#### DGXIII

Telecommunications, Information Market and Exploitation of Research



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# Council conclusions: increased European RTD cooperation.

The conclusions of the Presidency of the European Council, delivered at the Copenhagen meeting of 21-22 June 1993, set out among other topics the importance of increased European cooperation in the field of research and development.

The council proposed the following : \* 3% of GNP to go to R&D and innovation (ie a 1% increase)

\* concerted action in areas which can complement the policies of Member States and businesses;

\* creation of European frameworks for business-to-business cooperation to help them harness innovation and adapt production processes;

A new technological revolution is focusing on the common information area. In order to keep pace, Europe must create a decentralized economy with a properly trained workforce and an abundance of small and medium-sized businesses cooperating with each another, and a European information infrastructure to serve as the real artery of the economy of the future and stimulate the information industry (telecommunications, computers, fibreoptics, etc.) with the prospect of abundant supply.

Training courses for these new skills must also be set up, and distance working by computer encouraged, not only for people in the dataprocessing industry itself but also for those in education, medicine, social services, environmental protection, urban planning and those dealing with important social issues such as the prevention of disease, drug abuse and crime.

# INTERNAL MARKET

# Green light for liberalisation of vocal telephony

On 16 June in Luxembourg, the Ministers of Telecommunications of the CEC confirmed that the Member States are determined to achieve total liberalisation of vocal telephony by the end of 1998.

Under the terms of the resolution adopted by the Twelve, four countries -Spain, Portugal, Greece and Ireland will benefit from a delay of five years maximum to make adjustments to the tarifs before putting liberalisation into action.

The Commission is committed to helping these countries to speed up these adaptations. Countries with very small networks, like Luxembourg, can benefit from a derogation of two years in this. The Commission furthermore accepted the request from Belgium to keep in mind the specific situation of small networks.

The Twelve reaffirmed their willingness to liberalise, but underlined the importance of maintaining a universal service, and of progressive structural adjustments, notably in setting tariffs, in order to make allowances for the specific difficulties of peripheral regions with less developed and very small networks.

The Twelve deferred until later the question of opening the private user networks to public supply, as well as that of liberalising infrastructures and telecommunications networks.

These latter will both come under the aegis of a Green Paper which the Commission has been invited to present by 1995. The Council also noted in its resolutions that it awaits a Green Paper on mobile communications. Finally, the Twelve have invited the Commission to present its views on a coherent framework for a Community telecommunications policy by the end of 1995.

At the end of the meeting Arne Melchior, Danish Minister for Communications and President of the Council, stressed the following: "The fact of allowing certain delegations to have time delays is not a sign of a "two-speed Europe", which would be a negative vision of the European or of its cohesion".

On the contrary, he continued, "It is the proof that we are taking account of the prevailing circumstances. There are some specific technical areas for which certain countries will be granted transition periods: this proves that we are sufficiently sensible and realistic to go beyond the existing situation. And just to underline the point again: there is nothing to stop the more advanced countries from going on ahead; they don't have to wait till January 1998 to make headway on the road to liberalisation".



# Fourth Framework Programme for Community research and technological development (1994-1998)

On Wednesday 16th June 1993 the Commission adopted its proposal for the Fourth Framework Programme (1994-1998) for Community research and technological development (RTD).

The Fourth Framework Programme, which is designed to cover all Community research activities between 1994 and 1998 and thus ensure greater coherence, will be the last framework programme to be implemented in its entirety before the end of the century. The proposal, which is being launched against a background of deep economic crisis and profound change on the international scene, is part of a major Community plan to revitalize the economy and stimulate employment.

The Commission has earmarked an overall amount of ECU 13.1 billion for the fourth framework programme to enable Community research to make a significant contribution to achieving these goals.

In order to rise to the challenge posed by American and Japanese RTD policy and make up the ground lost by the Europeans as regards research intensity (2% of Community DGP in 1991 compared with 2.8% in the United States and 3% in Japan) and human resources (an average of 4.3 researchers per 1 000 members of the workforce as against 7.5 in the United States and Japan), the fourth framework programme sets out to make the transition from a package of Community RTD activities to a Community policy in this field.

With a view, then, to making maximum use of the resources available, increasing the economic spin-offs and thus helping to make European industry more competitive and enhancing the quality of life, this framework programme will give priority, in the light of the conclusions of the Edinburgh European Council, to ensuring:

\* greater integration between national and Community RTD activities, in particular by means of improved coordination of Member States participation in major international projects and with the research conducted by various European organizations (ESA, CERN, etc.);

\* closer cooperation between Community RTD activities and those carried out under EUREKA, with particular emphasis on strategic projects which combine the development of key technologies with research which is close to the market;

\* greater concentration of RTD activity within each sector on a smaller number of problems and generic technologies with a multi-sector impact, particularly in the field of industrial technologies, but also in the field of life sciences and technologies. For the first time research will be conducted in a structured fashion on transport, the problems linked to evaluating technologies, and social issues;

\* improved dissemination of research findings, in particular to SMEs (networks, European infrastructure for technology transfer, etc.) in order to improve the record of European companies in translating scientific breakthroughs into commercial success.

In addition, the framework programme will endeavour to:

\* develop the links between research and education/training by undertaking research for the first time into education and training needs and methods, in order to better equip education systems to meet the demand for an increase and improvement in the level of training offered in Europe;

\* better exploit the scope for synergy between research policy and policy on economic and social cohesion, while respecting the specific nature of each, in a bid to reduce the considerable structural disparities which exist in RTD within the Community;

\* seek greater flexibility in the framework programme itself, the specific programmes, and the work programmes, in order to enable the Community to respond quickly to new scientific and technological changes.

### **Research council on fourth Framework Programme**

At its meeting on 30 June 1993, the Research Council proceeded to an indepth debate on the Fourth Framework Programme of Community activities in the field of RTD.

The Council focused its debate specifically on the global financial amount (ECU 13.1 billion) to be committed to the programme and on the breakdown of financial resources between the four different activities (RTD programmes, international cooperation, dissemination of results, training and mobility).

The management of Community RTD programmes was discussed in detail, with the Council recalling its conclusion of 29 April 1993, according to which detailed criteria and mechanisms should be established for cost-effective implementation and improved management of the framework programme in order to ensure that its objectives are fully met.

Simplification and harmonisation of procedures and tools for programme implementation were also emphasized in order to facilitate participation in Community research programmes, particularly by SMEs, and to allow for smooth, transparent and timely implementation of the Framework Programme. On this point the Council welcomed the regular circulation by the Commission of information bulletins.

As a continuation of the Council conclusions, improvements in specific areas were also stressed such as the shortening of delays between the deadlines for receipt of proposals and the start of selected projects, as well as the provision of information to applicants of non-selected proposals.

The Council, wishing to take a view on this issue as soon as possible, noted the Commission's intention to assess in further detail the possible benefits and disadvantages of decentralized management and possible further concrete measures that could be taken in this field. According to the Council, new types of activities, for example thematic networks of excellence, concertation networks and consortia for integrated projects, as proposed by the Commission, need to be clarified further.

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#### **Financial breakdown** of the Fourth Community RTD Framework Programme (1994-1998)

First Activity	( research, technological development and demonstration programmes )	million Ecu <i>(current prices)</i> 10 925	
Second Activity	( cooperation with third countries and international organizations)	790	
Third Activity	( dissemination and optimization of results)	600	
Fourth Activity	( stimulation of training and mobility of researchers)	785	
Maximum Overall Amount		13 100	

Tentative breakdown between themes within first activity	million Ecu (current prices)	
-Information and communication technologies*	3 900	
-Industrial technologies*	1 800	
-Environment*	970	
-Life sciences and technologies*	1 325	
-Energy*/**	2 525	
-Research for a European transport policy*	280	
-Targeted socio-economic research*	125	

\* Of which 1 067 million Ecu for the Community's Joint Research Centre (JRC).

N.B.: In addition to its participation in the first activity, the Joint Research Centre will also participate in the third activity to the tune of 70 million Ecu.

\*\* Of which 1 050 million Ecu for non-nuclear energy sources 495 million Ecu for nuclear safety 980 million Ecu for controlled thermonuclear fusion

# Introduction of High Definition Television: Council accepts action plan

At a meeting in Luxembourg on 16 June, the Ministers for Telecommunications adopted the Community plan of action for introducing high definition television (HDTV) in Europe, thereby opening a financial package of 228 million Ecus (Community funding) over 4 years.

This sum will be increased to 405 million Ecus by finance from other sources, preferably from the private sector, though without ruling out the use of public funds.

The agreement reached concerns a Council resolution on the development of technology and standards in the field of HDTV services, with a framework agreement attached for the plan of action.

Any extra costs incurred by manufacturers and broadcasters as a result of the introduction of such sources will be financed by the plan, which is envisaged for a period of 4 years, ending on 30 June 1997.

Out of the total funding of 405 million Ecus (228 of which are Community monies) 160 million will be available for projects of not more than 50% of the total cost once the action plan comes into force.

A reserve of 68 million Ecus has been frozen until the start of 1995. It is set aside for similar programmes in countries with underdeveloped audiovisual resources, the funding in this case being able to rise to 85% of the total cost. Funds will be accorded to companies broadcasting a minimum of 50 hours per year in 16:9 format.

As far as standards are concerned, the Council confirmed its intention of revising the Mac directive as quickly as possible. The approved text does not exclude any standards, stressing amongst its objectives "the implementation of all technologies including entirely numerical ones".

Martin Bangemann, Commissioner in charge of this subject, commented on the decision, pointing out that it was not, however, a question of simply abandoning the Mac standard: "The HD Mac has never been more necessary for achieving high definition, as this is equally possible with a digital standard", he stated, adding nevertheless: "High definition depends above all on the format being used and the degree of resolution on-screen".

Commissioner Bangemann confirmed that before 1st October 1993 the Commission would present a report on the development of digital television.

Furthermore, at the request of the U.K., the text also specifically mentions that in conformity with the rules already in force, the economic participants in the plan will have access to Community R and D and normalisation activities.

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### Transeuropean networks: new proposals announced

In the course of the last session of the Council of Telecommunications Ministers on 16 June in Luxembourg, Michel Carpentier, Director General of DG XIII (Telecoms) presented a brief oral report to ministers on the changing situation in the networks area.

In it he noted that on 15 March 1993 the Commission had presented a communication on this question composed of two draft proposals of the Council, one on directions for the development of networks for transmitting data between administrations, and the other for a programme of support over several years for data transmission between administrations (IDA-see the last edition of the News Review).

On the same occasion the Director General also announced to the Twelve that this services would announce two sets of new proposals.

\* One would be on the development of the Integrated Service Data Network (ISDN) for which a budget of 90 million ECU over 4 years was available.

