

# INFORMATION MARKET

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# Commission formally proposes IMPACT-2 programme

On 23 January, the European Commission formally proposed a follow up of the IMPACT programme. The new programme is foreseen to run from 1991 to 1995 with an envisaged budget of 100 million Ecu. IMPACT-1 had a budget of 36 million ecu for the two years 1989-90.

The proposal follows extensive discussions with the information industry, users and senior officials in the 12 Member States and an evaluation report on the first year of the operation of IMPACT-1.

The main objective of IMPACT is the establishment of an internal information services market in Europe as a matter of priority



because of its strategic importance for research, industry and commerce, and the new requirements arising from the creation of the single market. "It is a matter of vital importance for all sectors and all aspects of economic activity that modern information services using advanced computer and telecommunications technology should be available," says the Commission. Conversion to modern systems and services is already well under way in such sectors as banking, finance, transport, insurance and tourism.

In 1988 the world turnover in online database services was of the order of 7 thousand million Ecu. Observers forecast that, by the end of this decade, electronic services will have reached 100 thousand million ecu.

The European environment has its own particular problems which could cause the Community to fall behind: lack of pan-European working synergies, technical, legal and linguistic barriers. The two-year IMPACT programme 1989-90 made a start at tackling some of these problems and opened up new opportunities. The second programme has been reoriented in the light of the experience gained and market developments.

### Strategic info Strategic, analytic or trend infor-

Strategic, analytic or trend information can change the way a company manages its affairs. The new IMPACT-2 programme which is aimed at stimulating the information market in the Communty, has a new line: supporting strategic information iniitatives.

In this issue we review new products and services designed to help companies become more intelligent in information use and to come to grips with trends based on new technologies affecting industries. Where do external information systems fit in your company: at management level, a technical level or practically nowhere at all?

#### IN THIS ISSUE

Eastern Europe meeting	р.З
Networks and markets	р.4
Free CORDIS prototypes!	p.5
Writing Furanean	n Q

# The current position of Europe in world information markets

Europe is still significantly weaker in the market for electronic information services than it ought to be. For example the turnover of Europe's online information services (excluding videotex) is currently about a third of the US market. In 1989 the European Community produced only half as many online databases as the US. In addition the US has developed more higher value databases such as full text or factual databases and larger databases than the EC. For profit organizations operate more than four out of every five services in the US, whereas in Europe public or non-profit operators have more than half of the market. Fragmentation of services in Europe does not only cover subject matter of databases. Differences in languages, standards, regulations and tariffs pose other problems for Europeans.

The information handling part of the economy covers many sectors of the economy but service providers are often small and are oriented to regional or national markets rather than to European or global ones. Stronger international operators are now acquiring information or media services within the Community.

The liberalization of telecommunications, the emergence of Japan in advanced information services and new technologies are creating new challenges for Europe.

The disparity within the Community is evident from the fact that one Member State — the UK — produces one third of all databases, which accounted for three

quarter of all database exports to the USA in 1988. Another Member State, France, dominates the videotex market with 90% of all European terminals. Some other Member States produce few if any electronic products. This disparity is likely to shear the internal information market unless action is taken to encourage information service development throughout the EC.

Efforts to encourage industrial sectors to produce Europeanscale information services and the launching of European pilot and demonstration projects are some ways through which a truly European information services industry can be created.



# **4 Action Lines of IMPACT-2 programme**

Action line 1
Improving the understanding of the market



The European Information Market Observatory (IMO) will extend the scope of its activities to identify the Community's strengths and weaknesses and provide the raw material for drawing up policy. Besides the monitoring of the supply of database services, emphasis will be placed on publishing markets for business and trade audiences.

The IMO will keep a permanent inventory of existing market data sources and investigate, for example, strategic sectors that are poorly served. The Observatory will also encourage harmonization in statistical methodologies and stimulate the development of models and forecasting tools. Market survey work by private sector firms will be encouraged and supplemented. The IMO will strengthen its network of national correspondents and improve links with existing European and national associations in the information industry.

**Action line 2** 

Overcoming legal and administrative barriers.



A number of horizontal legal actions which will encourage the creation and use of European services will be undertaken. These include tackling the problems of protection of privacy, responsibility for data accuracy, intellectual property, proof and authentication of electronic signatures. The Legal Advisory Board will be reinforced in order to help in the preparation of Community legislation.

A second category of activity will concentrate on the preparation of initiatives specific to harmonizing rules on the marketing of data files held in public and quasi public bodies. For private sector services such as mailing lists and credit and solvency databases, European codes of conduct need to be introduced and monitoring of the correct use of personal data.

**Action line 3** 

Increasing userfriendliness and improving information literacy.



To complement the current efforts for Open Systems Interconnection (OSI), the Commission will promote the development of Open Information Interchange (OII) in cooperation with existing standardization structures such as EWOS, ETSI and CEN/CENELEC. The demonstration and application of information standards, such as the Standardized General Markup Language (SGML) and Office Document Architecture (ODA), will be encouraged.

The development of generic interfaces providing flexible and economic solutions for accessing a large spectrum of information services will be encouraged. This will include multimedia services and European-wide access.

Multiplier groups such as educational institutions, professional associations, national focal points, gateway operators and the specialized press will be encouraged to promote information literacy among professional people. A number of supporting actions will include multi-media shows, videos, seminars, workshops, a regular newsletter, as well as the operation of a multilingual databases host service. ECHO, the

European Commission Host Organization, will have a major rôle to help increase information literacy and awareness in collaboration with national multipliers. Training activities will address all kinds of information handlers in the information chain, from database production to final use of information. Special attention will be given to less favoured regions.

