

Realising Multimedia Potential

Development projects supported
by the INFO2000 programme



European Commission
Directorate General XIII/E
Luxembourg

Contents

This brochure has been prepared in the context of the INFO2000 programme to stimulate the development of a European multimedia content industry and to encourage the use of multimedia content in the emerging information society (Council decision of 20 May 1996). For further information on the programme and its activities, please consult the Internet server <http://www.echo.lu> or contact:

INFO2000 Central Office
European Commission
DG XIII-E, EUFO 1179
L-2920 Luxembourg
fax: +3540 116 2234
email: info2000@echo.lu

Published by the European
Commission

The views in this document do not necessarily represent the views of the European Commission.

Luxembourg: Office for Official
Publications of the European
Communities,
1997 Copyright ECSC-EC-EAEC,
Brussels: Luxembourg 1997.

Reproduction is authorised, except for
commercial purposes, provided the
source is acknowledged.

On 21 June 1996, the Commission published a call for proposals inviting the European multimedia content industry to submit pilot projects in four broad areas:

- The economic exploitation of Europe's cultural heritage;
- Business services for firms, in particular SMEs;
- Geographic information;
- Scientific, technical and medical information.

477 proposals were received, out of which 80 were chosen to carry out a definition phase by June 1997, when the results were evaluated. The 29 projects described in this brochure have been singled out because they appear to offer examples of best practice and innovative developments that hopefully will be of interest to other actors and potential entrants into the multimedia industry.

1 Cultural heritage sector

1968: A World Revolution	2
Art and Restoration Techniques Interactive Studio	4
Palaces and Gardens of Europe	6
Multimedia Dictionary of Twentieth Century Architecture	8
Artweb: The World's Finest Art Collection	10
Great Composers	12
Cultural Heritage and Multimedia Programme	14
Crusader	16
Cistercian Manuscripts of The Municipal Library of Dijon	18
The Great Shipping Discoveries	20
The Multimedia Codices of Leonardo da Vinci	22
Flashpoints of History	24
Source Vive	26

2 Business information sector

Agricultural Machinery Multimedia Catalogue	28
Multimedia Commentary on The CE Mark	30
Multimedia Programme in Documentary Credits	32
Kids' TV Multimedia Information Network	34
Upholstered Furniture Ignition Resistance Data	36
Electronic Image Safe Service	38
Multimedia European Financial Consulting	40

3 Geographic information sector

Polar Perspectives	42
Territorial Multimedia Information System on Industrial Areas	44
Alpine Guide - Italia - Deutschland - Austria	46
Pathfinder Towards the European Topographic Information Template	48
European Spatial Metadata Infrastructure	50

4 Technical and medical sector

Optical Professional Trade and Individual Multimedia Service	52
Breast Cancer Pathology Information Kit	54
World Electronic Book of Surgery	56
Information Context for Biological Conservation	58

Introduction

Enterprises contemplating new ventures in Europe often hesitate before the complexity of communicating across different cultures, languages and administrative regimes. For the electronic publishing industry in particular, both the acquisition of material on the one hand and the communication with users on the other imply a concerted effort to overcome the obstacles of transnational exchange. At the same time, the scale and diversity of European content and markets provides marvellous opportunities for those firms that are prepared to confront the challenges and thereby render themselves capable of taking on world markets. The end result for successful enterprises is increased employment, the issue at the heart of European and national public policies.

With these considerations in mind the INFO2000 programme was conceived to give a boost to industry initiatives that appeared to show the way forward to an improved capacity to conceive and supply imaginative and valuable information products on a European scale. The call for proposals in June 1996 resulted in a wide range of ideas, amply demonstrating the great variety of European content. However, evaluators observed that only little attention was being given to creativity, design and interactivity and that projects need to carefully take account of varying users' needs.

Clearly taking to heart such remarks, the eighty projects chosen to carry out a definition phase between 1 January and 30 June 1997 (see <http://www2.echo.lu/info2000/en/mm-projects/> for fact sheets) produced impressive prototypes. These convinced evaluators that the capacity to innovate and package information of real value to users is indeed alive and well in Europe. The selection of 29 projects for further funding from 1 January 1998 called for difficult choices but readers of the notes in this brochure will appreciate the many different aspects of multimedia design and choice of content that have to be taken into account in the development of information products in a fast-changing environment.

The Commission hopes that the support given to the developments both in the definition and the implementation phases to the small set of projects concerned, necessarily limited in each case by budget considerations, will have been instrumental in laying a foundation of know-how and practical experience that will extend far beyond the enterprises and initiatives concerned.

1968: A World Revolution

1968: A WORLD REVOLUTION (Media68) presents a multimedia archive of the cultural, social and economic upheaval of a year which, the authors would argue, had an enduring effect on European attitudes.

A generation on, the events of 1968, (such as the May revolt in Paris, the Valle Giulia protest in Rome and the Easter disorder in Germany) still hold a particular fascination for those directly or indirectly involved, who are now entering their fifties. "They want to relive those times or understand events better" says project co-ordinator Simona Bonsignori, managing director of Manifestolibri, a specialist publishing house connected to the Italian newspaper, *Il Manifesto*. But she believes the largest audience for Media68 will be young people who want to find out why 1968 was so important and exciting and for whom computer or television material is more attractive than book-learning.

Media68 is presented in a CD-ROM-based programme which has been carefully developed to

Interaction is the core concept of Media68

The core concept of Media68 is interactivity. Says Bonsignori, "Interactivity means several things in the context of this work. First, it means the way in which the actual events of that year were interwoven, so it is not possible to understand one without thinking about others; it also permeates the structure of the CD-ROM, the way the information can be viewed on several levels. Then, the CD-ROM connects to the on-line archive for users to both receive and contribute archive material and the Media68 archive also interacts with other European archives of contemporary historical material."

A large, active archive presents a long-term management challenge

Bonsignori says that managing this active archive is the biggest challenge of the project. The index and links to other archives will be in English. (There are plans to publish the Media68 CD-ROM in English, French, German and Italian versions.) One of the consortium partners, *Archivio Audiovisivo del Movimento Operaio e Democratico*, an electronic archive based in Rome, is able to advise on these questions.

A big challenge for Media68 is obtaining permission to use contemporary music, for example from Pink Floyd and Bob Dylan, because of the difficulties of tracking

make use of many images and to present information in a way that is easy to assimilate and never boring. The CD-ROM links to a web-site and on-line archive for more detailed information and research.

Manifestolibri and consortium member *Le Monde*, the French newspaper group, have used their own extensive archives and their connections with researchers, scholars, independent archives, commercial media archives and the participants in the year of revolution themselves to create this important and unusual archive of documents and images. Media68 draws on a wealth of material from contemporary television news reporting and documentaries, newspapers, photographs and contemporary music.

The link between the CD-ROM and the dedicated web-site and on-line archive is the most innovative aspect of the work, especially the possibility for people to contribute material to the archive so that it becomes an active, growing resource. There will also be links to other European archives. All the available documentation will be indexed, so the general public and researchers alike will be able to search for particular items or material on certain themes. A small fee may be charged to download items.

down the groups. Also, in Italy in particular, the costs of copyright permission are high.

Publishing a multilingual title has its advantages and its difficulties, says Bonsignori. On the plus side, is the opportunity for collaboration to access more information sources and develop a wider distribution base for the product; on the minus side, problems of interpretation and communication can slow work in progress considerably. But Bonsignori says "we have learnt a great deal about how to manage such relationships, and we hope to be able to apply this knowledge again in the future."



1968: A World Revolution (Media68)

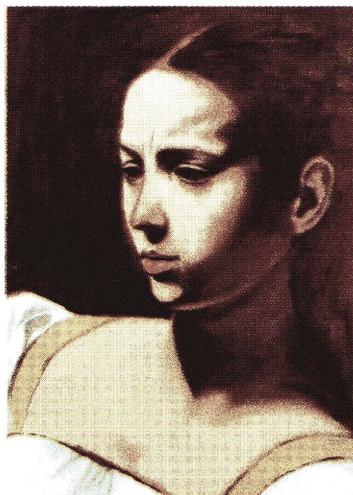
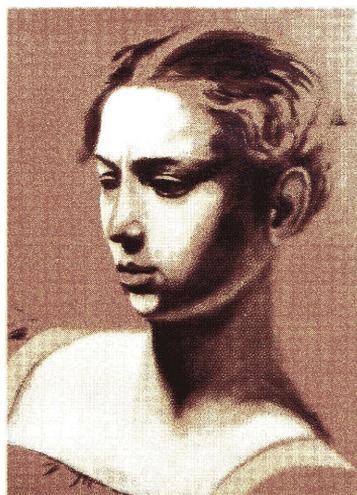
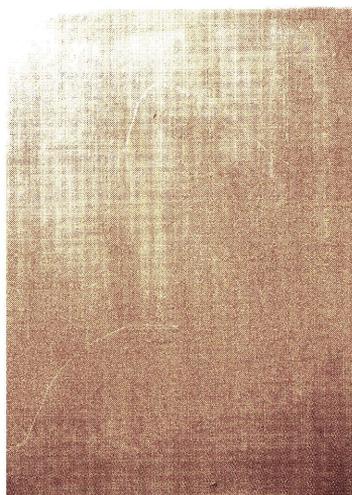
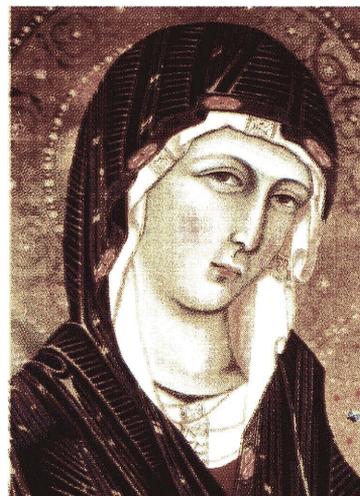
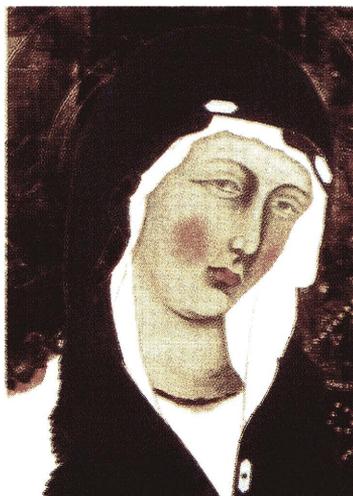
Visit Media68 at <http://www.media68.com>

Participants

- Le Monde SA, Paris, France
- Manifestolibri srl, Rome, Italy (co-ordinator)
- Archivo Audiovisivo del Movimento Operaio e Democratico, Rome, Italy
- ACTA S.p.a., Antella (FI), Italy
- Edizione Multi Media Electroniques SA, Paris, France

Contact the co-ordinator

Simona Bonsignori
 managing director
 Manifestolibri
 Viale dei Quattro Venti, 47
 Rome, Italy
 Tel: +39 6 5881496
 Fax: +39 6 5882839
 Email: redazione@manifestolibri.it



Art and Restoration Techniques Interactive Studio (ARTIS)

Visit ARTIS at <http://www.spinelli.it>

Participants

Istituto per l'Arte e il Restauro "Palazzo Spinelli",
Florence, Italy (co-ordinator)
Ecole d'Art d'Avignon, Département Conservation
et Restoration, Avignon, France
Escola Professional Superior d'Art y Restauracio,
Barcelona, Spain
Istituto Italiano Arte Artigianato e Restauro, Rome,
Italy
Iera Skiti Agiou Andrea, Agion Oros, Greece
Giunti Multimedia, Milan, Italy

Contact the co-ordinator

Francesco Amodei
general director
Istituto per L'Arte e il Restauro "Palazzo Spinelli"
Borgo Santa Croce, 10
Firenze, Italy
Tel: +39 55 246001
Fax: +39 55 2460094
Email: ps-info@spinelli.it

Art and Restoration Techniques Interactive Studio

European art institutions are co-operating to produce an important reference work on painting techniques and art restoration skills. Multimedia, multilingual tools allow the authors to provide a deep experience of the creation, ageing and sensitive conservation of European artworks.

