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M A G A Z I N E
News Review

G-7 Members confirm their commitment to the Global Information Society

At their meeting in Halifax on 11 June 1995, the Heads of State and Government of seven major industrialised nations and the President of the European Commission endorsed the conclusions of the Brussels meeting of the G-7 on the Global Information Society. In the final communiqué the G-7 Members confirmed their commitment to cooperate in the establishment of a Global Information Society.

"We welcome the results of the G-7 Information Society conference held in Brussels in February, including the eight core policy principles agreed to by Ministers, and encourage implementation of the series of pilot projects designed to help promote innovation and the spread of new technologies. We also welcome the involvement of the private sector. We encourage a dialogue with developing countries and economies in transition in establishing the Global Information Society, and welcome the proposal that an information society conference be convened in South Africa in spring 1996."

THE INFORMATION SOCIETY

Implementing the Information Society: the European Commission's proposal for a methodology

On the proposal of Mr. Bangemann, Commissioner for Industry, Information Technologies and Telecommunications, the Commission approved a communication on a "Methodology for the implementation of information society applications". This document was presented to the EU ministers for telecommunications at their meeting on 13 June.

The first part of the document describes how the Community can make the most efficient use of its resources to encourage the deployment of Information Society applications. In most areas the commercial viability of the new services and applications is sufficiently attractive to render public action unnecessary. But in certain application fields, where despite obvious socio-economic benefits, the prospects for commercial viability are judged by private investors to be uncertain in the long time, public authorities' encouragement can be envisaged particularly in areas of selective interest.

In this context the Union can fulfil several roles:

• Information and awareness-raising maintaining an updated inventory of projects that are planned or underway at national, European or international level. This is one of the 11 pilot projects identified by the G7 ministerial meeting on 26-27 February.
• Brokerage bringing together players from different sectors with a common interest in certain initiatives.

• Guidance and financial support for the realisation of projects.

The financial instruments to be used each according to its own rules are:
• the trans-European networks support mechanism: ECU 450 million for the period 1995-1999.
• The framework RTD programme with its three specific programmes Telematics (collective interest applications), ACTS (chiefly basic technology) and ESPRIT (basic technologies, applications and industrial best practice).
• The Structural Funds and the Cohesion Fund.
• The European Investment Bank and the European Investment Fund.

A series of Guidelines for Trans-European Telecommunications Networks

Article 129c of the Treaty establishing the European Community stipulates that the Community "shall establish a series of guidelines covering the objectives, priorities and broad lines of measures envisaged in the sphere of trans-European networks; these guidelines shall identify projects of common interest". On 11 May the European Commission put forward the proposal of a communication on a series of guidelines for trans-European telecommunication networks.

The proposed decision sets out the domains of Common Interest and a procedure for the identification of specific projects in these domains. Due to the specific character of the sector it is not possible to define a priori specific projects, like, for instance, in the transport sector.

Specific projects must therefore be identified through a demand-driven approach, using a procedure of call for proposals in chosen domains as follows:

Applications:
• A network for universities and research centres
• Distance education and training
• Health Telematics
• Transport Telematics
• Telematics for the environment
• Teleworking
• Telematic services for SMEs
• Trans-European Network for Public Administrations
• Electronic tendering
• City information highways
• Library services
• Telematic services for the job market
• Cultural and linguistic heritage
• The public's access to services

Generic Services:
• Implementation of operational trans-European generic services
• Progressive extension of the generic services toward a multimedia environment
• Introduction on non-proprietary digital signature as a basis for open service provision and mobility of use.

Basic networks:
• Euro-Integrated Services Digital Networks
• Commercial introduction of managed Asynchronous Transfer Mode (ATM) and other broadband networks
• Interoperation of existing and broadband communications networks

The projects of common interest will be identified in these domains in response to a Call for Proposals. These projects shall be transnational.

The selection criteria will be:
• the potential economic viability of the project
• the maturity of the project
• the stimulative effect of Community intervention on public and private financing
• the effectiveness of the financial package
• the direct or indirect socio-economic effects, in particular on employment
• the consequences for the environment
• Coordination of the timing for the different projects, especially for trans-border projects.

The G7 Business Round Table calls for Government action

In a Declaration submitted to the Halifax G7 Summit, the Round Table of Business Leaders calls on governments to take urgent and coordinated action at national and international levels to accelerate the building of the Global Information Society.

With this document entitled Building a Global Information Society - A call for government action, prepared at the initiative of the European Round Table of Industrialists, and by the multinational, multisectoral business leaders who participated in the Business Round Table of the G7 ministerial Conference on the Information Society (held in Brussels on 24-26 February 1995), the Business leaders confirm their full commitment to the principles agreed upon by the G7 Governments, and made specific recommendations to accelerate the process of the construction of the Information Society.

In the Chair's conclusions of the G7 Ministerial Conference on the Information Society, the G7 reached an agreement on a common set of principles which include, among others, promoting dynamic competition, encouraging private investment, defining an adaptable regulatory framework, providing open access to networks and recognising the necessity of world wide cooperation with particular attention to less developed countries. Fully committed to these principles, the Business leaders stated in a formal Declaration that "principles must be followed by action".

Therefore, and because they are "strongly convinced that a sense of urgency has to pervade all of the decision making process at a global level", they ask governments and international institutions to take urgent and coordinated action. This, they say, would create the conditions which encourage new investments and help create new jobs by industry. The Business leaders "offer their cooperation to government and international institutions to define a transparent and predictable regulatory environment and to monitor its implementation." Stressing the importance of education and training as a vehicle to promote equal opportunity for people in all countries to participate in and benefit from the Global Information Society, they commit themselves to work together and cooperate with the competent institutions to promote specific programs and experiments.

The Business Leaders call for urgent and coordinated action and make precise recommendations in the following areas:

• Development of global trade and investment (removing barriers to trade in goods and services as well as barriers to trade in content);
• Competition in telecommunications (transition from monopoly to fully competitive markets, definition of universal services, role of telecommunications regulator);
• Interoperability and standards;
• Privacy, data protection and information security;
• Effective protection of intellectual property rights;
• Education as a priority for global pilot projects.

European Commission launches two new advisory groups on information society

Following a proposal by Mr. Martin Bangemann, the Commission has approved a proposal to set up two independent bodies to advise on the measures Europe should be taking in preparation for a fully fledged information society. The `Information Society Forum´ representing both industry's and the social partners´ views, and the `High Level Group of Experts´ will be expected to contribute to the European Commission's preparations for the economic and social changes anticipated in Europe from the current information revolution.

The aim of the Information Society Forum will be to contribute to open debate and reflection on the challenges of the information society. It will also recommend priority projects to be implemented by the Commission. Participants in the Forum will be drawn from a wide range of groups: users, network operators, academia, trade unions, youth groups, parliamentarians, industry, the public sector and consumer groups, amongst others. Member States have been invited to put forward names of half the participants for the Forum, the remaining participants have been selected by the Commission.

According to the recommendations in the Bangemann Report, the European Information Society Forum will provide the opportunity for representatives from a wide variety of different groups, including the social partners, to contribute to open debate and reflection on the challenges of the Information Society. The Forum should also indicate to the Commission the priority projects that need to be implemented. It will produce an annual report assessing the overall progress made. This annual report will be adopted by the plenary session of the Forum.

The members of this forum have been chosen to represent the views of the different interested parties in the Information Society: various user groups; network operators; academia; social partners; parliamentarians; professional bodies and information and service providers.

Taking into account the variety of social, economic and societal aspects, approximately 100-150 representatives have been selected, on an individual basis, from the groups identified.

The aim is to also invite representatives who can bring a fresh perspective by approaching the issues from a wider angle, and who can make non-technical contributions. These contributions should help to broaden the horizon of the debates.

Information Society Forum: inaugural meeting

Representatives from a wide variety of backgrounds met in Brussels on 13 July for the inaugural meeting of the Information Society Forum under the auspice of the European Commission, represented by Martin Bangemann, Commissioner in charge of industrial affairs, information technologies and telecommunications.

The aim of the Information Society Forum is to contribute to an open debate and a reflection on the challenges including social, cultural and linguistic aspects of the information society. It will also recommend priority projects to be implemented by the Commission.

124 members have been drawn from a wide range of groups: users, networks, operators, academia, trade unions, family associations, parliamentarians, industry, the public sector and consumer groups, amongst others.

At the inaugural meeting, the Forum elected Mrs. Birgitta Carlsson (Sweden, Telia AB Teleservices) as chair, Mr. Roberto Carneiro (Portugal, Televisão Independente - TVI) and Mrs. Caroline Kerstiens (Netherlands, BEUC) as co-chairpersons.

Working groups covering the following themes were set up:

1. Impact on economy and employment;
2. Basic social and democratic values in the virtual community;
3. Influence on public services (healthcare systems, administrations, transport, environment);
4. Education and training;
5. Sustainable development of technology and infrastructures;
6. Cultural dimension and the future of the media.

The Forum will submit an annual report to the Commission assessing the progress made.

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Commission's high-level experts on the social implications of the information society

In April 1995, Pádraig Flynn, European Commissioner for Employment and Social Affairs, established a High Level Group of Experts on the social aspects of the information society, as suggested in the Action Plan "Europe's Way to the information society" adopted by the Commission in July 1994.

The Group is made up of fourteen external experts appointed on a personal basis with a wide range of experience and expertise in this area. It met for the first time in May 1995 and is due to provide a preliminary report in November 1995. A further report will be made available by April 1996.

As a first step, the Group will work on the basis of the priority themes mentioned in the Commission report for the Essen European Council of December 1994.

• impact on employment of the introduction of new information and communication technologies and conditions for optimal exploitation of new jobs linked to technological progress;
• impact of new technologies on work organisation (flexible enterprise, teleworking) and potential consequences on social legislation (labour law, social security, including health and safety at work);
• consequences of the information society on the cohesion of Europe's regions and cities;

• opportunities offered by new technologies for the adaptation of education systems to the needs of the information society;
• opportunities offered by new technologies for improving management of systems devoted to healthcare and quality medical care;
• opportunities offered by new technologies for improving the labour market situation and developing human resources.

A special European Colloquium will be organised in 1996 to present the Group's findings, and in the second half of 1996, the Commission plans to present a Green Paper on the social implications of the information society.

People invited to participate in the high level group of experts on social and societal aspects of the information society:

President: Mr. Luc Soete, University of Limburg, Director of MERIT (Maastricht Economic Research Institute)

Mr. Johan Blankert, President of NCW (Nederlands Christelijk Werkgeversverbond)

Mrs. Bergitta Carlson, Senior Advisor, TELIAS (Swedish telecommunications provider)

Mr. Manuel Castells, Professor, University of Madrid

Mr. Liam Connellan, Former Director-General of the Confederation of Irish Industry (CII)

Mrs. Ursula Engelen-Kefer, Vice-President of DGB, Member of the Economic and Social Committee and governing body of the ILO

Mr. Chris Freeman, Founder and former Director of the Science Policy Research Unit, Sussex University

Mrs. Lisbeth Knudsen, Chief Editor, Det Fri Aktueit

Mr. Yves Lasfargue, CREFAC (Centre d'Etude et de Formation)

Mrs. Isabelle Paillart, Master of Conferences on Sciences and Communications, University of Stendhal, Grenoble

Mr. Jorma Rantanen, Director-General, Finnish Institute of Occupational Health

Mr. Amando Trindade, Professor, Universidade ABERTA

Mr. Pierre Verderio, Director for Research Department, FIS-CISL (Confederazione Italiana Sindacati Lavoratori).

"Europe and the Global Information Society": Conference in Bologna on the "Digital Cities" Action

On the occasion of the conference on "Europe and the Global Information Society" held in Bologna on 30 March 1995, Commissioner Martin Bangemann invited Europe's cities to undertake ambitious projects to stimulate the transition to the Information Society by promoting the "digital city", including:

• the use of alternative networks to provide early experience of the new competitive environment;

• fostering innovative technological solutions in public administrations, e.g. through electronic tendering in public procurement;
• stimulating the deployment of new approaches to the provision of more citizen oriented and efficient public services.

