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Information Market Marché de l'Information Information Market Mercado de la Información

Published by the Commission of the European Communities
Directorate General XIII: Telecommunications, Information
Industries and Innovation.

Issue No. 52

May—June 1988



On the French Minitel service, the number of micro-hosts more than doubled during 1987 from 2 700 to 6 379 at the beginning of December 1987.

Vice president Narjes announces tighter schedule for new telecoms market rules

"At present the telecommunications sector provides 1.3 million jobs in the Community. . . . By the end of the century the viability of up to



Jean Guyaux

Vice President Narjes (left) confers with DG XIII Director General Michel Carpentier at the Telecoms Forum

Network services

This year is a big one for the introduction of a totally new quality data network in many of the European Community countries. Integrated Services Digital Network (ISDN) can use the same two telephone wires as are already installed in millions of businesses and homes.

But instead of just voice transmission it can deliver a wider, improved range of services to the same outlet: telefax, data to a micro computer, video images to a screen, as well as voice to the telephone.

Engineers, doctors, insurance brokers, architects, editors, businessmen and administrators will be able to deliver documents, photographs, X-rays, plans and graphics with increased speed and efficiency.

Like the packet switched services that preceded ISDN, the new network will have a much more rapid uptake if the **services market is stimulated**. More services mean more customers; more customers mean more services. New businesses can flourish if they have the knowledge and the means to exploit the new European Market.

Learn what ISDN is about on page 6.

60 million jobs will largely depend on information technology and telecommunications services," declared Vice President Karl-Heinz Narjes, in Brussels on 24 February.

Speaking at the International Consultative Forum on Telecommunications, he announced a firm schedule for the introduction of new market rules for telecoms equipment and services. "The European market in this sector will be the largest and the most attractive in the world in the 20 years ahead," he said.

The Commission's Green Paper on telecoms tried to find a middle way to provide fair competition between telecoms authorities and equipment and service providers, to mark out a "level playing-field", Mr Narjes said. On the other hand, the privatisation

debate on telecoms belongs in the national context.

In response to the Green Paper proposals, companies, associations and Member States have fully endorsed the concept of separation of regulatory and operational responsibilities of the telecommunications authorities. A general consensus was clear on the liberalisation of value-added services, the high value-end of the overall spectrum of telecommunications services, which the Green Paper proposes should be open to competitive provision. There is also a general consensus concerning the full liberalisation of the terminal market.

In response, the Commission has laid down "a binding set of deadlines which have to be kept exactly" in order to open up the market. This process

will not allow "measures to be watered down or postponed through obstructivism or delaying tactics", Mr Narjes said.

The **terminal equipment** market will be opened quickly and fully and completed by the end of 1990. A Directive based on Article 90 (3) of the Rome Treaty will be presented by Spring 1988. Telephones and other terminal equipment having type approval will be offered on the open market by both private and public bodies in 1991. A draft Directive on full mutual recognition of **type-approval procedures** will be submitted by the end of 1988.

Telecommunications services will be gradually liberalised not later than 1989. This need not include the telephone service in the first instance. But services could be offered within and between Member States for "own customer use", for use jointly and with other users or even third parties.

The principles for giving private providers access to the

(continued p. 2)

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Για να λύσετε τα προβλήματά σας - βλ. σελ. 12

Narjes announces

(from p. 1)

network have to be studied; but studies on open access to **leased lines** should be completed by mid-1988, **data networks** by the end of this year, and **ISDN** by mid-1989.

The principle of establishing **telecoms charges** according to general cost trends will be examined in depth and **tariffs** will be re-examined at the beginning of 1992.

A review of the market will also be made as at 1 January 1992 in regard to any **privileged services** or exclusive rights which may still exist.

A fully open market for **receive-only satellite antennae** that are not connected to the public networks is planned for 31 December 1989.

A **European Institute for Telecommunications Standards**, proposed in the Green Paper, will be created by CEPT in April 1988.

By 1990 telecommunications services across the Community will be subject of a comparable rate of **VAT**.

Consultations on further action will be continued. Such fields include satellite communications, Europe-wide services and common tariff principles, the development of a social dialogue and the definition of a European position on the major international questions in telecommunications.

Sea change for information society

"Technology is the engine but not the steering wheel" of rapidly evolving new information systems, warns Glenn C Bacon in a lecture, *Forces shaping the new information paradigm*. Smaller, faster, cheaper and more integrated information technologies have so changed the old ways of navigating and thinking about the information territory around us that we are left with little guidance for future trips, he says. Classical industrial models will no longer serve.

He suggests that Abraham Maslow's psychological study of the hierarchies of basic human needs, from survival to security to socialising to self actualisation can be paralleled in the development of software and informationware in organisations and companies. The information user's drive for autonomy will ultimately reshape our knowledge-based institutions.

Glenn Bacon, chairman, corporate technology committee, IBM, is one of 12 distinguished Samuel Lazerow Memorial lecturers, whose entertaining and provocative contributions have been collected in **Libraries and information science in the electronic age**, edited by Hendrik Edelman.

Contact: ISI Press
3501 Market Street
Philadelphia PA 19104,
USA
Tel: +1 215 386 0100

The technology gap myth

According to a recently published study the supposed technology gap between western Europe and the US and Japan has not been the cause of the lack of competitiveness and innovativeness of western European high technology. In **Western Europe: technology and the future**, Stanley Woods compares and contrasts the environment for in-

novation in the three areas analysing differences in respective technological bases, industrial structures, patterns of demand and government policies to find where European weaknesses lie.

Contact: Croom Helm, Publishers
Burrell Row
GB-Beckenham, Kent BR3
1AT
Tel: +44 1 658 7813

Corrections

Materials awareness

People interested in attending seminars and workshops on the demonstrator programme which integrates 11 materials databanks should

Contact: FLA Consultants
27 rue de la Vistule
F-75013 Paris
Tel: +33 45 82 75 75

Intelligent info

The telephone number of Infotap which commercialises ii (Intelligent Information) is Luxembourg +352 436165; telex 60468

InfoSearch on the Istel network can be contacted in England: +44 527 64274; telex 339954; Fax +44 527 63360

Great Euro Dictionary on Gold

For information on the 440 000 word seven language online dictionary on Telecom Gold apply to Microlink, Telecom Gold system 72:

Contact: Microlink Communications Ltd
Europa House
Adlington Park
Adlington
GB- Macclesfield SK10
4NP
Tel: +44 625 878 888



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Published by Directorate General XIII Commission of the European Communities.