Art and Restoration Techniques Interactive Studio (ARTIS) explores the techniques of painting on canvas and wood panels as a background to learning how to conserve and restore Europe's art heritage. A CD-ROM-based project, ARTIS uses sequential photographs and video to illustrate the techniques used to create particular works, the gradual effect of ageing on the

materials and the possible restoration procedures that might be applied. "The user can actually see each of these processes happening, providing a depth of understanding not possible from reading a text book" explains Dr Claudio Paolini, scientific co-ordinator of the project at the Istituto per l'Arte e il Restauro in Florence, Italy.

Opportunities for collaborative learning

The project has stimulated co-operation and knowledge-sharing between the participant institutions. This co-operation has produced a rich and comprehensive work, which includes the development of technique in different European geographic areas and the cross-fertilisation of ideas and methods across the region.

also by academics, art historians, gallery owners, conservation specialists and others with a general interest in the history of art. There are also plans to link the CD-ROM to a dedicated web-site to encourage dialogue and interaction between users, experts and institutions.

One of the objectives of the ARTIS project is to bring the expertise of the institutions to as wide an audience as possible. Paolini expects the CD-ROM to be used primarily by students at secondary school level, but

To stimulate the user to learn and to test his or her knowledge, ARTIS includes a studio offering interactive games and quizzes about the different techniques studied.

A multilingual glossary facilitates international research

ARTIS is a powerful visual learning tool, but it also constitutes an important reference source by incorporating an extensive bibliography, a glossary of pigments and materials and a multilingual glossary. Says Dr Paolini "often the same technical term may have a different meaning in a number of languages. By working with art experts and using multilingual tools we are aiming to provide a commonly understood terminology for discussing European painting and restoration techniques."

All the visual material needed for the ARTIS project has been made available by the participants, and the photography and video work has been undertaken in-house. It has been necessary to specifically reproduce copies of well-known works to show the processes over time. Paintings were created step by step and photographed at each stage.

A competition open to secondary school students for a cover design will be used to help promote ARTIS before publication.

Palaces and Gardens of Europe Baroque and Classicism

Imagine visiting the baroque and classical palaces of Europe and experiencing contemporary life. Look in the kitchens, walk in the gardens and hear the music of the day. PALACES AND GARDENS OF EUROPE sets out a virtual tour on CD-ROM.

CD-ROM technology offers an experience beyond the guide book or art catalogue because it can make use of sound, movement and interaction as well as text and graphics. This project exploits the medium to make European palaces and gardens - some of them long since destroyed - come to life. The enthusiast can pursue different routes through the buildings and explore several levels of information as desired.

Each of the twenty palaces and gardens is reconstructed from pictures, film and photographs to create animated, 3D sequences using virtual video.

Promoting European cultural heritage in Europe and beyond

Palaces and Gardens will be part of the Monumenta collection, from the publishing house Kairos Vision in Paris, which has European cultural heritage as its theme. The project builds on the work of an earlier project undertaken with support from the Impact2 programme of the European Commission. Says Denise Vernerey-Laplace, manager, Kairos Vision and project co-ordinator "We learnt a lot from our previous collaboration which we are able to apply to this project, particularly when it comes to the difficult task of negotiating copyright and permission to film at the different sites."

Future-proofing the technology

Care is being taken to ensure the publication will not date too quickly from a technological point of view. The CD-ROM will connect to the World Wide Web so that users can get time-critical information, such as

The "visitor" can enter different rooms at will and examine the objects there. For example, in the kitchen there are recipes and information about food preparation, in the garden the different plants and their uses can be studied and in the music room excerpts from contemporary music can be enjoyed. The project is generous with the amount and depth of information available - it includes, for example, a detailed glossary of architectural terms. Palaces and Gardens covers the most important baroque and classical sites from Versailles in the West to the Palace of St Petersburg in the East.

Having an international team makes this task easier, and is also indispensable in gaining access to distribution channels in Europe and beyond. Palaces and Gardens will initially be produced in French, English and German versions, and versions are also planned for the Italian, Spanish and Japanese markets. But, according to Vernerey-Laplace "It's not just a matter of translating into several languages, it's more a case of presenting the material for several cultures. The international collaboration is exciting because it really makes us think harder about how we approach the subject from the outset". For example, she says, the US market demands a very interactive approach to the material.

news about special exhibitions, new research and so on. Film-work has taken account of the emerging DVD (Digital Video Disk) technology and 3D virtual video is used effectively throughout.

Palaces and Gardens of Europe. Baroque and Classicism

Participants

Kairos Vision, Paris, France (co-ordinator)
Compal, Berlin, Germany
Etablissement Public du Musée et du Domaine
National de Versailles, Versailles, France
Telegael, Galway, Ireland
UNESCO, Venice, Italy

Contact the co-ordinator

Denise Vernerey-Laplace
manager
Kairos Vision
1 rue Théodule Ribot
Paris, France
Tel: +33 1 42 12 07 06
Fax: +33 1 42 12 05 02
Email: kairosvision@hol.fr



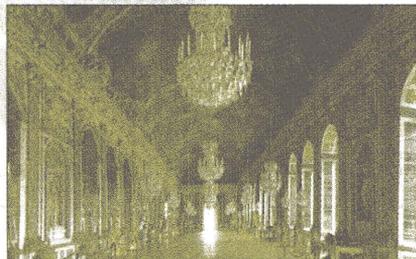
Palais & Jardins d'Europe

Baroque et classicisme

À travers Versailles et ses Jardins

En 1678, Louis XIV décida d'installer une galerie qui faisait communiquer l'appartement du Roi et celui de la Reine entre l'Aile du Nord et l'Aile du Midi, à la place de l'ancienne terrasse. On préserva l'effet de transparence qui avait l'ancien palais de La Vau. Dix sept hautes fenêtres ornées ouvrent sur le jardin. La lumière se reflète dans dix sept arcades ornés de miroirs de la Manufacture de Saint-Gobain. C'est ici qu'avaient lieu les réceptions, les fêtes et les bals masqués lors des mariages des princes de la Famille Royale.

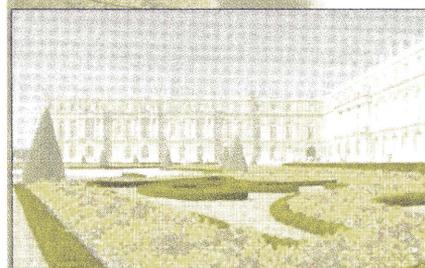
La Galerie des Glaces



Galerie des Glaces

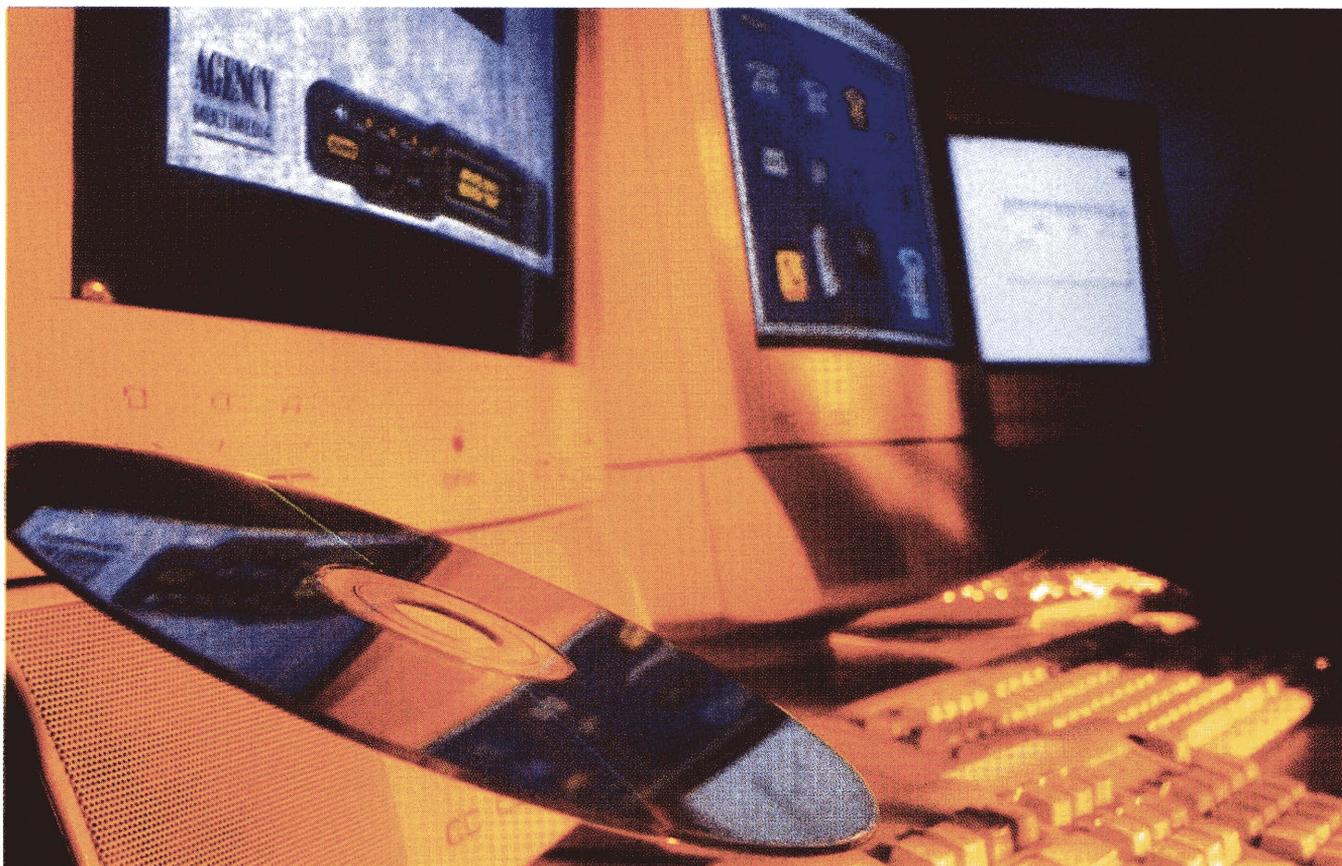


Les massifs



On désigne sous ce terme tous les ensembles compacts d'arbustes, d'arbrisseaux ou de plantes à fleurs (annuelles, bisannuelles, vivaces, à bulbes...), destinés à un effet ornemental de couleur et/ ou de texture.