Action line 4.
Supporting
strategic
information
initiatives

The supply of electronic information services in s c i e n c e and technology will

be stimulated and strengthened. For example, the Commission will build on recent initiatives in the areas of biotechnology and engineering materials data systems by creating a cooperative network for biotechnology information and the further development of material data services. Strategic information services will be stimulated on the basis of requirements identified by the IMO, the mid term review and after consultation with industry representatives. Pilot and demonstration projects in some market sectors will be aimed at achieving a catalytic effect on the development of European information services which would otherwise remain inadequate in size, coverage and scope. More flexible ways to encourage the participation of small and medium sized enterprises and the provision of services in less favoured regions will be explored.

# Community document on IMPACT-2 now available!

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- ☐ Italiano
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Readers who would like the Commission document on the IMPACT-2 proposal (COM (90) 570 final) may request it in any of the nine Community languages.

Yes! Please send me the Community Proposal document on IMPACT-2

Name	***************************************
Company	
Adress	

To Mr. D. Buckley, DGXIII-B, CEC L-2920 Luxembourg Fax: +352 4301 3909



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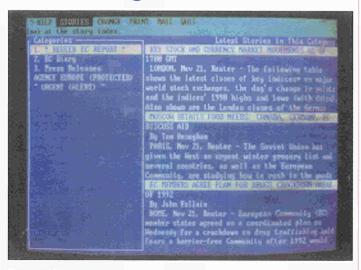
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Comments and inquiries to: Information Market P.O. Box 2373 L-1023 Luxembourg Tel.: +352 48 80 41 Fax: +352 48 80 40 Telex: 2181



# Reuters launches **Eurostrategic info service**



Reuters EC Report aims to provide access to precise information on the European Community quickly and simply. Specific information needs and interests may be programmed into the system and the PC based windows system provides both an index and full text, delivered overnight on the Reuternet connection.

Thus a company executive, lobbyist or lawyer can find the most relevant issues of the day as soon as he or she turns to his computer. The service includes analysis by a specialist team of Reuters journalists, a diary of events, contact names and addresses, press releases and the publication, Europe.

The Reuters Textline service has also added Europe to its publications and a new enhancement provides greater flexibility in free text searching. Reuters has announced Trendlink, a Windows 3 graphics product that provides a plotting and graphics environment for such statistical services as Pricelink.

Contact:

Mr. J Wynne Reuters 61 rue de Trèves **B-1040 Brussels** Tel: +32 2 230 0420

# **Commission discussions** with eastern countries

On 15 and 16 January the European Commission (DGXIII) invited representatives of central and eastern European countries to a presentation on the information market programme, IMPACT, the language programmes, Systran and Eurotra, and the innovation programmes, Value and Sprint.

The aim of the meeting was to open up a discussion with countries including Poland, Hungary, Czech and Slovak Federal Republic, Bulgaria, Romania, Yugoslavia and the Soviet Union in the context of political changes and the moves to market economies that have recently taken place. The invitees presented briefly the information and innovation scene in their own countries. Representatives attended both from telecommunications administrations and information service providers, as well as embassies.

After a discussion, the following was agreed:

1. An exchange of information was envisaged on a reciprocal basis. An inventory of databases and hosts existing in central and eastern European countries could be drawn up.

- 2. Commission documentation on IMPACT and other programmes and ECHO, would be sent on request. Each country was encouraged to have one organization act as a focal point for distribution.
- 3. Experimental access would be given to ECHO databases for central and eastern European countries. To assist the Commission in identifying problems regarding access to Community information services, eastern subscribers are asked to provide feedback about their experiences accessing and using ECHO.
- 4. In order to help east/west partnerships in database production, some articles about opportunities in eastern countries could be published in DGXIII newsletters.
- 5. Organizations from central and eastern countries would send material on the status of their information markets (networks, databases, access conditions, videotex services etc.).

Mr. Axel Szauer DG XIII-B

CEC. L-2920 Luxembourg Tel: +352 4301 3526

# Geographic info systems workshop

Geographic information has numerous applications in both commercial, academic and public applications. The European Commission (DG XIII-B) therefore held a workshop to clarify needs for European action for IMPACT-2, at Brighton on 22 October 1990. The discussion identified main topics for future policy formulation including standards,

organizational structures, copyright, data availability and quality, awareness, training and education. The report, Geographic information systems, is available from the Commission.

Contact:

Mr M Littleiohn CEC, DG XIII-B L-2920 Luxembourg Tel: +352 4301 2187

# Czechs and Slovaks

Czechoslovak Market provides fortnightly news in both English and German editions about innovation, opportunities, partnerships, laws and conditions in Czechoslovakia. A recent issue contains sections on finance and investment, enterprises and mar-

kets plus a guide to useful addresses and a calendar of exhibitions.

Contact: Czechoslovak Market Cz-100 00 Prague 10 P O Box 24 Czech and Slovak Fed Republic Tel: +422 782 0162

# **Bulgarian videotex offers** advertising

Infotel, the Bulgarian videotex system of CTS, Centre for Telematic Services, offers the possibility to advertise western products and services and also help identify possible partners and investigate the latest situation on firms, legislation and prices. Infotel services present news and information on economics, politics, law, science, tourism and culture, some of it free of charge. Electronic mail is also offered to Infotel subscribers. The services are accessible through public X.25 data networks. An MS DOS emulation diskette and manual is available. Additional information in English and German can be had by telephoning between 7 am and 3 pm on weekdays.