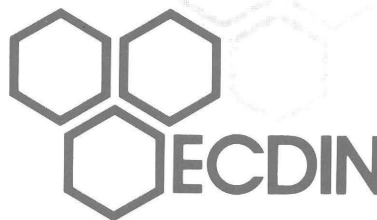
Incorporating **EuroNet** **DIANE NEWS**

This newsletter (formerly Euronet News) is published by the Directorate General for Telecommunications, Information Industries and Innovation, Commission of the European Communities, Luxembourg, and is available on request from the address given here. It is published as a special supplement to Euroabstracts. Reproduction is authorised, but the CEC is not responsible for the use which might be made of the information.

Editor: David J. Price.
Luxembourg. ISSN 0256-5066

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Commentaires et renseignements à:
Fragen und Bemerkungen an:

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L-1023 Luxembourg
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Telex: 2181



The EC
Commission's
data bank

Environmental Chemicals Data and Information Network

Offers easy access for factual data on chemicals and their impact on man and on the environment.

For more information fill in and return to.

DC host centre

I/S DATACENTRALEN af 1959

Retortvej 6-8, DK-2500 Valby, Copenhagen, Denmark
Phone: (451) 46 81 22, Telex: 27122 DC DK

Organisation:
Name:
Address:
Country:
Phone: Telex:

I wish to have more information
I wish to attend a training course
* Preferred country/city:

Booming European telecommunications

During the next four years, fully integrated and flexible worldwide data communications between desk-top personal computers will become a commonplace in Europe, according to the findings of a Dataquest industry overview.

It predicts that by the year 1991, the total European communications market which is growing at an annual rate of 8 per cent will be Europe's largest single market and worth \$ 80 000 million (65 000 MECU).

Data communications equipment will be the most significant growth area, the report says, with an average annual increase of some 17 per cent. By 1991 data comms equipment will comprise about a quarter of all telecoms equipment on the market and be worth well over \$ 3 000 million (2 500 MECU).

The ability to "glue together"

PCs through area networks will revolutionise international communication and business practices. By 1991 there will be nearly 40 million desk-top PCs compared with just over 15 million in 1986. In that year 37 per cent of desk top PCs had "hard-wire" connections to data entry terminals. By 1991 that percentage should fall to 22%. Instead the vast majority of connections will be achieved remotely by dial up modems and local area networks (which will grow from under 5 per cent to over 10 per cent of the market in the next four years).

The facsimile market is also headed for fast expansion in line with its 100 per cent growth over the last two years. Attached network functions involving emerging technologies such as voice-messaging, video-conferencing is seen as a major market sitting alongside ISDN developments.

Estimates of desktop terminals connected

	1986 %	1991 %
Hard wired	36.7	22.5
Remote	35.2	46.4
Not connected	21.3	18.1
Local area network (LAN)	4.6	10.3
Data PBX	1.9	1.5
PBX	0.3	1.2
Total	15.6 million	39.4 million

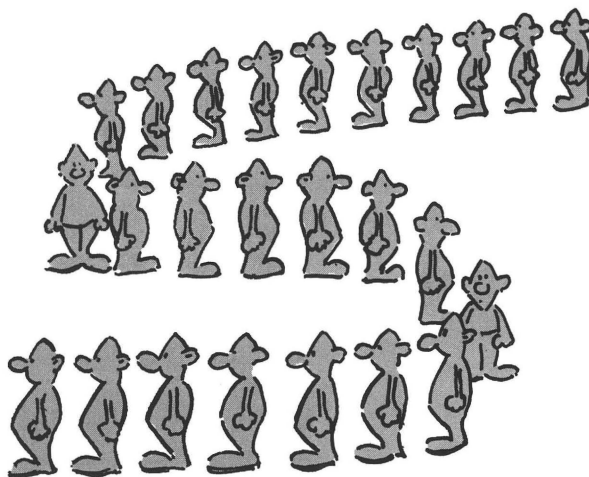
Contact: Dataquest/Cochrane Communications Ltd
59 Fleet Street
London EC4Y 1JU
Tel. +44 1 353 8807

Teledata opens data to Danes

Business companies are seen as the primary beneficiaries of a easy access system to Danish and international databases, called Teledata. The Danish P&T is collaborating with telecom companies in a 14 million Danish Kroner system which was launched in October 1987.

The Teledata centre in Copenhagen receives all calls and re-routes them on the Danish Datapak network to the respective database host. The Teledata centre looks after accounting both for the users and the database hosts. An electronic mail system for customers is also provided.

More and more onliners



Nine out of ten UK organisations use some of information technology and three out of four are onliners, according to a recent survey conducted by Aslib, the Association for Information Management.

The Aslib information technology survey 1987, assessing the impact technology on information professionals, shows that more users are doing it themselves: 11% of end-users do their own searches compared with virtually nil in the last survey made by the Online Informa-

tion Centre. Most, however, still turn to professionals for help.

Surprisingly 17% of libraries have developed their own software for information retrieval. That is a higher percentage than for any individual commercial package and indicates either dissatisfaction with cost/quality of such software or the need for better marketing.

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Aslib, Information House
26-27 Boswell Street
London WC1N 3JZ
Tel: +44 1 430 2671

50 000ème abonné à Transpac

Avec près de 2.2 milliards de francs de chiffre d'affaires pour l'exercice 1987, le réseau français Transpac, enregistre une progression de 38% par rapport à l'année précédente. Le bénéfice net progresse dans des proportions voisines.

Le cap du 50 000ème a été franchi en décembre 1987. Le trafic écoulé atteint le chiffre record de 1 300 milliards de caractères par mois en progression de 40% sur un an. Les différents services Télétel étaient responsables pour plus ou moins la moitié du trafic.

Les commandes nettes totalisent près de 10 000 abonnements nouveaux. Pour faire

face à cette demande, le rythme des investissements, qui s'était accéléré en 1986, a été maintenu en 1987 avec un montant de 460 millions de francs. Il a permis de financer le déploiement industriel du réseau qui comporte désormais 75 commutateurs de deuxième génération et 11 commutateurs de transit de haute capacité.

L'année écoulée aura été marquée par le lancement du service de messagerie universelle Atlas 400.