Multimedia Dictionary of Twentieth Century Architecture (TOTEM)

Participants

Editions Fernand Hazan, Paris, France (co-ordinator)
Editional Blau, Lda, Lisbon, Portugal
Ediciones Akal, Madrid, Spain
Altrimedia S.r.l, Milan, Italy
Victory Interactive Media France srl, Neuilly-sur-Seine, France

Contact the co-ordinator

Eric Hazan
directeur general
Editions Fernand Hazan
35-37 Rue de Seine
75006 Paris, France
Tel: +33 14 44 11700
Fax: +33 14 44 11709
Email: g-isabelle@calya.net

Multimedia Dictionary of Twentieth Century Architecture

An extensive database of information about twentieth century architecture and design will meet the needs of professionals, teachers, students and a general audience. The developers plan it will also provide source material for new multimedia titles in the future.

This project draws on two previous works, The Dictionary of Twentieth Century Architecture published by Editions Hazan in 1996, and The Multimedia Dictionary of Modern and Contemporary Art, published on CD-ROM by Editions Hazan and

Akal under the IMPACT programme. This new collaboration also benefits from the specialist knowledge of Victory, a multimedia publisher of architectural titles, as well as other partner organisations.

Information about architecture and design is fragmented and difficult to access

The content of the published Dictionary of Twentieth Century Architecture will be radically enlarged and geographically extended for this work. "We want to provide an exhaustive directory of the architectural and design resources of Europe. At the moment, information about these areas is fragmented and difficult to access" says project manager Isabelle Garel of the publishers Editions Hazan. To create the comprehensive work envisaged, the consortium must work in this fragmented environment. "The difficulty

of obtaining copyright permission and the associated costs are one of the biggest hurdles we have to overcome" says Garel. Because of this experience, the consortium wants to make the final content available for re-use in other multimedia projects.

An advisory board of prominent European specialists has been established, including François Barré, French Minister of Architecture, and the architects Mario Botta, Jean Nouvel and Aldo Rossi.

Totem: Europe-wide directories of information for professionals and others

Technically, the current work extends the experience with the earlier projects mentioned in two ways: firstly, the project will exploit the greater storage capabilities of DVD (Digital Video Disk) with publication in this medium as well as on CD-ROM.

Secondly, an associated on-line database will also be developed, called TOTEM. This will offer a range of useful Europe-wide directories of information about architecture, design, engineering and construction, including contact information for European institutions, SMEs (small and medium-sized enterprises) and individuals; job and training opportunities; product information and catalogues and a directory of relevant European legislation.

Users will also be able to consult TOTEM for news of events and exhibitions of interest to their particular discipline or area of study, find out about other multimedia products and software available, and use email or participate in an on-line forum.

The specialised experience of the consortium partners in both architecture and multimedia will be valuable for marketing and distributing the multimedia dictionary. "The association with Victory, market leader in this area, is especially important" says Garel. The consortium is also actively seeking English-language partners, particularly for the planned on-line database.

Artweb - The World's Finest Art Collection

ARTWEB is a "virtual shopping mall" where publishers can access fine art collections from prestigious European art archives, select works for publication and obtain copyright information, all in a single process.

While art collections generally see their primary purpose as fostering public enjoyment of the arts and providing academic resources, they also need to survive commercially, so selling reproduction rights to publishers represents a vital source of revenue.

The Artweb project brings together three important European archive collections: The Bridgeman Art Library based in London, Bildarchiv Preussischer Kulturbesitz in Berlin and La Réunion des Musées Nationaux, Paris in an electronic co-operation between commercial competitors. The combined resource will initially amount to 300,000 works of art

An on-line resource for swift, comprehensive research and ordering

Artweb is a dedicated web-site with public areas providing hyperlinks to the web-sites of the museums and galleries represented by the participants. Registered clients will also have access to private areas within the site and to the image databases of one or more of the archives. They will be able to search for images according to various criteria (from artist's name and nationality to image details such as colours) and make selections for reference. Then they can download low resolution images for in-house design and planning purposes and order production quality images on-line from the archives represented. Artweb also offers an important copyright database where

Harmonising databases requires extensive work

To create Artweb the participants have had to take some strategically important decisions about access to their prime commercial assets via database technology. Discussions about how to bring the data together in one resource and where to locate it have been long and hard. The solution had to enable each archive to retain control over its material. Another problem was that it proved impossible to work with the different existing database structures of the three participants. As a result each archive has built a new database on a common structure and provides a copy to a central jointly-owned server where it can be accessed by the users. Fees charged for images downloaded from

from museums, artists and collections across Europe and world-wide, representing the most comprehensive specialist resource available.

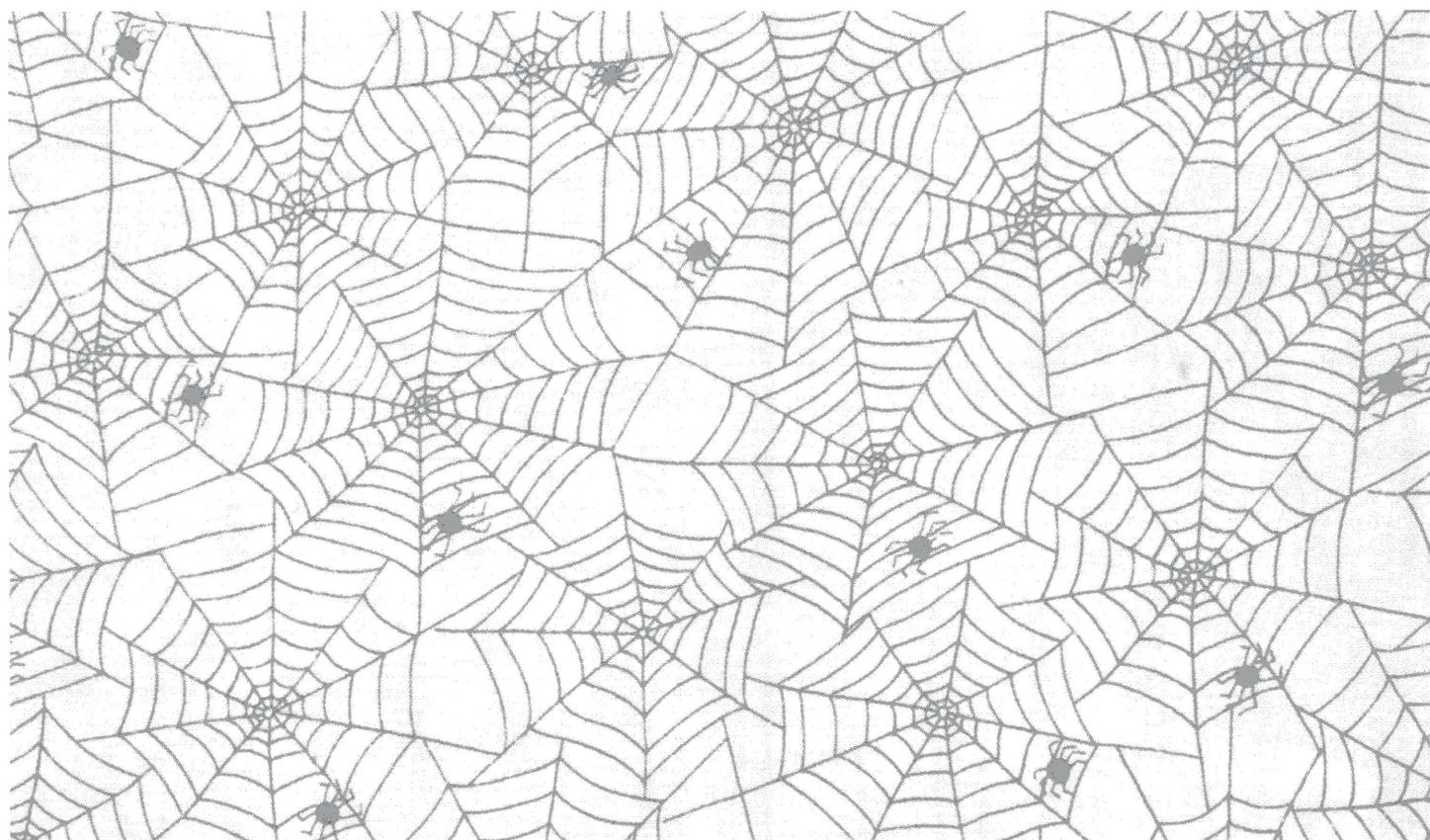
Says Lewis Orr, IT manager at the Bridgeman Art Library and project co-ordinator, "Artweb represents a necessity for a picture library. We need to digitise our images and go on-line for our future survival in the marketplace." The realisation that global "one stop shopping" operations would in future dominate the international image and intellectual property rights trade was the impetus for this initiative.

users will be able to find details of copyright ownership of the images they wish to use. To assist an international client base, Artweb will be available in English, French and German language versions.

How orders are completed will depend on the technical readiness of the client and the type of order being processed. Generally it will be necessary to conduct price negotiations directly and deliver the images by traditional means, such as a transparency. But the Artweb participants hope to be able to move towards completing orders on-line - including electronic delivery and payment.

Artweb will be used to resource the maintenance of the central server and databases. Eventually the consortium plans to commission a trusted third party to manage the central resource on behalf of the participants.

Artweb is primarily a commercial tool, but the participants have also recognised its potential for education and research. "We're all art historians who individually would have loved to have access to a resource of this kind when we were studying" says Orr. Academic access to Artweb looks feasible for a basic subscription to cover costs.



**Artweb - The World's Finest Art Collection
Participants**

The Bridgeman Art Library Ltd, London, UK (co-ordinator)

Bildarchiv Preussischer Kulturbesitz, Berlin, Germany

Circuits, Tests and Systems Ltd, Dublin, Ireland

Museums Documentation Association, Cambridge, UK

La Réunion des Musées Nationaux, Paris, France

Image Finder Systems AG, Zürich, Switzerland

Contact the co-ordinator

Lewis Orr

IT manager

The Bridgeman Art Library Ltd

17-19 Garway Road

London W2 4PH

UK

Tel: +44 171 727 4065

Fax: +44 171 792 8509

Email: Lewis@bridgeman.co.uk

1930's roller printed
cotton,
The Design Library,
New York



Great Composers - The Multimedia Reference on European Classical Music Heritage

Participants

Hulton Getty, London, UK
Marshall Cavendish, Paris, France (Co-ordinator)
AmuHadar Media, Malmö, Sweden
Polygram UK

Contact the co-ordinator

Aïssa Derrouaz
senior multimedia executive
Marshall Cavendish
66, Rue de la Rochefoucauld
Paris 75019, France
Tel: +33 1 44 53 95 00
Fax: + 33 1 53 21 06 84
Email: 106310.235@compuserve.com

Great Composers

"A living encyclopaedia which introduces the heritage of European classical music to a general audience" - GREAT COMPOSERS employs the virtuosity of multimedia technology to promote the pleasure of listening to music.

Great Composers is a CD-ROM which can be linked (via a modem) to a dedicated site on the World Wide Web. The CD-ROM is an enduring encyclopaedia of knowledge about the European composers and their music, while the web-site can provide the user with up-to-date news about concerts, festivals and events, and interactive facilities such as ticket-booking and a forum to discuss and listen to music.