\* The other would be on Integrated Broad Band Communications (IBC), with a budget of 12 million ECU over two years.

## Hearing aids and electromagnetic pollution: a special point made by the Presidency

At a press conference on 16 June at the end of the Telecommunications Council, Mr. Arne Melchior, Danish Minister for Communications and President of the Council up until the end of June, stated that he had submitted a communication about the effects of electromagnetic pollution on hearing aids to Mr. Martin Bangemann, the Commissioner responsible for this sector.

According to this report, which refers to studies carried out over several months in Denmark, mobile phones are the cause of significant interference to hearing aids, thereby creating serious problems for hard-of-hearing people wearing such aids. The President of the Council requested the Commission to attend to this question and examine the possibility of laying down regulations not only to protect hard-of-hearing people from being inconvenienced by such equipment being used near them, but also to enable them to make use of it themselves.

Commissioner Bangemann took note of this and indicated that his department was working on this topic at the moment.

# Ministers welcome new Community postal services guidelines

In May '93 the Council published a Communication entitled "Guidelines for the Development of Community Postal Services".

This gives the results of a public consultation exercise which was initiated by the Commission's Green Paper of June '92 on developing the single market for postal services.

After Ministers had given their first reactions in a preliminary discussion in Luxembourg on 16 June, they decided that because of the importance of the topic a decision on the matter should be deferred to the next Council meeting on 16 November.

Copies of the guidelines are available in the nine EC languages from the address below.

Contact:

F. Toledano CEC XIII/A7 200 Rue de la Loi B-1049 Brussels

Tel: +32 2 29681770

# Equipment for land-based satellite communications: the Council agrees

On 16 June the Ministers for Telecommunications reached an agreement on the draft directive on legislation for equipment for land-based satellite communications.

This directive widens the field of application for telecommunications terminal equipment, including the mutual recognition of their compatibility, adopted in 1991. It is the first in a series of texts aiming to regulate the satellite communications services and equipment sector. It addresses four essential objectives:

1.to establish the single market for land-based equipment;

2.to instigate harmonised procedures for certification, testing, brand names, quality assurance and product evaluation, in order to ensure conformity to the essential requirements detailed in the 1991 directives; 3.to guarantee rights of use for landbased satellite communications equipment legally available on the market;

4.to guarantee connection rights to public telecommunications networks for land-based communications.

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# **PROGRAMMES IN ACTION**

# **ESPRIT NEWS**

### The European IT Conference 1994

1994 marks the completion of 10 years of Community R&D in information technology. 1994 is also the year which will herald a new era for Community R&D in IT with the adoption of the Fourth Framework Programme.

These landmark events have prompted the Commission to reorient and reshape the annual ESPRIT conference and to move it from its late autumn slot to a time appropriate for the opening of a

# **RARE News**



# JENC4 OF HIGH QUALITY AND WELL ATTENDED

On May 10-13 the 4th Joint European Networking Conference took place in Trondheim, Norway. 350 people from 33 countries attended the event, which was hosted by the Norwegian Institute of Technology. The attendees could take their pick from more than 50 presentations, numerous BOFs, demonstrations, and meetings of RARE and EARN (European Academic Research Network) working groups. A number of interesting social gatherings completed the event, e.g. an organ concert in the impressive Nidaros Cathedral.

The best papers presented during the conference will be selected for publication in a special issue of the Elsevier North Holland Journal "Computer Networks and ISDN Systems" (October or November issue).

#### INET'94/JENC5 ORGANIZATION TAKES SHAPE

As announced earlier, JEC5 will be held in conjunction with INET'94 (the annual conference of the Internet Society in Prague. RARE and ISOC officials attending JENC4 already took the opportunity to draft a preliminary Call for Papers for next year's event (available from inet-jenc request@rare.nl). The conference committee of INET'94/JENC5 is chaired by Geoff Manning (UKERNA, responsible for JNT programme), while Bernhard Plattner (ETH, Z, rich) again chairs the public dialogue on the future implementation of the IT programme. It will now be called the European IT Conference, and the next one will take place between 13-15 June 1994 at the Palais des Congrès, Brussels.

The theme of the conference, "I.T. and the Transformation of the Enterprise", is one that promises to play a major role in determining the future direction of R&D.

Contact: The European IT Conference secretariat Fax: +32 2 296 83 97

programme committee. Local arrangements are in the hands of Jan Gruntorad (Czech Technical University).

# HUNGARIAN OFFER TO HOST JENC7 ACCEPTED

Following the conference the 26th RARE Council of Administration meeting was held in Trondheim. During this meeting the CoA welcomed the offer from the Hungarian Academy of Science to host JENC7. It will take place in the first week of the World Exhibition EXPO'96, the theme of which - "Communication for a better world" - fits in well with the character of the JENC.

#### CEEC SEMINAR BUDAPEST

This autumn a seminar addressing computer networking for research and development in the central and eastern European countries will be held in Budapest, Hungary. The seminar was initiated by HUNGARNET officials and will be financially supported by NATO while RARE will be involved in the organization. The central topic will be how to improve the availability and quality of networking services for the R&D community in CEEC countries.

# CONTINUED SUPPORT FOR RIPE NCC

An important decision taken by the CoA was that RARE will continue to support the RIPE Network Coordination Centre (NCC) in 1994. It was unanimously felt that RARE should continue to take the responsibility for operating the NCC after 1993. The RIPE NCC provides a wide range of technical and administrative support to network operators in the Internet community throughout Europe.

### GENERAL MANAGERS APPOINTED FOR OPERATIONAL UNIT LTD.

In the context of the OU initiative RARE has set up a company called Operational Unity Ltd. Two general managers have been appointed: Howard Davies (University of Exeter) and Dai Davies (COSINE Project Management Unit). Currently other senior staff are being recruited. The setting up of the OU Ltd is to facilitate its start-up. Legal structures will be finalised this summer.

#### NEW PUBLICATIONS

RARE has published the fifth in its series of Technical Reports: "TRT5, A survey of Distributed Multimedia. Research, Standards and Products". The report was compiled and edited by Chris Adie from Edinburgh University Computing Service. The RARE Working Group on Multimedia commissioned this survey of state-of-theart multimedia networking.

A new edition (2nd printed and 3rd electronic) of RTR1 "User Support and Information Services in Europe" has been issued. In this updated version information on 25 national networks and five international networks has been collected.

Thirdly, the RARE Annual Report 1992 is available for distribution.

Paper copies of RARE publications are available from the RARE Secretariat. Electronic versions can be obtained from the RARE documents server via gopher.rare.nl or ftp.rare.nl, directories doc/reports or doc/rtr or e-mail: send a message to server@rare.nl with the text: send doc/reports/rare-annualreport.92 (add.ps for ps version) or send doc/rtr/rtr1 (add.ps for ps version).

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#### 5th IFIP conference on high performance networking

#### **Call for Papers**

The Conference organised by IMAG Institute and IBP Institute is due to be held in Grenoble (France) from 27 June-July 1 1994. This workshop belongs to the series started in 1987 in Aachen, followed by Liege in 1988, Berlin in 1991 and Liege in 1992. It aims at presenting and discussing evolution in the framework of high-speed networking and computing in private and public networks. Original contributions on the following topics are solicited.

A. New MAC Services and Protocols (Gigabit networks; ATM-based Systems)

B. Enhanced Network and Transport Services and Protocols (Multipeer Services and protocols; admission and congestion control; time-constraint management)

C. New Services and Protocols (Synchronisation semantic and management; protocols for groupware communication; video over high speed networks; QoS semantic) D. New applications (Multimedia; distribution network algorithms; groupware communication)

E. Internet working (Routing in high performance multimedia networks; bridges and routers technology and protocols; meshed architectures)

F. Implementation and Performance Evaluation (MAC Performance in high speed networks; efficient protocol implementation; parallelism)

G. Protocol and Network Engineering (Traffic control, modelling, and analysis; performance evaluation; formal specification; validation, simulation, implementation)

Authors of accepted papers will be requested to sign a copyright release form to IFIP. A participant edition of the proceedings will be made available at the conference from the cameraready copy which will be used later on for the publication of the proceedings by Elsevier (North Holland). The accepted papers not presented by the author(s) at the conference will not be included in the published proceedings. Deadline for submission of papers: As soon as possible

Notification of intent to submit a paper October 30, 1993

Full paper submission deadline January 31, 1994

Notification of acceptance March 31, 1994

Camera-ready copy due June 27-28, 1994

Tutorials June 29-July 1, 1994 Conference

Contact:

Serge Fdida Université René Descartes-UFR Math-Info L a b o r a t o i r e M A S I - I n s t i t u t BlaisePascal 45, rue des Saints Pères 75006 PARIS (FRANCE) Tel: +33 1 42 86 21 36 Fax: +33 1 42 86 22 31 e.mail: fdida@masi.ibp.fr

# Delta: telematics based training

On 26-27 October, a first online multisite conference will be organized focusing on distance learning.

European research will be the basis of this conference. During the two days, researchers, decision makers and other experts in distance learning will meet in seven European sites, (Athens, Bern, Berlin, Brussels, London, Madrid, Montpellier) with broadband diffusion on Eurelsat satellite and ISDN video feedback facilities.

The demonstrative value of the event will be the facilitating of group discussion between the sites, while at the same time keeping the individuality of each site during separate site debates. This conference will be a platform for on-line demonstrations and exchanges about the state of the art in DELTA Projects and more widely of distance teaching research.

Three main problems will dominate the debates in seven sites, each site tackling these problems from a specific technological point of view:

\* User requirements: Market/user trends. Relevance for peripheral regions. Configurations to meet the demands of home users, professionals and training centres. The future electronic campus, trans-European knowledge networks for SME and specialized professionals.

\* Pilot experiments: Pilot trials in delivery, distributed joint production, information access and integrated networks.

\* Standardization and networks: Network architectures for education and training. Standards organizational and management issues. Towards a test-bed.

Each site will take a specific technological subject:

\* ATHENS VSAT Applications \* BERN ISDN Applications and Tele-tutoring  \* BERLIN ISDN Applications and Integrated Broadband Communications (ATM based)
\* BRUSSELS Interactive Cable TV
\* LONDON VSAT Applications

and ISDN Applications \* MADRID Computer Conferencing

and Electronic Mail

\* MONTPELLIER DBS Applications and Interactivity, videotext.

Contact:

SNE France Télécom on tel : + 33 67 04 14 08 fax : + 33 67 14 67 29 or :

Jacques Babot DG XIII/ C3 (DELTA) Telecommunication applications 200 Rue de la Loi B-1049 Brussels Tel: +32 2 296 35 94

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# DELTA News

#### MULTIMEDIA AND SIMULATION-BASED TRAINING MATERIAL

This DELTA workshop took place in Barcelona 26-27 April 1993. The workshop brought together leading experts to compare and assess the differenct approaches, methods and tools supporting the design and developments of multimedia and simulation based training material. The workshop provided an opportunity for the six DELTA projects in this area to present their projects and discuss their findings in a wider context. The proceedings of the conference will be available for the DELTA Central Office in September 1993.