Infotel/CTS

58 Krum Popov str 1421 Sofia Bulgaria

Tel: +359 2 658 506 Fax: +359 2 658 506 Telex: 24 479

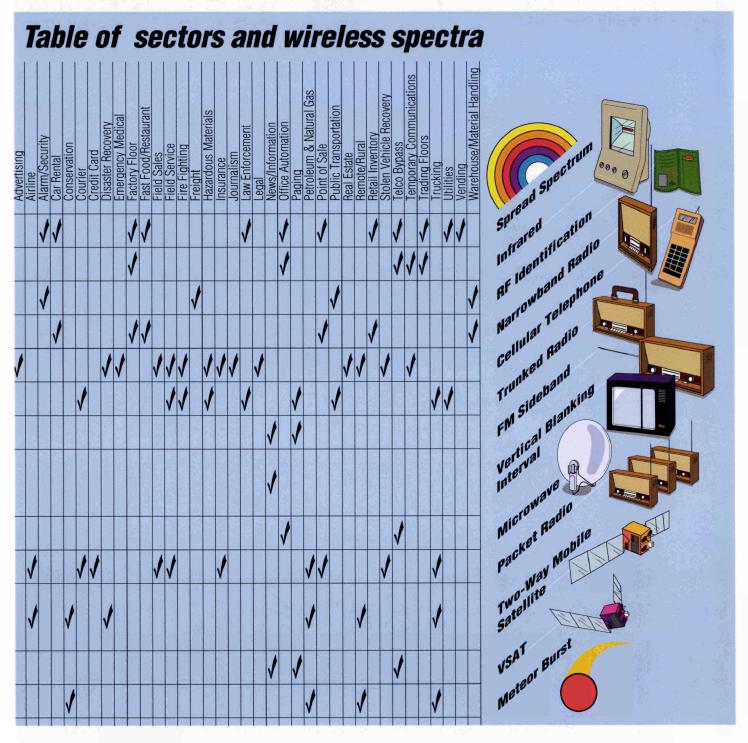
# User survey

Do you access data networks for email, bulletin boards or databases? If so please call the NUA: 023421720014500. Those in UK should call, 21720014500.

Contact:

BrainStorm 103a Seven Siosters Rd GB-London N7 7QN Tel: +44 71281 4411

# Alternative networks / alternative information markets





Wireless data communications equipment and services could quadruple from \$500 million in 1990 to \$2000 million by the end of the decade, according to a US report. Wireless data communications worldwide markets. Specialized applications seen as potential users of radio data include automation of field maintenance operations, point of sale and credit card authorization. Others uses emphasize avoidance of telecoms administration system ("telco bypass"), disaster recovery

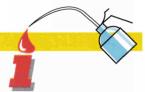
and local portability. Earthquakes, electricity brown-outs, fires, cable breakages have made some data centre managers nervous of traditional systems, especially in time sensitive industries. Retail shelves and trading floors that have resisted cabling because of cost may find a solution in radio data. Explosive growth is expected in both the retail and entertainment sectors.

Although entry costs are low, wireless LANs and radio modems are readily available, most customers want "better, faster, cheaper" packaged systems without being mesmerized by the technology. security of broadcast data is also an issue that needs to be tackled.

Contact:

IRD PO Box 1716 USA- New Canaan CT 06840

Tel: +1 203 966 2525 Fax: +1 203 972 6151



# Thinking strategically ...in five minutes

Strategic thinking is about setting longer term goals based on a cross focus of key developments. Executives will redirect whole industries when they see trends moving in different directions.

How can executives quickly identify strategic trends from a mass of facts?

Now it can be done in five minutes. Trend Monitor have produced their Strategic briefings. This is how they work. Normally executives collect key facts and trends. Strategic briefings do better than that: they boil down each crucial fact to a succinct sentence or two. These are then structured in a logical flow or synthesis. Individual conclusions become rational and inescapable.

Inescapable, for each individual and firm, because each firm is different and conclusions and reactions must be different. That is probably why **Strategic briefings** leave the left hand side of the page free for hand written comments of each reader to whom it is passed.

The **Strategic briefing** on *Electronic document distribution* provides some provocative analysis on the impact of broadband and fax on the paper publishing industry.

Contact:

Trend Monitor 3 Tower Street GB-Portsmouth PO1 2JR

Tel: +44 705 864 714 Fax: +44 705 828 009

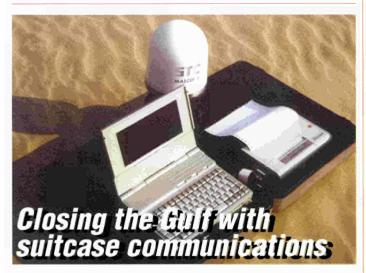
# Global look at copyright

Copyright issues relative to computer and other machine readable forms of artistic creation have added a new dimension to previously accepted legal positions. Global copyright issues in the secondary information industry by Arthur Levine and published as NFAIS report 4, summarizes within less than 100

pages the law, registration, owner's rights and recent developments in the Americas, the Asia and the Pacific countries and western and eastern Europe.

Contact:

NFAIS 1429 Walnut Street USA-Philadelphia 19102 Tel: +1 215 563 2406 Fax: +1 215 563 2848



Journalists in dangerous areas with unreliable communications compounded with the unwillingness of authorities to forward messages, have turned to a marine satellite system. Fitting into a suitcase the Mascot Nomad system of STC International Marine includes a battery driven portable PC and an omnidirectional domeshaped aerial plus a mini telex

printer. The system can connect to telex services or X.25 gateways via the Inmarsat satellite. The company also offers a two-suit-case telephone, telex, fax and computer communications system.

Contact: STC International Marine 302 Commonside East GB-Mitcham, Surrey CR4 1YT Tel: +44 81 640 3400

Tel: +44 81 640 3400 Telex: 261440 imrccr g



Hot ideas for new commercial products are contained in a new database that CORDIS, the European focal point for Community research and development (R&D) has announced to be online in April this year. PROTEAS, one of three new services, is a database containing a broad spectrum of pre-commercial research results including know how in new technologies and significant findings in basic research. The service is essential for companies seeking joint ventures, new manufacturing ideas or licences, those wanting to develop new spin-off technologies, consultancy and research partnerships.