The idea originated at publishing house Marshall Cavendish in Paris. Aïssa Derrouaz, Senior Multimedia Executive, explains that from the start he realised a project of this scale, combining visual material and music on CD-ROM, would require a

significant partnership of companies with expertise in music, publishing and technology. "We had started to make the necessary contacts when I heard about the INFO2000 programme at a meeting of the Paris Chambre de Commerce" he says. "Our subject matter fitted the objective of promoting European cultural heritage. We decided to try to form a consortium and submit a proposal."

Success in the programme provided some welcome financial support. "Without this Great Composers would not have been such an ambitious project, and perhaps we would not have been able to make it at all" says Derrouaz.

Information on 600 composers and 1200 musical works can be accessed from different perspectives

Great Composers is certainly an ambitious and extensive work. As well as the most famous of the European composers, less famous, country-specific composers and movements are covered. (For example, the Danish School, represented by Gade and Nielsen). In total, 600 composers and 1200 excerpts from their musical works are represented in the multimedia encyclopedia representing four hours of music, 60 animated biographies and 5000 pictures!

The material can be accessed from many different perspectives. A timeline provides a historical

perspective of composers from early times up to the twentieth century; the composers of different countries and locations can be explored through a map interface; different movements and genres of work can be grouped, selected and compared and the user can search for information according to his or her own criteria. Then there is the workshop where the user can approach music through experience by, for example, comparing different interpretations of one work, seeing musical notation evolving through a number of scores or changing the sections of the orchestra and hearing the effects.

Special interfaces address the needs of disabled users

Great Composers will be published in English, German and French initially, but careful design of the underlying architecture means translation into other European languages will be straightforward. The team has also thought about how to make Great Composers accessible to disabled users, and has drawn on the experience of AmuHadar Media, the team partner responsible for the programming and technical execution, to design specific interfaces. Says Dr Hans Sundström, director "At the start of Great Composers users can choose a number of special interfaces. The information about this is also delivered by speech, so visually impaired users won't miss it. The interfaces available are a bigger display, tab-key navigation or a synthesised voice output. A

Braille keyboard can be added or a special keyboard with just four buttons can be used to drive the programme."

The Great Composers team believes the INFO2000 programme has contributed more than just financial support to the project. The methodology required by the programme was rigorous, but useful: "It made us build a serious, strong and well-structured work" says Derrouaz. Creating a product with partners from several countries and cultures also imposes another form of self-discipline "working with European companies is a very rich experience and a difficult one" the partners agree. "We had to learn the basis of good communication and apply it."

Cultural Heritage and Multilingual Programme of Long-standing Legacy in Open Network

The CHAMPOLLION project is named after the nineteenth-century "founder" of Egyptology. Collaboration between ten European museums brings the public and academics a rich library of Egyptian artefacts and texts for study.

There is a huge wealth of Egyptian artefacts in European museums, many of them in store and inaccessible to the public. The museums involved in this project have each undertaken to build a database of digital images and descriptions of 1,500 objects from their collections, including everyday items as well as famous works of art and hieroglyphic texts. The result will be ten CD-ROMs - one for the collection of each museum - offering a comprehensive reference work designed for both the general public and academics.

A multilingual thesaurus adds an important academic dimension

Specialists may want to refine their search still further by entering the comprehensive thesaurus to select from a larger number of objects. Here, for example, it would be possible to select search terms from all available levels. On the first level the description of an object may be "human"; the second level has "man" or "woman"; the third level under "man" gives a list of many types of men (king, priest, non-Egyptian); level four specifies under "foreigner": "Asiatic", "Greek", "Nubian" and so on.

The work is being co-ordinated by Prof. Dr Dirk van der

Meeting market needs

Egyptian Treasures in Europe will have wide appeal to the general public as well as historians, libraries, schools and universities. There will be a world-wide distribution and the CD-ROMs will also be sold in the participating museums which will receive royalties from the sales.

But the sheer size of the work creates problems as well as opportunities. To purchase the complete collection would prove quite expensive for the

The collection is entitled Egyptian Treasures in Europe.

Users can search for objects according to twenty different categories and refine their search further by entering characteristics such as materials, age and provenance of the object. Then they can view a typical artefact in full colour from a number of angles, and read a detailed description. A useful feature is the facility for the user to record individual study notes and save them alongside the photographs of the object.

Plas of the University of Utrecht in The Netherlands. He stresses the importance of building a collection which is "linguistically standardised" - in other words, that the terms used in different languages have a common point of reference in a definitive thesaurus, so that experts can be sure they are communicating what they actually mean. The collection builds on earlier work to create a multilingual thesaurus for Egyptology. This thesaurus has been approved by the Committee of Egyptian Collections under the aegis of UNESCO.

individual, so, says van der Plas, it is likely a number of different mixes may be produced. Eventually, there will be versions available in eight European languages and Arabic and Russian. For academic use the consortium is watching developments in the area of Digital Video Disk which would enable the whole collection to be offered on one disk. The CD-ROMs will also link to a dedicated web-site, which is already proving a fruitful means of promoting the project to Egypt enthusiasts everywhere.



Relief of King Tuthmosis I (ca 1500 BC), RPM Hildesheim Inv. nr 4538

Cultural Heritage & Multilingual Programme of Long-standing Legacy in Open Network (Champollion)

Visit Champollion at <http://www.ccer.ggl.ruu.nl/champollion/>

Participants

Centre for Computer-aided Egyptological Research,
Utrecht, The Netherlands (co-ordinator)

Soprintendenza Archeologica Toscana, Museo
Egizio di Firenze, Florence, Italy

Museo Nacional de Arqueologia, Lisbon, Portugal

Museum of Mediterranean and Near Eastern
Antiquities, Stockholm, Sweden

Künsthistorisches Museum, Vienna, Austria

Allard Pierson Museum, Amsterdam, The Netherlands

Musées Royaux d'Art et d'Histoire, Brussels, Belgium

Roemer-und Pelizaeus-Museum, Hildesheim, Germany

Université Charles de Gaulle, Lille III, Villeneuve
D'Ascq, France

Liverpool Museum, Liverpool, United Kingdom

Museo Arqueologica National, Madrid, Spain

Contact the co-ordinator

Prof. Dr. Dirk van der Plas
director CCER

Utrecht University

PO Box 80.105

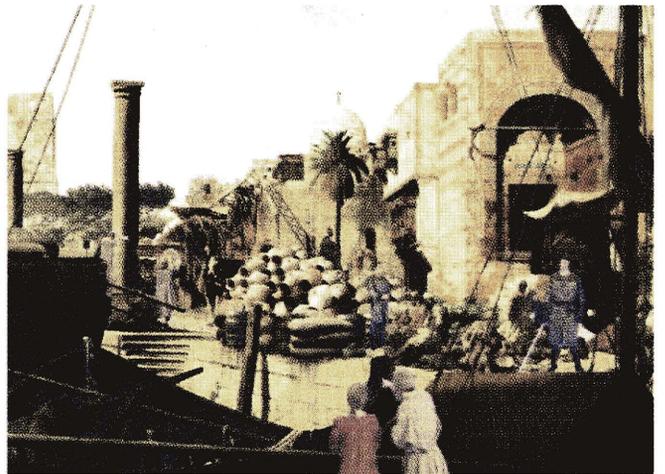
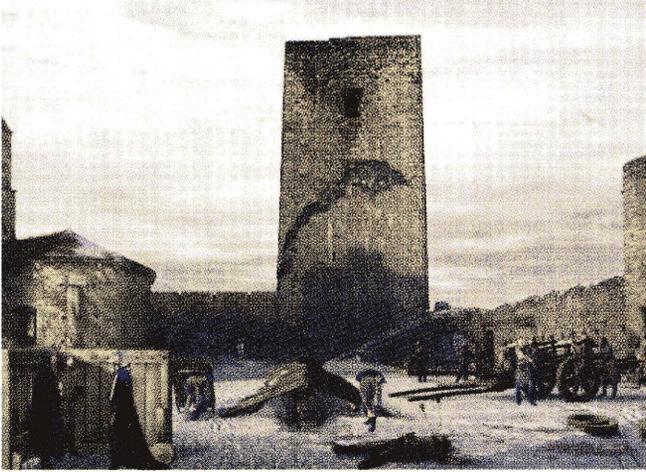
Utrecht

The Netherlands 3508 TC

Tel: +31 30 2531982

Fax: + 31 30 2540413

Email: vdplas@cc.ruu.nl



CRUSADER

Through fictional adventures in a recreated mediaeval world, **CRUSADER** immerses its audience in the history of two continents and three religions.

"**Crusader**, a Conspiracy in the Kingdom of Jerusalem" is a new way of approaching history. This game-filled title is sure to arouse the desire to discover more about the Crusades, whose cultural heritage still has an influence on the Mediterranean region today. The crusades hold many clues to the present-day, according to Edouard Lussan, author

of this multimedia programme. "Embargo, colonisation, religious strife - many of the issues of the Middle East in the XII century still have resonance today" he says. "From the beginning of our project we were determined to present the material from the point of view of all three of the religions involved."

A fictional quest based on real-life characters and facts

The format is a fictional adventure game, in which the user must travel through five worlds of East and West: the castle home of the protagonist, a French knight called Arthaud; the Italian ship in which he travels to the crusades; his port of arrival in the Middle East; a Frankish fortress and the holy city of Jerusalem. Arthaud's story is told by a Syrian (Moslem) chronicler, spy of the great Saladin, sultan of Syria & Egypt. In Jerusalem, says Lussan, the story involves episodes based on the Jewish, Moslem and Christian histories of the city. Although the adventure is fictional, all the characters are historical figures.

To progress through the worlds and complete the

adventure, the user must solve 26 puzzles or enigmas, based on real historical situations. To do this, he/she must collect objects or find pieces of relevant information from the 180 on-screen fact-files, which detail the history and major characters of the era. As well as information from the fact-files, the user needs to collect objects from within the scenes. The quest ends when Arthaud regains the holy cross - but there is a philosophical twist to the tale!

The CD-ROM programme is targeted at adult users, but with the intention that it can be enjoyed by younger family members also.

Adapting the programme for different markets

The French multimedia publisher, Index Plus, is project co-ordinator for The Crusader. The Belgian partner, Magic Media, was involved in the interactive mechanisms. Historical source material comes from France, the UK and the US and has been used to make the scenes, buildings and costumes historically accurate. (For example, copyright material has been acquired from Versailles and from the British military publisher, Osprey.) Technical assistance was provided

by Cryo Interactive to achieve the 3D animations for the programme.

With the French language version of Crusader now complete, there are plans for more titles in a series. The consortium is working to research other national markets and adapt the programme as necessary. Crusader will be published in French, English, Italian, German and possibly Japanese.