#### CANADIAN STUDY TOUR AND JOINT WORKSHOP ON LEARNING TECHNOLOGIES.

A DELTA study tour of Canada took place in April. The tour included a workshop with a transatlantic ISDN/DBS based video conference experiment organised by one of the DELTA projects which allowed the participants, in seven European sites (Madrid, Berlin, London, Paris, Brussels, Oslo and Uppsalla), to attend and contribute to the conference in Canada. The study tour included visits to successful distance learning projects. Canada is facing many similar challenges to Europe: skill shortages, problems of distance, cultural and language diversity. However, Canada has a powerful telematics infrastructure in place, a strong commitment to education and training as a priority area, an increasing emphasis on non-formal (non-traditional) education, and a tradition of close cooperation between technologists and educators.

The workshop discussions focused largely on the Canadian and European experience in the use of communications networks for flexible and distance learning. The Canadian as well as European telecommunications carriers participated in the workshop and explained the role they expect to play in providing networks for training and education.

Workshop participants discussed a number of emerging distance learning issues such as: the development and implementation of new instructional models for interactive and group learning; the development of a full range of media (voice, graphics, data, imge, fullmotion video); a focus on the needs of the learner in individual, institutional and life-long learning environments; cost-benefit and efficiency analysis of different learning scenarios; government/private sector policy and partnership models. Further research and development in each of these areas will ensure that people learn when, where and how most appropriate to their needs.

Cross-fertilization of research and development undertakings, exchanges of information and experiences of leading-edge research in the area of flexible and distance learning are expected to occur as a result of the EC mission to Canada. These collaborative activities will be enhanced by the negotiation of a science and technology cooperation agreement between the government of Canada and the Commission of the European Community. More information, including practical examples of Canadian distance learning projects, can be obtained from the address below.

#### Contact:

Lieve Van den Brande DELTA Central Office Rue de la Loi, 200 - BU 29 04/05 B-1049 Brussels Belgium Tel: +32 2 296 34 16 Fax: +32 2 296 23 92 Email: Irod@postman.dg13.cec.be

#### DELTA 1993 annual report

The Annual Technical Report on Research and Technological Development: Flexible and Distance Learning is now available from the DELTA Central Office. This report is one of seven annual reports on the EC Programme for the development of telematics systems in areas of general interest. The DELTA 1993 report provides an overview of the DELTA programme. It includes a short description of the 23 DELTA projects and 9 concerted actions, involving 176 organisations, working together to meet a common goal - the improvement of education and training systems in Europe. 1993 is a crucial year for these projects: they are now in their second year of operation, launching experiments and starting to consolidate results. This report gives an overview of the progress to date.

The Review Board Report published in May 1993, is now available

for the DELTA Central Office. The Board reviewed the objectives of the Telematics programme of General Interest in the area of Flexible and Distance Learning. The Board recognised the positive effect of the DELTA programme in widening interest and promoting research in technologybased learning in and between Member States, and noted that the DELTA programme has made "a substantial contribution to flexible and distance learning opportunities across Europe". The Board recommended that the mission for the future for R&D in telematic applications for flexible and distance learning should be "to develop and test technologies which improve access to and efficiency of education and training" This was followed up by the identification of a number of priority actions and research topics.

# News from Telematic Systems on flexible and distance learning (DELTA)

A Call for Proposals for DELTA was published on 1st May 1993 (OJ C 121/10) with a deadline of 15th June 1993. The key objectives of the call were as follows:

\* integration and validation of research and development results emerging from current DELTA projects;

\* interoperability and management of training delivery networks;

\* extension and strengthening of ongoing DELTA projects.

The emphasis of the call was very much on validation, integration and strengthening of DELTA research activity. The technical evaluation was carried out by a group of independent experts fom all over Europe. The total budget available for this call was 6 MECU. In total, 65 proposals were submitted (many more than anticipated); 52 proposals were for new projects and 13 were for extensions to existing projects. The proposals were of high quality and the overall funding requested was 32.4 MECU.

Because of financial contraints, only a small number of projects could be proposed for acceptance. These include seven new projects, one new 'Accompanying Measure' (an information/awareness raising activity) and eight extensions to existing DELTA projects. It is anticipated that the new projects will begin this autumn and the extensions to existing projects at the start of 1994.

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# RTD telematics programme: 6 AIM Projects to be launched

A Call for Proposals for AIM was published on 1 May 1993 (OJ C 121/20) with a deadline of 15th June. Following a technical evaluation by a group of independent experts, the Commission intends to launch new projects and accompanying measures.

The Call consisted of three parts. The EC contribution to the first two parts all in all will be in the region of 7 MECU, and to the third part in the region of 3 MECU. Although a number of very good proposals were submitted, financial constraints will necessitate a strict selection of only a limited number of projects, concerted actions and accompanying measures, and the extension of some contracts for ongoing projects.

A total of 87 proposals requested 73 MECU in the domain; the recommendations of the evaluators would imply the spending of 11.1 MECU. The proposed finance plan therefore represents a further reduction to 10.1 MECU and a reserve list of 4 proposals representing a value of 1.9 MECU. This reserve list should be considered only if the negotiations foreseen with some of the selected consortia would fail or lead to further reduction of costs. The objective of the shared cost projects are to be implemented at the integration, interconnection and validation of key AIM projects.

Twenty-eight proposals were received in this part. Of these evaluators recommended considering 6 projects for a total funding of 5734 KECU and 1 project was put on a reserve list. The proposals retained constitute a package which addresses the technological approach, regional and wide area interconnection, primary and secondary care, and relations with other European programmes. Together the six projects integrate, interconnect or validate at least 14 out of 35 on-going AIM projects as operative tests, with one of the selected projects providing the necessary framework. It is the proposal of the Commission to fund these activities with 5124 KECU, subject to outcome of negotiations.

The objective is the demonstration of results of the on-going R&D efforts in health care telematics by either supporting large scale demonstration activities or establishing and coordinating pilot added-value services for health care providers. Thirty-one proposals were received requesting and EC contribution of 22.2 MECU. A total of six proposals were recommended to be retained for an EC contribution of 2400 KECU. Another proposal was put on the reserve list. The proposals meet the objective and are seen to strengthen efforts in data collection, local or remote access to databases and standardisation. It is the proposal of the Commission to fund these activities with 2275 KECU, subject to outcome of negotiations with the consortia. Details are shown on the following table, "Draft Commission Proposal for Topic 3.3" and on the table, "Draft Commission Proposal: Reserve List for Topics 3.1, 3.2 and 3.3".

The objectives are to allow finalisation of emerging products, promote common results and demonstrate viability of solutions. Extensions will be subject to a favourable technical review outcome planned for October 1993. A total of 28 on-going projects asked for extensions at an EC funding level of 13.8 MECU. Evaluators recommended extensions of 15 projects subject to a favourable technical review and put 1 project on the reserve list. The Commission plans to propose 14 of the 15 for extension with a CE contribution of 2670 KECU, subject to outcome of negotiations, and to put 2 on the reserve list.

### **R&D** in advanced communications technologies for Europe-RACE

#### Final report on Phase 1 (1988-1992) CEC - DG XIII-CD-NA-15022 EW-C

Telecommunications now underpins most industrial activities and is central to business competitivity in Europe. Mastering the technology options has therefore become a key to economic growth and the creation of new employment.

The first phase of a 10-year RACE Programme (Research and development in Advanced Communications technologies in Europe) was launched by decision of the European Council of Ministers in December 1987. The objective was to "promote the competitiveness of the Community's telecommunications industry, operators and service providers in order to make available to final users, at minimum cost and with minimum delay, the services which will sustain the competitiveness of the European economy and contribute to maintaining and creating employment in the Community".

The Council Decision requires that "after the completion of the first fiveyear period of the programme, the Commission shall, after consulting the Managemnt Committee, send to the Member States and the European Parliament a report on the performance and results of the programme". This report fulfils that obligation.It draws on numerous evaluations and audits of the programme and its constituent projects during the period to December 1992. It was adopted by the Commission as a communication to the European Parliament and the Council of Ministers in March 1992, with the reference COM(93)118.

#### Contact:

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#### Technology transfer days 1993-95

The SPRINT programme is organising eighteen Technology Transfer Days over the next two years to promote transnational technology transfer to selected firms by introducing companies located in a Member State or region. The emphasis is on selectivity and a targeted approach, whereby the brokers are previously briefed on the needs or resources of these selected firms and therefore come with potential partners firmly in mind. These meetings, with a total Community contribution of 600,000 ECU, will lead to technical cooperation between European SMEs.

Technology Transfer days are part of additional activities designed to support technology transfer networks. Since 1986, SPRINT has supported about 300 transnational innovation networks of organisations (such as Chambers of Commerce and Industry, research and technology institutes, technology brokers, regional technological advisory centers) providing technology transfer services to European SMEs. Along with other types of actions, these networks are considered to be a significant tool for improving the industrial innovation capabilities of companies.

In 1990 SPRINT launched a first Call for Proposals which resulted in the organisation of a series of 23 Technology Transfer Days during 1991 and 1992. Following this successful two-year programme, at the end of 1992 a new call for proposals to organise these Community-wide events over the next two years was launched.

After this call, 17 organisations were selected, including national agencies like EOLAS (IRL), DTI (DK) and ANVAR (F), and regional development bodies like IMPIVA (E), KTTC (UK) and ARIST Alsace (F). The European Association for the Transfer of Technologies, Innovation and Industrial Information (TII) is also organising five of these events across Europe in conjunction with some of its member organisations.

SPRINT will coordinate these meetings to ensure a comprehensive and coherent overall programme, and good geographic coverage.

Contact:

Mr Gottfried Thesen CEC - DG XIII / D4 Telecommunications, Information Market and Exploitation of Research Jean Monnet Building L-2920 Luxembourg Tel: +352 4301-32508 Fax:+352 4301-34544 or

Mr Jacques Bonnin SPRINT Technical Assistance Unit 119, Avenue de la Faïencerie L-1511 Luxembourg Tel: +352 465588 Fax: +352 465550

SPRINT Technology Transfer Days 1993-1995 EOLAS DUBLIN (IRL) NOV 93 SOGES LECCE (I) JAN 94

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	T.V.A BERLIN (D)	<b>FEB 95</b>
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	ANVAR BORDEAUX (F)	MAR 95
	Technology Exchange BEDFORD (UK)	MAY 95
3-1995	IMPIVA VALENCIA (ES)	JUNE 95
OV 93	ARD N. Pas de Calais LILLE (F)	SEPT 95
AN 94	Zabala/T.I.I. PAMPLONA (ES)	DEC 95

#### The Barcelona Investment forum

The European Commission SPRINT programme is supporting an investment forum to bring together innovating entrepreneurs and financiers, which will take place in Barcelona on 18 November 1993.