Contact: Transpac
Tour
Maine-Montparnasse
33 Ave du Maine
F-75755 Paris Cédex 15
Tél: +44 1 45 38 52 11

Δημοσιογράφοι, Επιχειρηματίες, Επιστήμονες Γνωρίζετε τις τράπεζες πληροφοριών που υπάρχουν;

Με σκοπό την υποστήριξη και επέκταση των δυνατοτήτων ενημέρωσης στην Ευρώπη μέσω των υπηρεσιών άμεσης ανάκτησης πληροφοριών, η EIMDG (European Information Market Development Group) (Euronet-Diane) οργανώνει σε συνεργασία με το Εθνικό Κέντρο Ερευνών και το Εμπορικό Επιμελητήριο σεμινάρια

στην Αθήνα στις 19, 20, 21 Απριλίου 1988.

Στα σεμινάρια θα συζητηθούν τα οφέλη της άμεσης ανάκτησης πληροφοριών, η έκταση των υπηρεσιών που προσφέρονται και πως μπορούν να χρησιμοποιηθούν. Θα δοθεί ιδιαίτερη έμφαση στο πρακτικό μέρος. 10 διαφορετικές Ευρωπαϊκές εται-

ρείες θα παρουσιάσουν μία μεγάλη έκταση επιστημονικών, τεχνικών και επιχειρηματικών πληροφοριών που α-ντιπροσωπεύουν.

Τα σεμινάρια είναι μια μοναδική ευκαιρία για Δημοσιογράφους, Επιχειρηματίες, Επιστήμονες που θέλουν να είναι καθημερινά ενήμεροι του όγκου των πληροφοριών,

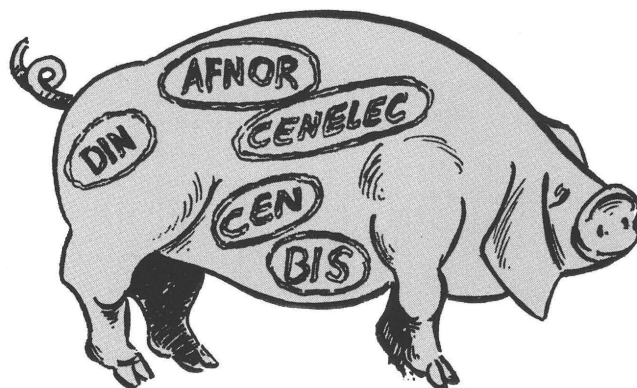
που σήμερα είναι διαθέσιμες και τόσο σημαντικές για τη οικονομική και βιομηχανική ανάπτυξη.

Πληροφορίες: **Λέλα Πουλακάκη**
Ε.Ι.Ε. Κέντρο
Τεκμηρίωσης
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116 35 Αθήνα
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00 30-1-72 46 825
72 30 310
Τελ.εξ: 2 24 064

Standards for marketing in Europe – ICONÉ

Several countries have developed large, often specific, national collections of standards and technical rules and the harmonisation of work carried out at European and international level is far from having been completed. As a result it is often quite difficult for European enterprises – particularly particularly small and medium size firms – wanting to market new products in the various Member States without a thorough technical investigation, to identify quickly the degree of equivalence between different national standards for a given product.

In order to overcome this problem and, rather than compiling all the information contained in the national standard institutions, the Commission proposed the development of a comparative index linking and comparing national and European standards. During the first phase a comparative index of national standards that have an equivalent European or international standard have been compiled. This phase, in which the EFTA countries also participate, and which involves the linking and comparing of 28 000 documents on national standards of Member States to 7 500 key international and European harmonisation documents, is carried out under contract for the Commission by the CEN, the European Committee for Standardisation in conjunction with national standards institutions. A database is now available on ECHO.



Plusieurs pays ont développé de vastes et souvent très spécifiques collections nationales de normes et de règles techniques. Le travail d'harmonisation entamé tant au niveau européen qu'au niveau international est loin d'être achevé. Il en résulte que pour les entreprises européennes, et plus particulièrement les petites et moyennes entreprises, désireuses de commercialiser de

nouveaux produits dans les différents Etats membres, il semble très difficile, sans une enquête technique approfondie, d'identifier rapidement le degré d'équivalence entre les diverses normes nationales pour un produit donné.

Dans le but de contourner ce problème et plutôt que de compiler toutes les données produites par les instituts de

Zahlreiche Länder haben umfangreiche, häufig spezifische nationale Normen und technische Vorschriften. Die auf europäischer und internationaler Ebene durchgeführte Harmonisierungsarbeit ist noch längst nicht abgeschlossen, so daß es für die europäischen Unternehmen, insbesondere die Klein- und Mittelbetriebe, die in den Mitgliedstaaten neue Produkte auf den Markt bringen wollen, ohne gründliche technische Nachforschung oft sehr schwierig ist, rasch den Grad der Identität verschiedener nationaler Normen für ein bestimmtes Produkt festzustellen.

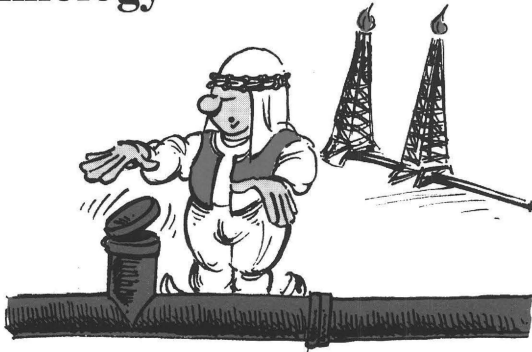
Zur Lösung dieses Problems hat die Kommission die Schaffung eines die nationalen und europäischen Normen verbunden und vergleichenden Index vorgeschlagen, statt die gesamte bei den nationalen Normungsinstituten vorhandene Information zusammenzustellen. In der ersten Phase ist ein vergleichender Index der nationalen Normen zusammengestellt worden, für die eine gleichwertige europäische oder internationale Norm besteht. In dieser Phase, an der sich auch die EFTA beteiligt, werden 28 000 Dokumente über nationale Normen der Mitgliedstaaten zu

normalisation nationaux, la Commission proposait le développement d'un index comparatif reliant et donnant l'équivalence entre les normes nationales et européennes. Au cours de la première étape un index comparatif des normes nationales ayant un équivalent avec une norme européenne ou internationale a été développé. Les pays de l'AELE participent à ce projet qui établit une relation entre environ 28 000 normes nationales par comparaison avec les 7 500 normes harmonisées existant actuellement au niveau international et européen. Ces travaux sont effectués sous contrat pour la Commission par le CEN (Comité européen de Normalisation) en coopération avec les instituts nationaux de normalisation. Cette base de données est maintenant disponible sur ECHO.