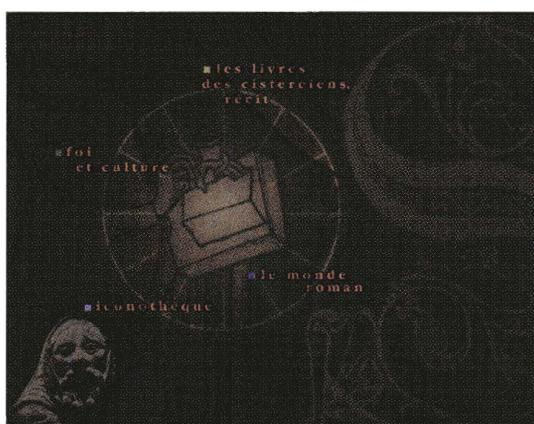
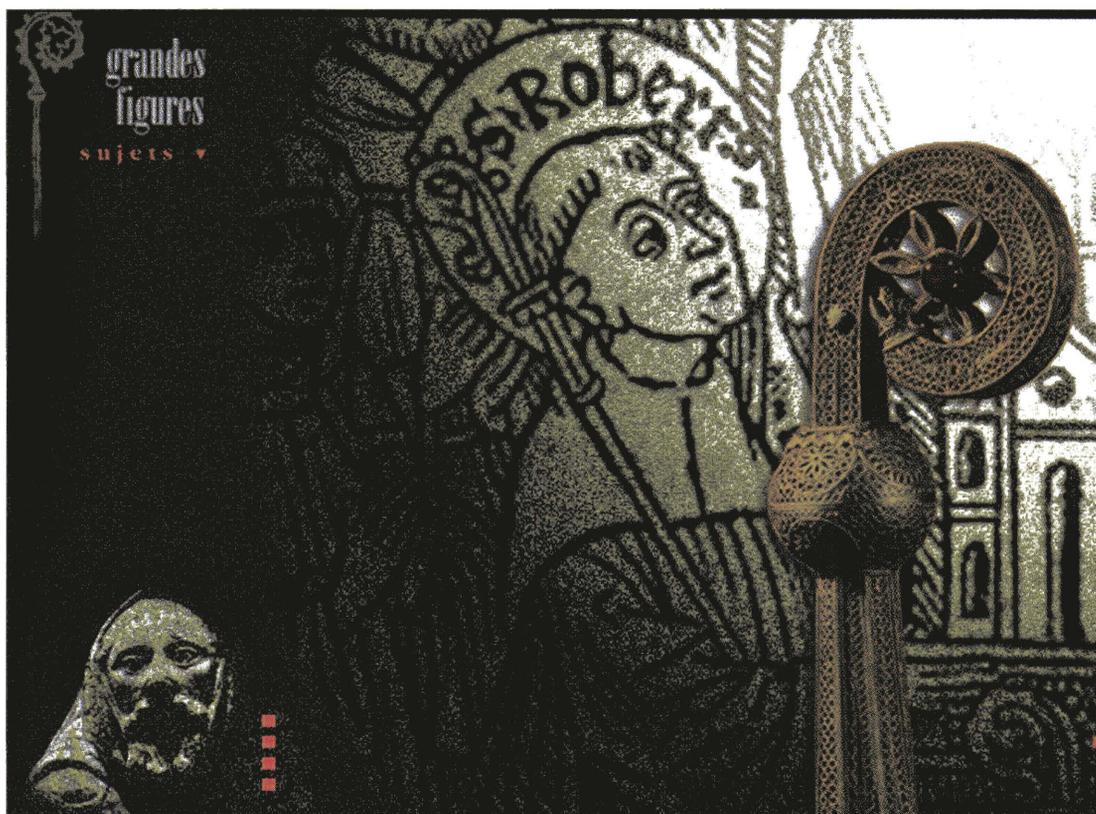
Crusader

Participants

Index plus, Paris, France (co-ordinator)
Cryo Interactive Entertainment, Paris, France
Mondadori New Media, Italy
Magic Media, Brussels, Belgium

Contact the co-ordinator

Emmanuel Olivier
Index plus
47 rue de Charonne
75011, Paris, France
Tel: +33 1 49 29 51 51
Fax: +33 1 48 05 29 30
Email: daf@indexplus.fr



Valorisation of the Cistercian Manuscripts of the Municipal Library Of Dijon

Participants

ENESAD-CNERTA, Dijon, France (co-ordinator)
 Abbaye Villers la Ville, Villers la Ville, Belgium
 Advanced Services Group Ltd, Athens, Greece
 Bibliothèque Municipale de Dijon, Dijon, France

Contact the co-ordinator

Jean Chevaldonné, directeur
 ENESAD-CNERTA
 26 Boulevard Petitjean
 Dijon, France
 Tel: +33 380 772710
 Fax: +33 380 772701
 Email: j.chevaldonne@educagri.fr
 Website: <http://www.cnerta.educagri.fr>

Valorisation of the Cistercian Manuscripts of the Municipal Library of Dijon

A unique collection of Cistercian manuscripts dating from the XII century is housed at the City Library at Dijon, France. The CITEAUX project is bringing the collection to a much wider audience via CD-ROM and the World Wide Web.

Preserving our historical heritage often means protecting it from the public, especially when the original materials are fragile or perishable. Access to a unique collection of Cistercian manuscripts at Dijon has to be restricted because of its fragility. The manuscripts were made in the scriptorium at the Abbaye de Citeaux in France during the XII century. They have been preserved in Dijon for centuries, surviving the destruction of the French revolution.

The collection is particularly important for scholars because it pre-dates the influence of St Bernard. It is a rich source for studying the development of manuscript and illumination. The illustrations, which

include mythical beasts and rural and everyday scenes, also provide an insight into the daily life, thinking and mythology of the times.

Under the leadership of the City Library of Dijon and the National Center for Research and Survey on Advanced Technologies (CNERTA), a multimedia publishing house, the Citeaux project is dedicated to bringing the manuscripts to a wider audience, via multimedia technology. It will be the only means to view the manuscripts. A key objective has been to create an information resource which can respond to the user's own level of interest, catering for a general audience and for the specialist or academic.

Citeaux - from the scriptorium to the World Wide Web

Like many of the INFO2000 projects, the Citeaux consortium was attracted by the presentation strengths of CD-ROM linked to the immediacy of the World Wide Web.

The CD-ROM presents the manuscripts in the context of their times by means of three modules: Cistercian books, Faith and culture and the Romanesque world. The user can take a guided tour, or devise his or her own route through the material. There is an illustrated glossary linked to the text. Other links take the user to an image library section containing some 800 illuminated letters and

illustrations, many of which can be enlarged on screen. Says project manager, Sylvie Bourinet "the library of Dijon organised expert photography of the illustrations, taken from 300 manuscripts. This was painstaking work. Then the photos were scanned and digitised for the CD-ROM."

The user connects to the web-site via the menu bar of the CD-ROM. The site has two aims: to bring the Citeaux enthusiast to other information about the Cistercian heritage, and to provide a work-space where scholars and researchers can exchange information and opinion.

Multimedia celebrates Citeaux's nine hundredth anniversary

From the point-of-view of the general user, an important aspect of the web-site will be information about exhibitions and events. The Abbey of Citeaux celebrates its nine hundredth anniversary in 1998, and the web-site will be used to promote the festivities surrounding this event.

The study section will report conferences and research connected to the study of Cistercian culture. It will contain summaries of specialist publications, and a bibliography of works. To make this knowledge accessible to the general public, a glossary of specialist terms is included. A subscription section, called Forum, will give specialists a restricted area for high-level communications.

A scientific committee established to oversee the project content involves many eminent Cistercian specialists. Benoît Chauvin, member of the CNRS in France, Marie-Elisabeth Henneau, professor of history at the University of Liège in Belgium, Terryl N Kinder, historian and archaeologist, Martine Plouvier, a regional conservator in Picardie and André Pierre Syren, conservator of the Library of Dijon are some of those contributing to this project.

The CD-ROM will be available in French and English, in versions for Macintosh or PC.



The Great Shipping Discoveries O Tempo Português (NAVEGAR)

Participants

Oda Edition, Sèvres, France (co-ordinator)
Parque Expo 98 SA, Lisbon, Portugal
Réunion des Musées Nationaux, Paris, France
Eme, LDA, Lisbon, Portugal

Contact the co-ordinator

André Hatala
manager
Oda Edition
7 Avenue de la Cristallerie
Sèvres, France
Tel: +33 1 46233452
Fax: +33 1 46233259
Email: ahatala@oda.fr

The Great Shipping Discoveries

O Tempo Português

The Portuguese explorers of the fifteenth and sixteenth centuries were the ultimate adventurers. Multimedia will help visitors to the World Exhibition in Lisbon share the excitement of their GREAT SHIPPING DISCOVERIES.

Between 1418 and 1543 Portuguese sailors voyaged to new lands: from Brazil to Africa and from India to Japan. They built fortresses, trading-posts and religious buildings and exchanged foodstuffs, technical knowledge and ideas. They drew the outlines of our continents and perfected their navigational instruments. Their adventures are an important chapter of history; O Tempo Português celebrates their achievements in multimedia on CD-ROM.

The forthcoming World Exhibition to be held in Lisbon in May 1998 was the impetus for the development of

Original documents, animation and 3D modelling unlock a chapter of history

The authors have combined ancient manuscripts and sources with modern tools to unlock this important chapter in European history. Animation and 3D models are used to make the ships and situations and the characters from history come alive for the viewer. Ancient and modern maps can be compared and simulations show how it felt to navigate with ancient instruments.

Many of the original sources are in Portuguese so this is the base-language of the project, but the

Potential for Digital Video Disk version is built in

The rich content of the programme has pushed the technology of CD-ROM to its limits, explains Jacques Kempin of ODA Edition. "The early animated sequences we produced involved a great deal of action going on at the same time. This called for a high compression rate, which affected the quality of the images. So we had to re-think and scale down the animation to keep the quality we wanted." But the early experiments have been saved and can be re-used when the market is ready for the more powerful DVD (Digital Video Disk) standard.

The project will also exploit the World Wide Web - a web-site will contain all the information available on the CD-ROM but in a database called Navegar.

this ambitious multimedia programme. Some 7.5 million visitors are expected at the exhibition, providing an excellent platform to promote and sell the title. The consortium expects to find an even wider audience for O Tempo Português at schools and among historians, geographers, curators, archaeologists and teachers. Depending on the commercial success of this first venture, it is hoped to develop more programmes in The Great Shipping Discoveries series.

experience of O Tempo Português will also be available in English, French, Spanish and Portuguese versions. Project participants in the various countries are overseeing the translation work and ensuring an effective interpretation in their native language. ODA Edition, the French publication house which is co-ordinating the project, also has considerable experience in managing multi-lingual versions.

"This will be our first experience of publishing content in this medium and will also provide an opportunity for us to test the available payment mechanisms" says project co-ordinator André Hatala.

This is an ambitious project within a short time-frame, and negotiating copyright issues can cause frustrating delays. Keeping partners informed of all the developments is also a challenge for the co-ordinator role. "Simultaneous contacts are needed to keep the synergy of the project and this is a demanding task" says Hatala. "But it is also very rewarding. The partners have a significant impact on the project through their knowledge of the content, and experience of electronic publishing."

The Multimedia Codices of Leonardo da Vinci: The Codex on The Flight of Birds

The advanced and visionary nature of Leonardo da Vinci's work makes it an exciting subject for an interactive multimedia programme. THE MULTIMEDIA CODICES OF LEONARDO DA VINCI lets the audience see the world through Leonardo's eyes and experience his work in action.

The original Codices of Leonardo da Vinci are dispersed in a number of European libraries, making it difficult for a general audience to have access to the ideas, inventions and theories in his writings. But through twenty five years of work, the Italian publishing house Giunti has acquired exclusive rights to the reproduction of the codices. In this project, Giunti and its consortium partners aim to bring to life the Codex on the Flight of Birds for all lovers of Leonardo's work.

