR 16713

GEM-E3 Computable Equilibrium Model for studying Economy-Energy-Environment Interaction

EUR 16714

EUR 16785

WARM World Assessment of Resource Management

models of the JOULE II Programme EUR 16712

The models developed during the JOULE II Programme are described in these 6 brochures. These models address the complex interactions between the processes of energy production, transformation and consumption, the economy and

Contact: E. Donni

Design of composite structures against fatigue; applications to wind turbine blades

EUR 16687, edited by R. Mayer and published by Mechanical **Engineering Publications**

Cooling architectural ideas competition

EUR 16480, edited by D. McClean, E. Fitzgerald and J.O. Lewis and published by Energy Research Group, University

Contact: G. Deschamps Fax + 32 2 2960621

SAFIRE

EUR 16716

Economy-Energy-Environment

STD ISC

the environment.

Fax + 32 2 2994991

Contact: K. Diamantaras Fax + 32 2 2960621

ZEPHYR, European Passive

College Dublin

NUCLEAR FISSION

SAFETY

Advances in Radiation Measurements: Applications and Research Needs in Health Physics and Dosimetry EUR 16177 EN - ISBN 1 870965 33 7

Contact: H. Menzel Fax + 32 2 2966256

Information leaflet on the PC COSYMA Version 2 COSYMA is a probabilistic

accident consequence assessment (ACA) system for use in calculating the risk posed by potential nuclear accidents giving rise to releases to atmosphere.

Contact: G. N. Kelly Fax + 32 2 2966256

INCO **AVICENNE**

Scientific Cooperation of the European Union with Third Mediterranean Countries.

ISBN 90-75390-05-X Catalogue of joint research projects funded by the European Communities - 1982-1994

For further information, contact:

Fax + 32 2 2966252

STD2

Science and Technology for Development Tropical and Subtropical Agriculture. 1987-1991 Research Projects Vol. 2

Summaries of the final reports Edited by CTA

For further information, contact: Fax + 32 2 2966252

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