Mr. Bangemann highlighted that cities are not just users of ICT applications, they are also the owners of networks and the providers of services. He also

noted that the Information Society will change the character of public administrations.

"More and more information will be online, and this will bring citizens into closer contact with their administrations", he said.

"Information and communication technologies provide a powerful tool for solving many of the problems faced by cities".

Conference in Bologna on the "Digital Cities" Action (continued)

He therefore welcomed the pilot schemes being launched by cities throughout Europe to build "digital cities", as the results and experiences would benefit all those affected by the information society.

"Although there is no lack of activity, there is a lack of visibility", explained Mr. Bangemann.

"It is important to bring these activities together to create the critical mass necessary to stimulate the provisions of new services and the creation of new jobs", he said. To contribute to the exchange of experiences, the Commission's Information Society Project Office (ISPO) is making an inventory of the pilots.

Mr. Bangemann sees the cities' pilot schemes as testbeds for the new competitive environment envisaged for 1998.

"These pilots demonstrate how different operators can cooperate and learn from their experiences", he remarked.

"But the successful launch of such pilots requires public initiative", he added. "For example, increasing their visibility will certainly help to attract the necessary private investment and get the required political support for innovative applications".

He pledged that the Commission would support these pilots with all available instruments, but at the same time he called for a "just do it" mentality to be shown by all parties.

POLIS: Amsterdam, Athens, Barcelona, Berlin, Birmingham, Bologna, Bristol, Brussels, Cork, Dublin, Frankfurt, Glasgow, Cologne, Lyon, Marseille, Munich, Norwich, Paris, Pireus, Rotterdam, Southampton, Torino, Hampshire, Edinburgh.

TELECITIES: Amsterdam, Amaroussion, Antwerp, Bari, Barcelona, Berlin, Birmingham, Bilbao, Bologna, Bradford, Cardiff, Den Haag, Edinburgh, Geneva, Helsinki, Hull, Cologne, Leeds, Leeuwarden, Leipzig, Lewisham, Lille, Lisboa, Liverpool, Lyon, Maastricht, Madrid, Manchester, Marseille, Montpellier, Munich, Nantes, Newcastle, Nice, Nottingham, Nürnberg, Palma, Porto, Rome, Rotterdam, Sheffield, Turin, Toulouse, Venice.

The ISPO Webserver (http//www.ispo.cec.be)

The ISPO webserver has been online since 13 February 1995. It provides topic-oriented material about the Information Society in the European Union. When you access the ISPO server you will be required to understand the structure of the European Commission or of its different DGs.
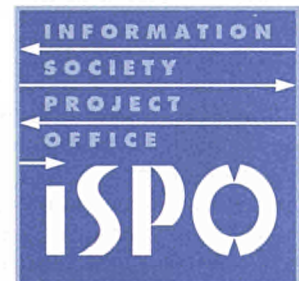
By using the World-Wide-Web you will be able to follow a logical train of thought through many different documents which should give you a better understanding of the variety of topics involved. Using this technique will provide real added-value to documents about the information society by developing links giving you both context and background data at the click of a mouse.

The ISPO webserver contains or has links to documents created by the Commission and other EU institutions which relate to the information society.

Documents include general short explanations of what the information society tables showing the current status of the information society and even the green papers and legislative texts. If the topic of interest cannot be located by browsing, the server can be easily searched and then it is easy to jump straight to the page of choice. Online discussion lists are available, and feedback is always welcomed.

Key Facts about the ISPO webserver:

- available 24 hours a day
- free of charge
- contains more than 200 documents
- over 1000 internal and external links

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EC Council confirms political support for effective liberalisation

The European Union's telecommunications policy took a major step forward with the adoption on 13 June by the Telecommunications Council of a Resolution outlining the future regulatory framework to accompany the liberalised telecommunications environment from 1 January 1998,* the date agreed by the Council of Minister for full liberalisation of telecommunications infrastructure. That is the same date as that agreed in July 1993 for the removal of the remaining monopolies over the public voice telephony service in the Member States.

The Resolution endorses the results of the public consultation carried out by the Commission during the first half of this year on infrastructure liberalisation (see separate article) and provides a political framework for a common Union-wide approach on the three key regulatory issues: interconnection, universal service and licensing. The Commission will bring forward proposals to address these areas between the summer and the end of the year.

The Council has now agreed on the following principles for the Commission's proposals for legislation on the future regulatory framework:
• Telecommunications markets are open to all operators and service providers which satisfy objective and non-discriminatory licensing requirements;
• In order to guarantee that all citizens and businesses throughout the Union can access at least basic telecommunications services at an affordable price, the future framework at a European level will require Member States to identify which companies are to provide universal service. It will also establish common rules for identifying the cost of universal service in each Member State and for sharing any burden associated with providing universal service amongst market players;
• The main commercial issue after 1998 will be the terms upon which new players can interconnect with today's incumbent operators and with each other. The creation of common rules for

interconnection is therefore essential. Priority is to be given to commercial negotiations, though supported by common rules on interconnection and by existing competition provisions of the Treaty. Regulatory Authorities will oversee the technical and commercial aspects of interconnection negotiations in order to avoid discrimination and to promote the development of competition.
• Account must be taken of the social impact of telecommunications liberalisation.
• The Council has reaffirmed the Union's commitment to effective and comparable access to worldwide markets. Agreement on the shape of the future regulatory environment for telecommunications will substantially assist the Community in achieving this aim in the context of the on-going multilateral trade discussions within the World Trade Organisation.

• Legislative programme
In the light of the Council's position, the Commission is already preparing proposals to translate these policy objectives into legislation, which it will present during the second half of the year. These proposals will have to be adopted by Council and Parliament during 1996 so that they can be implemented by Member States in good time on 1 January 1998.

At the same time, discussions at a Union level should not prevent Member States from moving forward more rapidly in preparing for a liberalised environment. The Council specifically called on the Member States to make progress in promoting the adjustment of tariffs in preparation for competition and to publish as early as possible their proposed licensing or authorisation schemes, so that future market players will be authorised to start operating from day one of the new liberalised environment.

* Subject to a transitional period of up to five years for Member States with less developed networks, and of up to two years for Luxembourg.

Legislative Programme to implement the future regulatory framework for telecommunications

In relation to the timetable for liberalisation, the Commission expects:
• to amend the 1990 Services Directive to set the date and other necessary conditions for full liberalisation of telecommunications infrastructure and services from the beginning of 1998, and also
• to liberalise fully mobile and personal communications services and infrastructure before 1998.

These two measures are in addition to those already proposed by the Commission to open up the use of Cable TV networks to supply liberalised telecommunications services. If required, there will also be proposals to give further effect to competition principles set out in the Treaty, e.g. Articles 85 and 86.

Between the summer and the end of the year the Commission will also propose:
• a directive on interconnection, (including the financing of universal service obligations), and
• a directive covering licensing of services, as well as a separate initiative on the co-ordinated licensing of satellite based personal communications systems).

The Commission also hopes to see the final adoption of the pending directive applying the open network provision rules to voice telephony services. This measure will strengthen user rights and provide an initial framework for some interconnection well in advance of 1998.

Finally, the Commission will also propose technical amendments to the existing regulatory measures (the so-called Open Network Provision Framework and Leased Lines Directives) to adjust them to a competitive environment after 1998.

Telecommunications liberalisation Directive in the Member States

In the field of the liberalisation of telecommunications services, the European Commission has produced a communication reviewing the transposal of Directive 90/388/EEC by the Member States.

The Directive has been central to the liberalisation of telecommunications in the European Union and aims to achieve the liberalisation of all telecommunications services and infrastructures by 1988. The proposals in this field are to be put forward by 1 January 1996.

The Commission communication comprises:
• A report on the implementation of the Directive by the Member States.
• A presentation of the basic questions arising as regards application and interpretation.
• A presentation of the role which the Directive is designed to play in the group of reforms which are to be achieved by 1998.

The timetable was laid down in two Council Resolutions of July 1993 and November 1994, namely 1 January 1998 for the liberalisation of public voice telephony services and telecommunications infrastructures. There is a five-year extension (i.e. 2003) for Member States whose network is less developed, and a two-year extension for very small networks.

The report addresses the main features of the Directive:
• Definition of voice telephony services where exclusive rights can be maintained.
• Maintenance of the other exclusive rights.
• Transparency and openness of authorisation procedures.
• Requisite conditions for the simple resale of leased data-communications capacity.
• Conditions for open access to public networks (reasonable timescale).
• Justification of restrictions on data processing.
• Effective establishment of an independent regulatory authority.

The main questions of application and interpretation are:
• Definition of voice telephony.
• Enforcement of the voice telephony monopoly in a liberalised environment.
• Corporate networks and closed user groups.

• Data services for the public.
• Separation of the operating and regulatory functions.

In the field of the future evolution of services, the following were to be liberalised:
• Satellite services (this has been done).
• Mobile telephony and paging services (in progress).
• Public voice telephony (1998).

In addition, the principle of the liberalisation of infrastructures has been decided by the Council.

On 21 December 1994 the Commission adopted at first reading a proposal for a Directive concerning the liberalisation of the use of cable networks for the supply of previously liberalised services. The regulatory framework which has to be adopted by 1 January 1996 requires that this Directive, the harmonisation (ONP) Directives and the proposals relating to the universal service and interconnection be amended.

Fourth Framework Programme
Adjustment of the budget

On an initiative from Mrs. Edith Cresson, the Commissioner responsible for science, research and development, and education and training, the Commission adopted, a proposal on 12 April 1995, for a Council and Parliament Decision for a 7% increase in the budget for the Fourth Framework Programme of RTD activities.

The adjustment is required following the accession of Austria, Finland and Sweden to the European Union on 1 January 1995. This would increase the budget for 1995 to 1998 from ECU 12.3 billion to ECU 13.161 billion.

On 29 November 1994, Parliament, the Council and the Commission agreed to raise the budget ceiling for the EU's internal policies, including R&D policy, by 7% a year. In response to this decision, the Commission has proposed maintaining the high priority which research takes amongst its internal policies and, accordingly, raising the budget for the Fourth Framework Programme by the same percentage.

In order to maintain the consistency and continuity of the activities undertaken, the Commission has proposed an across-the-board increase for the entire Framework Programme (both EC and Euratom) and for each of the specific programmes.

The new breakdown of funding for the Fourth Framework Programme would therefore:

• First activity (research, technological development and demonstration programmes): ECU 11.434 million.

• Second activity (international cooperation): ECU 578 million.
• Third activity (dissemination and optimisation of results): ECU 353 million.
• Fourth activity (stimulation of the training and mobility of researchers): ECU 796 million.

This adjustment will require unanimous approval by the Council under and co-decision procedure and in no way prejudices the decision to be taken by the Council and Parliament by June 1996 on whether to unblock the additional reserve of ECU 700 million set aside when the Fourth Framework Programme was adopted. The Commission will make a proposal on this point in due time.

Council's common position on ONP Voice Telephony Directive.

On 13 June EU Telecommunications Ministers took an important step towards ensuring that European citizens will continue to have access to a good quality, affordable telephone service as the European telecommunications sector becomes increasingly competitive. Meeting in Luxembourg under the Presidency of the French Minister of Telecommunications, they agreed on a Common Position on the Commission's proposal for a Directive on Voice Telephony.

Martin Bangemann, the European Commission Member in charge of telecommunications, said that this Directive constituted an essential part of consumer protection in this area.

It sets out the basic features of a universal public telephone service to be available to all users in the EU - and in particular to individual consumers. These include such features as the provision of telephone lines within published delivery periods, the provision of itemised billing, and the availability of independent procedures for settling billing disputes. The Directive will also ensure that public call boxes, directory services and special tariff schemes for certain social groups continue to be available.