Inhabit Leonardo's world ...

The user finds him or herself in the persona of Leonardo inhabiting an ingenious environment which represents Leonardo's thoughts, life and work. The central hall (a cloister in the architectural style of XV century Florence) leads to a study, a dome-shaped flying room, and a roof-top look-out. In the study, Leonardo writes about flight and watches the birds through the window. In the flying room, his flying machines are stored and from the look-out, he observes nature and recalls his journeys to other countries. In the cloister the user (in the role of Leonardo) can meet and talk to other significant figures, like Giorgio Vasari, one of the earliest collectors and commentators on Leonardo's work.

"Good collaboration helps everyone's work grow in quality"

Giunti Multimedia, the co-ordinating organisation, has extensive experience of managing international consortia through participation in Impact2 and other programmes. Project co-ordinator Leonardo Montecamozzo explains that a local publishing house can give the best advice on how to produce a title for a particular national market, and it is always useful to have the involvement of other well-respected publishers. But collaboration has other, deeper benefits "a good collaboration will help everyone's work to grow in quality" he says. In particular, he believes it is important for partners to have confidence in each other and to take the time to change elements of a project that may not be working well. For

The team chose CD-ROM as the platform for the work mainly because it offered a good quality of graphics for still and motion pictures, competitive performance for 3D processing and interactivity and overall a high level of compatibility (one version can be used on PCs and Macintosh computers). A linked web-site is also planned.

Through a door from the cloister Leonardo's childhood in Vinci can be revisited. Objects in the various rooms represent different areas of work and take the user to more detailed information.

The programme makes use of animation and 3D modelling to show the flying machines in operation and to construct the buildings and cities Leonardo conceived. For this part of the programme the consortium drew on the work of the Museo della Storia della Scienza di Firenze to create the flying machines and buildings in virtual reality. Professor Paolo Galluzzi, president of the museum, has also been closely involved in advising on programme content.

example, originally, the powerful Digital Video Disk standard was considered as a platform for this project, but eventually rejected because of the slow rate of adoption in the market. "We had to recognise that our market assessment had been too optimistic and be prepared to change" says Montecamozzo. However, since work to complete multimedia versions of all the codices will take up to ten years, the team plans to "future proof" current work. It will be capable of conversion to the new format in the future.

The Codex on the Flight of the Birds will be available in five languages: English, French, Italian, Spanish and German.



The Multimedia Codices of Leonardo da Vinci: The Codex on the Flight of Birds

Participants

Giunti Multimedia srl, Milan, Italy (co-ordinator)
 Ernst Klett Verlag, Stuttgart, Germany
 Anaya Multimedia S.A., Madrid, Spain
 Giunti Gruppo Editoriale, Florence, Italy
 Museo della Storia della Scienza di Firenze,
 Florence, Italy

Contact the co-ordinator

Leonardo Montecamozzo
 R&D manager
 Giunti Multimedia srl
 Ripa di Porta Ticinese, 91
 20143 IT
 Milano, Italy
 Tel: +39 2 8393 374
 Fax: +39 2 5810 3485
 Email: leonardo.gmm@interbusiness.it



Flashpoints of History

LES BRULURES DE L'HISTOIRE (Flashpoints of History) is based on the long-running television series of the same name, devised by Patrick Rotman. The CD-ROM version adds the dimension of interactivity to the study of history.

The first CD-ROM in this planned series about The Flashpoints of History deals with the events of the twentieth century and covers Communism in Europe, Fascism in Europe and the end of colonialism. The user can approach the material either as a narrative, or in research mode. In both cases, the information is made available through contemporary

sources such as images, archive documents and eye witness accounts. The source material is interspersed with commentaries and analysis from historians, who have the benefit of hindsight. The project co-ordinator Kuiv has been responsible for negotiating the complex copyright requirements for the audiovisual archive material.

The study of an inexact science

Multimedia offers the user a richly structured content, interpreted by the historians. Flashpoints of History embraces a range of interpretations. Jean Sylvestre, general manager of consortium partner SDC Informatique, explains the philosophy behind the

work: "It is not enough just to present a chronological account through images. We have to enable the user to interpret the images in their context. Part of the job of Flashpoints is to show that history is not an exact science."

A multi-lingual work, involving historians who are well-known in their home countries

Flashpoints of History will be published in French and English versions, and there are plans for a German version. The consortium is working with multimedia editors who are able to involve historians well-known

in their home countries. There will also be a Digital Video Disk (DVD) version as soon as the market will support it. The marketing is the responsibility of Mediangles.

Flashpoints of History

Participants

Kuiv S.A., Paris, France (co-ordinator)
ELG, London, UK
SDC Informatique, Paris, France
Mediangles, Paris, France

Contact the co-ordinator

Marie H el ene Ranc
general manager
Kuiv S.A.
55 bis, rue de Lyon
75012 Paris, France
Tel: + 33 1 44 75 79 15
Fax: + 33 1 44 75 79 19

Source Vive

SOURCE VIVE is a collection of multimedia programmes which each takes a single historical document as the starting point to unravel the history and culture of its period.

"There is really no substitute for original documents to give a true insight into an era. Multimedia is a perfect medium to bring such experience to a general audience." So says Jacqueline Chiffert, project co-ordinator and (with Henry Colomer, designer of the original concept of the project) enthusiastic originator of Source Vive. The approach is tried and tested - a previous multimedia programme successfully used a single painting to explore the life, times and technique of its creator.

The core value is the content, not the delivery mechanism

A large measure of the success of this work depends on the availability of specialised historians with the skill to communicate their subject for a non-specialised audience. Chiffert is very aware of the value of this input. "In each case, we're benefiting from twenty years or more of scholarship," she stresses. This leads to the view that, although the technical medium for communicating the work is obviously important, the core value is the content, not the delivery mechanism. "As a team we're more and more convinced that the quality of the content is the most important part of

On-line capability adds value to the content

The initial products will be developed on six CD-ROMs, with the possibility of using DVD (Digital Video Disk) in the future. Links to search tools and an on-line directory of related sources add value to the products and make Source Vive a reference site for on-line research of European historical data. Says Chiffert "the development of the on-line resource really focused our thinking. When we first thought about doing this, there were no examples of linking CD-ROM and the World Wide Web. At first we became involved in the development of search tools, but we soon realised that what we wanted to do was find people who could use existing tools to add value to the content. So we changed direction and now we are working with universities associated with the partner-libraries (such as Ecole des Chartes of Paris and Université de Poitiers) who are researching the available sources and are able to suggest ways for users to find out more".

Working on relatively specialised themes is far from a luxury. Chiffert is hard-headed about the necessity to get the marketing right to ensure the product sells in a difficult market. "We want to encourage the desire to

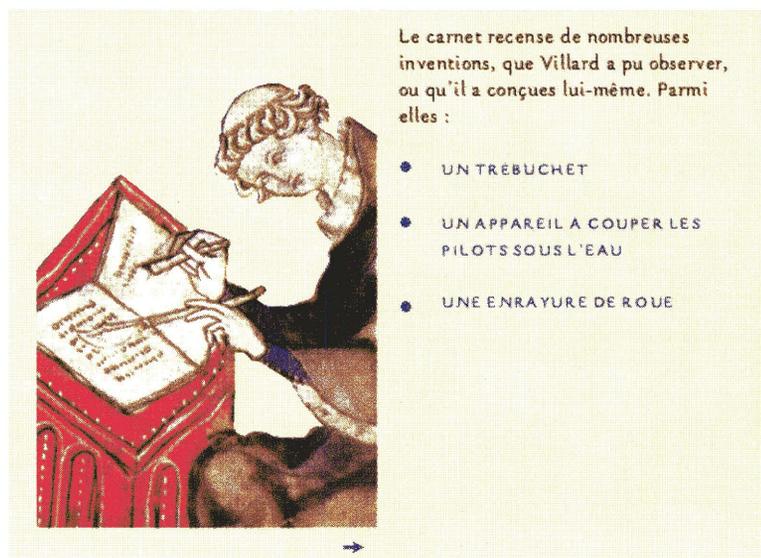
The current series depends on a collaboration between a group of French publishers and The Bibliothèque Nationale de France and The British Library. The libraries have made available the documents used for the series including Villard de Honnecourt's sketch book, which is a rich source for Gothic architecture and The Armorial of Golden Fleece and Europa, which explores the use of heraldry in the middle ages. Subsequent work will focus on Plants and Gardens in Renaissance Europe and Cartography in the Age of Exploration.

our work, and that it can in future be adapted for a variety of delivery methods as appropriate" she says.

The content is demanding of the user, with the temptation to "talk down" carefully avoided. "We haven't created games and quizzes" says Chiffert "but there is a great deal of interactivity. For example, in the title dedicated to Villard de Honnecourt's Sketch Book, the user can experiment with different ways of cutting stone to avoid waste, sharing the experience of the Gothic builders."

collect the series, so we want to keep the price for each CD-ROM as low as possible. We won't market through general distribution channels because of the high commissions that involves. Instead we will market direct, and use our own web-site and reciprocal advertising with other relevant sites as much as possible."

Funding from INFO2000 has been critical to making Source Vive, and there have been difficult moments when Chiffert felt obliged to observe that the Commission's rigid and sometimes arcane procedures are unfortunately not in keeping with its stated intention of assisting small businesses. But, she says, aside from the demands of financial controllers, the international collaboration required by INFO2000 is a good way to build European co-operation. "The point is that working with partners from other cultures is hard, and if you could avoid it you probably would! We certainly lost time, energy and potential profits at the outset. Now we have reduced our partnerships to a more manageable number and it's proving a very valuable experience. We're enjoying learning together."



Le carnet recense de nombreuses inventions, que Villard a pu observer, ou qu'il a conçues lui-même. Parmi elles :

- UN TRÉBUCHET
- UN APPAREIL A COUPER LES PILOTS SOUS L'EAU
- UNE ENRAYURE DE ROUE



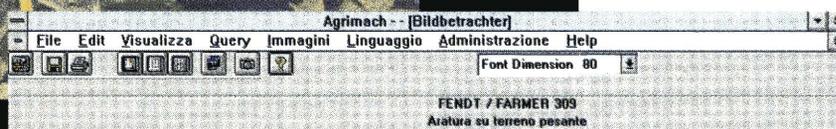
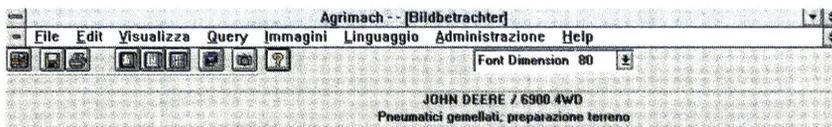
Source Vive

Participants

HEXAGRAMM2, Paris, France (co-ordinator)
 British Library, London, UK
 Bibliothèque Nationale de France, Paris, France
 SDI son données images, Paris, France

Contact the co-ordinator

Jacqueline Chiffert
 production manager
 Hexagramm2
 19 avenue Duquesne
 75007 Paris, France
 Tel: +33 1 42 61 08 60
 Fax: +33 1 42 36 30 64
 Email: hexagram@compuserve.com



Agricultural Machinery Multimedia Catalogue (Agrimach Multimedia)

Visit Agrimach Multimedia at <http://www.crpa.it/agrimach/index.htm>

Participants

Centro Ricerche Produzioni Animali S.p.A, Reggio Emilia, Italy (co-ordinator)

Kuratorium für Technik und Bauwesen in der Landwirtschaft e.V, Darmstadt, Germany

Institute of Agricultural and Environmental Engineering, Wageningen, The Netherlands

Danish Agricultural Advisory Centre, Aarhus, Denmark

Contact the co-ordinator

Adelfo Magnavacchi
managing director

Centro Ricerche Produzioni Animali
Corso Garibaldi 42

Reggio Emilia
I-42100 Italy

Tel: +39 522 436999

Fax: +39 522 435142

Email: m.adelfo@crpa.it

Agricultural Machinery Multimedia Catalogue

AGRIMACH MULTIMEDIA extends and adds value to an existing technical database for the agricultural machinery market. The new project will provide more information, better user interfaces, and cheaper and better ways to collect data.