Proteas is linked to Eurotech Capital, a Commission, DG XVIII initiative promoting venture capital investment in transnational high technology developments in Europe.

The results come from across the European Community and include work done in EFTA countries, whether funded by the European Commission or national, international or independent sources.

The **Proteas** database provides a European structure for the dissemination of R&D results in Europe to encourage

- industrial and commercial exploitation of results
- · technological collaboration
- · information exchange

The entries in **Proteas** are gathered through direct contact with researchers and developers or through existing technology transfer networks. They have applications in every sector of techno-

logy including environment, energy, materials and industrial manufacturing technologies, biology and medicine, and information technologies and telecommunications

Each record contains a detailed description of the result, followed by relevant parameters such as level of completion, technical limitations and conformance to national and international standards. Potential applications, relevant market sectors and patent and copyright details are also listed.

Examples of the collaboration sought by contributors such as research, finance, manufacturing or licence agreement are given.

Currently, over 1300 technology or know-how records are stored. Proteas has been accessible over public data networks for over a year and already has over 600 registered customers.

The two other services available on Cordis from April are

- · RTD-ComDocuments
- RTD-Acronyms.

The first lists relevant Commission documents about RTD programmes; the second gives most commonly used abbreviations for Community programmes, projects and results.

The CORDIS service was launched in December last year. It provides a user friendly menu driven or CCL interface. Three services already up and running are the Programmes, Projects and Publications databases.

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# LAB looks into European legal framework for Audio-and Videotex

How can videotex and audiotex services best operate under the conditions of a Single European Market? To create European services similar to the French kiosque where videotex callers can choose a service according to a telephone tariff, poses a number of regulatory, legal and sometimes moral questions.

On 17-18 October 1989, the Commission asked the Legal Advisory Board to discuss these and other issues. At the moment none of the European Community countries has a complete and specific legal framework for videotex or audiotex. In some countries such as France, it is the legislation on radio and television that applies to these new services. In other countries contract-law is applicable. In the United Kingdom it is a combination of statute law, common law and self-regulation. In Germany a federal law between Länder gives rules about competence, the press and data. Relations between suppliers and users are left to market forces.

Conditions for operating services also vary. France offers several levels of kiosque for professional, online information and general public information. Separate conditions exist for telematic services and audio-visual services. In Denmark, rules for contents of services similar to those governing mail services apply. In Ireland, a case was brought to the High Court where

students supplied information about English abortion services.

Other issues which arose concerned the rights and obligations of information suppliers and the question of liability. All countries also have problems with some services posing questions of public morality.

Bilateral connections of videotex systems raises two types of questions: those relating to the free circulation of information and related questions of fair competition, market transparency and access to networks; another type of questions relate to public order and good morals on which Community competence is less clear. But unless a European legal framework is established, there is a risk of both market distortions and bypassing of Member States national laws by providing services outside their territories.

Different principles may apply to contract services and those which require no password or contract. Codes of conduct established by the information providers themselves could provide useful elements for a Community approach but each code tends to be result of practical experiences, based on particular traditions.

Contact: Mr. G. Papapavlou DG XIII-B L-2920 Luxembourg Fax: 352 4301 2847

### Confidentiality in online searches

Opening someone's mail may not be a gentleman's occupation but could be the source of information of a security, commercial or personal nature. The electronic equivalent of revealing what sort of information was researched and retrieved, for example in a patents database, may be of prime importance to a competitor company.

What obligations have online hosts, network operators, gateway operators and electronic mail services? The European Commission (DG XIII-B) had legal specialists undertake a study, short title CONFI, on the problems raised by the monitoring of database searches by hosts and others. It outlines the facts and analysis of confidentiality of online consultations and explored the legal frameworks in each of the Member States. A questionnaire was sent both to database users and information providers.

In Ireland, for example, two out of three users and in Denmark, Luxembourg and Greece one in two, indicated that they were not informed at all about which user data is recorded and for which purposes. Hosts often store data for long periods of time: in the UK 72% of providers stored for more than five years.

Do users consider the problems of confidentiality when taking out contracts for services? Most said yes: 100% in Ireland, 96% in Germany, 86% in the UK, 66% in Luxembourg and the Netherlands, and 57% in Denmark.

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# Exploiting public sector data

The European Commission has recently commissioned a two volume report on Legislation for general access to public information. Such Freedom of Information laws are associated with fundamental human rights. Volume one gives reports by subject including data protection, company registers, and car registers. The second volume gives reports by countries.

The report recommends that the EC should encourage Member

States to make clear their public sector information inventories, the points of contact for obtaining information and the conditions of accessibility for such information, such as the legal and financial conditions. The Commission could lead the way in making Community information resources more transparent and accessible.

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### Learn about the EC on your Videotex

Some 150 pages of information about the European Commission, ECHO and the IMPACT programme and the Community's information technology research programmes are being offered to users of European videotex systems. Videotex is now offered in nearly all EC countries.

#### The pages will tell you

· Who does what in the Commission's Directorate General XIII on innovation, information industries and telecommunications.

- · How to access ECHO.
- · What databases are available free of charge and for a fee on
- · What the IMPACT programme (Information Market Policy Actions) is doing to make access to European information services easier for EC citizens.

Special pages will be devoted to news, surveys and

... infomercials.

#### Infomercials? What are infomercials?

This is a new concept in European information advertising and service promotion. Both videotex and online databases are rich sources of information for work, the office, laboratory, research centre, the bank ... and the home. However many people who use videotex do not use online and vice versa.

That's where infomercials come in. Their aim is to encourage commercial online hosts to advertise their wares to an audience they may not have tried

A number of pages will be offered to advertisers in Information Market and others. Infomercials will be publicized in Member States of the Community in the native language of the users!

Videotex users will be able to see a broad offering of European

information products - far wider than they usually see on their national system! The Single Market of 1993 is less than two years away! If both the online and the videotex market are combined it already creates a very large market of electronic information users.