This event is part of a series of investment forums aiming to introduce innovative small and medium sized companies (SMEs) from Member States seeking funding to financiers seeking investment opportunities. At these events a selected number of SMEs give short presentations about their activities to potential investors, notably venture capitalists, but also development finance companies, investment banks and large corporations.

The programmes are structured to allow adequate time for private meetings between entrepreneurs and investors, in addition to opportunities for informal discussion during social events. Contact:

Mr Juan C Fernandez CDTI

Tel: +34 1 5815526 Fax: +34 1 5815594

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#### Sprint workshops on Laser Techniques for industrial measurements

This year the SPRINT Programme is supporting a number of workshops on laser measurement techniques and the benefits these offer to manufacturing, process and energy generation industries.

These include better monitoring and control, which lead to improved quality, reduced waste, greater efficiency and, above all, enhance competitiveness.

Workshops are being run in the UK, Italy, France and Germany during September and October 1993. The content and structure of each has been carefully designed against marketresearched regional needs.

In addition to presentation on various topics, exhibitions and demonstrations are planned which involve the latest rechnology and methods from leading suppliers of instrumentation and consultancy. Information and advice will be available to delegates with specific technical requirements.

Schedule of Workshops on Laser Techniques for industrial measurements

\* 12-13 October 1993 Gaz de France, Paris, France

Contact:

Jocelyne Bardeau, Laboratoire de Chimie Physique de la Combustion Université de Poitiers Domaine du Deffend 86550 Mignaloux Beauvoir Tel: +33 49 468019 Fax: +33 49 468382 \* 21-22 October 1993 Universität Erlangen-Nürnberg Germany

#### Contact:

Dipl - Ing. Manfred Stieglmeier Lehrstuhl für Strömungsmechanik Universität Erlangen-Nürnberg Cauerstrasse 4 D-8520 Erlangen Tel: +49 9131 859490 Fax: +49 9131 859503

# Promoting the acquisition and diffusion of tacit knowledge: A Sprint/EIMS policy exchange workshop

Tacit knowledge is an expression to describe the type of knowledge learned only by experience and which is difficult to transmit to others by any means other than demonstration.

A simple definition of tacit knowledge is that "we know more than we can tell". Thus knowledge is diffused via personal communication, mobility and contact, and is highly dependent on the ability to communicate what is involved.

A common observation among plant managers is that starting a new plant with identical equipment, organisation and even the same people does not automatically lead to the same productivity and quality levels as in the old plant. One reason behind this is that competence is mainly accumulated in people, and therefore is tacit and intangible in form. Thus there is a growing awareness that the performance of firms and nations depends on skills that can only be transferred by experience and demonstration. Despite its importance, this subject has been neglected in the analysis of corporate strategy and public policy.

In order to contribute to an increased awareness, the European Innovation Monitoring System of the SPRINT programme (DG XIII) organised a workshop on the promotion of acquisition and diffusion of tacit knowledge in Luxembourg on May 25-26, with the participation of about 50 experts from different Member States.

By and large, such promotional schemes have been developed not only at national level, but also by regional or sectoral participants, and are often implemented on a public/private partnership basis. They have to address both the interest of firms in acquiring experience and knowledge, and their interest in protecting their technical competence, often a relevant factor in their competitive advantage. These points were highlighted in the introductory statement by Prof. Soete from MERIT and R. Chabbal, former Director at OECD.

At the conference ample evidence was given of the efficiency of Japanese companies and society to create, utilise and diffuse this type of knowledge. This intangible knowledge approach is probably one of the key factors behind Japanese industrial success.

Knowledge transfer by demonstration continues to be important, despite growing codification and electronification of innovation, such as the use of expert systems, CAD/CAM and CIM. This is partly due to the fact that the complexity of the system limits the codification of knowledge.

Since this knowledge can be acquired only by personal experience or personal interactions with experts, several public programmes have been launched at the regional, national and community level in recent years. These

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programmes cover support of knowledge transfer by mobility, site demonstration, user-supplier relationships and through technology clubs.

Most Member States have implemented programmes of this kind, quite often following the example of similar schemes in another Member State, e.g. many mobility schemes have been inspired by the Teaching Company Scheme in the United Kingdom, such as CIFRE and CORTECH in France, TECHSTART in Ireland, and the German TOP-Scheme. An important effect of these programmes has been to increase the ability particularly of small and medium sized firms to identify and absorb technical competence. Programme managers are aware, however, of the difficulties in implementing such schemes with a large number of firms: companies will only participate once they can operate in a climate of trust, and feel that they can engage in both giving and receiving relationships.

At the conference the question of creating a European network for scheme managers to exchange experiences was raised. In addition it was requested to facilitate secondments for scheme managers across different countries.

This policy forum was the second of a series of workshops in the field of innovation support for firms and technology transfer, launched by the Commission of the European Communities as a part of the SPRINT programme. The seminars bring together programme managers, policy and strategy developers and experts in innovation support and technology transfer in order to exchange experiences and to inform on best practices.

The next workshops are scheduled as follows:

\* November 15-16: Research and technology organisations - strategies for the future

\* December 6-7: The clustering of innovative SMEs

Contact:

MM Gerhard Bräunling/ Enrico Deiaco CEC - DG XIII / D/4, Jean Monnet Building L-2920 Luxembourg Tel: +352 4301 34532 Fax: +352 4301 34544

#### **Bright future for Science Parks Networks**

The increasing number of science and technology parks or similar initiatives in the Community raises issues of what communication and coordination is necessary between them, a trend which coincides with the spontaneous emergence of networks around local, regional, and national, formal and informal, science and technology parks.

These networks can include universities, research centres, public agencies, enterprises, etc. Organisations actively participate in technology transfer and diffusion, exchange of good practice, and of technical, financial and administrative information.

Networks can be based on telematics, or can depend on traditional means of communication.

It is important for this movement to develop as efficiently as possible and in a way that will allow communication between the various networks across European national boundaries.

It is of equal importance that the least favoured European regions are not left outside this networking process.

In this context, the Commission services responsible for innovation and technology transfer, telecommunications and regional policies are jointly looking into the necessity and feasibility of supporting Networks of Science Parks and the Diffusing of Advanced Telematic Tools (SPNET).

Following a call for tenders, a consortium of experts and international consultants led by Segal Quince Wicksteed Ltd (UK) has been appointed to carry out a feasibility study on the networking of science parks.

The study has three main objectives:

1.To see how, where and when networks of European science parks can be established or strengthened.

2. To evaluate if the use of telematic applications by science parks and their tenant companies could support the transfer of technology, exchange of experience and cooperation between science parks and firms as well as research centres locally or internationally.

3.To assess the potential role of science parks as demonstration centres for

local SMEs, specially in the least favoured and/or peripheral European regions. Science and technology parks located in these regions usually have the task of technology dissemination to local business.

They can, for example, play host to technology transfer centres and re search units, etc.

The use of some parks as demonstration centres for advanced telematic tools could be an efficient way of encouraging the use of such tools and disseminating technology in the areas surrounding the parks.

Results, including the opportunity and conditions of eventual Commission actions on the promotion of networks between science and technology parks, are expected to be available at the end of this year.

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Mr Jacques Bonnin SPRINT Technical Assistance Unit 119, Avenue de la Faïencerie L-1511 Luxembourg Tel: +352 465588 Fax: +352 465550

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# Pilot information service for Open Information Interchange: OII Spectrum



The pilot information service covering OII standards will be launched in September.

The CEC is supporting the launch of a "news plus" service, that will combine the friendly and useful features of a newsletter with the in-depth knowledge analysis of experts and consultants.

To be published monthly, each issue contains: analysis, discussion and guidance in authoritative feature articles commissioned from leading experts and industry commentators, providing you with the basis for short-term decisions and long-term strategy formulation. OII Spectrum will explain what is being done to make OII possible, by whom and why, and how you can ensure that your organisation benefits from OII.

The news service is a commercial service and will be published by Technology Appraisals Ltd.

A free wall chart explaining OII will be available at the same time as the launch in both English and French.

To obtain a copy of the wall chart and more information about OII Spectrum write to: Technology Appraisals Ltd

82 Hampton Road Twickenham Middlesex TW2 5QS United Kingdom

Fax : +44 81 744 1149

#### **Open Information Interchange**

#### Study of graphics standard

A study of graphics standards has been carried out by PIRA (UK) in the context of the OII (Open Information Interchange) actions.

The study provides a brief introduction to each of the main standards for image and graphic coding for still images, their application and use, and a general statement of the factors to be taken into consideration when using graphic standards.

The standard covered are both official standards from ISO and other international bodies and the main de facto standards in use in industry.

Copies of the 94 page report can be obtained free from:

The IMPACT Central Office

DG XIII/E L-2920 Luxembourg Fax: + 352 4301 32847.

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#### Second Work shop on OII

The IMPACT programme will organise a two-day workshop on Open Information Interchange the 2nd-3rd December 1993 in Luxembourg.

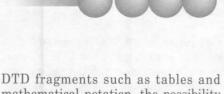
The workshop is a follow-up to the first workshop in June 1991.

\* The first half-day will provide a progress report on OII activities: image standards study, references model study, pilot information service and the multimedia/hypermedia workshop.

\* The second half-day will cover intellectual property management services: what data will be required and how will it be connected to documents.

\* The second day will be devoted to the standardisation of Document Type Descriptions (DTD) for use in SGML environments to aid the interchange of electronic documents.

Speakers will discuss how DTDs can help in overcoming the problems of SGML/ODA interworking, the current state of international DTD standards for publishing, standards for specific



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DTD fragments such as tables and mathematical notation, the possibility of extending the Text Encoding initiative to business information, and the use of SGML coding in conjunction with EDI.

The workshop will provide a forum for publishers and document designers to discuss the issues of attaching intellectual property management information to electronic documents and design issues in the use of SGML.

Registration for the workshop is free; further information can be obtained from DG XIII/E in Luxembourg.

Contact:

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#### Info EURO Access:

#### **Call for Declarations of Intent soon**

In order to stimulate increased participation in the IMPACT programme, its Central Office is giving advance information on a call for Declarations of Intent, due for publication in the EC's Official Journal in early October.

IMPACT's main aim is to create a European market for information services, and the projects sought will therefore be orientated towards applications based on available technologies, rather than on technological research and development.