The aim of the Agrimach Multimedia project is to produce a comprehensive information system on the technical and commercial characteristics of agricultural machinery and implements. The importance of such a system is clear, considering that in the European Union the agricultural machinery industry comprises about 5,000 manufacturers, 18 billion ECUs of gross production and 60,000 types of implement.

There is no single, comprehensive archive covering the entire European market, although a European Commission-funded databank of information, Agrimach, has details of 40,000 different items produced by around 2,000 of the 5,000 manufacturing firms. Agrimach Multimedia will extend and exploit this database, explains project co-ordinator Adelfo Magnavacchi, managing

Working to improve data exchange and reach a wider market

The project has three development strands aimed at improving data interchange, providing better user interfaces and reaching a wider market of both suppliers and users of information.

Data Pick is a data acquisition software application, developed using MS Jet Engine. The software performs an automatic upload to and download from the databases and will be used by project partners and data suppliers. It will enable the suppliers to update their own data directly.

Agriview Europe is a tool to enable professional users to make customised queries to the database. The tool will be packaged with the database on CD-ROM or diskettes for distribution. It will be suitable for use by a wide range of professional users who require detailed information from the database. The intention is to keep the purchase price relatively low to encourage users to buy the annual updates and avoid the need for administratively-burdensome subscription schemes.

Language is a barrier to be overcome

Another important task is to find new partners to meet the goal of building a Europe-wide resource. The products will be produced in English, Danish, Dutch, French, German, Italian and Spanish. Says Magnavacchi, "it's not easy to find partners with co-incident interests and aims but it is important. Language is a major problem when developing multimedia products in Europe with regard to the

director of Centro Ricerche Produzioni Animali, a research organisation in Reggio Emilia, Italy. "The new information system will eventually cover the whole European market and be accessible electronically as well as by printing out material. "It will also be multilingual for example, you'll be able to find data in Danish on tractors sold in Italy" comments Magnavacchi.

A number of organisations and publishers in various European countries currently collect and publish agricultural machinery information. But, says Magnavacchi, data collecting and updating is becoming so labour-intensive that some significant experiences are being reduced or eliminated altogether. Agrimach Multimedia will address this problem by developing a software tool to speed up the collection and updating tasks.

Agrimach Website provides a gateway to the complete Agrimach Multimedia databases. It will be attractive to users who require relatively limited information and will also serve to promote the Agriview Europe product. When suitable charging mechanisms are available, the web-site should provide a means to access the whole database, says Magnavacchi.

As well as working on these end-products, the project team is developing the central database using Oracle RDBMS which will provide a highly flexible enquiry facility and is also backwardly compatible with the original Agrimach database. An innovative feature of the new information system is the addition of labour capacity calculations. They will enable farmers and advisory services to identify optimal dimensions of equipment for particular circumstances before even starting to look at the technical characteristics of the machinery.

effectiveness and cost of the products themselves." He also warns that international programmes such as INFO2000 make high demands on participants in terms of bureaucratic procedures!

The Agrimach Multimedia products will be published in October 1998.

Multimedia Commentary and Communication Service on the CE Mark

CE Multicommedia will use the immediacy of the World Wide Web and the presentational power of multimedia to communicate more effectively with business users of technical and standards information.

Research* among small and medium sized enterprises (SMEs) has found that only 20 per cent can name the European directives applicable to their products and fewer than 30 per cent can correctly quote the corresponding European standards. Yet there is a large amount of information available in various forms (booklets, help-desks, document databases and so on) from the many national standards organisations, chambers of commerce and other bodies. This information covers national,

European and international standards (including requirements for the CE mark discipline of the European Commission).

The CE Multicommedia consortium wants to find a better way to communicate this important information about the CE mark using an integrated system of information based on off-line communication (CD-ROM) linked with on-line assistance and interaction via the internet.

The challenge - to make learning about legislation fun!

The consortium is working to produce five information CD-ROMs on topics of particular relevance to small and medium-sized enterprises. These CD-ROMs will set out and explain the legislation covering machinery, medical devices, construction products, toys and personal protective equipment. The commentaries will be enlivened by pictures, video and animation to drive home the various points.

The CD-ROMs will form important reference resources including references to relevant European harmonised standards for each discipline, checklists and examples of practical applications of the legislation and a detailed glossary explaining the terms used in the documents.

The project co-ordinator is Claudia Strasserra of the Italian national standards organisation, Ente Nazionale Italiano di Unificazione. "Multimedia is the key to combining theory with evidence of experience, to catch the operators' attention and interact with them" she says. "The fundamental aim of this project is to inform, show, interact and - why not? - to amuse."

A dedicated web-site will be available for each title, accessible directly from the CD-ROM. The site will give updates to the information on the CD-ROM as well as providing an on-line help facility with answers to FAQs (frequently asked questions) and a discussion forum where users can exchange opinions and ask for information about matters of concern to them.

Multilingual product will stimulate a "multiplier effect"

The international partnership has made it possible to produce prototype material in English, Italian and Portuguese. The final products will also be available in French, German and Spanish, thanks to a national derivation agreement which defines how national standards bodies can exploit and commercialise the products within their national boundaries. Says Strasserra "The idea is to produce a 'multiplier effect' by encouraging the development of further national products from the consortium's work. The agreement allows for national derivations at two levels - a

straight translation, or a national customisation, containing full texts of national laws and standards."

The international partnership has been a fruitful one, says Strasserra "each partner can concentrate on his or her own area of expertise, contributing specific experience to the overall result." The internet has, she explains, helped to solve some of the inconveniences of long distance collaboration: "We created a private web conference where each partner could leave messages for the others and give and receive information about the progress of the project."

(* Source: Euromanagement)



Multimedia Commentary and Communication Service on the CE Mark (CE Multicommedia)

Visit CE Multicommedia at <http://www.qec.it/multicommedia>

Participants

UNI - Ente Nazionale Italiano di Unificazione (co-ordinator)

Q&C - Quality and Competitiveness, Milan, Italy

Consorzio Milano Ricerche, Milan, Italy

Mate s.r.l, Milan, Italy

Instituto de Soldadura e Qualidade, Oeiras, Portugal

Sistemas Avançados de Formação SA, Oeiras, Portugal

Contact the co-ordinator

Claudia Strasserra

Ente Nazionale Italiano di Unificazione

Via Battistotti Sassi 11B

20133

Milan, Italy

Tel: +39 2 700 24 421

Fax: +39 2 70 10 61 49

Email: claudia@qec.it



Multimedia Instructional and Reference Programme in Documentary Credits and UCP500 (DC-PRO)

Participants

ICC Publishing SA, Paris, France (co-ordinator)
Deutsche Bank AG, London, UK
Export Edge Ltd, Dublin, Republic of Ireland
IntoWhite, Limerick, Republic of Ireland

Contact the co-ordinator

Pascale Reins
director
ICC Publishing SA
38 Cours Albert 1er
Paris 75008, France
Tel: +33 1 49 53 2864
Fax: +33 1 49 53 2862
Email: 10065, 1116@compuserve.com

DC-PRO

The requirements for issuing documentary credits to support international trade are demanding, so international trade bankers and their corporate customers will welcome DC-PRO, a new multimedia training and support tool.

When two parties trade, they may want guarantees beyond the spoken word. Documentary credits, (a system of exchanging evidence of the steps in a trade transaction between the banks of trading partners) are used to support approximately \$400 billion worth of international trade every year. But the procedures are complex, and minor errors in documentation can lead to costly delays and disputes.

The Banking Commission of the International Chamber of Commerce oversees the rules governing documentary credit practice, and also administers professional certification exams. The ICC is working with two Irish technology companies, Export Edge and IntoWhite, and with Deutsche Bank, to develop a documentary credits training and support tool which exploits the latest technology.

Web-enabled CD-ROM gives access to a large database of information

DC-PRO is a CD-ROM linked to a web-site which offers multimedia training and a large, constantly-updated, easy-to-search database of information. The training material will include practice exams and registration for the professional examinations.

The database will include all relevant ICC material as well as decisions and opinions of the Banking Commission arising from disputes and (at a future date) leading cases and judgements from many jurisdictions. Users can link to the web-site to download database updates, send e-mails to other members of the CD-ROM network, visit an electronic bulletin board, or see electronic ICC newsletters and other publications. Says Guillermo Jimenez, responsible for the Banking Commission at ICC in Paris "A web-linked CD-ROM is a very powerful concept for business applications. The CD-ROM is

useful because it obviates the need for an extremely lengthy download by modem and in addition it provides the publisher with a certain degree of security against unauthorised use of the material. The web link is essential in the international banking field because developments are so frequent that any other means of up-dating would become too cumbersome."

The amount of information to be disseminated is already a challenge for the project: "We will have to be attentive to the requirements of speed and storage capacity that will be associated with the final product because our current software prototype may require too much processing power for today's lap-tops, for example" comments Jimenez, adding: "Given the rapid increase in the computing power of semi-conductors, however, we do not expect this to be a problem in the long run."

Careful preparation wins support and opens distribution channels

The partners had to go through a lengthy political process in order to obtain authorisation for the project from the ICC governing bodies. That done, the ICC's world-wide network of national chapters, national and regional banking associations and export associations should provide a fast distribution network for DC-PRO.

Early attention to the relationships involved has also paid off for the group says Jimenez: "We have all

invested a good deal in getting to know each other better and we have made provisions for resolving uncertainties or misunderstandings that may crop up as the project progresses. ... We work with a very conservative and demanding constituency - international trade finance bankers. They are trained to be incredibly meticulous, and they expect any products servicing their industry to apply the same quality standards."

Kids' TV Multimedia Information Network

KIDS' TV is an on-line resource for the media industry which provides a multimedia library of children's television programmes. Users can search a database of more than 500 programmes, view video clips and order sample CDs.

Kids' TV has grown from the work of the European Children's Television Centre (ECTC), a not-for-profit research organisation with more than 1,000 members worldwide.

Developing an electronic resource which is comprehensive, robust and responsive enough to meet the needs of the world's television industry calls for high investment. "At the start we were in a chicken-and-egg situation" says Elias Kyriakakis, managing director of Brainware, the partner responsible for the technical

direction and co-ordination of the project. "We couldn't get funding without a proof of concept and without funding, we couldn't build one!" Success in the INFO2000 programme has solved the initial financial problems, but there will still be a need for commercial funding to bring the project to market. Kids' TV's research suggests there is a world-wide audience of between 3,000 and 10,000 children's television specialists - programme compilers, research organisations, magazines and so on - who would be willing to subscribe to an on-line service of this kind.