7 500 Schlüsseldokumenten der harmonisierten internationalen und europäischen Normen miteinander vergleichen. Diese Arbeit wird vertraglich für die Kommission vom Europäischen Komitee für Normung (CEN Comité européen de Normalisation) in Zusammenarbeit mit den nationalen Normungsinstituten durchgeführt. Diese Datenbank ist demnächst bei ECHO verfügbar.

Contact: **Euronet DIANE ECHO**
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Telex: 2181.

Sesame — European energy technology



SESAME is a documentary or full text data base containing information on all 1200 Community ongoing and completed Energy Demonstration and Hydrocarbon Technology projects administered by the Commission's DG XVII. From design, to construction and onto the important monitoring phase of each project, up-to-date details are continually entered into the data base for every project. The data provide a valuable source of information for those who need to follow the latest developments on the European Energy Market.

Sectorial coverage is wide including new and renewable sources of energy, energy saving, use of solid fuels, electricity and heat and, liquefaction and gasification; a third of the projects concern the hydrocarbon extraction industry. Each record in the data base gives concise details of the technical aspects of a single project.

The database records contain the names and addresses of contact points, information on the undertakings carrying

out the projects and details of manufacturers supplying the state-of-art technology which is used. Useful details on the project location, costs, energy savings and payback times are also listed.

SESAME can now be accessed by users of either teletype terminals (or micro-computers with suitable communication software) on Datacentralen or, videotex terminals such as those used for MINITEL, PRESTEL and BILD-SCHIRMTEXT on ECHO.

Many of the project contractors are looking for partners either to set up joint ventures in order to further develop their technology or exploit new markets. By identifying technology which has successfully entered one market, SESAME users may also see opportunities for introducing the same technology elsewhere.

Contact: Datacentralen
Retortvej 6-8
DK - 2500 Valby
Tel: +45 1 468122
Telex: 27122

ECHO P.O. Box 2373.
L - 1023 Luxembourg
Tel: +352 488041
Telex: 2181.

Dianeguide — 82 hosts in Europe

DIANEGUIDE, ECHO's directory of the publicly accessible databases in Europe shows that there are now 82 hosts offering an enormous variety of information. These host organisations are based in both Community and non Community European countries.

Host or database information can be added free of charge by

writing to ECHO or leaving a message in the ECHO mailbox.

Contact: Ms Christine Stoelin
Euronet DIANE ECHO
P O Box 2373
L-1023 Luxembourg
Tel: +352 488041
Telex: 2181.
Fax: +352 488040
NUA: 270448112;
password: DIANE
then type:
INFO MAILBOX

DOMIS guide

Un petit manuel d'utilisation donnant des explications de la base de données, **DOMIS**, (Directory of Materials Data Information Services), est maintenant disponible gratuitement. Le répertoire est destiné aux utilisateurs dans l'industrie, la recherche et l'administration, et donne des renseignements sur les sources d'information disponibles dans divers do-

maines des matériaux et plus particulièrement les:

- métaux, alliages et aciers
- céramiques et verres
- matériaux composites, revêtements et joints
- plastiques et caoutchoucs
- matériaux pour l'électricité et l'électronique
- bois et autres matériaux techniques d'origine organique.

DOMIS-Leitfaden

Ein kurzer kostenloser Leitfaden von **DOMIS** (Directory of Materials Data Information Services) ist jetzt verfügbar. Das Verzeichnis ist für Benutzer aus Industrie, Forschung und Verwaltung bestimmt, und verfügt über Informationsquellen für Werkstoffdaten:

- metallische Werkstoffe, Legierungen, Stähle

- Keramik und Glas
- Verbundwerkstoffe, Beschichtungen und Dichtungen
- synthetische Werkstoffe (Kunststoffe) und Gummi
- Werkstoffe zum Gebrauch für den Bereich Elektrotechnik und Elektronik
- Holz und sonstige organische Werkstoffe.

Delta study



During 1986 a workplan was developed for the DELTA (Development of European Learning through Technical Advance) with the aid of 16 contractors from the industrial and academic communities. Some 400 specialists participated in a number of seminars drawing the interest of 1250 organisations and individuals.

The detailed reports of the results have now been presented in a volume, **DELTA, initial**

studies and provides an insight of what may become a European learning system encompassing the development of software tools, artificial intelligence for database facilities, a family of learner workstations, personal electronic libraries and the creation of reference models and management structures.

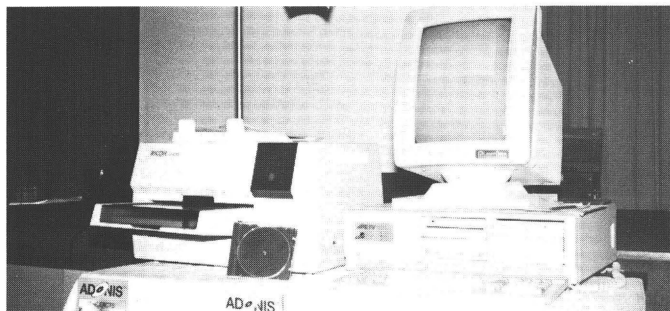
Contact: Les Editions du Logiciel d'Enseignement
8 rue Duguay Trouin
F-75006 Paris

Dansk DIANE Center

The Dansk DIANE Center's new address and telephone number are:

Contact: Dansk DIANE Center
Sigurdsgade 41
Dk - 2200 Copenhagen
Tel: +45 1 81 66 66

Adonis delivers 219 journals on CD-ROM British Library to match docs



An ambitious publishing application of optical disc computer memory, CD-ROM, called ADONIS, was launched on 26 February at the British Library Document Supply Centre at Boston Spa, Yorks. The project was initiated with Commission help and involves coordination with major European publishing houses. Scientists, researchers and onliners who use the Adonis system will receive a high quality laser printed original of their requested document, not a photocopy.

"Our aim is to improve the speed and quality of document delivery at lower cost," says Adonis project coordinator, Barry Stern.



Four major international publishers — Blackwells scientific, Pergamon, Springer and Elsevier — and six other publishers are involved in the project with 13 participating document delivery centres in Europe, U.S.A., Mexico, Australia and Japan.

Adonis produces at least one disc a week. Journal publishers can supply major libraries and other document delivery centres with articles stored in facsimile form on digital discs. Copies of articles can then be printed out from discs on request in line with the increasing worldwide demand for individual scientific research articles.