In the Council Decision 91/691/EEC of 12 December 1991 the EC Commission adopted a programme for the establishment of an internal information services market (IMPACT 2). It now intends to complement its market support of 1992 and 1993 with an initiative in favour of integrated information tailored to the needs of specific endusers in different locations in Europe.

Known as INFO EURO ACCESS, this initiative is designed to improve European-wide access to information and enable businesses to obtain information rapidly and efficiently, in particular through the emerging transmission facilities to be offered by EURO-ISDN, forthcoming broadband comunications and other advanced delivery channels.

By supporting key development projects INFO EURO ACCESS will show viable ways of combining data from different sources, local and remote, for the benefit of business users, and demonstrate solutions for overcoming technical, linguistic and administrative obstacles impeding access to information. At the present time it is not feasible to invite formal and complete proposals since IMPACT's 1994 budget will not permit support for new projects in that year.

However, as an adequate budget should be available for 1995, the Commission will be looking for interested organisations to declare their intent to make a later proposal. Such declarations should contain only very brief summaries of the intended projects. Full details would only be necessary in response to a later, formal call for proposals.

The Commission will also be inviting

organisations to declare tasks or subject areas which are not yet ready to be the subject of proposals but require initial study, further work or activity on the legislation front.

Declarations will enable the Commission to plan the INFO EURO ACCESS exercise in the light of the interest and orientation shown by industry, in particular by defining the scope and conditions of the intended call for proposals and ensuring adequate administrative and budgetary support for projects. They will also assist the Commission to define future actions supporting the development of a European information market.

The Commission will be looking for the following characteristics in projects:

\* the development of information products and services for significant groups of users. Such users should be addressed as an open market and not linked in closed networks. Information sources likely to be of value to the European economy, for example by improving commercial and industrial productivity or creating new employment opportunities, will be of particular interest.

\* the improvement of access to and use of information through innovative approaches and presentational features, using new tools such as geographical information systems, interactive multimedia devices, advanced interfaces and intelligent interpreters to overcome language or other barriers to information access.

\* commercial viability

\* involvement of active partners from different Member States. This may include participation from States in the European Economic Area. The involvement of enterprises in the less favoured regions and projects benefitting the economy of those regions will be encouraged.

\* Projects must be led by a privatesector company

This list is not exhaustive, and projects are likely to be sought with specific features such as:

\* organisational and administrative measures to simplify contract and payment facilities for access to remote information;

\* integration of information in different forms, such as text, images, video



or sound, where such forms are of value to the user in his working environment;

\* a clear and open combination of locally stored information and remote information, in particular using ISDN, broadband, satellite or other advanced transmission facilities, showing how the end-user can integrate it into his working environment.

Responses to the October call will be invited from organisations established in an EC Member State or in another country included in the European Economic Area (Austria, Finland, Iceland, Liechtenstein, Norway, Sweden).

Responses should arrive by 15 January 1994 at the following address:

CEC - DG XIII-E-2

IMPACT Programme, Jean Monnet Building, Office C4-25A, L-2920 Luxembourg

Organisations submitting their names and addresses after that date will nevertheless be sent further information on calls for proposals or other actions decided as a result of this exercise.

The Commission expects to be able to invite full proposals from all respondents by mid-1994 in order to permit evaluation and negotiation of projects by early 1995.

Contact:

**IMPACT** Central Office

Tel: +352 3498 1222 Fax: +352 4301 32847

# Internet extends information access potential: ECHO databases now accessible via this network

It is increasingly difficult to keep track of the proliferation of data networks available. The past decade has seen significant growth in the number of public and private, local, wide area and regional networks now estimated to exceed one million.

Beyond these are the national, international or top-level domain networks which can, for example, enable researchers to obtain information or communicate with other researchers on almost any network in any part of the world. International networking may appear potentially straightforward. However, each network has its own physical layout or topology determined by location, equipment and application. To enable different networks to link up and communicate with each other, special protocol converters or interfaces have therefore been developed.

An example of the extension of a national network to an international level is the case of the JANET network connecting all university research networks in the UK. By installing the special EuropaNET (formerly IXI - International X.25 Infrastructure) interface, JANET users can connect to all EuropaNET users in other countries.

Addressing the demand to access and search information on a global scale by tackling the plethora of networks and protocols that exist, Internet has emerged as an organised "network of networks". Aiming to link all networks together so that a user has access to information from all parts of the world, Internet operates on TCP/IP (Transmission Control Protocol/Internet Protocol). Networks which register with and operate on Internet are, where permitted, accessible to any other Internet network, using either the TCP/IP protocol suite or the OSI (Open Systems Interconnection) protocol suite.

Created in 1983, Internet has seen dramatic growth in the number of networks connected to it, expanding from 100 networks in 1985 to over one million hosts connected worldwide in March 1993. Present-day user figures stand at over 10 million worldwide (16,000 organisations), mainly from the university and research institute communities. Services available can be categorised as connectivity (via the Internet Protocol), communication (such as electronic mail and file transfer) and information (access to databases).

So, what have \*LANs, WANs and MANs to do with DG XIII's IMPACT programme (Information Market Policy Actions) aimed at developing the European information services market? The availability of such wide networking potential is seen as an opportunity not to be overlooked in disseminating awareness about electronic information services. Network users are obviously already converts in terms of using electronic information. There is, however, huge scope to increase awareness of what is available in the European electronic information services market. The number of users capable of being reached offers a vast audience who can benefit, for example, from access to the I'M Guide database, the "Yellow Pages" of the European electronic



information services market. This directory contains information on more than 2500 online databases, 2000 CD-ROMs and CD-I products, 800 other information products, 1800 information producers, 800 services offering access and 1000 information brokers.

In addition, via Internet, online users can access the entire range of databases hosted on the European Commission's host ECHO, falling within the general categories of user support, research and development, language industry, and industry and economy. All databases can at present be accessed free of charge with the exception of TED (Tenders Electronic Daily), the online version of the Supplement S to the Official Journal the of European Communities, containing invitations to tender for public contracts from over 80 countries.

ECHO is accessible via Internet at the following address: Telnet ECHO.LU. Internet mailbox address: echo.mail@Eurokom.

Contact:

ECHO Customer Service B. P. 2373 L-1023 Luxembourg Tel: +352 3498 1200 Fax: +352 3498 1234

\* LAN = Local area network (or short-distance network) WAN = Wide area network MAN = Metropolitan area network

# LAB meeting addresses information industry concerns

At DG XIII's Legal Advisory Board (LAB) meeting on 29-30 April 1993, two main agenda items were of concern for the electronic information industry: namely the situation concerning VAT in general and on information after 1 January 1993, and liability issues related to information services.

Since 1 January 93, the basic principle concerning VAT on information serv-

ices across borders is that the seller (the information service) applies no VAT, whereas the buyer (ie the user) has to apply the VAT, pay the VAT to his administration according to the rate in his country.

In the Council Directive 92/77/EC of 19 October 1992, the Communities have for the first time established a harmonised principle concerning where to



charge full or reduced VAT. In the annex to the Council Decision, a list of supplies of goods and services which may be subject to reduced category is of interest to the information industry: information published on traditional media, newspapers, books, periodicals and library loans. This means that, if a database is published on paper, a reduced rate can be applied; if it is published electronically (e.g. on a



CD-ROM), the full rate must be applied.

Concerning the difficult subject of liability issues, the LAB had a lengthy discussion based on a number of documents and introductory presentations.

The LAB recommended to the Commission that more studies be carried out. It was also proposed that the Commission initiate work on providing practical guidelines to all those concerned with the provision and use of information services. These should not seek to offer definitive guidance but should describe any relevant national or EC authorities and should include check lists of significant legal issues. Finally, and in conjunction with the guidelines, it was suggested also to make model standard contracts.

#### Contact:

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Tel: +352 4301 34318 Fax:: +352 4301 32847

### Proposal expansion awards for SMEs participating in the Libraries third call for proposals

The advanced notice concerning proposal expansion awards related to the Libraries intended third call for proposals, has been published in the Official Journal of the European Communities.

The proposed third call is scheduled for November 1993, subject to availability of funds.

Results of the two previous Libraries calls indicated that a problem exists in matching the technological skills of suppliers of library-related systems and services, primarily small to medium-sized enterprises (SMEs), with the requirements of libraries as users of new or emerging technologies.

To facilitate communication between SME suppliers and libraries the Commission is examining the possibility of making financial awards to partly fund activities related to the proposal expansion of suitable projects.

These expansion awards would be made only in conjunction with the pro-



posed third call, and are intended for SMEs established within the Community, in partnership with libraries. Qualifying consortia would be invited to submit proposal outlines for themes of Libraries action line 4: Stimulation of a European market in telematic products and services specific for libraries, feasibility and requirements.

A final decision concerning the proposal expansion awards initiative should be taken in September. However, interested organizations are invited, as of now, to contact the Commission for information

Contact:

CEC/E-3 LIBRARIES Programme Expansion Awards Jean Monnet building (C5 66) Luxembourg Tel: +352 4301 32126/4301 34071 Fax: +352 4301 33530

#### Libraries programme: results of Call for Proposals 1992



The second Call for Proposals in the framework of the DG XIII Libraries Programme was published in October 1992 with the same scope (defined by preferred priority themes) as the first call.

By the deadline of 15 February 1993, a total of 97 proposals were received, representing 500 participants from 438 organisations in all Member States except Luxembourg. EFTA countries were also amongst them. 38 of the proposals submitted had libraries as coordinating partners, and libraries or library agencies and cooperative organisations accounted for almost half of the participants.

Following technical evaluation, 19 proposals were retained, involving 98 participants from the 11 Member States which put forward proposals. Of these 66 (68%) are from the library sector, including 11 from public libraries. All types of organisations are represented, though private sector participation is particularly weak (only 7 organisations). After strategic considerations 15 of these 19 have been selected for further negotiation as a first priority.

There are two test-bed projects in the OSI standards area: use of X.500 protocols and structures to support an enquiry and reference service; the development of a gateway between two search and retrieval standards, Z39.50 and ISO SR. Service-oriented projects will extend and improve access to information sources for users of mobile libraries. for end-users accessing the academic networks, distance and independent learners in public and higher education institute libraries, and for public library users requiring community or quick-reference information. A number of projects will test access to information and delivery of documents for specific categories of users (aerospace research and industry, distance learners, those requiring chemical information) and in two different national contexts (Italy and Portugal).

The technologies are varied, including: \* the network interfaces for online access and ordering; \* electronic delivery methods, including typically fax;

\* development of multimedia front-end tools to the services;

\* experimental technologies new to libraries such as voice recognition and the communications technologies necessary in a mobile, rural environment.

A number of projects will develop prototype tools or products aimed both at end-users (handling of SGML documents and automatic matching of search results with local holdings) and at library professionals (scanning and structuring of enriched bibliographic data in documents and a prototype CD-ROM integrating bibliographic data and textual images).