Mr Bangemann also said that delivery periods and service quality had already been significantly improved in some Member States. In others the introduction of detailed invoices had proved popular with customers. The Directive reflected the importance Ministers attach to universal service in a fully liberalised market. The Directive would be updated as necessary to keep pace with changes in the market and the technology.

Once liberalised, public telecommunications networks and services will be owned and operated by various public and private organisations. The directive will provide a balanced development of the market, will set out in clear terms the scope of universal telephone services, and will provide a stable regulatory framework in advance of the full liberalisation of telephone services.

The directive covers issues such as:
• non-discriminatory service for all users, i.e. availability of technical access, tariffs, quality of service, availability of information to customers;
• the user's right to have a new telephone line installed within a published delivery period;
• the user's right to have itemised telephone bills,and acces to independent settlement procedures for billing disputes;
• the need to guarantee that the cost of a telephone service remains affordable to all users,under supervision of the national regulatory authority;
• transparent and properly published tariffs, a transparent cost-accounting system;
• discount schemes for certain users, socially desirable tariffs for particular groups of people, for particular types of call, or at particular times of day;
• ensuring the supply of telephone directories and directory services;
• provision and availability of public pay-telephones;
• promoting the creation of a single type of telephone payment card, which can be used in all Member States;
• support to groups of people with special needs, such as disabled people;
• development of Europe-wide telephone numbering schemes, facilitating the use of freephone/green-number services;
• guaranteeing users the same rights and legal protection as when dealing with other goods and services.

Digital television:
the Commission welcomes the amendment of the European Parliament.

The European Parliament has, in second reading, amended the Council's common position on the proposed directive about standards for the transmission of television signals.

Following the report by Mr. Gérard Caudron (Socialist, France), the Parliament insists that the Member States take every measure possible that conditional access service operator and cable operators who produce and market access services to digital network offer access to all broadcasters on equitable, reasonable and non-discriminatory conditions. All consumer equipment rented, sold or otherwise made available within the Community should allow the reproduction of clearly transmitted signals.

The Parliament also stresses that the operators must obtain remuneration for their investment and provision of services, and provides for the possibility of resorting to an arbitration body or national settlements authority in the case of dispute. The Assembly places emphasis on the problems of piracy and on the need for effective legislation in this field. Recalling that the directive aims at setting up digital television, offering conditional access and establishing European norms, Mr. Caudron said he felt this technology would make it possible to multiply programme offers by eight. The legislative framework aims at preventing consumers having to pay the price of technological developments, which, he said, would be unacceptable.

In the reporter's opinion, the Council's common position is insufficient and does not go as far as the conclusion of the Digital Video Broadcasting (DVB).

This has resulted in a compromise stipulating that holders of conditional access systems could offer closed systems on condition that they authorise other operators to use their systems. In his report, M.R. Caudron found in favour of "conditional access" allowing for investment remuneration to be guaranteed while granting access to all broadcasters on fair, reasonable and non-discriminatory terms.

At the meeting of the Telecommunication Council, held in Luxembourg on June 13, Martin Bangemann, Commissioner for telecommunications, announced that the Commission may accept all the amendments put forward by the Parliament. The Council requested the experts to examine these to prepare a formal decision for adoption at a future session.

Wide-screen TV report hails encouraging first year for new 16:9 screen format in Europe

Following a proposal of Martin Bangemann, Commissioner responsible for Industry, Information Technologies and Telecommunications, and Mr. Marcellino Oreja, Commissioner in charge of Culture and Audiovisual Policy, the European Commission adopted the first annual report on the Action Plan for the Introduction of Advanced Television Services.

The objective of the Action Plan, which was launched by a Council Decision of 22 July 1993, is to break the vicious circle of "chicken and egg" which had earlier prevented the introduction of the new screen format. Broadcasters feared the extra costs of transmitting 16:9 and would not start services without 16:9 television sets being available, while manufacturers would not produce the new television sets without broadcasting, fearful for their investments. The structural separation between broadcasting and consumer electronics therefore meant that market forces could not themselves initiate a solution: two different sets of equally valid market forces were involved with no way of resolving them. It is achieving this by contributing to broadcasters' and programme makers' extra costs for introducing wide-screen TV. This is ensuring that 16:9 wide-screen can be offered to the European public in a coherent fashion.

Wide-screen has met with strong consumer approval. European sales of wide-screen TVs were only 15,000 units in 1992; they rose to 150,000 in 1994 during the first year of Action Plan services and seem set to at least double this year. 16:9 wide-screen is popular with consumers because it is more ergonomic and makes TV resemble cinema, which also uses wide-screen. "Home Cinema" is a popular concept with the public currently. 16:9 is also the screen format for high definition television, and the transition from today's screen format to 16:9 is a precondition for a market-led introduction of HDTV using digital technologies at some point in the future.

Industry's response has also been encouraging. The Action Plan is supporting 22 wide-screen broadcast services in eight different Member States, totalling some 30,000 broadcast hours so far. Funds are awarded following competitive calls for tender and these have been oversubscribed: demand usually exceeds available budgetary resources by up to ten times. A critical mass of services - to allow consumers a reasonable choice of services - has been achieved in France and Germany. Achieving a critical mass of services throughout the European Union is one of the Action Plan's indicative targets. The other target is a sufficient and increasing volume of programming in 16:9 format. Programme producers have responded enthusiastically, with around 13,000 hours of programming supported, over half - 65% - being "long shelf-life" programmes whose cultural significance is also important since they will continue to enrich the diversity of Europe's cultural heritage over an extended period. The Action Plan also shows that it is possible to combine market impact and cultural aspects.

The Action Plan has also enabled Community policy to rise above the technical debate because the new screen format is independent of the technology chosen to deliver it. Broadcasters can use either analogue or digital technology to deliver pictures depending on their strategies and circumstances.

Digital TV and its introduction in Europe are among the issues to be raised in the high-profile conference on wide-screen TV announced by Commissioners Bangemann and Oreja for October 1995. This will be organised by the Commission as part of its continuing efforts to align audiovisual policy with the Information Society initiative.

Legal protection of databases:
Council reached political agreement on a proposed directive

Meeting in Luxembourg on 6 June, the Internal Market Council reached a political agreement on a proposed directive concerning the legal protection of databases. This "common position" will be formally adopted at a later Council meeting and then transmitted to European Parliament.
The future directive is founded on the fact that databases are not sufficiently protected in all Member States. Making databases is expensive; copying or accessing them is much cheaper. Moreover, with the advent of the information society, the protection of databases takes on an added importance as most services will be provided from an electronic databases available on-line or off-line (CD-ROM, CD-I etc.). They will also have a major impact on the creation of new multimedia products.

The proposed directive covers paper-based as well as electronic databases and represents a balance between the right of manufacturers and those of users. It provides for a harmonisation of copyright legislation applicable to the structure of databases but not to the content itself (which is often already covered by such a right). The directive aims to create a new exclusive economic sui generis right to protect investments in time, money and effort in establishing a database which does not justify the application of a copyright. Manufacturers will be able to invoke the sui generis right to prohibit the extraction and/or re-utilisation of all or substantial parts of the database by third parties.

This right would be valid for 15 years, subject to renewal when new substantial investment take place. The Member States would have the ability to provide for exceptions, as regards use for private purposes, teaching or scientific research. Protection could be extended in future to databases manufactured in third countries, on condition that their legislation provides for a level of protection similar to that in the European Union.

The Commission is shortly expected to adopt a Green Paper dealing with amongst other topics authors' rights in the Information Society.

Mobile and Personal Communications: Commission wants open market

In the wake of the Telecoms Council of 13 June 1995, Commissioner Van Miert, in cooperation with Commissioner Bangemann, has put forward an Article 90 directive to introduce full competition in the EU mobile and personal communications market by 1 January 1996. Substantial progress has already been made in the Member States as EU competition rules have been applied to abolish monopolies in the provision of mobile services. However, the new measures include liberalisation of the most important cost factors for the new market entrants, particularly use of own facilities and alternative infrastructure.

With the directive, the European Union takes the lead in setting the right regulatory conditions for encouraging the development of mobile and personal communications into a vast mass market. The EU market will be the first to enjoy the combination of liberalisation of services and networks, together with the deployment of harmonised, leading edge, digital standards over such a large area. These are GSM, DCS 1800 (the two frequencies available for digital mobile services) and DECT (digital cordless telephony within a fixed radius). The directive is based on the discussion process launched last year by the Green Paper on Mobile and Personal Communications. It requires Member States to abolish all exclusive and special rights in the area of mobile communications and, wherever this has not yet been achieved, to establish licensing procedures to authorise the launch of digital services GSM, DCS 1800 and DECT.

The directive also goes further on specific issues, most importantly concerning use of own and alternative infrastructure. It thus removes all existing restrictions on use of facilities for mobile networks, allowing new mobile operators to make full use of their own infrastructure as well as that provided by third parties such as utilities' networks. The countries with less developed networks are to be given derogations of up to five years to take account of their specific situations.

This concerns Portugal, Greece, Spain and Ireland. Very small networks (Luxembourg) will have a two-year derogation. Alongside this, the directive also abolishes restrictions on direct interconnection for mobile networks.

Use of infrastructure othan than those controlled by the incumbent telecoms operator is essential to the success of new entrants to the mobile market as it gives them much greater control over their cost base. Leasing capacity currently represents a cost factor for second operators of between 30 and 50%. Furthermore, the right to set up their own networks and choose alternative infrastructure and connections gives mobile operators significantly more flexibility, which represents an important push towards further development and innovation in the market.

Competing operators in Member States have complained, for example, that for the same price of renting capacity from the incumbent they could already have built up their own networks, but regulatory restrictions have prevented them taking up this obviously preferable opportunity. Current restrictions on direct interconnection means that in most Member States the second mobile operator is obliged to pass a call through the fixed network of the incumbent national operator for interconnection into another Member State, whereas direct interconnection with a choser operator in the country of destination is often both technically logical and cheaper.

A booming market

The mobile sector is by far the most dynamic in the telecoms market experiencing levels of growth averaging 60%. In just one year the number of cellular subscribers in Europe has grown from around 9 million (3/94) to around 15 million (3/95), now outstripping growth in numbers of fixed subscribers.

Commission studies predict 38 million cellular mobile users in Europe by the year 2000 and around 80 million by 2010.

On top of very substantial analogue networks in countries such as the UK, Italy and Scandinavia, the growth potential of GSM is now also evident in most Member States. In France, for example, GSM subscribers grew from 112,000 to 500,000 over the past year. In Belgium there were around 11,000 GSM subscribers at the beginning of 1994 and there are now nearly 90,000. Italy saw growth over the same period from 9,000 in 1994 to 94,000 in 1995. Germany still remains by far the most important market with over two and a half million users, of which close to two million are now on the GSM network.

However progress in countries with less developed networks is also notable. Last year GSM subscribers in Greece increased from 45,000 to 180,000, and in Portugal, from 109,000 to 175,000.

The Scandinavian are now also experiencing massive growth in take-up of GSM. Most impressive is Sweden where the GSM market has grown from around 38,000 to 465,000 over the past year. The growth is evenly divided between the two competing operators.

Enthusiastic response to first calls for ACTS, IT and Telematics Applications programmes

Response shows commitment of industry and service providers to cooperative research

The first calls for the ACTS, IT and Telematics Applications programmes have between them attracted over 2610 proposals and a total request for EU funding of over 7.8 billion ecu.

The projects and other actions proposed cover work on the more basic or underpinning information technologies and their integration into systems (IT programme, 903 proposals); the development of advanced communications systems and infrastructures and trials of the new services these make possible (ACTS, 331 proposals); and applications of information and communications technologies in areas such as education and training, healthcare, the environment and transport (Telematics Applications, 1375 proposals).

Commenting on the response to these first calls for the ICT programmes, Commissioner Bangemann welcomed the fact that many of the proposals have as their core theme the development of the Information Society, adding: "This signals that Europe is well placed to help realise the vision of the global information society formulated at February's G7 summit in Brussels."