It is hoped that commercial online hosts will begin to see the potential of videotex market as many of the videotex users are potential users for the more sophisticated searches that can be done with full text or statistical databases.

Some hosts may also want to create the sort of service that ECHO has pioneered which opens its online databases for videotex users. Or videotex users may want to use a personal computer software to emulate both videotex and online terminals so they can access both systems.

# European telecom users call tariffs "unfair".

European telecommunications charges vary so widely from one country to another, that the European telecoms user group, Eurolug, calls them "arbitrary" and says that they constitute a barrier in the run up to the Single Market of 1993. The tables below show the cost of the telecommunications connection for an 8 minute network connection, with 10,000 characters received and transmitted and with the segment over 60% full ie 40 characters per seg-

Within Europe on an X.25 connection at 2400 bits/second, the cost varies from 0.26 ecu in Ireland and 1.37 ecu in Greece -a huge variation of 426% more. European users find it hard to work out why there should be such a differential.

"It is not market pressures that decide pricing, "says Nigel May, chairman of Eurolug, " since pretty well all the telecommunications operators we analyzed have national monopolies." Distance seems to play no role in international traffic nor the GNP per head of population. In fact some of the poorer countries have the highest tariffs.

The following conclusions on these discrepancies were drawn from the tables:

- 1. It is due not market pressure, since pretty well all the national authorities listed have monopolies in this service
- 2. It is not connected with labour costs as the low labour cost countries tend to have the higher charges.
- 3. It is not connected to distance. Italy is not so much further from the USA than is Germany.

4. For the user it is all pretty arbitrary and is unfair that people in one country should pay so much more for the same thing without good reason.

The Commission's Competition Directorate General is presently looking into cartel and monopoly price fixing.

Eurolug 9a High Street Calne, Wilts SN11 0BS Tel: +44 249 814 584 Fax: +44 249 813 656

For dialup X.28 the charges vary from the cheapest (Ireland again) with a cost of 0.36 and the most expensive - this time Spain with a cost of 1.64 ecu. That makes Spain 355% more expensive. The rates for communication with USA and Japan show a similar arbitrary nature.

### PTT charges for X28 dial up connections in ecu (taxes included)

	National	Europe	Scandin.	USA	Canada	Japan
Austria Belgium Denmark Finland France Germany Greece Ireland Italy Luxembourg Netherlands Norway Portugal Spain Sweden Switzerland UK(BT)	0.32 0.64 0.32 0.39 0.61 0.85 0.50 0.35 0.20 0.57 0.50 0.21 0.93 0.54 0.51 0.39	1.09 1.20 1.39 1.41 1.54 1.21 1.37 0.36 1.32 0.76 1.40 1.45 0.99 1.64 1.06	1.09 1.20 1.17 1.08 1.64 1.21 1.37 0.36 1.44 0.76 1.40 1.28 0.99 1.64 1.24 1.06	3.19 2.65 2.38 1.70 2.86 2.08 4.21 1.61 3.04 1.93 2.96 2.69 1.44 3.14 2.17 2.19 2.66	3.19 2.63 2.68 1.70 3.56 2.64 4.21 1.51 3.04 2.23 2.96 3.39 2.38 3.14 2.61 2.19 2.66	4.77 3.43 3.88 3.29 3.56 3.50 4.21 1.71 3.64 3.38 2.39 3.14 4.16 3.37 3.12
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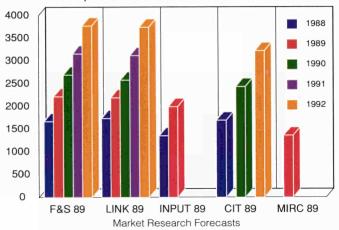
### PTT charges on X25 connections in ecu (taxes included)

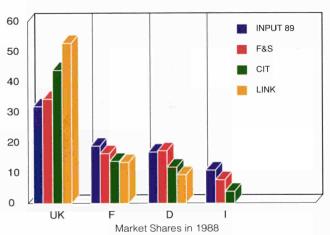
	National	Europe	Scandin.	USA	Canada	Japan
Austria Belgium Denmark Finland France Germany Greece Ireland Italy Luxembourg Netherlands Norway Portugal Spain Sweden Switzerland	0.32 0.18 0.12 0.19 1.08 0.69 0.38 0.14 0.33 0.20 0.37 0.25 0.21 0.80 0.20 0.28	1.09 0.90 0.99 1.25 1.16 0.80 1.37 0.26 1.32 0.76 0.98 1.19 0.99 1.50 1.17	1.09 0.90 0.78 0.91 1.16 0.80 1.37 0.26 1.44 0.76 0.98 1.04 0.99 1.50 1.03 1.06	3.19 2.44 2.18 2.63 2.45 1.67 4.21 1.35 3.31 1.93 2.54 2.47 1.44 3.00 2.25 2.19	3.19 2.44 2.18 2.63 3.08 2.23 4.21 1.35 3.04 2.23 2.54 3.14 2.39 3.00 2.25 2.19	4.77 3.22 3.49 5.23 3.08 2.59 4.21 1.56 3.97 3.08 2.76 3.14 2.39 3.00 3.81
UK (BT)	0.19	1.06	1.06	2.66	2.66	3.37 3.12



# Market grow faster than predictions







Recent assessments of the actual size of the 1989 Europe (Community and EFTA) online electronic information market put it much bigger than predictions made in early 1989.

At the beginning of 1989, market analysts expected the European electronic information market to be between 1187 million and 1610 million ecu or \$1400 to 1900 million.

The actual size of that year's market is now estimated at about 1364m to 2273 million ecu or about \$1500 to 2500 million.