Contact:

CEC - DG XIII /E-3 Libraries Unit, Jean Monnet Building room C5/66, L-2920 Luxembourg. Tel: +352 4301 32126. Fax: +352 4301 33530.

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#### Current state of development of EUROGI

Issue no 10 of XIII Magazine News Review announced progress towards the establishment of a European UmbrellaOrganisation for Geographical Information (revised acronym EURO-GI), following an enquiry into its feasibility initiated by DG XIII/E entitled Information Industry and Market and Language Processing. The inaugural meeting to set up EUROGI is scheduled to take place in Luxembourg on 25-26 November 1993.

It has been recognized that the current national and international initiatives in Europe which deal with geographical information need to be consolidated within a unique forum. The existence of a European umbrella organisation would better address the commercial opportunities presented by forces such as flexibility of computer tools and the versatility of digital geographical information and its access. Because most national and international geographic activities have spatial aspects that could affect the lives of most European citizens, better harmonisation and exchange of ideas and skills leading to successful exploitation of these developments could bring potential benefits to a large proportion of the European population.

By May 1993, a draft document was written detailing the strategic, coordinating and service roles of EUROGI.

In terms of strategy, it is proposed that EUROGI would: stimulate strategic thinking and innovation; promote standards and technical benefits; stimulate R&D developments; accelerate technical developments; and stimulate discussion on legitimacy and support for GI in Europe.

In terms of coordination, it is proposed that EUROGI would: improve and streamline cooperation; reduce duplication; increase internationalisation and harmonisation; and serve as a point of contact between the European Community and the GI community.



*Regarding services*, it is proposed that EUROGI would: improve and effectuate interdisciplinary communication at a European level; improve information gathering and dissemination; and provide assistance to the less advanced.

A business plan is currently being prepared to select from the proposed activities those that are most appropriate for the new organisation. A more detailed status report is now available from the address below.

#### Contact:

Martin Littlejohn CEC, DG XIII/E L-2920 Luxembourg Tel: +352 4301 32187 Fax: +352 4301 33190

#### Information Market Observatory (IMO): an update

IMO working paper (93/2) on the CD-ROM market 1987-1992 provides a comprehensive overview of the market, from both a geographical and a technical perspective. It gives specific details on both demand and supply sides of the market: number of installed drives, titles in print, revenues and market trends. The paper addresses the continuing proliferation of format and platform types, and the confusion experienced by the consumer.

The third working paper of 1993 (93/3) contains an overview of the audiotex market for the period 1987-1992. Attention is focused on European issues in a global context, the current state of premium rate services, as well as non-technical problems. The paper also reports on the barriers in the market, and how these may be overcome.

The IMO's 1991 Annual Report covers the main events and developments in the European electronic information services market, and reviews the most important trends in the following sectors: online ASCII database services, videotex services, CD-ROM publishing, and fax-based and audiotex services. Among the many interesting findings presented is that the inter-EC trade in online ASCII databases (26.1% growth in absolute terms) was the fastest growing market area between 1989 and 1990. The equivalent 1992 Annual Report is in the final stages of preparation. In addition to the areas covered in the 1991 report, attention is given to the business environment for electronic publishing and to the evolving European information marketplace.

The proceedings of the IMO workshop held in Luxembourg on 3-4 November 1992, entitled *The role of information in the economy and in society*, are also available. This workshop discussed the wide-ranging role of information, from the point of view of the economy, firms and organisations, and the social, legal and policy aspects.

Finally, the IMO is pleased to announce that, for Belgium, IMO working papers may now be obtained from the address below.



Mr Steffens NCWTD-CNDST 4 Boulevard de l'Empereur B-1000 Brussels Tel: +32 2 519 5640 Fax: +32 2 519 5679

With the exception of the working papers (available as above and from the national dissemination agents), copies of the above reports may be obtained from the address below. Please note that the Annual Report is available in all official Community languages. When requesting the 1991 Annual Report, please indicate if you wish to receive the 1992 version when it becomes available. All other documentation is in the English language only.

#### Contact:

IMPACT Central Office CEC, DG XIII/E L-2920 Luxembourg Fax: +352 4301 32847.

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#### **PUBLAW 2 workshop findings**

The previous issue of the News Review  $(N^{\circ}1/93)$  outlined the subject of synergy between public and private sectors in the information market, which was addressed by the Legal Advisory Board (LAB) workshop held on 4 March 1993. The aim of the forum was to produce concrete indications of action which the marketplace expects the CEC to take in this field.

Options for action focused on:

- \* the future of the Guidelines for synergy
- \* reinforcement of the Guidelines' status
- \* exploration of a legislative initiative \* the organisation of discussion groups and similar measures.

The discussion and the replies to a questionnaire confirmed that there is quite a division between the views of some members. Many participants, predominatly from the public sector, appeared sceptical about a potential legislative initiative by the Commission. They would be prepared to accept a slight upgrading of the Guidelines or their being supplemented with sector-bases guidelines.

Parts of the private sector pushed for a directive that would create a format for possible action with the public bodies in dealing to establishing a commercial right of access to public sector databases.

Supplementary or alternative steps were also proposed, such as obliging public bodies to publish inventories of their information resources; the proceduralisation of the process by which Member States make decisions in the information market; and the appointment of a single authority in each Member State administration to deal with the private sector and ensure a realistic approach to synergy and access issues.

Both public and private sector representative seemed to agree on the organisations of forums to discuss practical public-private synergy issues at both national and EC level. There appears to be a wish for Commission involvement and support in the organisation of these forums.

IMPACI

A large number of participants expressed serious doubts about the opportunity to include a provision in Article 8.2 of the Draft Directive on the Legal Protection of Databases which would introduce a de facto right of access to public sector databases.

After useful debate, it was concluded that the various proposals should be thoroughly examined and that the resulting series of difficult points required further clarification.

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#### **Results of LRE Call for Proposals 1992**

A second Call for Proposals was published in October 1992 for shared-cost projects in the area of linguistic research and engineering (LRE), one of the seven areas covered by the Specific Programme in the field of Telematic Systems.

The call generated a very positive response by its deadline of 11 January 1993. The 82 proposals accepted for technical evaluation represented some 400 participants from 300 different organisations based in 17 countries, with a evenly balanced distribution between universities (55%) and companies, administrations and R&D centres (45%). The total EC contribution requested by the 82 projects amounts to approximately 69 Mecu, exceeding by a factor of 7 the funds available.

Sixteen proposals have been recommended for funding, representing around 2000 man-months of work, and involving some 90 project partners in all Member States and several EFTA countries. A wide variety of organisations is represented, ranging from academic institutions, research laboratories and universities, through SMEs to IT companies and user organisations. Half of the projects eligible to receive EC funds are concerned with the building of practical applications based on existing knowledge. R&D tasks are nevertheless present in all projects, along with integration and validation of innovative technologies.

Compared with the first call for proposals, which addressed a wide range of themes, the second call took a more selective and integrated approach to technology development and application building. The main themes addressed were research aimed at improving the scientific basis of linguistic technologies; common methods, tools and linguistic resources; and pilot and demonstration projects (those selected focusing on machine-aided translation and advanced office automation tools).

The call has been successful in attracting the interest of the private sector, including major IT suppliers, SMEs specialising in natural language processing and artificial intelligence, service industries and user organisations. Unexpectedly, several Member State administrations and government bodies also participated.

Despite the limited budget available, the growing interest and participation of those active in the industry throughout the EC, including SMEs, is significant. It shows that LRE initiatives can successfully increase awareness of the economic impact of language modelling and engineering activities in Europe, and stimulate the emergence of a European language infrastructure.

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# New opportunities for publishers in the information services market

Over the past 15 years, traditional publishers have experimented with new media products, but with limited success in terms of return on investment. The world's leading publishers still gain more than 90% of their profits from paper-based systems. It is therefore of strategic importance for the future of the European information industry that the publishers, who own most of the content, become involved in the emerging scene of electronic publishing. This fact has led the CEC, in close cooperation with representatives of the publishing industry, to commission a strategic study on new opportunities for publishers in the information services market. This has been initiated within the framework of the IMPACT (Information Market Policy Actions) programme of DG XIII.

The main findings of the CEC study are as follows. On 7th October 1993 electronic publishing will also be the subject of a plenary meeting and interactive workshop during the Frankfurt Book Fair, with the participation of leaders of the relevant industry sectors.

Although print products will remain the most important publishing sector in the coming decades, the study identified a rapidly growing market for electronic information products in Europe. Most of the 60,000 European publishers (mainly SMEs generating a turnover of more than 75,500 Mecus) are unaware of the dramatic changes in the information industry and of the opportunities and threats of the new media. There is uncertainty about technologies, markets and economics, and very little vision of the future.

Whereas Japan is strong in hardware and the USA has an additional strength in application software, Europe's strength lies in the richness of content for information products. Whilst this gives European publishers attractive opportunities for electronic publishing, it is also a threat that their mainly text-based contents will not be adequate for multimedia applications where music and "movies", with production dominated by non-European companies, play a significant role.

Since publishing markets are based on languages, electronic publications in the English language find larger markets and offer a higher and faster return on investment. This gives an advantage to publishers based in the USA and makes the necessary learning curve longer, more costly and risky for non-English publishers.

There are many new opportunities for publishers in electronic information businesses (such as corporate publishing), but also for players outside the traditional publishing arena, who are expected to play a stronger role than most traditional publishers have yet realised. For example, the strength of video game publishers, largely Japanese and American companies, should not be overlooked. Traditional publishers not exploiting opportunities in electronic publishing at the right time and with the appropriate strategy will lose this business to third parties. The same applies even more to booksellers and in particular to printers.

Against this background, the report suggests that significant support from the European Commission is necessary to help the European publishing industry increase awareness, willingness and ability in electronic publishing. This is strategically even more important in the light of the Japanese and American governments' commitments to electronic and multimedia publishing and related industries.

The report has been disseminated to 2000 participants in the market with a request for comments. Their replies will enable the Commission to validate the views and recommendations expressed in the report.

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# GIS Call for Proposals evaluation results reflect pan-European interest

A Call for Proposals for information services based on geographical information systems (GIS) technology was published in the Official Journal of the European Communities (No. C308) in November 1992.

In this context GIS is understood to represent an information integrating technology for digital processing, spatial analysis and presentation of information which is associated with a position on the earth.

It is a powerful tool enabling easy access to large volumes of data, selection of information on the basis of themes or locations, and representations of data in new forms derived from processing or modelling of the spatial component. The development of new services based on the capabilities of GIS can potentially contribute towards achieving the aim of DG XIII's IMPACT (Information Market Policy Actions) programme, whose strategic theme is improving the accessibility of information at the European level for all interested parties.