Improved procedures

The three programmes all introduced measures to make it easier to obtain call-related documents (such as work-programmes and proposal submission forms), cheaper and less risky to prepare and submit full-blown proposals, and, for SMEs, simpler means for becoming involved in programme activities:

• Documents were made available via the Internet (e-mail, ftp, World-Wide Web), on diskette, and via popular commercial services such as CompuServe™ and EuroKom™. As

befits a programme whose participants tend to be well placed to make good use of communications technologies and services, ACTS pioneered the submission of proposals by electronic transfer of encrypted and digitally signed files. Most ACTS proposals were received by this means. This considerably speeded up the evaluation process, and made information about the number and nature of proposals more reliable, as the need to re-key data was greatly reduced.

• The IT programme successfully tried out a two-step proposal submission scheme in two of its domains. Coupled with a policy of tightly focusing the scope of the call, this approach greatly reduced the oversubscription experienced in earlier calls and is likely to be extended. The Telematics Applications programme introduced an optional outline proposal scheme, with comments and suggestions by Commission staff sent back to each proposer.

• Both the Telematics Applications and IT programmes introduced specific measures for SMEs. In Telematics, funding was earmarked for SMEs wanting to pilot the use of telematics networks and services, with the term "SME" encompassing service providers such as hospital departments, schools, libraries or trades unions as well as private companies. The IT programme launched an award scheme for SMEs wanting to participate in the programme; proposals can be submitted at any time.

Users well represented

The Telematics Applications programme is firmly oriented towards satisfying the needs of users, be they companies and institutions (hospitals, education and training institutes, etc) or citizens (as consumers of healthcare services, for example). This bottom-up approach is well reflected in the majority of proposals received: these are clearly driven by the wish to tackle real-world problems, and give priority to the needs of users. Particularly noteworthy are the strong user-provider partnerships formed around networks

of towns, cities, regions and rural areas. In ACTS, the already strong usage focus in all proposals retained will be strengthened through a planned second call for proposals from organisations already involved, as users, in advanced networking and service trials, and which could benefit from and contribute to the ACTS programme. The IT programme registered a large increase in user participation, reflecting the attention paid when drawing up the programme to exhaustively researching the views of representatives of industry and service sectors with related business and IT needs.c

Good cooperation between programmes

Reflecting the increasing convergence of information technologies and communications, the three programmes cooperated closely in evaluating the proposals sent to each and exchanging information about their nature and content. Some proposals were transferred from one programme to another according to topic, others were assessed by joint teams of evaluators, and the IT and Telematics Applications programmes carried out a joint evaluation (which will lead to eventual joint funding) of proposals for advanced networks linking universities and research centres.

Evaluation and selection well advanced

The first call for ACTS was published on 15 September 1994. The calls for the IT and Telematics Applications programmes were launched on 15 December 1994. The closing date for all three programmes was 15 March 1995 (apart from two IT domains, HPCN and Long-Term Research, which closed on 15 February 1995. The Commission's current scheme for RTD calls envisages up to four calls per year.

The external evaluation process, involving nearly 1000 evaluators in total, was substantially completed by the end of March. Their shortlist of the

Enthusiastic response to first calls (continued)

most highly rated proposals will form the basis for the Commission services' consultation, in May and June, of the three programme committees. These committees are composed of representatives of each EU member state and associated country, and the substantial overlap of membership between them is of great benefit in developing a coordinated approach and avoiding duplication of effort. The final list that emerges from these discussions will be presented to the Commission for a formal decision in June/July. Subject to the outcome of contract negotiations, the first projects will start soon afterwards.

TELEMATICS NEWS

Successful IE Information Day

To coincide with the Call for Proposals of 15 March 1995 in the Information Engineering (IE) sector of the Telematics Applications Programme, an Information Day was held at the Commission's Jean Monnet Building in Luxembourg on 6 April 1995. The full-day event organised by DG XIII/E was attended by more than 250 people representing industry, academia, research organisations and user groups. Representatives of the Member States were also present to offer assistance through their respective National Contact Points. The main objectives of the Information Day were to clarify issues relating to the Call, and to assist intending proposers to find partners.

The official welcome was given by Mr de Bruïne, Director of DG XIII/E, who addressed the topic of Information Engineering from the perspective of the information society. Further presentations by the Commission covered the Telematics Applications Programme, Information Engineering objectives, sector support tasks and proposal submission and evaluation procedures.

Supplementary presentations included project organisation and management, the National Contact Point network and CORDIS. The event included demonstrations of partner-finding services from EuroKom and CORDIS, while ECHO demonstrated its I'M-Europe World Wide Web services.

Information boards representing each of the main focus areas (electronic newspapers and magazines - multimedia catalogues - multimedia asset trading including advertising - technical documentation/services - STM publishing) were used by attendees as meeting points and many new links were forged. Reaction from attendees indicated that the format of the event was successful and that contact-making opportunities were maximised. For the Commission, information received at the event was of value in estimating the likely response to the Call.

Telematics for Administrations Conference

Within the Telematics Application Programme (1994-1998), the sector known as Administrations will be carrying out R&TD activities to further the initial work carried out by the ENS programme under the third framework programme which was aimed at helping to bring about a swift improvement in the economics and efficiency of public services.

As the third framework programme is now drawing to a close, a conference under the heading "Telematics for Administrations" was held on 14-15 June for programme users. These were both representatives of the National Delegations and project users who could gain benefit from the implementation of the R&D work

carried out within the ENS application projects.

The main theme of the conference was the transfer of knowledge gained within the programme particularly in he areas of issues which affect nearly all European telematic services such as legality and security, benefit to the user and provider, the use of standards and the implementation of modern technologies. The use of multimedia was demonstrated most effectively by having 4 speakers giving their presentations from their national offices by way of video conferencing. These were from France, Denmark, the UK and one of the participants of the CARE project spoke from Chicago in the USA.

The ENS programme has produced comprehensive awareness material which is now available and can be applied for by requesting the following details from:

Telematics for Administrations Office
Fax: +32 2 296 42 60
e-mail: jmcg@dg13.cec.be
http//www.sdn.dk/euweb/

Contact:

Alan Moseley
DGXIII - C2
200 Rue de la Loi
B-1049 Brussels
Tel: +32 2 296 34 75

Titles	Language Available:
Conference Proceeding: copies of the papers presented at the Telematics for Administrations conference	EN only
STEPS Handbook (version 2): a document to assist in the design and implementation of a trans-European telematic network	9 languages: FR, EN, DK, GR, ES, P, NL, I, D
Telematics for Administration: the final report on ENS giving summaries of the programme and all of the projects	EN only
ENS video: an 8-minute video about the ENS programme	9 languages - but limited stock
CD-ROM 1: a PC-based CD-ROM including copies of STEPS (version 1.3) plus most of the ENS project deliverables.	EN only
CD-ROM 2: an animated CD-ROM which covers the ENS Programme, STEPS (Version 2), the horizontal ENS projects, and information on the ORA programme.	EN with STEPS and CD-ROM in all 9 languages and reviews in EN, I, D, ES and FR Not available until September 1995

Telematics Applications: Results of call in education and training

The European Commission published a first call for proposals for the specific programme for research and technological development, including demonstration, in the field of telematics applications of common interest (1994-1998) on 15 December 1995.

For the sector concerning training and education, a total of 229 proposals were submitted which had education and training as their primary sector. A further 50 proposals were received

which had training and education as their secondary sector.

The total cost of the 229 proposals was ECU 1 billion and the funding requested ECU 627 million. The indicative available budget for the education and training sector of the call is ECU 34 million, which means that the call is oversubscribed some 17 times. This demonstrates a very high level of interest in this field. The quality of proposals received was deemed to be very good with a high

level of user involvement and good European coverage.

Contact:

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e-mail: telematics@dg13.cec.be

Health Telematics at MEDICA, Düsseldorf, 22-25 November 1995:

5,000 DM prize for European Medical Software competition

Effective diagnosis and treatment depend on the amount of information available to the doctor concerned. Computers are therefore increasingly the providers of information, documentation, quality assurance, research, data searches on medicines, and helping to make computer-supported diagnoses, - quite apart from their administrative functions.

Radical new possibilities in diagnosis and treatment are being offered by image banks, multimedia, and now virtual reality, information superhighways and telemedicine. In this field new ground is being broken by the Health Telematics programme of the European Union (EU). MEDICA - Medienstrasse '95 (MEDICA - media street) will be the forum for software developers and doctors from all over the EU to unveil their new programmes under the banner of 'HEALTH TELEMATICS - EU projects show the way to the future'.

With over 100,000 visitors, MEDICA is the world's largest trade fair and conference on medicine. As a permanent feature of the fair, MEDICA - Medienstrasse is the most important medical software exhibition, and will cover the areas described here, highlighting the EU-projects of the Telematics Applications programme on a special stand.

This year the annual MEDIZIN Software competition will be open to all EU Member States, with a first prize of 5,000 DM given by the Deutsche Ärzteblatt. The second prize is a European Union-funded trip to ISPRA, the European Union Research Centre. (Deadline for receipt of entries: 31 August.)

The competition concerns software which offers users high-performance results, from computer-aided information about diagnoses or medicines, learning and training, treatment control, data documentation and quality management, to image treatment and manipulation of biosignals, database searches, networking and many more.

It aims to strengthen the concept of quality in medical applications programmes, and encourage creative thinking about how to anticipate the as yet unspoken needs of imaginary users, and how to obtain ever-increasingly high-quality simulation of human users' behaviour and psychology through programme structures, neurone networks and multimedia.

For more information contact:

MEDISOFT GmbH, P O Box 900 649, Frankfurt, D-60446, Germany.
tel: +49 (0) 69 77 43 21
fax: +49 (0) 69 77 23 41
or
Dr. Gottfried Dietzel,
European Commission
DG XIII/C-4 (BU 29 3-51),
Rue de la Loi 200,
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First Language Engineering Call for Proposals

Language Engineering was one of the Telematics Applications Programme sectors open for proposals under the call launched on 15 December 1994. By the deadline for submission, 15 March 1995, 79 proposals were received, involving 485 participants from 21 countries.

The most significant participation comes from the private sector, including SMEs, totalling 55% of the proposals received, followed by universities with 20%, research organisations with 13%, and public authorities and services and international organisations with 12%. There is strong user involvement (28%) and significant participation by manufacturing, service and IT industries.

The total cost of all the proposals received is over 222 MECU, for which an EU contribution of over 127 MECU is requested.

The distribution of proposals per Member State and associated EEA countries is as follows: A (8), B (29), D (70), DK (12), E (26), F (79), GB (81), GR (31), I (55), IRL (15), IS (0), L (12), N (3), NL (19), P (9), S (8), SF (8).

Among the topics addressed by the proposals are technical document authoring, intelligent document navigation and browsing, automated indexing extraction and routing of information, communication and navigation systems, advanced multi-lingual information services, and translation services. The proposals were reviewed by independent external experts at the end of March. After the Telematics Management Committee opinion and the Commission decision, final results of this call are expected to be available in July.

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ESPRIT NEWS

ESPRIT - European Porting Project
Industrial application codes on parallel computers

Computer simulations of real-life problems, for instance, in the areas of fluid dynamics and structural mechanics, are becoming increasingly important for industry. Shortening design cycles, lowering development costs, reducing risks and improving quality are major goals.

For example, the computer simulation of airflows around an entire aircraft or the realistic simulation of car crashes are possible. Unfortunately, although a variety of computer programs for performing such simulations are available on the market, their usage is limited due to a lack of computer power.

In the long run, only parallel computers can satisfy industry's demand for large realistic simulations. And yet, industry widely fails to invest in this new technology because most available industrial or commercial software was written many years ago and cannot exploit the capabilities of parallel computers. The significant amount of work required to move major application programs to these new machines has stalled their take-up in industry, thereby preventing the extra competitiveness of this technology from being fully utilised.

Therefore, the European Commission has decided to promote European industry through the EUROPORT project by partially funding the porting of a large set of industrially relevant codes to parallel computers. This will serve as an example to industry and increase the awareness of the competition-enhancing capabilities of high performance parallel computing within industry at large.