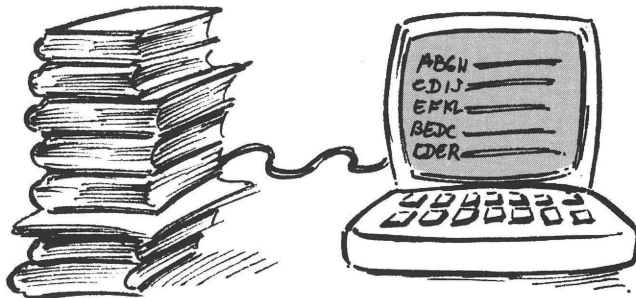
The content of the journals are indexed at *Excerpta Medica* in Amsterdam and every article is identified by a unique ADONIS number. The index information is sent in machine-readable form to the Scanmedia Ltd bureau in the United Kingdom where the articles are scanned to convert the entire image of each page to a digital form. The index information and digitised image are then sent to Philips and Dupont Optical company (PDO) in Hanover where the discs are produced for dispatch to the participating centres around the world.

The centres use a work station developed by the British Library Document Supply

Centre with the financial assistance of the Commission (DG XIII/B). Retrieval software was developed by Quasa Systems Ltd of Amersham, UK; the workstation is based on the LaserData System and comprises a microcomputer, high resolution monitor capable of displaying a full journal page, a CD-ROM drive and a laser printer.

Data collected during the 2 year trial will provide both librarians and publishers with hitherto unavailable information on article usage.

Contact: Mr Barry Stern
Adonis
Sara Burgerhartstraat 25
NL-1055 KV Amsterdam
Tel: +31 20 5862 418



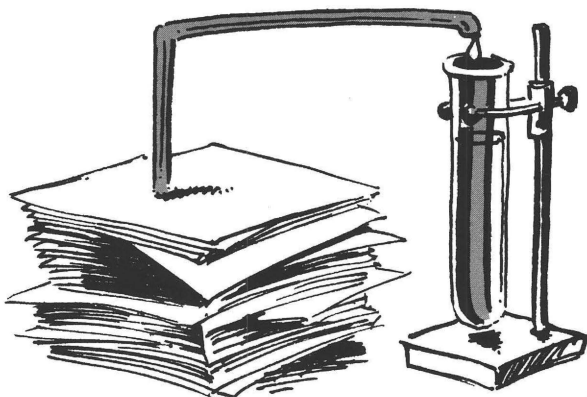
The British Library and the University of Bradford are to collaborate on the Docmatch-2 project to assist in practical delivery system of documents ordered online. The project itself is a trial implementation of the software proposed by the earlier Docmatch-1 study which set out to simplify and speed up the electronic ordering and delivery of documents using the Universal Standard Bibliographic Code (USBC), a unique identifier for bibliographic records. Other document identifiers including the Adonis identifier will be tested.

Bibliographic records are often stored in one place, the full text in another. Hence the problem of linking them most

efficiently concerns document supply centres, database hosts and publishers. A key advantage of the USBC system is that the code is drawn automatically from the document and represents an economical method of identification. The trials will be associated to the experimental Adonis workstations which at present stores full texts of over 200 journals in electronic form. The project is being funded by the Commission (DG XIII/B).

Contact: Mr Andrew Braid
B L Document Supply
Centre
Boston Spa
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Biosis clocks 5 million



The "3'-orf and sor genes of human immunodeficiency virus: in vitro-translation and immunoreactive domains" by Suresh K Arya is the five millionth abstract entered in the

Biosis file. The biological and biomedical file reached its 3 millionth entry ten years ago and the 4 millionth only four years ago.

Computer interprets speech



British Telecom demonstrated their automatic translation of speech by computer at Telecom '87 in Geneva. Developed by their Martlesham Heath research laboratories, the experimental sys-

tem recognises spoken phrases (for example, from someone making hotel reservations) in English, French or German and interprets them in a computer voice in one of the other languages.

Each phrase has to be pronounced deliberately and clearly. The system has a total vocabulary of more than a thousand words and stores several hundred phrases. But the computer needs only to recognise about 100 words, and the computer can make an "intelligent guess" at the whole phrase. The phrase appears on the screen of the personal

computer. Once this is reasonably correct, the computer speaks out the translated phrase. Presently the vocabulary is stored on voice prints introduced by trained operators.

**Contact: British Telecom
Research Laboratories
Martlesham Heath
Nr Ipswich, Suffolk
U K
Tel: +44 1 356 5369**

STN opens third centre

The third STN (Scientific and Technical Network) service centre — STN Tokyo — was opened on 30 November at the Japanese Information Centre of Science and Technology (JICST). In conjunction with this event, a new English-language file has been introduced on the STN network: JICST-E, the JICST file on science, technology and medicine.

The establishment of the JICST centre helps answer the need of European and US scientists for ready access to

significant Japanese databases.

A quick translation service is now offered for patent excerpts provided by the Japanese Association for International Chemical Information (JAICI). A translation from Japanese into English is provided for bibliographical heading; claim or first example.

**Contact: STN international
Postfach 24 65
D-7500 Karlsruhe 1
F R Germany
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ISDN offers a challenge and new opportunities to European businesses

The benefits of ISDN provide European companies with a unique opportunity to improve their performance and increase their competitiveness in world markets. ISDN removes the barriers between speech, data text and picture by integrating them in a single network.

Based on the concept of Open Systems Interconnection (OSI), it provides the user with optimum flexibility for current applications and of-

Durch die Vorzüge des ISDN erhalten die europäischen Unternehmen eine einzigartige Chance, ihre Leistungsfähigkeit zu steigern und ihre Wettbewerbsfähigkeit auf den Weltmärkten zu verbessern.

ISDN hebt die Schranken zwischen Sprache, Daten, Text und Bildern durch ihre Integration in einem einzigen Netz auf.

Auf der Grundlage des Konzepts der offenen Kommunikation (OSI) gibt es dem Benutzer optimale Flexibilität für die Anwendungen von

L'ISDN fornirà alle Amministrazioni Europee una opportunità unica di migliorare la qualità del servizio offerto ed incrementare la loro competitività sui mercati mondiali.

L'ISDN rappresenta un significativo passo avanti nell'evoluzione dei servizi di telecomunicazione in quanto rimuove la barriera tra voce, dati, testi ed immagini mediante la loro integrazione in una singola rete.

Basata sul concetto dell'OSI (Open Systems Interconnec-

Les avantages qu'offre le RNIS sont pour les sociétés européennes une chance inestimable d'améliorer leurs performances et d'augmenter leur compétitivité sur les marchés internationaux.