By the deadline of 1 March 1993, a total of 190 proposals was received involving 596 different organisations from all Member States. High participation by the five less favoured regions (LFRs) is illustrated by their involvement in 166 of the 190 proposals.



At the conclusion of evaluation procedures, 28 proposals were recommended for Community funding, 24 of which (i.e., 85%) have LFR participation and 13 of which are LFR-led.

Of the total of 596 companies involved in proposals submitted, 527 were small and medium-sized enterprises (SMEs), taking under 500 employees as the distinguishing criterion.

Selected projects involved 118 companies/organisations, 98 of which were SMEs.

The types of organisations participating in these projects are distributed as



follows:	
- Public administration:	21
- Research/academic:	12
- Private enterprise:	77
- Non-profit association or	
institute in private sector:	8

The total number of proposals recommended for funding per Member State is as follows: (T = total participation as a partner or coordinator; C = participation as a coordinator):

3 (T)
5 (T); 2 (C)
7 (T)
3 (T); 1 (C)
10 (T); 3 (C)
6 (T); 1 (C)
6 (T); 4 (C)
8 (T); 1 (C)
7 (T)
10 (T); 5 (C)
15 (T); 11 (C)

The distribution of subject areas in the 28 projects recommended for funding roughly reflects the current trend in the usage of GIS technology. Environment, business, transport and navigation (including tourism), planning and local government emerged as the main application areas addressed. Projects were selected on the merit of the proposal without preference being given to specific subject areas. Following confirmation of the final selection, the projects will be supported for a definition phase of up to six months. After a further selection procedure, support will be given to a limited number of these projects for an implementation phase of up to 18 months' duration.

The timing of the call for proposals was considered appropriate by the evaluators, who noted considerable variations in terms of general presentation, information content, GIS features, market definition and potential commercial viability of proposals. In general, they were able to commend proposals for marketable GIS information services, as opposed to applications internal to an organisation or group of organisations that:

\* comprised a clear and adequate definition phase,

\* addressed essential issues such as copyright and costs of set-up and of maintenance,

\* proposed appropriate technology for delivery,

\* set out a strong and realistic preliminary business plan and showed clear understanding of the inherent problems to be faced in implementing a GIS information service. Many proposals were strong in specific aspects but not all, or were insufficiently clear or did not comprise a sufficiently significant use of GIS functionality, particularly in spatial processing.

The GIS market is not yet equally well established in all Member States. However, the size of the response indicates the considerable interest in this market, especially in LFRs. The Commission's responsibility is now to disseminate the results of the call and the progress of the ensuing projects as widely as possible to build on this level of interest.

A listing of the proposals recommended for support, together with fact sheets on these 28 individual projects, may be obtained from the address below.

Contact:

Mr Martin Littlejohn CEC, DG XIII/E L-2920 Luxembourg Tel: +352 4301 32187 Fax: +352 4301 33190

### Tenders Electronic Daily = TED

The publication of Calls for Tender has long been a tradition at a national and regional level, but it is clear that a Single Market in the European Community will not succeed without the liberalisation of public procurement. Though calls for tender which amount to a sum of money below a certain threshold will be of particular interest at a national level, those which are above this threshold will certainly be of interest to all EC countries.

With this policy in mind, the EC established, during the seventies, two main directives which cover the supplies and the construction areas. The Council has decreed that supply contracts which exceed 200,000 Ecus and works contracts exceeding 5 million Ecus must be made known to all EC companies under the same conditions. With a new regulation, services exceeding 200,000 Ecus must be published and opened EC-wide as of 1 July 1993.

Tenders are translated into all official Community languages and are publi-

shed in the Supplement S to the Official Journal of the EC - and also in the database TED (Tenders Electronic Daily). Every day between 200 and 300 calls for tender, contract awards and other tender-related documents are published in both printed form and online, the overall contract value per year amounting to approximately 500 billion Ecu. Calls for tender and calls for proposals issued by the Commission of the European Communities are also usually announced via these media. In addition, TED contains tenders from other sources such as GATT and ACP agreements.

While the text of the documents is the same printed and online, the online users benefit from enhanced search facilities. Searches are possible by country and city. Products can be searched either by typing their name or by using the NACE product classification. Further codes include searching by legal aspects in order to select, e.g., by type of document, regulation of procurement or type of bid required. It is also possible to search by dates, e.g., the publication date or the final date for submission of tenders.

TED is available online via a number of commercial information providers. In addition, to ensure equal opportunities for potential tenderers from all Member States, TED is offered in all official languages of the European Community by ECHO (European Commission Host Organisation) in close collaboration with EUR-OP (Office for Official Publications of the EC) and DG III of the EC Commission.

TED can be accessed online on ECHO, with the simple but powerful retrieval language CCL. For those unfamiliar with CCL, a menu version is available. Access to TED is charged at 48 Ecus per connect hour; users wishing to have a look at TED may use the freeof-charge TED-DEMO database available under the public password ECHO (Network User Address: 270448112).

Companies interested in systematic scanning of their range of activity can obtain tenders matching their profile daily via telex and telefax.

Contact:

ECHO P.O.Box 2373 L - 1023 Luxembourg Tel.: +352 - 34 98 12 00 Fax: +352 - 34 98 12 34



# European Commission encourages Multimedia developments

On 15 and 16 March 1993, the Commission of the European Communities brought together in a special workshop the developers of 58 interactive multimedia projects to hear the latest news from equipment and software suppliers, discuss vital issues such as copyright and marketing, and exchange views and experience in the new field of interactive multimedia information products.

Interactive multimedia is seen by the CEC as an essential activity for the European electronic information industry and one in which new players will emerge from sectors as diverse as traditional print publishers, the film and television industry, and computer hardware and software houses. The merging of skills from these different sources will result in new information products that will put a strong emphasis on the concept of interactivity and accessibility of information.

The 58 projects were selected from over 300 proposals received after a Call for Proposals published in June 1992, within the framework of DG XIII's IMPACT programme. The projects are currently engaged in a six-month definition phase, with Community financial support, to solve the initial problems anticipated in mounting new projects in a rapidly changing environment. Their subject matter is diverse, but in each case is expected to attract a significant number of users, thus opening up new markets and encouraging further participants and products to appear on the market. The European Commission is investing almost 7 million Ecu in support of the projects.

One project sets out to produce, for a Philips CD-I system, a comprehensive encyclopaedia on the history of Europe, combining text, pictures and video sequences, aimed at the home and educational markets. Another will compile a maintenance guide for trucks, while a number of projects, using CD-ROM and multimedia PCs as well as CD-I and other bases, will offer health information on a variety of subjects including childbirth, childhood illnesses, fitness routines, nutrition, and health and safety at work. Because of the opportunity to include pictures, video and sound in a truly interactive system, many of the projects target cultural subjects such as paintings, architecture and music.



The standards required of the new products will be high, given that a number of different delivery bases are expected to co-exist on the market for the foreseeable future. Moreover, although the unit cost of the hardware is not high, in general users are not likely to invest in more than one system. In the Commission's view, the key to market penetration in these circumstances comprises the twin facets of subject importance and interactivity. Whereas it is clear that the information content of the product must be authoritative, valuable and tailored to the user's needs, the concept of interactivity has yet to be developed to its ultimate potential. The surge of electronic games in recent years has led to higher expectations in terms of response speed and interaction with a variety of symbols and routines. The challenge now is to take these advances further in the context of information delivery.

For this reason, the project developers at the workshop were interested to note the latest advances of the major suppliers, IBM, Philips and Microsoft, who demonstrated their authoring tools and latest application products. Authoring tools allow the developers to compose the information product they intend to put on the market. These programmes cut the cost of setting up a new information product on an optical disc, but the major task lies with the imagination of the developers, drawing on the skills of film, computer animation, programming and subject expertise to produce commodities that will be bought and used both in the home and for a variety of professional needs.

The 58 European projects continued their definition phase work until July 1993, after which they will be in a position to present their results and a concrete plan for implementation of main developments, production and marketing. The European Commission will offer further support to a small number of the projects through this stage, but the majority will continue with other financing, including venture capital.

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# Attention focused on European biotechnology information needs

Nine European organisations involved in biotechnology information have formed a strategic forum in response to a report published in 1990. Entitled "Bioinformation in Europe: Strategy for a European Biotechnology Information Infrastructure", the report (co-financed by the CEC) concluded that Europe lacked the focus and infrastructure to provide long-term stability to both academic and commercial biotechnology information products.

Given the immense importance of biotechnology to industrial Europe, it was concluded that greater benefit could be derived by all users and producers if biotechnology information products could be brought together.

Supported by a grant from DG XIII, the European Biotechnology Information Strategic Forum (BTSF) brings together: CAB International (UK), Excerpta Medica (NL), Inst.PAS-CAL (France), Pergamon Press (UK), Springer Verlag (Germany), The Royal Society of Chemistry (UK), Wolters-Kluwer Academic Publishers (NL), the EMBL Data Library (Germany) and CERDIC (France).

Modern biotechnology is highly information-dependent and uses a wide variety of information sources and technologies. The members encompass these skills, and cover the full range of sciences relevant to biotechnology, including agriculture, the environment, medicine, biomedicine and tropical medicine, biology and chemistry. The business aspects of biotechnology are also catered for. Among the members are publishers active in the field, while the EMBL Data Library produces and distributes nucleotide and related protein sequence databases, and CERDIC produces immunoclones and cell line datahases

The forum has agreed the following initial tasks:

\* to identify and characterise user needs through interactions with industry platforms, advisory groups, market sectors and individual purchasers/users;

\* to measure these needs against commercial, technical and political limitations;

\* to develop potential solutions to such market-led questions;

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\* to develop systems for the long-term support of non-commercial products; -to examine ways of interlinking products to ease the use of both individual and combinations of files and products; \*to examine ways of securing the future of independent database hosts for the European user;

\* to strengthen the European information industry's response to international market and political demands.

The project will run initially for two years, although the intention is to establish the BTSF as the permanent focal point for multi-partner European project development, general commercial strategic needs, and product and project security in the biotechnology information sector. The BTSF also plans to become a European focal point for international activities.

The partners stress that they will maintain their independent products; strategic emphasis is being placed on issues rather than individual project details. At the same time, many of the same group are investigating further research into the production of a common core database in biotechnology.

#### Contact:

The Biotechnology Information Strategic Forum, Voorhaven 33, NL-1135 BL Edam, The Netherlands. Tel: +31 2993 72751 Fax: +31 2993 72877

# **STANDARDISATION**

#### Electromagnetic compatibility: workshop on the EC directive

On 25th-26th October 1993 the Directorate for Internal Market and Industrial Affairs - DG III - is organizing a workshop entitled "Electromagnetic compatibility" in Brussels.