EUROPORT - 1 is managed by the German National Research Center for Computer Science (GMD) and includes 14 codes in the areas of fluid dynamics and structural mechanics.

EUROPORT - 2 is managed by Smith System Engineering and operates on over 20 codes from a wide range of distinct application areas: computational chemistry, databases, oil reservoir simulation, computational electromagnetics, radiotherapy, earth observation, drug design and visualisation.

Important messages of the project will be:

• Industrial application codes are available for parallel computers.
• Industry can perform larger and more realistic simulations.
• The use of parallel computers is cost effective.
• The effort for parallelisation is reasonable when compared to the benefits derived.

Contact points:

EUROPORT -1 :
Clemens Thole
GMD/SCAI, Europort
Management group
SchlossBirlinghoven
D-53757 St Augustin, Germany
Tel.: 49 (0) 2241 14 2330
Fax: 49 (0) 2241 14 2102

EUROPORT - 2 :
Adrian Colbrook
Smith System Engineering Ltd
Surrey Research Park
Guildford GU2 5YP - UK
Tel: +44 1483 442000
Fax:+441483 442304

COMMISSION:
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EITC '95 : Managing change

The annual European Information Technology Conference (EITC), organised by the European Commission (DG III - Industry) will be held in Brussels on 27-29 November.

The theme of the 1995 European IT Conference is Managing Change. The Conference will give business leaders, public administrators, researchers and individual citizens the opportunity to explore the latest information technologies, and to debate the wider issues and future directions of the Information Society.

Commissioner Bangemann will host the presentation of the "IT European Awards" on the of 29 November.

The first part of the Conference is devoted to strategic technological issues, and provides a platform for exchange of information on leading-edge technology and on the IT R&D programme. The second part addresses broader issues relating to the emergence of the information society, taking as its focus the application of IT across industrial leaders.

An exhibition with the same theme as the conference, will be open throughout the event.

Contact:

European Commission, DG III
EITC 1995 Conference Secretariat
200, rue de la Loi RP11 2/70
B-1049 Brussels
Fax: +32 2 296 99 30
e-mail: eitc@dg13.cec.be
Internet: htpp://www.cordis.lu

Information Technologies first call for proposals

The enthusiastic response to the first call for proposals of the new Information Technologies (IT) programme of the Fourth Framework Programme demonstrates Europe's strong R&D activity in the field of information technologies, a necessary step for the transition to the Information Society.

Over 900 proposals were received, as follows:
• 161 proposals for software technologies (ST).
• 181 for technologies for components and subsystems (TCS).
• 92 for multimedia systems (MMS).
• 131 for long-term research (LTR).
• 52 for the open microprocessor systems initiative (OMI).
• 111 for high performance computing and networking (HPCN).
• 88 for technologies for business processes (TBP).
• 93 for integration in manufacturing (LiM).
The total funds allocated to this first call are ECU 322 million.

Building the information society

The IT programme is one of the specific programmes of the Fourth Framework Programme for research and technological development and demonstration (1994-1998). It has a budget of nearly ECU 2 billion for the next four years which will mostly be spent on supporting R&D, training, and disseminating technological competence.

The programme is contributing centrally to the building of the Information Society and aims at improving the competitiveness of all European industry. The current work plan was developed in very close cooperation with industry and users so that a strong market orientation was achieved.

Focused calls

The first call was published on 15 December 1994 and had a closing date of 15 March 1995 (the domains of HPCN and LTR closed on 15 February 1995). The second call for proposals was published on 15 March 1995. The current scheme envisages up to four calls per year with each call having a particular focus. The new programme has a strong market and user orientation and the new rolling system of multiple focused calls enables more flexibility and responsiveness to changes in both technologies and the market.

Contact:

European Commission
Directorate-General III - Industry
IT Programme Office
200 rue de la Loi
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e-mail: infodesk@dg13.cec.be
http://www.ecrc.del/
http://www.cordis.lu/

Intelligent Manufacturing System: Commission's mandate to negotiate an international agreement

The Research Council of 10 March 1995 gave a mandate to the Commission to negotiate an international agreement in the field of Intelligent Manufacturing Systems (IMS). IMS is an initiative in international collaborative RTD for advanced manufacturing.

Once concluded, an international agreement would establish a framework for planning and executing joint projects and accompanying actions between organisations in the EU, the US, Japan, Canada, Australia, Switzerland and Norway.

The initiative would be financed up to a maximum of 55 MECU from the Information Technology and Industrial Materials Technology programmes.

The negotiation mandate was requested following a two-year, industry-driven feasibility study initiated in February 1992. The results of the feasibility study, completed in February 1994, proved that under reciprocal terms and conditions, there could be added value for Europe in global cooperation on IMS. The International Steering Committee, which was set up to guide and implement the feasibility study, included recommendations in its final report for a follow-up programme, and terms of reference for its implementation.

In Europe during 1994, dissemination of the IMS experience was carried out and a multi-faceted survey of industrial opinion was undertaken. In general, the feedback indicated support for the continuation of some form of IMS activities, albeit with due caution, as in the feasibility study.

IMS has both "top-down" and "bottom-up" elements. The infrastructure and "rules of the game" represent a top-down approach which provides a jointly managed and symmetric underpinning of the initiative. Projects themselves are expected to emerge from industry in a bottom-up fashion, to give companies maximum flexibility to manoeuvre within the strategic framework.

The next step now is to conclude the negotiations with the third countries and secure the subsequent launch of IMS.

Projects on information services for business and industry

Following the IMPACT Call for proposals for information services for business and industry at the end of 1994, 14 projects have been shortlisted for financial support. A further three projects are on the reserve list. Subject to favourable contract negotiations, the successful projects are expected to get under way before the summer.

The titles of the shortlisted projects and the countries involved are given below. The project coordinator is located in the first country mentioned.

• Steps towards a pan-European trading/financial database (Company information) (UK, Belgium, France, Germany, Ireland, Italy)
• CD-ROMs for small and medium-sized businesses within the plastics transformation industry (Spain, France, UK)
• Broad information dissemination gateways for enterprises (scientific, technical, medical) (France, Germany, Italy, Luxembourg)
• PROMONET information

dissemination, marketing and communications using World Wide Web (Sweden, Greece, UK)
• A telematics service providing technical information about materials and works in the building sector (Italy, Austria, France, Germany)
• Aufbau einer Europäischen Zulieferer-Kooperationsvermittlung (Belgium, France, Germany, Italy, UK)
• European energy information exchange (oil and gas industries) (UK, France, Greece, Italy, Netherlands)
• Music on demand - A European interactive music information and delivery service (Norway, France, Germany, Netherlands, Spain, UK)
• Information service for the European footwear industry (Greece, Ireland, Spain, UK)
• IMAGE-IN A commercial image reproduction service for visual arts and multimedia (UK, Germany, Ireland)
• Serveur d'Images Numériques d'Archives & Technique de Recherche Audiovisuelle (Belgium, France, Germany, Italy, Luxembourg, Portugal)
• European business publications

online (Luxembourg, France, Germany, UK)
• Information services for the small boat industry (UK, Denmark, Greece, Portugal)
• Freight information network in Europe (UK, Ireland, Netherlands, Portugal, Sweden)

Further details may be obtained from the following address.

Contact:

IMPACT Central Office
European Commission
DG XIII/E
L-2920 Luxembourg
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Fax: +352 4301 32847
e-mail: impact@echo.lu

Digital imaging: Addressing the problems

DG XIII/E-3 of the European Commission organised a successful meeting in November 1994 to address the use of digital imaging, which is being investigated by many library research projects in Europe, several of which are funded by the Libraries Programme. The meeting provided an opportunity for project members to exchange experiences and, in particular, to highlight the problems encountered in the areas of scanning, storage, intelligent character recognition, networking and delivery, and image retrieval and recognition.

The following issues emerged as being of key importance to a wide range of libraries' imaging applications and therefore worthy of consideration for further investigation:

• Suitability of scanners for library applications (as opposed to commercial documents)
• Ease of use and repeatability of performance of scanners
• Lifetime of optical storage media and drives, and techniques for refreshing and preserving data stored on these media
• Recognition of archaic diacritics, non-Latin characters and scientific symbols by OCR systems
• High costs of wide area networking and difficulty of designing an optimal storage architecture for distributed imaging applications
• Difficulties in using ISDN, especially in cases where more than one supplier's equipment is used
• Automated image recognition still at a very early stage of development

• Problems with image indexing based on textual descriptions owing to lack of standard practices.

Details of EC projects which are currently investigating such problems are available from the following address.

Contact:

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DG XIII/E
L-2920 Luxembourg
Tel: +352 4301 32923
Fax: +352 4301 33530

Training workshop

Under IMPACT 2, DG XIII/E has launched several training and education actions as kick-off projects on an experimental basis. Actions have been aimed at the information industry itself as well as all other economic sectors, ie users of electronic information sources and services. Projects undertaken have addressed training of trainers, training of information service specialists, stimulation of universities, and training of information intermediaries within SME associations.

As IMPACT 2 ends in December 1995, it is now pertinent to draw conclusions from the projects and make recommendations regarding future training actions, giving due consideration to the overall Community policy and programmes for education and training, such as SOCRATES and LEONARDO (1995-99).

To this end, DG XIII/E will organise a workshop in Luxembourg on 19-20 July 1995 with the objective of defining a strategy for future education and training initiatives concerning electronic information provision.

The workshop has been structured in four sessions. First, the experience gained through the IMPACT projects will be evaluated, followed by an evaluation of the need for this kind of training in the information industry itself, in other industrial sectors and in the educational field. The workshop will end with a critical analysis of which of the needs expressed could be accommodated within the Commission programmes and a discussion of how other needs - not accommodated in these programmes - could be satisfied.

Speakers at the workshop will include:

• Frans de Bruïne, European Commission, DG XIII/E
• Jose Rebelo, European Round Table of Industrialists and Petrofina
• Daniel Confland, Ministry of Research and Higher Education, France
• Prof. Tom Wilson, University of Sheffield
• Dan Jensen, Danish Employers' Confederation
• Mona Hillmann-Pinheiro, ABF, Sweden.

The workshop will bring together representatives from:

• European industry
• European information industry
• Policy-makers for industrial and educational policy in the Member States and at Commission level
• Experts representing all levels of education in the Member States
• Practitioners in the field of training related to electronic information provision, eg representatives from the contractors involved in the IMPACT training projects
• Existing and potential users of electronic information services.

For further information, please contact:

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Open information interchange (OII) update

The Bangemann Report concluded that "Interconnection of networks and interoperability of services and applications should be primary Union objectives. The European standardisation process should be reviewed in order to increase its speed and responsiveness to markets."

Some elements of the current programme of OII activities within IMPACT, which address the use of a common set of specifications in information interchange, are outlined below.

- OII Standards List
A revised edition was published in March 1995. This has been updated in its entirety and is more comprehensive in its coverage than the previous edition. It is available in electronic form on the I'M-Europe WWW server (http://www.echo.lu/). Future editions will include de facto specifications (including relevant Internet protocols) and material on the provisioning of products and educational courses.

- Report on Character Codes in SGML
A 60-page report, researched and prepared under the auspices of DG XIII/E, covers the methods provided by Standard Generalised Markup Language (SGML) for handling and extending character codes, for handling foreign formats and notations, and the facilities for processing documents for problem-free interchange of information.

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Content for the Infobahn: INFO2000 to stimulate European multimedia content

Building on the results of earlier EU initiatives, the Commission is planning to implement a new four-year programme: INFO2000, which is expected to start at the beginning of 1996. INFO2000 aims to stimulate the demand for, and the use of, multimedia content and to create favourable conditions for private sector investment in the European multimedia content industry. The programme's objectives are to facilitate the development of the European multimedia content industry; to optimise the contribution of new information services to growth, competitiveness and employment in Europe; and to maximise the contribution of advanced information services to the professional, social and cultural development of the citizens of Europe.