Le RNIS repousse en effet les barrières entre voix, données, texte et images en les intégrant au sein d'un même réseau. Basé sur le concept d'Interconnexion des Systèmes Ouverts (ISO en français ou OSI en anglais), il procure à

fers a solution to cater for future requirements.

ISDN is being developed within Europe and outside Europe. Telecoms operators throughout the world are developing national networks and participating in international standards work. European operators are working together:

- to make an active contribution to European and worldwide standardisation

heute und bietet eine Lösung für die Anforderungen von morgen. Das ISDN wird gegenwärtig innerhalb und außerhalb Europas entwickelt. Die Netzbetreiber in aller Welt entwickeln nationale Netze und beteiligen sich an der internationalen Standardisierungsarbeit. Netzbetreiber in europäischen Ländern haben zusammengearbeitet, um

- einen aktiven Beitrag zu den europäischen und weltweiten Standardisierungsaktivitäten zu leisten,

tion), l'ISDN fornisce all'utente una ottima flessibilità per le applicazioni già esistenti ed offre una soluzione in grado di soddisfare i requisiti di quelle che stanno nascendo.

L'ISDN si sta sviluppando in Europa e nel mondo; in ciascun paese, infatti, si stanno realizzando reti nazionali e si sta operando al fine di definire degli standard internazionali.

Lo scopo degli enti che lavorano per questo progetto è di:

l'utilisateur une souplesse maximale en ce qui concerne les applications actuelles et fournit en même temps une solution qui pourvoira aux exigences futures.

Le RNIS est en cours de développement à la fois en Europe et hors Europe; les exploitants du monde entier développent des réseaux nationaux et participent aux travaux de normalisation internationale. Les exploitants en Europe coopèrent avec comme

- to produce detailed technical specifications to promote developments of compatible services and equipment

- to plan interconnection of networks.

As a result, customers will be able to use the same terminals and standardised services, across national frontiers.

Commercial offerings of the ISDN should appear in our various countries within the

- dettagliate tecniche di specificazioni per la promozione della sviluppo di servizi compatibili e per la creazione di apparecchiature per i servizi, attraverso i confini nazionali.
- la pianificazione dell'interconnessione delle reti nazionali.

Als Folge davon werden die Kunden in der Lage sein, gleiche Endgeräte und standardisierte Dienste über die nationalen Grenzen hinweg zu nutzen. Die Serieneinführung des ISDN wird in Europa innerhalb der kommenden 12 Monate erwartet; die internationale Zusammenschal-

- fornire un attivo contributo alle attività di standardizzazione in Europa e nel mondo

- realizzare delle specifiche tecniche per promuovere lo sviluppo di prodotti e servizi compatibili

- pianificare l'interconnessione delle reti nazionali.

Come risultato di tale lavoro in comune, gli utenti saranno in grado di utilizzare gli stessi terminali e servizi standardizzati attraverso le frontiere internazionali. L'offerta commerciale sperimentale

objectif:

- la contribution active aux travaux de normalisation en Europe et dans le monde

- la création de spécifications techniques détaillées promouvant le développement de services normalisés par-delà les frontières nationales.

Des offres commerciales pour le RNIS devraient voir le jour dans divers pays d'ici 12 mois; l'interconnexion des réseaux

next 12 months; international interconnection of our networks is planned for as soon as 1989-90.

ISDN introduction in Europe, in accordance with European Economic Community (EEC) and International Telegraph and Telephone Consultative Committee (CCITT) recommendations, should enable customers, both in industry and commerce, to improve their productivity by using new services.

der Netze ist schon für 1989-90 vorgesehen.

Die Einführung des ISDN in Europa, das in Übereinstimmung mit Empfehlungen der Europäischen Gemeinschaft (EG) und des Internationalen beratenden Ausschusses für Telegraphie und Telefonie (CCITT) ermöglicht werden, wird allen Kommunikationsbedürftigen, insbesondere dem Handel und der Industrie, neue Möglichkeiten eröffnen und durch die Nutzung neuer Dienste die Wettbewerbsfähigkeit steigern.

dell'ISDN è prevista nei paesi europei entro i prossimi 12 mesi; l'interconnessione tra le reti nel 1989-90.

L'introduzione dell'ISDN in Europa, in accordo con le Raccomandazioni della Comunità Economica Europea (CEE) e del Comitato Consultivo Internazionale Telegrafico e Telefonico (CCITT), dovrebbe consentire all'utenza più qualificata sia nel campo dell'industria che del commercio, di migliorare la propria produttività mediante l'uso di nuovi servizi.

au plan international est prévue dès 1989-90.

L'émergence du RNIS en Europe, en accord avec les recommandations de la Communauté Economique Européenne (CEE) et du Comité Consultatif International du Télégraphe et du Téléphone (CCITT), devrait permettre aux clients, dans l'industrie et le commerce d'utiliser de nouveaux services et d'augmenter ainsi leur productivité.

What is ISDN?

ISDN stands for Integrated Services Digital Network. It is a synchronised hierarchy of digital transmission and

switching systems permitting the compatible transmission of voice, data and video signals.

Was ist ISDN (Diensteintegrierendes Fernmeldenetz)?

Es ist eine geplante Hierarchie digitaler Send- und Vermittlungssysteme, die so synchronisiert sind, daß die digitalen Elemente auf kom-

patible Art und Weise zur Sendung von Sprach-, Daten- und Bildsignalen zusammenarbeiten können.

Che cosa è l'ISDN (Rete digitale di servizi integrati)?

Gerarchia pianificata di sistemi digitali di trasmissione e di commutazione, sincronizzati in modo che tutti gli ele-

menti digitali operino insieme in modo da trasmettere segnali telefonici, video e dati.

Qu'est-ce que l'ISDN (Réseaux numériques à intégration de services, RNIS)?

C'est une organisation de systèmes numériques de transmission et de commutation synchronisés, de sorte que

l'on puisse transmettre sur le même réseau des données, du son ou de la vidéo.

How does ISDN work?

Your telephone and other machines will still be connected by two copper wires to the public network. But instead of transmitting analogue signals which mimic the sound waves of your voice, the signals will be digital — like a computer's signals.

Why?

Because with digital signals the same two wires can be used much more efficiently in terms of traffic. The same access point can be connected to a whole range of equipment: your telephone, of course, and your answering machine but also your computer, your telefax machine and so on. The signal will select which ever machine you choose.

What can ISDN deliver?

Using digital techniques, calls can easily be diverted to another number if you are out or busy. You can move your phone or terminal to another socket without breaking the call. You will also get a signal that someone else is waiting to speak to you when your line is engaged. Your caller's number can also be identified when he calls.