Items to be discussed:

\* international and European standardization,

\* the "new approach" directives,

\* the EMC directive of 1989,

\* telecommunications terminal equipment,

\* electromagnetic compatibility in the information technology and telecommunication equipment sectors.

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#### **ETSI's Intellectual Property Rights Policy**

ETSI adopts framework principles for the implementation of its Intellectual Property Rights (IPR) Policy and Undertaking

At its 17th General Assembly, ETSI approved the framework principles for implementing its IPR Policy and Undertaking. Recognising that ETSI statutes allow the Institute to take any actions which help it fulfil its mission, the general assembly confirmed in its resolution that such actions may include the implementation of the IPR Policy and undertaking previously adopted.

As a consequence, the Institute's statutes and rules of procedure will be amended to allow its implementation.

The IPR Policy and Undertaking stipulates Members' rights and obligations on IPR in relation to ETSI standards. Building on the policies of other standards bodies, it ensures that the IPR used in standards are licenced on fair, reasonable and non-discriminatory terms, and while preserving the rights of IPR holders, it tries to minimise the right to standardise.

It thereby substantially reduces the risk of an IPR holder exercising his right to withhold his IPR at the end of a standardisation project by refusing to grant licences on fair, reasonable and non-discriminatory terms. In the event of this happening, the standard in question would have to be redesigned in order to avoid the withheld IPR incurring delays and extra costs.

The ETSI's IPR arrangements preserve the right of an IPR holder to withhold his IPR, if he so desires, but requests all its members and any other signatries to the arrangements to specify their intention of withholding IPR within 180 days of the formal approval of a work item. This enables the ETSI work programme to be modified so that standards are not blocked by IPRs.

ETSI is the recognised standards body for telecommunication, and has direct representation. Its IPR Policy and undertaking aims to meet the needs of all members, which include manufacturers, users, network operators, telecommunications administrations and research bodies. It is therefore a vital tool for ETSI if it is to achieve its goal of producing the technical standards necessary to create a large and unified European telecommunications market.

# **EUROPEAN DIMENSION**

#### **EIB** loans for Slovak Telecommunications

The European Investment Bank, the European Community's long-term financing institution, has announced loans totalling ECU 100 million for projects in Slovakia.

A loan of ECU 24 million to Slovenske Telecommunikacie will help finance the expansion and modernisation of the Slovak telecommunications network. The investment comprises a digital overlay network, including four transit and one international exchanges and associated fibre-optical and micro-wave transmission facilities. The works will allow the connection of some 300.000 new subscribers and are part of a 1993-95 investment programme co-financed by the EIB, the World Bank and the EBRD.

These loans bring the total EIB lending in Slovakia to ECU 138 million, and the amount provided in six Central and Eastern European countries to more than ECU 1 billion, some sixty per cent of the ECU 1.7 billion authorised by the EIB's Board of Governors for lending in this region.

The EIB's lending in Slovakia is part of the European Community's programme to support Central and Eastern European countries in their move towards market orientated economies.

# TELEVERKET (Swedish Telecom) to become TELIA

The Swedish Parliament has decided that the Televerket (Swedish Telecom) is to begin operating as Telia AB, a limited liability company on July 1, 1993.

Parliament has also passed telecommunications legislation that specifies the rules of the game for the Swedish telecommunications market.

Solely owned by the Swedish State, Telia AB will assume responsibility for business operations, while a new independent agency, the National Telecommunications Board, will take over all authoritative powers.

Televerket already cooperates internationally with PTT Netherlands and Swiss PTT in Unisource, a jointlyowned datacommunications company.

Televerket is also involved in major projects in the Baltic countries and in St. Petersburg.

# Danish IT & Telecoms industry under scrutiny

Fischer & Lorenz European Telecommunications Consultants have just completed a review and assessment of the information technology and telecommunications sector in Denmark.

The study was undertaken on behalf of the Danish Ministry of Foreign Affairs in the context of the Danish Government's Investment Promotion Plan to attract foreign high-technology investments. The objective of the Investment Promotion Plan is to contribute to the internationalisation of Danish industry in order to strengthen technology innovation, production and export.

The review is presented in the report 'Analysis of the Information Technology and Telcommunications sector in Denmark'.

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# Information technology business opportunities in Eastern Europe and the former Soviet Union: conference

Organized by the Adam Smith Institute, a conference will be held in London from 13th-14th October 1993.

The conference will analyse the investment and trading possibilities offered by the IT industry in the Eastern European countries and the former Soviet Union.

#### Subjects include:

\*The emerging Eastern European and FSU IT markets within the international context \*Established and developing and efficient distribution and manufacturing network for IT products

\*Financial, structural and legal issues essential in the creation of a commercial basis for the IT industry.

\*Government assistance: tariff protection, tax incentives, import/export regulations.

\*Characteristics and segmentation of the market for IT products in Eastern Europe. \*Experience of local and international software and hardware distributors, manufacturers and users.

#### Contact:

Christina Watts Conference Division 11-13 Charterhouse Buildings London, EC1M 7AN ENGLAND Tel: +44 71-490 3774 Fax: +44 71-490 8932

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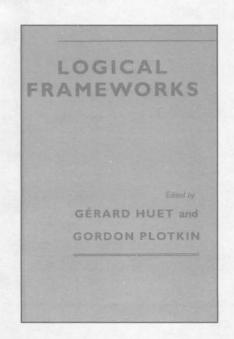
# PUBLICATIONS

### **Logical Frameworks**

Gérard Huet (INRIA-Rocquencourt) G. Plotkin (University of Edinburgh) Cambridge University Press ISBN: 0-521-41300-1

This book is a collection of papers presented at the first annual workshop held under the auspices of the ESPRIT Basic Research Action 3245, Logical Frameworks: Design, Implementation and Experiment. It took place at Sophia-Antipolis, France, from 7-11 of May, 1990. 74 people attended the workshop: one from Japan, six from the United States, and the rest from Europe.

The contributions are concerned with the application of logical reasoning and proof theory in computer science and its relevance to automatic theorem proving, and consequently topics such as artificial intelligence. It is the only source for much of this material, and will be a necessary purchase for mathematicians and computer scientists undertaking research at the interface of logic and software engineering.



#### Contact:

Press Syndicate of the University of Cambridge - The Pitt Building Trumpington Street Cambridge CB2 1RP - UK

#### Panorama of EC Industry 93 Industrial affairs (DG III) of the Commission of European

Commission of the European Communities - DG III Industrial Affairs

Office for Official Publication of the European Communities 1993 —ISBN 92 - 826 - 54 28 - 1

Panorama of EC Industry 93 is a directory providing a comprehensive picture of industry and services within the European Community. It is intended for all those requiring an update on the present situation and probable future developments in the EC's manufacturing and service industries.

It opens with a "special features" section, which takes a global approach to a number of horizontal subjects of topical interest. The main part of the book is composed of the industry reviews which provide a microeconomic survey of EC industry and services, tracing the major developments in production, employment, trade and structural change, and including in most cases detailed statistical data and forecasts. *Panorama* was commissioned by the Competition and Industrial Policy Unit of the Directorate-General for

Lectures on parallel computation

ALAN GIBBONS (Department of Computer Science, University of Warwick)

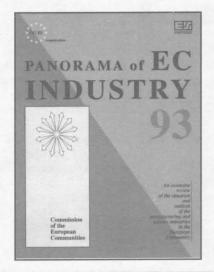
PAUL SPIRAKIS (Department of Computer Science, University of Patras)

Cambridge University Press, 1993 -ISBN 0521 41556

This volume is essentially based on a series of lectures delivered at the Spring School of Parallel Computation held at the University of Warwick. The School was organised under the general aegis of the ALCOM (Algorithms and Complexity) project of the ESPRIT II Basic Research Actions programme of the European Community.

Almost exclusively, this book is concerned with the foundations of parallel Industrial affairs (DG III) of the Commission of European Communities, with the cooperation of EC trade and professional associations.

Contributions were invited by all such organisations known to the Commission which represent industry at the European level.



#### Contact:

Office for Official Publications of the European Community L-2985 Luxembourg.

computation. The pre-dominant interest is in the efficiency of computation. There has been some effort to ensure that the bulk of the contributed chapters form a coherent stream, taking the reader from a position of having little prior knowledge of the subject to a position of being familiar with leadingedge material from a variety of contemporary research and preoccupations. For this reason, a few chapters are concerned with the presentation of basic material of broad interest, others present details of particular specialisations and yet others provide a wideranging but advanced perspective. The book may therefore function both as a source of teaching material and a reference for researchers.

Contact:

Press Syndicate of the University of Cambridge The Pitt Building Trumpington Street UK-Cambridge CB2 1RP



# AGENDA

### MUMPS users' group Europe-18th annual conference

'M Technology is an ISO standard Computer Software Technology (incorporating the MUMPS Language) which is widely used in Europe by organisations such as Shell, Nederlandse Aardolie Maatschapij, Swedish Onkologist Centrum, Russian Parliament, the University of Milan, the Hamburg Ports Authority, the Swiss Federal Chancellery, the Bank of England, Coca-Cola, BICC-Vero, Hoffman La Roche and many hospitals.

It is used as widely by many organisations around the world particularly in the USA and UK and is well known for its portability, performance and ease of use. The MUMPS User Group is a nonprofit making organisation dedicated to providing educational information and promoting the technology.

The MUMPS Users Group - UK & Ireland have been selected as hosts for the 18th Annual Conference and Exhibition of the European User Group. This will run from the 25-29 October 1993 in Jury's Hotel in Dublin.

The theme of the conference is The Future of Information Technology which will be covered by a wide range of tutorials, training courses, technical papers, presentations and meetings. There will also be a large exhibition of the latest innovations in Information Technology and a series of cultural and social events.

Contact:

Steve Gillman DUBLIN'93 Organising Committee SMS Ireland SMS House, St. John's Court Swords Road, Santry Dublin 9 Ireland Tel: +353-1-8420022 Fax: +353-1-8420927

### DG XIII participation in technology exhibitions

SMAU (Esprit ABHS-P) Milan 30 Sept. - 4 October

COMPAT (Tedis) Birmingham 5-7 October

FOROTECH 93 (Esprit IPSS) Bilbao 20-23 October Le Génie Logiciel (Esprit IPSS) Paris 17-19 Nov.

SITEF Toulouse 19-23 Oct.

Stamp Exhibition: 5-7 October Strasbourg 11-22 October Lisbon 29 Oct.-11 Nov. Madrid

XIII Magazine and XIII News Review are published every three months by the Directorate - General for Telecommunications, Information Market and Exploitation of Research (DG XIII) of the Commission of the European Communities. The opinions expressed in these publications do not necessarily reflect those of the Commission. All correspondence should be addressed to :

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