In working towards these objectives, the needs of both users and producers will be addressed. The programme's activities will be implemented under three action lines:

• stimulating demand and raising awareness
• exploiting Europe's public sector information
• triggering European multimedia potential.

INFO2000 actions will encourage exchange of experience, convergence of national approaches and cooperation at European level. Particular attention will be paid to creating more favourable conditions for the functioning of EU content markets.

The programme's actions will address both the demand side and the supply side. Actions will seek to create new markets by increasing awareness at the European level with specific user groups using a network of national awareness organisations. The establishment of pan-European user groups will be encouraged. Efforts will be made to exploit the potential of Europe's public sector information by developing policies for access and exploitation, improving access and making use of information content resources under public sector control.

With the aim of realising multimedia content opportunities for Europe, INFO2000 actions will catalyse high-quality European multimedia content, especially in the areas of European cultural heritage, business services for SMEs and geographic information. A practical approach will be favoured to trading of multimedia intellectual property rights. To encourage entrepreneurship, efforts will be made to develop and exchange best business practice.

Programme support actions will consist of observing and analysing the multimedia content market; spreading the use of multimedia content standards; and encouraging skills development at European level.

The INFO2000 proposal is available on the I'M-EUROPE WWW server (http://www.echo.lu/).

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IMO Working Papers address topical themes

The Information Market Observatory (IMO), within the framework of the IMPACT programme, has recently published three new working papers on the following subjects:

•- "Electronic Information Services in the Home"
• "Geographic Information Systems in Europe"
• "Virtual Reality Products and Markets".

A working paper on information quality issues is currently under preparation.

The papers are disseminated free-of-charge by the National Awareness Partners (NAPs) throughout the European Economic Area.

All IMO working papers are also available in electronic form on the I'M-EUROPE World Wide Web server (http://www.echo.lu/).

The documents are located on the IMPACT or INFO2000 home page under the IMO section. Enquiries should be e-mailed to impact@echo.lu.

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Watch-ECHO:
data at the click of a mouse

A newly developed GUI (Graphical User Interface) application, Watch-ECHO, brings to the end-user an innovative tool with which to search online databases hosted by ECHO, the European Commission Host Organisation. It is based on an application already developed for the CORDIS databases, which has been well received by users. The software is fully compatible with MS-Windows, is easy to install and requires only 4 Mb of base memory.

Watch-ECHO provides access to ECHO's databases via modem, X.25 connection and off-line via the I'M Guide CD-ROM or a local area network (LAN). The application is currently available for TED (Tenders Electronic Daily), I'M-Guide (directory of electronic information products and services available in Europe) and I&T Magazine and News Review, and will be extended to other databases hosted on ECHO during 1995.

The advantages of using Watch-ECHO include the following:

• an automatic logon procedure to the databases means that access is fully automated;
• queries can be prepared off-line, without incurring data communication charges;
• queries are transformed into syntactically correct query expressions formulated in the CCL (Common Command Language);
• users are able to compare data retrieved from the I'M Guide CD-ROM with its online counterpart;
• documents may be defined by the user.

Watch-ECHO can be obtained, free-of-charge, from the ECHO help desk. Alternatively, it can be ordered online and will be available for downloading from I'M-Europe, DG XIII-E's WWW (World Wide Web) server. The I'M Guide CD-ROM, including Watch-ECHO, can be purchased for the sum of 50 ECU from the IMPACT programme's network of National Awareness Partners (contact details available from the address below).

The development of Watch-ECHO, the I'M-Guide CD-ROM and the WWW server illustrates ECHO's increasing emphasis on providing state-of-the-art facilities. It thereby makes a positive contribution to promoting the information society within the framework of the IMPACT programme.

1994 marked an impressive upturn in usage of ECHO, with the number of registered users increasing by 50% over 1993 to a total of more than 22,000. At present, approximately 1000 new individual users are registering per month.

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Multimedia Content for the Information Society:
Austrian Information Days in September

Two Information Days on the above theme will be held on 25-26 September at the Design Center, Linz, Austria. They are jointly organised by the Austrian Ministry for Economic Affairs and the Ministry for Science, Research and the Arts in cooperation with DG XIII/E of the European Commission. In addition to information sessions, there will be an accompanying exhibition of Austrian industry demonstrations and European Union (EU) projects.

These events are organised with two objectives in mind. First, to inform interested market actors about developments taking place both at European Union (EU) level and, more specifically, in Austria in relation to the European information society. Secondly, to give participants the opportunity to meet with other persons sharing common interests from all EU Member States.

The first Information Day on 25 September - the Austrian Day - will start with a session giving an overview of industry activities. This will be followed by an afternoon visit to Hagenberg Software Park and an evening reception and multimedia concert.

The second Information Day on 26 September - the European Day - will include presentations on the Austrian approach and the European Union's approach to the information society. An Austrian industry viewpoint will be followed by a review of EU multimedia initiatives. The new programme INFO2000, of particular relevance to the day's focus on European content, will be introduced.

Anyone interested in participating is invited to contact the address below in order to receive further details and register for the event(s).

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INFORMATION SECURITY - Project BOLERO

On Friday 30th June, an important step in the march towards electronic commerce was finally completed, when the world's first electronic negotiable Bill of Lading was exchanged between Nedlloyd Lines and its forwarder customer Damco. Funding from the EC DG XIII Infosec programme made it possible for the Bolero project to develop a pilot system to achieve this long desired goal.

Negotiable Bills of Lading are documents of title and are therefore difficult to replicate in electronic forms. A number of attempts over the last ten years have failed, leaving the shipping industry with an ever-growing documentation handling problem. Project Bolero builds on past experience and, thanks to the use of digital signatures and multiple trusted third parties, is capable of offering the necessary security framework for a fully electronic version of a negotiable Bill of Lading.

The Bolero project is carried out by a consortium led by Deloitte and Touche Europe Services as main contractors to DG XIII, with the Cable & Wireless group, Unisource and Tandem Computers as leading private sponsors. Other consortium members include Marinade for commercial aspects and TeleConsulting for security evaluation and audit.

The pilot trials are carried out by more than two dozen blue-chip European companies, including Ericsson, Electrolux, Rothmans, United Distillers, P&O, Maersk, Nedlloyd, National Westminster Bank, ING Bank and SE-Banken.

The pilot users and others, interested in the concept, have now formed the Bolero User Association to take developments further, once the Bolero pilot ends.

Further details about Bolero and the other DG XIII projects in field of Information Security can be obtained from the adress below.

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Services of the European Commission:

Practising what they preach

The European Commission DGXIII-B has notched up a first in Europe by launching a call for proposals for research and demonstrations in Advanced Communications Technologies and Services (ACTS), which requested the submission of these proposals by secure electronic file transfer over public networks. The call for proposals in Advanced Communications Technologies and Services was opened on 15 September 1994, and closed on 15 March 1995.

A first analysis of the submissions has shown promising results. Of 333 proposals submitted, 75% were made electronically, with only 25% made by conventional use of paper and postal services otherwise known as "snail mail". In financial terms, the call has been oversubscribed by almost 4:1.

Bidding consortia were issued with a sealing tool (under licence) for the specific purpose of encrypting their proposal prior to transmission, to ensure its "commercial in confidence" status. Proposals were then uploaded by the bidders to FTP servers established in 13 different countries, acting as collection points. Connections to these servers were established via the Internet, or via direct modem links using the ordinary telephone network. The Commission then used the European ATM pilot to download the proposals from 10 of these national collection points, directly to their offices in Brussels. The remainder were downloaded to Brussels via ISDN, including a Canadian proposal sent directly to the Commission from the other side of the Atlantic.

Roland Hüber, the Director responsible for ACTS, commented:

"This was a very satisfactory demonstration of the performance of the ATM Pilot. Ten countries out of the thirteen having servers for the Call used it, and experienced no problem whatsoever. Our thanks and congratulations are due to the National Hosts, their FTP Servers and to the operators supporting the ATM Pilot itself.."

It is another first for the European Commission that such a Community research action has been opened for the first time to world-wide participation - where justified on the basis of mutual benefit.

By using trans-European high-speed networks under conditions of commercial confidentiality, ACTS has already demonstrated the viability of electronic tendering in the EU, at least for work to be supported by the Commission. From these small beginnings, one may see that Europe's ambition of establishing sustained economic growth based on an advanced communications infrastructure is indeed almost within the grasp of commercial enterprise.

Advanced Communications Technologies and Services (ACTS)

How to Download from Electronic Libraries maintained by DG XIII-B

Documentation on RACE, the ACTS call and subsequent preparations of the projects are disseminated electronically by DG XIII-B in a variety of file formats, via two servers. The following notes explain how to access these servers. It is known that these documents are regularly being copied on to a varity of other servers around the world. Although such initiatives to support a wider dissemination are to be welcomed, DG XIII-B has itself no control over the completeness or the integrity of these copies.

CompuServe: From the Telework Europa Forum (Go TWEUROPA)

The ACTS Workplan, Call Documentation and National Host Descriptions may be downloaded form the ACTS library (Library 12) of the TWEUROPA forum. A "README" file also placed in this library further explains the contents of each file. Full contact coordinates for persons that have expressed interest in ACTS may be found in files within the Partners/Participants Library (Library 13). Information related to RACE is held in the RACE General Library (Library 10).

Note that this CompuServe forum used to be known as ECTF (European Community Telework Forum). If you have been accustomed to opening the forum using the old name (Go ECTF), this should still function during the foreseeable future.

FTP Server: at the University of Stuttgart (RUS)

FTP Servers may be accessed via the Internet. All DG XIII-B-related files have been placed in a directory structure under /pub/org/cec.

NOTE: This is a unix server, and all commands issued are therefore case-sensitive!! Type commands, directory and file names exactly as written overleaf, or as shown on-screen!! Beneath the "cec" directory are sub-directories for RACE and ACTS (and some others). These in turn have specific sub-directories for each of the file-format options used. There is usually a README file to help find your way.

The basic procedure to retrieve files via FTP is to follow the command sequence shown, once connected to the Internet.

FTP Commands, used to download from the University of Stuttgart (RUS) Server
Once connected to the Internet, issue the following sequence of commands (noting that they are case-sensitive):

1. ftp ftp.rus.uni-stuttgart.de (or ftp 129.69.18.15)   (connect to host)

2. login as: anonymous

3. password: (type your e-mail adress)   (eg: nhe@postman.dg13.cec.be)

4. cd   (allows you to check the current directory name and path)

5. cd pub/org/cec   (changes directory on the host)

6. dir   (allows you to view the directory contents, including and subdirectory names)

7. mget README   (downloads the file named README)

8. cd (type sub-directory name)   (changing directory again as necessary)

9. binary   (sets binary file transfer mode, as necessary to download formatted files)

10. mget *.* (or specify each)   (downloads the files)

11. quit

If you have not accessed this server before, you are strongly advised to download and to *read* the README file before doing anything

Evaluation of regional innovative potential
Methodologies used in the EU

In 1994 a team of experts from the EU completed a SPRINT-EIMS project involving a "horizontal" review of methodologies used in the EU to evaluate regional innovative potential and infrastructures. The conclusions of the review are about to be published by the Commission.

The review analysed existing studies on the measurement and evaluation of regional technological innovation services and infrastructures, innovative networks and other aspects of the regional innovative potential. The following main trends were found:

• Studies aim at problem solving rather than knowledge building.
• The linear vision of innovation dominates regional innovation evaluations: traditional methodologies and indicators measure factor endowments rather than the dynamics of the system.
• Process indicators are neither particularly robust nor reproducible.

• An interactive approach implies a focus on qualitative data.
• A failure to take into account the degree of openness of the regional system of innovation is highly common.
• The content of evaluation studies depends on the orientation of related policy measures.
• Regional data on innovative potential remains limited and of poor quality.

These conclusions imply the need to move progressively towards a system methodology which takes into account interactions, both locally and externally, between the various components and factors of the innovation process.