In dollar terms the market is even larger than in ecu terms due to the changes in the exchange rate. Both the market observers **Link** and **Frost and Sullivan** expect the market to be of the order of 3727 million ecu or \$4100 million by the end of 1992.

The distribution of the market is uneven across the Community;

the UK, France and Germany represent some 70% of the market. The UK's share is put at half the market by Link and CIT, but closer to a third by INPUT and Frost and Sullivan. The Italian market is growing fast.

Frost and Sullivan estimate the market share of real time (ie foreign exchange and stock) information at 61% and CIT put it at 43.4%. Financial information represents the most important part of the market according to Link, while INPUT and CIT put the share of business and financial information at 60% and 55% respectively. Scientific and technical information is in the range of 8 to 12%.

The number of subscribers to electronic information services is estimated at between one million (INPUT) and 1.5 million (Frost and Sullivan).

Contact: IMO

CEC, DG XIII-B L-2920 Luxembourg

# New access point for Euro info



From left: Mr. V. Parajón Collada, Deputy Director General DGXIII; Mr. L. Emringer, Director of Office for Official Publications; Commissioner Mr. J. Dondelinger and Mr. F. Theis, Director of the Commission's Office in Luxembourg

European Commissioner Jean Dondelinger opened the first Info-Point-Europe on 21 February in the centre of Luxembourg city. The Info-Point-Europe will offer the public the latest information on the Community developments, including access to databases on Eurobases and ECHO.

Premier Info-Point-Europe inauguré M. Jean Dondelinger, membre de la Commission responsable de la politique audiovisuelle et de la culture, a inauguré le 21 février à Luxembourg, le premier Info-Point-Europe dans la Communauté. Situé en plein centre de la ville, l'Info-Point-Europe offre l'information la plus complète et la plus à jour possible sur le fonctionnement, les activités et l'évolution de la Communauté européenne, y inclus la consultation sur place des bases de données d'Eurobases et d'ECHO.

Contact: Info-Point-Europe CEC, DG X 200 rue de la Loi B-1049 Brussels

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# Writing European in rich Latin and Greek

The arrival of a Single Market brings with it the need to communicate in several languages. The addition of accents, special letters or whole alphabets for Greek or Cyrillic may present a whole new set of problems and barriers. In an office it will increasingly become necessary to move from one language to another. Can this be performed on the same word processor or personal computer?

There are now several solutions on the market.

#### **Built-in solutions**

Some keyboards such as the Swiss French or Luxembourgish keyboard present both French and German characters. This entails the loss of some characters or signs that are not frequently used. Or an additional ALT may also be used for creating these symbols. Several computer manufacturers now build machines or have builtin software that allows the typist to switch from, for example, a Greek keyboard to a French keyboard. This may require rebooting the machine and choosing the alternate character set through a choice of say, F1 or F2.

#### **Printer solutions**

As what is mainly needed is the printed output not the screen version, one solution is to make a small programme that will change the output to a pin printer. This enables each output to be designed individually; special logos or signs can also be substituted for little used letters. Computer keys should be relabelled. The wished for variation may be printed instead of the normal character that appears on the screen.

### **Text processing solutions**

For typing letters or reports using several character sets, it is more convenient to be able to use the same software and change character sets from time to time. MF Word has produced a processor for all nine EC languages. If it is only a matter of an occasional letter, this can often be accomplished by using the extended keyboard. For example pressing ALT with one finger and keying the number 146 with another, produces the Danish letter Æ. For a broad selection of European languages that includes Polish, Welsh, Greek and Russian, this solution is cumbersome or presents technical problems.

Word processing or Desk Top Publishing (DTP) that use environments like Windows, permit the typist to change Fonts from Times to Helvetica, and also to Greek and Cyrillic. Software fonts with accented west European letters or special characters, such as Scandinavian, Welsh, Irish characters may be difficult to find.

Some word processing packages now incorporate multifonts giving a broad range of possibilities. Some software comes in linguistic modules that can be bought as required.

# Integrated writing packages

The following are some software packages on the market:

Loco Script is an inexpensive package that includes with the word processor, a spell checker (English), mail merge, a database and a disc manager. The Loco-Script character set is claimed to

# Advantages and disadvantages

Multilingual word processing is often a compromise with cost. As the package becomes larger so does the cost. Software does not always follow standards and this poses problems of transfer and conversion. What would ideally be in such packages would be:

Multilingual dictionaries easily accessible: this can sometimes be accomplished via CD-ROM drive with multilingual technical dictionaries.

Multilingual spelling checkers and hyphenation dictionaries, rather than just in the base language.

Flexible conversion possibilities to standard word processing software and Desk Top Publishing, including Windows environment programmes.

cover all characters in any European language - including all common accented characters.

Accents include acute, grave, double acute and grave, circumflex, umlaut, tilde, ogenek, caron, macron, breve, ring, cedilla, Latvian tail. Special letters include the scharfes s, eng, eth, thorn and a number of dipthongs. Greek and Russian characters are also provided with some extras: Ukrainian, Bulgarian, Azerbaijani, Serbian, Mongolian, Kazakh and Tartar letters.

Mathematical and graphical symbols are also included. Keyboard layout can be changed via a ALT F1, F2, F3 or F4 command from a normal QWERTY, to Cyrillic, Greek or symbol layout. Accents are accessible by using CTRL with the respective keyboard. ALT with the non Latin keyboards returns it temporarily to QWERTY.

Contact: Locomotive Software Dorking Business Park Dorking GB-Surrey RH4 1YL

**Vuwriter** by Vuman is a windows type environment, with mouse operated pull down menus. Changing to a Greek or Cyrillic alphabet is effectuated by simply changing the Font. Each language has fonts available in several

point sizes. The Roman font extension gives Gaelic letters, dipthongs, and accents. Inspite of the 20 or more diskettes, the programme is easy to install, to use without training and produce output even with a nine pin printer. It comes with English legal and medical dictionaries.