What about other services?

Teletex, a high quality telex service, and file transfer can

be facilitated for the use of CAD/CAM (computer aided design and manufacturing). Professional applications also include the transmission of graphics and pictures, which could be press photos, X-rays, dental charts, or printing corrections. Travel agents or estate agents can give better services by accessing remote video databases. Security services can keep track on sites hundreds of miles away through remote surveillance monitors. Electronic transfer of funds and point of sale transfers can be performed with a higher degree of security.

How can all this be done with two "telephone wires"?

Using two copper wires three independent functional information channels can be established. These are known as 2B+D.

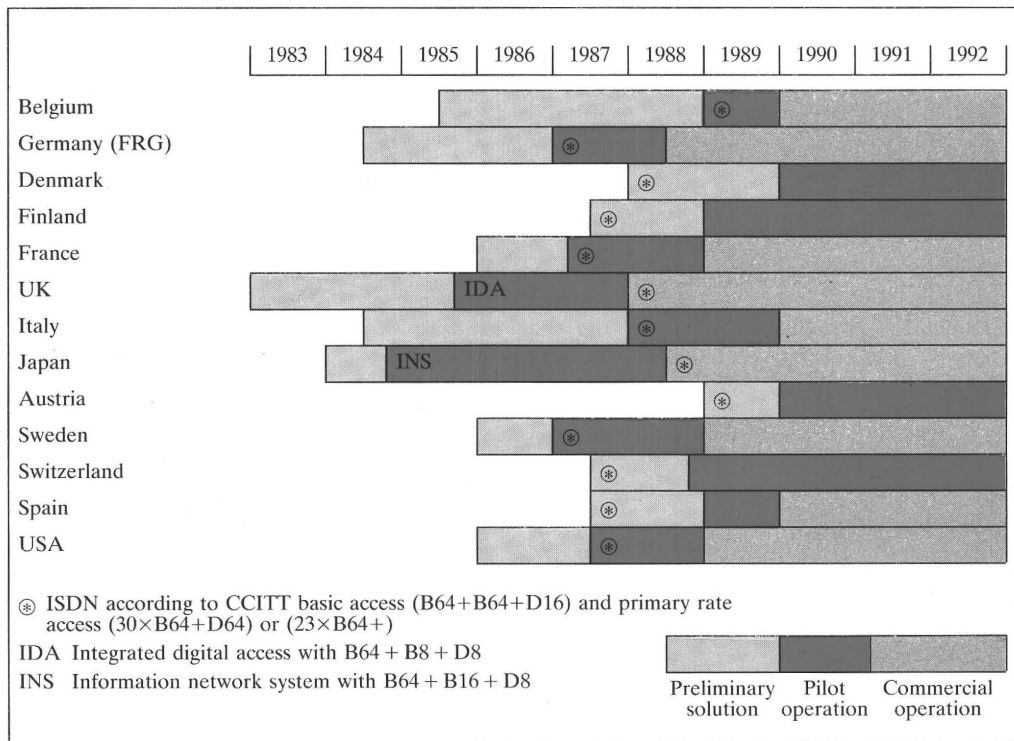
The B channels can transmit at a rate of 64 kbitd/sec in either direction. The D channel is also bi-directions and is used to exchange signalling such as call set-up and call clearing. It has a speed of 16 kbits/sec. If four wires are used up to eight speech, data text, picture or integrated terminals workstations can be serviced. There are different data speeds in the pilot operations in some countries.

How much will it cost?

A common approach towards the principles for charging for services offered has been adopted by major network operators. The aim is to simplify the charging and billing arrangements compared with those for existing services.

ISDN charges will include a **connection charge** which will be raised when the customer is first provided with access to the network; a **rental charge** which is linked to the network access type (basic or primary) and may include subscription to various services (eg supplementary services); and **utilisation charges** which will be closely linked to those of the telephone service. ISDN save the customer having to subscribe to various dedicated networks.

Introduction of ISDN





European libraries — the State of the Art

An in depth study which will enable a comprehensive assessment of varying needs of European libraries to be made in relation to recent technological developments can be found in the recently published study, **State of the art of the application of new information technologies in libraries and their impact on library functions** (EUR 11036).

Comprising twelve volume, one for each of the Community's Member States, the reports, based on the Commission's Lib-2 study, give an general national overview of data automation in libraries of each country. Funding and expenditure (as far as this information is available), systems of cooperation, suppliers and

the use of standards, national policy on automation and a general assessment of the current status of automation are also covered.

The volumes each survey the four main areas prone to automation: catalogues, house-keeping systems, user services, including online databases and videotex, and inter-library lending mechanisms. Overall the survey provides an overview of the European library market in relation to the uptake of the new information technologies.

Contact: Office for Official Publications of the EC
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Telex 1324

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Statistics workshop

Some 20 experts from Community Member States met in Luxembourg on 1 February at the initiative of the Commission (DG XIII) to discuss library statistics for policy making. The purpose of the workshop was also to discuss the findings and recommendations of a report prepared for the CEC, **A study of the library economics of the EC**, by Philip Ramsdale of IPF Ltd. This collected and analysed both activity and financial statistics as far as they were available, produced macro-statistics and discussed problems of the gathering of such data on libraries.

There was wide agreement among the views of experts

present and it was recommended that the report be published thus contributing to work already undertaken by UNESCO and ISO. The Commission was encouraged to undertake further action in this area. It was agreed that although the circumstances prevailing in the EC countries differ in important respects from those in the Nordic countries, the Commission could build closely on the Nordinfo experience in advancing the work of harmonising key library statistics in Europe.

Contact: Ms Ariane Iljon
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Preservation policy for libraries materials

Few Community countries have a complete or coherent national policy and structure for preservation of its library resources, according to **Library policy for preservation and conservation in the European Community**, the published version of a study undertaken by Alexander Wilson for the European Commission, DG XIII/B. The book reviews the current state and practice in Europe, emphasising the rôle of new information technologies (NITs), giving American experience for comparison.

It summarises preservation practice worldwide, and state of technology used, noting re-

cent developments in mass deacidification, cooperative microfilming, and the application of optical technology to libraries and archives. Campaigns for the use of "permanent" paper in new books, the education and training of conservators are also mentioned.

The report also covers an analysis of approach to conservation in major European countries. It notes similarities and differences of approach determined by library structures and organisations and gives recommendations.