There is no single best-practice methodology in this respect. This would suggest that regional planners interested in gaining a better understanding of the innovation process in their region need to use an "eclectic" assortment of tools in order to evaluate the various dimensions of a "regional system of innovation".

The range of possible methodologies, empirically tested in the EU, is presented in the report, which is available on request from the Commission's Technical Assistance Unit (DG XIII)

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Good practice in technology transfer

Good Practice in Managing Transnational Technology Transfer networks: Volumes 1 and 2. Good Practice in Technology Transfer.

Over the past ten years, SPRINT, the Commission's former programme for innovation and technology transfer, gave support to help establish an effective transnational technology transfer infrastructure in Europe. The experience gathered during the period has now been collected and published in:

• An introductory brochure on "Good practice in technology transfer", which explains how to run transnational networks of innovation support organisations.

• A two-volume manual on "Good practice in managing transnational technology transfer networks", which discusses the key aspects of networking, and illustrates them through more than 25 case histories.
• A CD-ROM-based dissemination tool, which allows the user to explore interactively the concept of transnational technology networking.

The SPRINT programme has now been absorbed into the Third Activity for the dissemination and optimisation of RTD results (DG XIII/D) of the Fourth Framework Programme (1994-1998).

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TEN-IBC and the Automotive Industry: successful workshop

The Maastricht Treaty calls for the establishment of Trans-European Networks including telecommunications. The Trans European Networks - Integrated Broadband Communications (TEN-IBC) initiative aims to detect and understand the barriers hampering the development of broadband communications, allowing fast communications of different media-types in a user-friendly way, creating many new possibilities. In this context a set of projects are gaining experience from broadband trials, shared with sector actors, to formulate guidelines for the European Union.

A successful example of this took place on 9 February 1995 when network operators, manufacturers, service providers and of course the users of the automotive industry itself attended a workshop entitled "Computer Supported Co-operative Working (CSCW) through ATM in Car Design and Manufacturing". They formed a Common Interest Group of the automotive sector in Europe, supported by the related RACE project, SMAC. This workshop was organised by the TEN-IBC project IDEA in two parallel sessions conducted at CSELT in Torino, Italy and Disegno Industrial in St. Just Desvern near Barcelona, Spain.

The most impressive part was the live CSCW CAD session between Italy and Spain, showing an example of the possibilities. On a 4 Mbit/s connection through the European ATM Pilot, integrated audio and video conference, file transfer but especially shared CAD tools and whiteboard allowed two designers to solve a specific design problem (the attachment of a spoiler to the car body) in a few minutes, whereas the current time needed is some weeks.

The discussion showed the strong interest of manufacturers in using these technologies to their competitive advantage.

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ELRA
(European Language Resources Association)

The European Language Resources Association is a group of organisations who believe that the production, validation, distribution and use of language resources is vital for the economic and social welfare of the European nations. With the help and encouragement of the European Commission, they have come together to create an Association devoted to promoting the creation of language resources in all their machine-usable forms, in particular spoken, written (in both lexical and corpora form), and terminology.

The Association will itself undertake the validation and distribution of European language resources that are offered to it for that purpose. It will gather data on the market needs and provide an informed source of information for the funders of resource creators, such as the European Commission and the European governments, on all aspects of language resource needs and development. It will encourage the development and application of standards and quality control to be applied to the electronic language resource development of the European languages. It aims to become the focal point for pressure in the creation of high quality and innovative language resources in Europe.

The Association is open to any organisation, public or private, working in the nations of the European Union and European Economic Area, with an interest in language resources, whether as a creator or user.

Membership applications may be obtained from the address below.

Contact:

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ELRA Membership Secretary
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ETSI unveils plans for European information infrastructure

At its 22nd Technical Assembly held in Nice France (19-20 June), the European Telecommunications Standards Institute (ETSI) unveiled plans for the European Information Infrastructure (EII) and announced the creation of a European Project on Information Infrastructure (EPII) which will set the pace for an information and communications revolution in Europe.

The Institute's Strategic Review Committee, under the chairmanship of Mr. Joachim Claus from Deutsche Telekom AG, presented a roadmap toward the development and deployment of Europe's future communications infrastructure which will provide a means to greater European competitivity through a wider availability of all kinds of information via Information Highways.

The ETSI Strategic Review Committee was responding to businesses' needs for global telecommunications solutions and outlined the necessary measures to ensure the rapid availability of a backbone infrastructure across Europe for communications products and services. The ETSI Strategic Review Committee foresees the EII as enabling people to use securely a set of communications services which support an unlimited range of applications. These will embrace information in all its possible forms, at any time, from wherever it exists to wherever it is needed, at acceptable cost and with acceptable quality.

The plan the Committee presented is divided into two standardisation programmes. The first focuses on the information and storage platforms ensuring an EII based on narrow-band services and capabilities (PSTN, Euro-ISDN, GSM and CATV networks). It will also include early implementations of broadband networks including access to other networks such as the Internet.

The second standardisation programme will make available standards for the evolution of the EII based on broadband services and capabilities and distributed processing environments. In particular, Asynchronous Transfer Mode (ATM) transport capabilities will be developed as a core technology for the EII. Interworking with the first generation EII capabilities will be ensured.

In response to market pressures to introduce new communications products and services at an increasingly rapid pace, the Institute has set an ambitious time scale for the standardisation programme. A common definition phase will be completed in March 1996, the first standardisation programme by June 1997 and the second by June 1998.

To carry out the plan, ETSI has established a European Project for Information Infrastructure (EP11), consisting of a starter group and core competence centre for the management of the project. The Chairman of the ETSI Technical Assembly, Mr. Peter Hamelberg, stated that: 'The European Information Infrastructure is the basis for business and information transactions on a global scale. It must not be hampered by differing national implementations within Europe and, moreover, it is important that this initiative takes into account similar evaluations elsewhere in the world.'

Furthermore, at a recent Global Standards Collaboration meeting, ETSI helped identify the high interest priority subjects where coordination is essential for the establishment of a harmonised Global Information Infrastructure. These high interest subjects include intelligent networks, personal communications, broadband communications, Telecommunications Management Networks, signalling systems, multimedia communications and network reliability.

Commenting on the outcome of the meeting, Mr. Hamelberg added: 'ETSI is setting the pace in Europe for the establishment of the Information Infrastructure; Globalisation in telecommunications standardisation is a common concern for all standardisers, regional or global. It probes that users of standards require global solutions in order to benefit from new sources of strategic advantage in markets that are no longer bound by geographic frontiers."

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ITSEC Recommendation

The Information Technology Security Evaluation Criteria, more commonly known as the ITSEC, were formally endorsed by the Council on 28 March 1995 in the form of a Recommendation. Originally published by the Commission in June 1991, and subsequently used throughout Europe and elsewhere, these European Criteria provide a different approach to that of the US Orange Book whilst still retaining the essential requirement for an appropriate level of confidence to be achieved in the security features of the product or system under evaluation.

The Recommendation also addresses the need for broader international harmonization of Criteria as well as the desirability of mutual recognition of the associated evaluation certificates. Work is in progress aimed at the completion of an international Common Criteria which could eventually replace both the ITSEC and the US Orange Book.

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EPHOS: European Procurement Handbook for Open Systems
An Introduction towards the Information Society

EPHOS provides essential guidance for public procurers and planners in national, European and international administrations on how to specify requirements for information and communications technologies (ICT) which are capable of interconnection and interworking, ie. Open Systems technologies.

The guidance given starts from the procurer's business requirements, gives precise advice, outlines problems and allows the procurer to judge the merit of assurances of openness given by suppliers.

The handbook is written on the principle of minimal reading. If the procurer (whether in the public or private sector) has typical requirements, concrete procurement guidance can be obtained directly; only if special conditions apply, should the in-depth sections be read. When external assistance is used by procurers, those engaged should also be required to use and interpret EPHOS.

The handbook is introduced by a "Guide to the Handbook" and there is also a comprehensive glossary. The booklets contained in the second EPHOS handbook consist of guidance on the following topics:

- Directory Services
- Virtual Terminal
- Message Handling Services
- File Transfer, Access & Management
- OSI Management
- Electronic Data Interchange
- Document Formats
- Character Sets
- Local Area Networks
- Cabling

Currently being developed under the 2bis phase of the EPHOS programme for projected publication in the first half of 1995 is advice on:

- Security
- Metropolitan Area Networks
- Transaction Processing
- Operating Systems
- Database Enquiry
- ISDN

- OSI Management extension
- X.25 maintenance

Topics for a further phase are being proposed and are likely to include client server architecture, programming languages, use of CD-ROMs, object-oriented environments, high-speed media and networks, computer graphics and electronic commerce.

This second EPHOS Handbook (EPHOS '94 conference version) in English is available either in CD-ROM format or as a paper publication from the EPHOS Awareness Office. As the EPHOS guidelines are incorporated into Member States' national guidance, the handbook, in national languages, will become available from the national publications offices.

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Significant shake-up of European telecommunications standards making

At its 23rd General Assembly held on 21 June in Nice (France), the members of the European Telecommunications Standards Institute (ETSI) considered a report from its High Level Task Force representing a significant analysis of the future telecoms market, industry and regulatory environment. By adopting the report's 30 recommendations, the General Assembly agreed to initiate a radical change of its structure and procedures to adapt to the changing telecoms environment. This will be the biggest shake-up of the telecommunications standards body for seven years.

Action is now underway to implement the changes proposed by the High Level Task Force report. At the strategic level, ETSI is faced with choices: to retrench into core telecoms networks or to expand into the wider convergent field; to limit itself to standards of local regional interest only or to attempt to secure Europe's share of global standards; to limit itself to lower commodity transport requirements or to reach for the faster moving generic added value/applications specification requirement.

The General Assembly opted to expand the Institute's interests in all aspects of convergent technologies, especially through partnerships. It will draft standards with a view to them becoming international standards, but it has agreed to limit its ambitions by not trying to become an international standards body itself. ETSI has signalled its willingness to internationalise specific projects with partners in other parts of the world on a case by case basis.

The two ETSI Assemblies (General and Technical) will be merged into one which will meet less frequently. A board will take the remaining decisions on a more speedy basis.

The technical working structure will be broken into two broad elements: functional standing committees, as at present, which form the core competence centres dealing with the slower moving standards products (for instance, those relating to infrastructure) and new, multi-function project groups dealing with single tasks, able to approve their own outputs. This is where ETSI will get its speed.

ETSI has committed itself to using the leading edge electronic tools within the standards making process itself. It proposes that all paper communications to national standards bodies should cease within 18 months in favour of electronic means.

In order to elaborate a detailed, managed plan for implementing these changes, an implementation group has been created to give effect to these decisions. It will be chaired by Peter Bumann from Bosch Robert GmbH.

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EUROPEAN DIMENSION

Commission launches investigations into global mobile satellite systems

By the year 2000 millions of subscribers worldwide are expected to be offered satellite personal communications services. Global consortia are being set up involving major American and European companies. This new phenomenon is set to become a dominant feature of the international satellite market in the second half of this decade and has attracted the attention of the European Commission. Mr. Karel Van Miert, the European Commissioner in charge of competition matters, has recently asked for information on two mobile satellite systems: MSS, Globalstar (led by the US companies Loral and Qualcomm) and Iridium (led by the US company Motorola). Inmarsat-P, another major MSS, has already notified its system and partnership agreements to the Commission's competition services.

Although MSS systems are inherently global and the establishment of such systems is in principle procompetitive under the EC competition rules, it is important for them to be screened form the outset. The aim of the investigation is to ensure level playing fields in the EU and, in particular, to assess the impact of the consortia and their partnership and related agreements on future competition in the more localised markets of the European Union.

The two consortia have been asked to provide a comprehensive description of their systems from the technical, financial and commercial point of view.

Moreover, the investigation also addresses the major areas of potential concern under the competition rules of the EC Treaty. In particular these are the nature, terms and conditions of the distribution policies chosen by the consortia, the nature of links with cellular terrestrial networks and the access by competing MSS to infrastructure owned by partners in one of them. Most of these areas of concern have also been identified with regard to Inmarsat-P.