Contact: Vuman Manchester Science Park Lloyd Street North Manchester M15 4EN

Tel: +44 61 226 8311 Fax: +44 61 226 5855 Telecom Gold: 81:MMD054

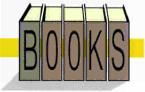


Producing documents in a number of languages such as Greek, Russian, Turkish or Hebrew is possible with the word processing package, Nota Bene. It is especially well suited for academic use as it provides rich character sets. As well as all Scandinavian letters, NB also provides Old English letters and even prerevolutionary Russian characters. Accents or diacritical marks include umlaut, circumflex, acute, grave, o-ring, tilde, breve, overdot, underdot, double underdot, overline, underline, hachek, cedilla, reverse cedilla, slash, double quote and double accent. The software includes full facilities of a regular word-processor such as page layout, automatic numbering, searching, page indexing and footnotes.

Contact: Dragonfly Europe Höhenkörbenerweg 85 D-4460 Nordhorn Tel: +49 5921 33500







# Nordisk EF-Vejviser

Medøkonomisk støtte fra Nordinfo, Det Nordiske Samarbejdsorgan for Videnskabelig Information, har Erhvervs-Info under Center for Erhvervsforskning i Århus i samarbejde med Handelshøjskolerne i de nordiske lande, udviklet en elektronisk EF-vej-

Vejviseren er et register over danske, finske, norske og svenske EF-informationssteder, dvs. personer og organisationer der kan give oplysningerom EF-spørgs-

I første udgaven af disketten, der udkom i december 1990, er medtaget oplysninger om 160 informationssteder, opdelt på biblioteker, forlag, konsulentvirksomheder, organisationer, ministerier og databaseværter. For hvert informationssted gives bl.a. oplysninger om hvilken type information som stedet kan levere, nøjagtig adresse samt hvem hos informationsstedet man i givet fald skal kontakte.

Udover disse oplysninger, indeholder disketten desuden oplysninger om udvalgte periodiske EFdokumenter samt nordisk EFlitteratur.

Disketten kan køres på en standard PC, og hvad vigtigere er: der kræves ingen særlige forkundskaber for at kunne søge informationen, idet systemet er opbygget med menustyring med mange - og gode - hjælpetekster og - menuer, der kan gives på enten dansk eller svensk.

Vejviseren tilbydes i abonnement med to årlige opdateringer i henholdvis juni og december måned til en pris af DKK 976, incl.

Kontakt: Erhverys-Info Forskerparken Gustav Wiedsvej 10 DK-8000 Århus C Tel: +45 86 20 20 00

Fax: +45 86 20 12 22

# When information becomes strategic

How do you tell when information has high value in a company? How should companies organize their information systems? How do you convince individuals within a corporation that their most precious asset is their knowledge and expertise ... and that they should share it with others?

The problems become more acute in medium and large companies. No wonder that according to Ruth Stenat in her book, The intelligent corporation, companies are spending more on external and internal information resources and, as corporate staff has thinned out during restructuring, resources devoted to information gathering have increased. Such information handling is having a bigger effect on decision-making.

With the pressure on companies to innovate, develop and customize their products, the race is now on to improve such intelligence systems. How can companies

introduce effective systems? Ruth Stenat, who has worked with many top US corporations on this problem suggests:

Step 1: Identify an internal information champion

Step 2: Organize key people

Step 3: Develop a work plan for an intelligence network

Step 4: Begin the short and long term planning phase

Step 5: Conduct a strategic information audit

Step 6: Develop a prototype intelligence network

Step 7: Obtain user feedback

Step 8: Redevelop the system

Step 9: Roll out the system

Step 10: Establish a support structure for the system

Step 11: Promote the evolution of the system.

Strategic Intelligence Systems 14-16 Place Cornavin

CH- 1201 Geneva Tel: +41 22 732 3949 Fax: +41 22 732 7587

# Formation en Europe

La Chambre de Commerce et d'Industrie de Paris vient d'éditer un guide, Formation Europe: les priorités communautaires, patronné par la Commission des Communautés européennes. Cet ouvrages rassemble toutes les informations en matière de formations: 13 programmes communautaires de formation, 52 programmes de recherche et de développement et des programmes d'enseignement complémentaires. Le guide consacre une large place à la politique éducative communautaire, aux problèmes de libre circulation et de reconnaissance des qualifications à l'intérieur de la Communauté europé-

Contacter: CCIP

27 Ave de Friedland F-75008 Paris

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# Finnish networking magazine

Tietoverkko is a new magazine dealing with networking, transmission of data, text, speech and images, and telecommunications. The publication appears six times

a vear.

Contact:

Tietverkko Box 920 SF-00101 Helsinki Fax: +358 0 145 109

# Technological newsletter

A new fortnightly newsletter, EuroInfoTech, concentrates on European Community policy in telecommunications, information technology and consumer electronics. Edited by well known Brussels journalist and author, Nigel Tutt, the newsletter highlights the latest news for lobbyists

and companies and publishes its own interviews with key personnel in the Commission and the European institutions.

Contact:

EuroInfoTech 7 rue Franklin B-1040 Brussels Tel: +32 2 733 7243 Fax: +32 2 230 5713

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### Electronic document delivery standards

Libraries and other interested bodies from Europe and USA have joined together to help resolve problems related to the transmission of the full text of a document. The Group on Electronic Document Interchange (GEDI) comprises the British Library Document Supply Centre, Pica Centre for Library Automation, (NL), the French Ministry of Education, directorate of academic libraries, Télésystèmes, Questel, the University and Technical Information Library, Hanover, OCLC and RLG (USA). GEDI plans to define a framework which will provide de facto standards for electronic document formats and protocols. This common framework will encompass a series of profiles based on existing OSI standards and products as far as possible and will facilitate compatibility between the various networks currently used by libraries in Europe and North America. This effort to improve user functionality is being supported by the Commission.