Contact: K G Saur, publishers
Muenchen, New York, London, Paris

Computerising libraries

"At almost every dimension of the computerised library service and networking environment, major, fundamental, structural and functional changes have occurred during the 1980s, up to the present." The quotation is from a recent book **Library automation in North America**, by Charles R. Hildreth. Part of the Lib-2 study funded by the Commission DG XIII/B, the volume is now made available to allow a wider, European assessment of the impact of networking and new information techno-

logies on the library scene in the USA and Canada.

The book comprises two parts: an overview of library automation and computer based networking in north America which summarises current trends and delineates differences between US and Canadian practice; and a second part giving profiles of major organisations, systems and participants.

Contact: K G Saur, publishers
München, New York, London, Paris

Language Industry Workshop

A workshop on the language industry, held in Luxembourg, 25-26 February, was opened by Deputy Director General Vicente Parajón Collada, who said it was intended as an open forum. Discussions showed that there was unanimous support for the development of a Community programme aimed at coordinating key activities in the growing area of information technology known as language industry, defined by one participant as "working with words."

The main objectives of such a programme would be to ensure **coordination** of existing scattered initiatives across Europe to provide pragmatically **standardized developments** aimed at promoting **multilingual communication** between the various Member States while **safeguarding the culture** underlying the use of both majority and minority languages in the exploding information market. These objectives would assist in achieving a true **European market by 1992** and would help Europe to live up to increasing **competition** in language-related developments from Japan and the United States.

Aspects highlighted for support within a Community programme were **machine translation services**, effective user-friendly systems for **free text interrogation** of data bases, **man-machine interfaces**, con-

vergence of **lexicographic resources** and development of **speech-driven systems**. In all these areas, developments in European industry were suffering from the lack of standardization and well-defined objectives as well as from the disparity and hence duplication of effort in various centres.

It was widely agreed that a Community programme could play an important **catalytic role** in helping to create a dialogue between the providers and users of systems both in a general way (by organizing workshops, seminars and conferences) and in more specific ways (by undertaking demonstration projects involving hardware suppliers, software houses, publishers and users or by encouraging cooperative developments between suppliers and users in Member States on actions of key interest to the future economy.

In parallel with the preparation of a more detailed Community programme on language industries, it was suggested that the Commission could help increase awareness and clarify specific actions by organizing further meetings involving suppliers, users and political representatives of the Member States.

Contact: **Mr Christian Guittet**
CEC, DG XIII/B
L-2920 Luxembourg
Tel +352 4301 2375

Télécoms et ordinateurs

«Télénet 88: le point de rencontre de la télécommunication et des réseaux d'ordinateurs», un salon professionnel et des journées d'étude, se dé-

roulent du 25 au 27 mai dans les Halles de Courtrai.

Contact: **cv De Hallen Kortrijk**
Doorniksesteenweg 216
B-8500 Kortrijk
Tel: +32 56 21 55 51

Translators/interpreters

The second international conference and exhibition of the Institute of Translation and Interpreting will be held on 29-30 April 1988 at the Hotel Russel, London.

Contact: **ITI conference secretariat**
Institute of Translation and Interpreting
318a Finchley Road
London NW3 5TH
Tel: +44 1 794 0931
Fax: +44 1 435 2105

Videotex em Portugal

Tendo em vista o desenvolvimento do mercado da informação nas regiões e entre categorias de utilizadores mais desfavorecidas, a Comissão das Comunidades Europeias co-financiou a acção piloto **VIDEOTEX/PORTUGAL**.

O contrato foi assinado, no final de 1987, entre a Comissão e o Ministério da Agricultura, Pescas e Alimentação que, juntamente com o IAPMEI e outras organizações portu-

guesas (o Transdata, por exemplo), é responsável pela realização do projecto.

A versão definitiva desta acção encontra-se elaborada e a criação de serviços de informação, interactivos, para os sectores agrícola e das pequenas e médias empresas industriais, já teve início.

Contacto: **Mr. Giorgio TREVISAN**
CEC, DG XIII/B
L-2920 Luxembourg
Tel.: +352 4301 2868

Videotex para España

En el campo de la promoción del Mercado de la información para las regiones menos favorecidas, la Comisión ha cofinanciado la acción piloto **IBERTEX-AGRI-PYME**.

Con este fin, firmo a finales de 1986 un contrato con el Ministerio de Agricultura, Pesca y Alimentación, que colabora estrechamente con el Instituto de la Pequeña y Mediana Empresa Industrial (IMPI) y los

demás organismos españoles competentes (por ejemplo, Telefónica).

El proyecto definitivo está terminado y ya ha comenzado la elaboración de los servicios de Información interactiva destinados a los agricultores y a las PYMES.

Contacto: **Sr. Giorgio TREVISAN**
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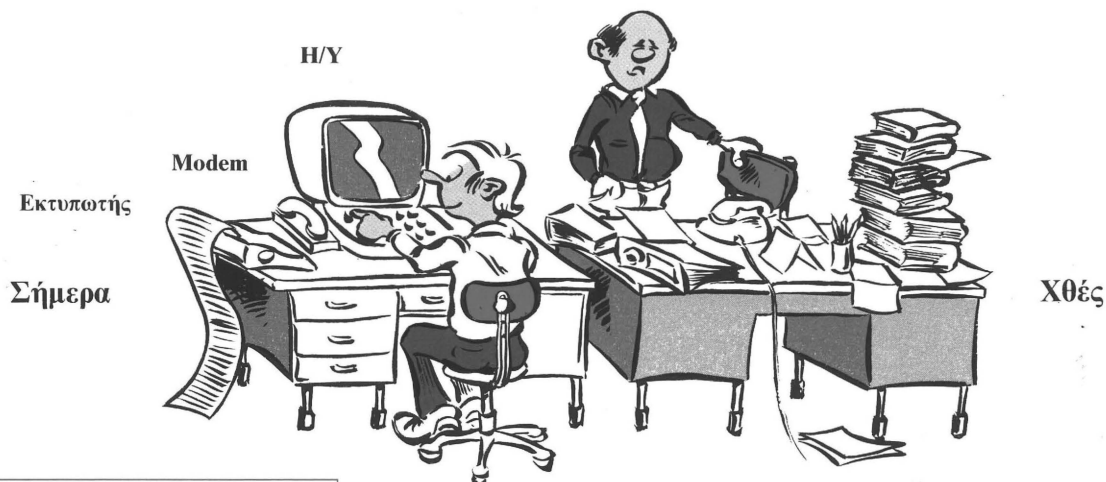
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