Satellite-based, global mobile communications using hand-held terminals represent a market which is expected to result in revenues of 10 to 20 Billion ECU during the next decade, with even greater indirect effects. However, frequencies are scarce, and operating the large number of satellites needed for such systems is expensive, and a high level of market uncertainty prevails. It is therefore

unlikely that there will be more than a few major players. Given this small number of alternatives and the potential market power of these global satellite system operators, it is particularly important that competition is maximised in the European Union for the other, "downstream", elements of the market involving local service provision, distribution and equipment supply. Open, non-discriminatory and fair conditions regarding partnerships and agreements will need to be maximised.

The Mobile Satellite Systems Services Market

The general service to be offered involves the full coverage of a roaming satellite system, using LEO (low earth orbit) or MEO (medium earth orbit) satellites, which will also support full user mobility, as well as offering the user a light hand-held portable terminal and identification by a single number anywhere in the world. Entering the global age, it is clear that global service is becoming the most appropriate solution to solving an increasing number of communication needs. It is expected that mobile voice service will be the primary application for these networks, but two other significant segments will involve so-called mobile personal digital assistants, data transmission and paging.

In essence, MSS represent the ability to maximise mobility of users, by providing global roaming and coverage in remote areas where terrestrial services may be uneconomic. "Global coverage" means not only that the user can move anywhere, but also that the communications system can "move" to serve new fixed or "stationary" users. Thus, these systems are not aimed only at the international business traveller. In fact Commission studies predict that by far the greatest potential (in terms of numbers of subscribers) in the MSS market will be for communities in less developed regions of the world as a substitute for "fixed service" where fixed networks have yet to be rolled out or are very poor. Central and Eastern Europe represents an important customer base in this context, which could be accessed from gateways within the EU. A third important use of MSS will be as a substitute for cellular mobile telephony in areas where the cellular network has failed to penetrate (i.e. rural parts of the developed world and both urban and rural parts of poorer countries).

Civic administration closer to the citizen: The Berlin Metropolitan Area Network

After German political unification, the Berlin city administration has had to face enormous tasks: rationalising the administration and services of Berlin, boasting economic expansion and providing an infrastructure which will meet the demands of a capital city.

For these reasons a high-speed fibre optic network is currently being installed to carry all data traffic of the Berlin city administration: the circular Metropolitan Area Network (MAN). The concept of this network was set up by the Berlin State Office for Information Technology (Landesamt für Informationstechnik).

The MAN replaces the lines and networks which grew organically over the last years and has sufficient capability to fulfil the city's requirements through to the next millennium. Its structure reflects the characteristics of the Berlin administration, e.g. a centrally oriented main administration and 23 district offices, which are vertically integrated into the overall civic administration duties. With a data transfer rate of 100 Mbit/s today, reaching 622 Mbit/s by 1996, the network can handle the entire data, image and voice traffic of all the individual city offices. The MAN will provide an improved service for the public especially within the social welfare, budgeting and human resources departments.

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EIB funding for European networks: special efforts for transport and telecommunications

In 1994, the European Investment Bank (EIB) provided funding for communications infrastructure amounted to 7,792 million Ecus out of which 2,155 million were devoted to telecommunications, telephone networks and satellite links. In its Annual Report 1994, the EIB underlines the trends towards increasing funding for European infrastructures, in particular in the transport and energy sectors, a more evenly balanced support for telecommunications, a levelling-off in support for wastewater treatment and waste disposal, and a new decline in funding for industry and the service sector.

In keeping with the concept of common interests, the bank takes into account objectives resulting from Community policies or decisions such as those designed to support economic recovery. The EIB has therefore broadened the scope of its operations in favour of investments such as trans-European transport and telecommunication networks. Funding for communications infrastructures amounted in 1994 to 7,792 million Ecu, which exceeded the level for 1993 (7,168 million), accounting for 47% of the total of the EIB's activities within the European Union.

Lending for telecommunications amounted to 2,155 million Ecu, with continued backing for programmes to boost domestic and international telephone capacity, usually applying the most up-to-date technology: digital network, fibre-optics, data transfer, mobile telephone system and satellite links. A noteworthy operation in this context was aimed at improving telecommunications between the new member state Austria and its neighbours.

Central and Eastern European Countries and European Industry discuss the Information Society

At the invitation of Commissioner Martin Bangemann, delegates representing European Union industry and research organisations met Ministers and industrial leaders from the Central and Eastern European Countries (CEECs) for a one-day conference, in Brussels on 23 June, on the Information Society. More than 200 participants from the EU and the CEECs participated in the event, which was organised jointly by Directorate Generals III (Industry) and XIII (Telecommunications, Information Market and Exploitation of Research), with the cooperation of DG IA (External Economic Relations).

The conference was called to discuss the implications of the Information Society for those CEECs that have, or are negotiating, association agreements with the European Union: Poland, Hungary, the Czech Republic, Slovakia, Bulgaria, Romania, Estonia, Latvia, Lithuania and Slovenia. The participants shared views, experiences and expectations with EU industry, laying the foundations for a continuing dialogue on information society developments. The underlying aim is to ensure that CEEC countries are able to fully participate and benefit from the new industrial revolution generated by developments in information and communications technologies.

Echoing the conclusions of the G-7 Ministerial Conference on the Information Society, it was recognised that a key priority should be to establish and implement, across the whole of Europe, common principles on regulatory and competition issues. Mr Bangemann, who chaired the forum, emphasised that this was a prerequisite if we were to encourage the required public and private sector investment in infrastructure and services, attract foreign direct investment in the CEECs and promote industrial co-operation between the Western and Eastern parts of Europe.

Both bilateral and multilateral dialogues on these subjects should be pursued, said Mr Bangemann. In order to inaugurate such a regular multilateral dialogue a meeting at Ministerial level will be held in November 1995 in the framework of the Regulatory and Policy Forum. This forum is to be supported by a PHARE multi-country programme.

In order to achieve a structured development of the global Information Society and to create awareness within the CEECs Mr Bangemann proposed the following actions:

• launching a promotion campaign to inform citizens in the CEEC about the information society. This campaign will include seminars and information events in the CEECs and the provision of relevant publications for the general public.

• encourage the establishment of contact points in the CEECs which would provide and distribute information on EU developments related to the information society and stimulate relevant analyses and discussions at a national level.

The development of the Information Society is largely depending on ongoing and further Research and Development. Therefore the specific programmes of the 4th Framework Programme in the field of telecommunications, telematics and information society, which are now open to CEEC participation, are substancially oriented to the Information Society. Mr Bangemann announced that the Commission would be ready to carry out the following actions in the near future:

• encourage greater involvement of CEECs in EU research and development programmes dealing with the priority areas of information technology, advanced communications and telematics applications in the context of the three abovementioned programmes;

• launch a call for proposals under Activity 2 (R&D co-operation with third countries and international organizations) of the Fourth Framework Programme in autumn 1995, including projects and activities in information and communication technologies and telematics applications;

• promote accompanying measures in particular to allow CEECs to improve their research funding mechanisms, reduce brain drain and improve contacts within the research communities and with industry,

• launch new activities similar in scope to those of the 11 pilot projects announced at the G-7 Conference on the Information Society in Brussels, in order to encourage the involvement of CEECs.

• improve the exchange of information between the EU and the CEECs on research priorities, research capabilities and opportunities for co-operation, by using existing tools of the Information Society, such as the World-Wide-Web servers and multimedia databases.

• extend the existing system of the European Information Technology Award to the CEECs to encourage and increase research in this field.
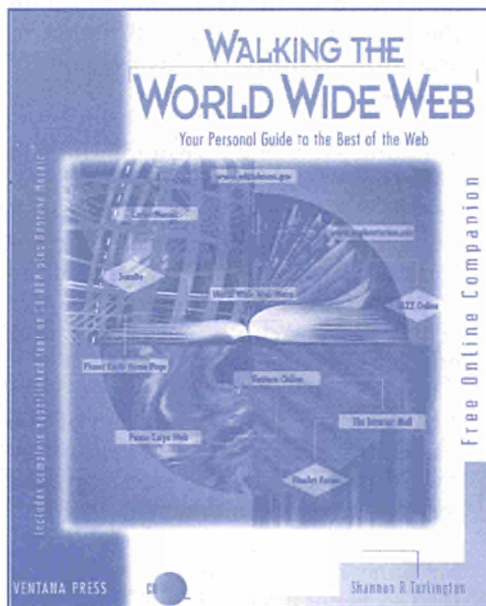
Mr Bangemann was keen to stress that the G-7 is not a "closed club."

"The Information Society requires international cooperation," he said, adding that "cooperation with the CEECs is particularly important," in order to "prepare a common future."

Walking the World Wide Web
Your personal guide to the best of the Web

Shannon R. Turlington
1995-ISBN 1-56604-208-9

Ventana Press Inc. USA

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The European Commission has published the latest edition of the CORDIS CD-ROM. The CD-ROM is produced by CORDIS under the VALUE (Valorisation and Utilisation for Europe) programme to stimulate the protection, exploitation and promotion of the results of technological research within the EU.

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The Information Society at Telecom'95

The Directorate-General XIII (Telecommunications, Information Market and Exploitation of Research) will represent the European Commission at the 7th World Exhibition and Forum for Telecommunications, Telecom '95 organised by the International Telecommunications Union (ITU). The event is to be held in Geneva from 3-11 October.

The Commission's stand will be set up on the theme "Building the Information Society for all the people".

There will be demonstrations based on the various Community's R&D programmes related to communications and organised following four items:

1. The universal appeal of advanced telecommunications;
2. Team work;
3. Personal mobility;
4. Enabling technology.

> European Commission -
> DG XIII's stand
> Hall 7 - N° 7-601
> Palexpo - Geneva

4th International Möbius Prize for Scientific and Cultural Multimedia Productions

Organised by the European Commission and supported by the French CNRS (Centre National de la Recherche Scientifique) in the framework of the "12e Rencontres internationales de l'audiovisuel scientifique", the 4th Möbius Prize for Scientific and Cultural Production will be held in Paris on 4-5 October 1995.

The Möbius Price presents the multimedia CD of the year in the field of science and culture. Selected by nine committees, the twenty-eight titles nominated for this year will represent 15 countries: Germany, Australia, Belgium, Brazil, Canada, Denmark, Spain, United States of America, France, Great Britain, Hong Kong, Italy, Japan, Norway and Portugal.

Four trophies will be given: the Grand Prize, the Creativity Prize, the best Scientific Multimedia Prize and the Special Jury's Prize.

Designers, researchers, university graduates, multimedia editors, electronic editing professionals and journalists are invited to participate in two days devoted to the content. Participation is free of charge.

For more information and to collect a permanent entry badge:

> Contact:
>
> AFIM-Prix Möbius
> 75 Rue de Lancry
> 75010 - Paris
> France
> Tel : +33 1 42 06 24 81
> Fax: +33 1 46 34 18 85

SAFECOMPS '95

The 14th International Conference on Computer Safety, Reliability and Security is organised by the European Commission - Joint Research Centre, Institute for Systems Engineering and Informatics and will be held at Villa Carlotta, Belgirate, Italy, 11-13 October 1995.

Safecomp is an annual event which reviews the state of the art, experiences and new trends in the areas of computer safety, reliability and security. Safecomp was initiated by EWICS TC7 (European Workshop on Industrial Computer Systems, Technical Committee 7) in 1979.

The conference focuses on critical computer applications. It is intended to form a platform for technology transfer between academia, industry and research institutions. Safecomp is a one-stream conference which, typically, attracts up to 150 participants.

Key topics discussed throughout the conference are:

- Safety Analysis
- Formal Methods
- Human and Legal Aspects
- Safety Guidelines and Assessment
- Validation and Verification

The advance programme and registration information regarding Safecomp '95 may be obtained from the address below:

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