The final report is due to be produced in mid-Summer and it is hoped it will lead to a wide ranging discussion amongst interested parties. A meeting is planned for Autumn 1991, to which interested bodies will be invited.

Contact:

Mr Ph. Climent Ouestel 83-85 Bd. Vincent Auriol F-75646 Paris Tél: +331 44 23 64 64

### Open systems for libraries

An expert group for Libraries has been established to define acceptable standards for Open Systems. Established as a group within the European Workshop for Open Systems, EG LIB will develop a taxonomy of the profiles needed, an integrated set of profile specifications taking into account the use of these library profiles, a complementary conformance

testing strategy together with test specifications as necessary and relevant tutorial material covering applications of the profiles as necessary.

Jean Marc Cailloux Jeanfre Datacommunication Consultants 3 rue de la Harpe F-28320 Ecrosnes

Tel: +33 37 31 17 26 Fax: +33 37 31 18 09

## Project Edilibe

A cooperative feasibility project has been launched using the electronic document interchange standard, Edifact, and the X.400 protocol between libraries and booksellers in Europe. This project will build on German library experiences in the same area.

Libraries and booksellers in Germany, the Netherlands, United Kingdom and Italy have formed a consortium for the first phase of this project. The booksellers involved are B H Blackwell (UK), Casalini Libri (IT), Otto Harrassowitz Buchhandlung und Antiquariat, Booksellers and Subscription Agents (FRG) and Starkmann Library Services (UK). The

libraries involved are Stadt- und Universitätsbibliothek, Frankfurt am Main, FRG; Bibliotheek der Rykuniversiteit te Groningen, Netherlands; John Rylands University Library, Manchester, UK.

The first phase will elaborate Edifact subsets, which can be then be submitted to the standardization process, check the state of the art of X.400 products in the participating counties, define interfaces for the inhouse systems and find telecommunications solutions.

Contact:

Ms A Iljon CEC, DG XIII-B-3 L-2920 Luxembourg Tel: +352 4301 2923 Fax: +352 4301 3530

### Library Programme help desk

Telephone and documentary help is now available for those wishing to know more about the European Community Action Plan for Libraries. The Help Desk is on the same Freephone telephone numbers as ECHO, the European Community Host Organization.

See the back cover for numbers in your country.

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

### Computer law

The world computer law congress 1991 is being organized in West Bonaventure, LA, California for 18-20 April. The conference deals with business, legal and marketing issues connected with the globalization of the computer industry.

Contact:

Center for computer/law Attn.: Michael D Scott PO Box 3549 Manhattan Beach, USA- Calif. 90266 Tel: +1 213 689 5186 Fax: +1 213 623 4581

### **European networking**

The 2nd European networking conference organized by RARE and EARN will concentrate on The Challenge of the workstation in networking; the user aspects of a distributed workstation environment and provision strategies. It will be held in the Loire at Blois from 13-16 May 1991.

Contact:

RARE Postbus 41882 NL-1009 DB Amsterdam Tel: +31 20 592 5078 Fax: +31 20 592 5043 email: raresec@nikhef.nl

# Electronic data interchange

Eledis '91 the second international conference about collecting, storing, manipulating, communicating and using, image, data and voice will be held in Milan, 15-17 May 1991.

Contact:

**XCOMS International** 23 via del'Orsa Maggiore Cassina de'Pecchi (MI) Italy

Tel: +39 2 952 2102 Fax: +39 2 953 43321

# Corporate info policy

Four separate high level seminars for policy making executives will be held at the Chateau de Faverges de la Tour, near Lyon, France. They cover Opportunities and status: the electronic information market in the 1990s 15-16 April; State of the art technologies in chemical information handling from 18-19 April; How to build corporate intelligent networks from 22-23 April; and The challenge of interactive multimedia from 25-26 April.

Contact: Infonortics

9a High St GB-Calne Wilts SN11 0BS Tel: +44 249 813 656 Fax: +44 249 816 407

# Electronic publishing

The tenth International Electronic Publishing Research Centre Annual conference will be held in London 19-21 June. Themes include electronic publishing success stories, new concepts and media, non conventional and

corporate publishing.

Status Meetings Ltd Festival Hall Petersfield GB-Hamps GU31 4JW Tel: +44 730 66544 Fax: +44 730 68865

# Info Brokers in Europe

Eirene, the European information researchers network which promotes contacts between information professionals across Europe, is offering special conditions for brokers wishing to join. Membership includes a newsletter on events, profiles and products, entry in the annual Eirene membership directory and

other activities promoting broking as a commercial activity.

Eirene Contact:

c/o First Contacts 224-232 St John St GB-London EC1V 4PH Tel: +44 71 490 5519 Fax: +44 71 490 4610





The European Commission (DG XIII-B) has implemented the first European Community-wide free phone system to help citizens find the answers to questions about the European information market.

Negotiations are under way with telephone administrations in all Member States to open lines to a Help Desk in Luxembourg. These reverse charge services allow European citizens to ask about general questions on the information market in Europe, what information services are available, how do you connect to a database, and the European Community's IMPACT programme, plus ECHO'S talking computer, Max. You can also request details about the Library programme.

## **Echo's Free-phone Services**

	ECHO Help-Desk	German	MAX English	Comments
Belgium	118456	118434	118435	118437
Denmark	80010756	80010734	80010735	80010737
France	05906956	05906934	05906935	05906937
Germany	0130823456	0130823334	0130823335	0130823337
Ireland	1800555256	1800555234	1800555235	1800555237
Luxembourg	08003456	08003334	08003335	08003337
Netherlands	060223156	060223134	060223135	060223137
U.K.	0800899256	0800899234	0800899235	0800899237





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