Internet access to video clips, sample CDs and other services

Users can access Kids' TV (free of charge, for the time being) via an attractive web-site. The heart of the offering is the Kids' TV section where users can search for programmes available by language, target age group and a number of other criteria. Once they have found something that interests them, they can view a one minute video clip and make an on-line request for a sample CD, containing a 20 minute excerpt from the programme, to be mailed

to them. (Kids' TV will not get involved in the process of negotiation and programme purchase - once that stage is reached, the potential purchaser will contact the producer direct). The web-site also contains the Audiovisual Forum for Youth, where users can see how children rated the different programmes, and a media literacy section, where details of other organisations and training opportunities can be found.

Video streaming eliminates downloading delays

Though a simple-enough concept, Kids' TV makes high demands on technology because it must be resilient and fast to meet the needs of the industry. "We have spent a good deal of time searching for, testing and rejecting various tools to find the right solutions" says Kyriakakis - and he expects this to be an ongoing process. Underlying the site is a relational database integrated with multimedia capabilities.

Perhaps the most obvious technological challenge is speed of delivery and quality of reproduction of the on-line video clips. Kyriakakis explains "Digitising and compressing the clips in the normal way meant it took

about 16 minutes to download a one minute clip using a standard modem. Obviously this is too slow. Now we are using a technique called video streaming which allows the user to view the clip as it is being downloaded. This technique will work with a modem of 28.8 kilobits per second, which is now standard. Although the quality is a little lower, we believe this is the best method for the business user." In fact, Kids' TV will offer both methods to view the videos once the necessary conversion process for video streaming is complete. Another challenge, not yet solved but under study, is how to produce one-off sample CDs in the most cost-effective way.

Building content is the biggest issue

Extending and developing the content of Kids' TV is the biggest challenge and the responsibility of ECTC, based in Athens, but so far the response from ECTC members has been enthusiastic. Content providers will not be asked to pay for participation until 1999 at the earliest.

There is more targeted market research underway and the project team plans to publicise its work at a

number of industry exhibitions and to launch the site at the Television World Summit in March '98. By the second half of '98 they hope to be registering their first subscribers. That, says Kyriakakis, will be the time to secure commercial sponsorship for the project. "By then, we'll have a concrete product to show potential investors" he says.

Netscape: Main frameset --- Kids' TV Net

Back Forward Reload Home Search Guide Images Print Security Stop

Location: <http://www.ectc.com.gr/kidstvnet/main.html>



[Home](#)

[Search](#)

[Year of production](#)

[Country of origin](#)

[Language](#)

[Genre](#)

[Target audience](#)

[Submit](#)

[Evaluate](#)

[Contact info](#)

[About Kids' TV Net](#)

Search



Use this screen to customize your search. Fill all or some of the following fields and click on the "Start searching" button to see the search results.

TITLE _____

ENGLISH TRANSLATION _____

PRODUCTION COMPANY _____

COUNTRY OF ORIGIN

YEAR OF PRODUCTION

DIRECTOR

DISTRIBUTION COMPANY

TARGET AUDIENCE AGE : FROM TO

GENRE	EXPRESSIVE MEANS
<input checked="" type="checkbox"/> Fiction	<input checked="" type="checkbox"/> Reportage images
<input checked="" type="checkbox"/> Information	<input checked="" type="checkbox"/> Archive images
<input checked="" type="checkbox"/> Cartoons	<input checked="" type="checkbox"/> Amateur images
<input checked="" type="checkbox"/> Game Show	<input checked="" type="checkbox"/> Interview
<input checked="" type="checkbox"/> Variety	<input checked="" type="checkbox"/> Narration
<input checked="" type="checkbox"/> Music	<input checked="" type="checkbox"/> Commentary
<input checked="" type="checkbox"/> Educational programme	<input checked="" type="checkbox"/> Animation
<input checked="" type="checkbox"/> Talk Show	<input checked="" type="checkbox"/> Puppetry
<input checked="" type="checkbox"/> Experimental	<input checked="" type="checkbox"/> Sketches
<input checked="" type="checkbox"/> Sports	<input checked="" type="checkbox"/> Other
<input checked="" type="checkbox"/> Filler	
<input checked="" type="checkbox"/> Other	



European Children's
Television Center

Kids' TV Multimedia Information Network

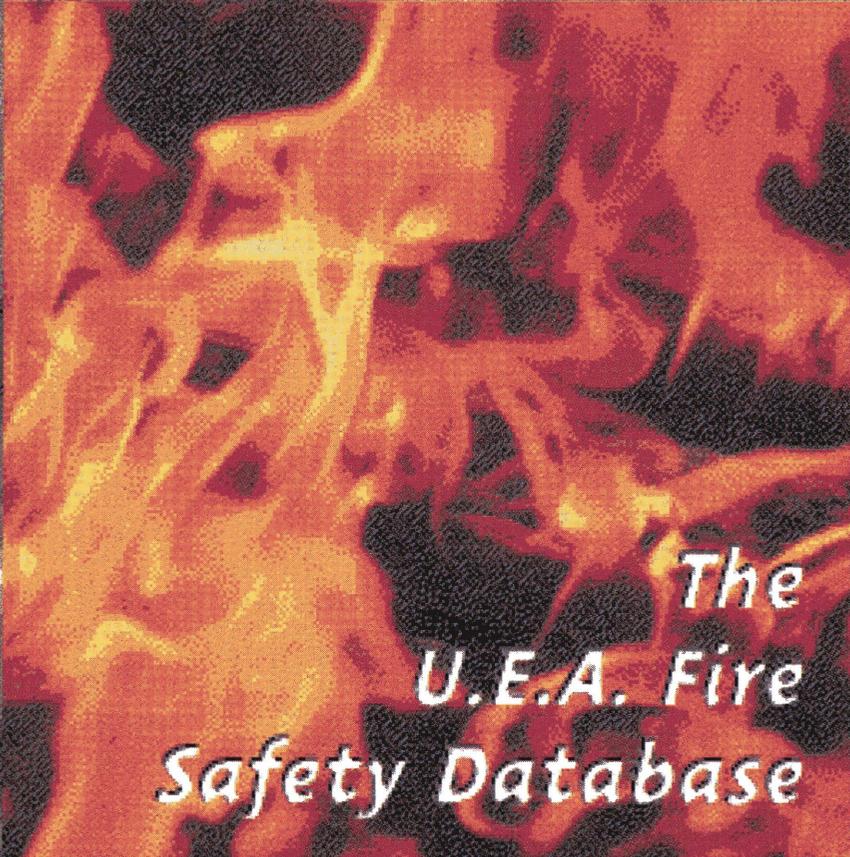
Visit Kids' TV at <http://www.ectc.com.gr>

Participants

Brainware, Athens, Greece (co-ordinator)
 Bourse Internationale des Co-productions, France
 European Children's Television Centre, Greece
 Norwegian Broadcasting Corporation, Norway
 Institute of Communication and Computer Systems (NTUA), Greece
 TV World magazine, EMAP Publishing Ltd, UK

Contact the co-ordinator

Katerina Stathis, R&D Manager
 Brainware
 105, Michalakopoulou
 Athens 11527, Greece
 Tel: +30-1- 7486590
 Fax: +30-1-7796593
 E-mail: kstathi@brainware.com.gr



*The
U.E.A. Fire
Safety Database*

Upholstered Furniture Ignition Resistance Data

In the absence of European legislation to harmonise requirements for fire resistance in upholstered furniture, this database of UPHOLSTERED FURNITURE IGNITION RESISTANCE DATA brings together a range of relevant information for the benefit of manufacturers, laboratories, wholesalers and consumers.

"There has been a real need for a comprehensive source of information on fire resistance requirements for furniture for a long time" comments Andrea Boggiano, project leader at the Union Européenne de L'Ameublement Communications (UAE) in Brussels, the co-ordinator of the project. "As well as national legislation and testing procedures, there are also particular requirements in some regional or city

jurisdictions" he explains. Making sure a fabric, filling or construction process meets legal standards in all its markets can be a time-consuming task, and undergoing mandatory testing is expensive. So it is in the interests of Europe's 7,000 or so upholstery manufacturers (many of them small businesses) to make sure they get things right first time.

The database provides a useful and authoritative market place for the European upholstery industry

The database developed by the expert organisations participating in this project should be a first port of call. It contains three main sources of information - the existing legislation itself, manufacturers' information and filmed examples of test procedures - on a CD-ROM incorporating photographs, film, text and voice-overs in a choice of languages. The legislation will be accessible from a map showing all the countries and cities covered (five European countries in the first edition, gradually extending to global coverage). Users simply click on the country or city to access the relevant documentation. They can also search the database for specific information, such

as details and suppliers of a particular filling or material. This information will be provided by manufacturers who are invited to provide information on their products for inclusion in the database, which will become a useful and authoritative market place for the industry. The database also offers commercial opportunities for some of these players - the consortium has already worked with one commercial sponsor to develop the prototype and paid advertising is an option. But, says Boggiano, all manufacturers will be able to supply key information to the database free of charge.

A commercial project with internet/extranet links

Users will pay an annual subscription for the database on CD-ROM, which will be updated and re-issued to subscribers every six months. Alternatively, subscribers will have the option of linking to a private web-site via the public internet using a password or via a private line, to get access to updated data on a regular basis.

Boggiano says that developing the database and the prototype has proved a considerable challenge.

"It's been a large co-ordination task and of course, everyone has the problem of fitting something extra in alongside their normal work. But a large project delivers a large experience and we all feel we have learnt a lot. We hope that in the next few years the small and medium sized enterprises which make up this industry will be able to benefit not only from the information contained in the database, but also from the experience it provides of multimedia technology."

Upholstered Furniture Ignition Resistance Data (UFIGREDA)

Visit UFIGREDA at [http:// www.U-E-A.com](http://www.U-E-A.com)

Participants

Union Européenne de L'Ameublement
Communications, Brussels, Belgium (co-ordinator)
Manifestation Etudes et Développement des
Industries Francaises, Paris, France
e-COM, Zwijnaarde, Belgium
Laboratorio Prevenzione Incendi s.r.l., Prato, Italy

Contact the co-ordinator

Bart de Turck
Union Européenne de L'Ameublement
Communications
Rue Royale 109-111
1000 BE Brussels, Belgium
Tel: +32 2 218 18 89
Fax: +32 2 219 27 01
Email: bart.de.turck@infoboard.be

Electronic Image Safe Service

ELECTRONIC IMAGE SAFE SERVICE (EISS) is an independent copyright registration and reference pool that links providers and users of images and visual material. The tool will help small and medium enterprises move into the new era of digital archiving and trading.

The digital age represents a real threat to photographers and originators of images who stand to lose control of their work as it can be transmitted and reproduced more easily than before. The objective of EISS is to safeguard the rights of authors while giving

them access to the electronic market place which is the future of the industry. At the same time, EISS will also make it easier for small and medium-sized businesses (SMEs) who use images to find the material they need.

A network of servers and service centres creates a powerful business tool

The EISS project co-ordinator is Marion Wedekind, manager and president of Transglobe Agency, a photographic agency in Hamburg, Germany. She wanted to take advantage of existing image and text data held by archives, agencies, museums and other organisations. Her idea was to build an electronic tool which could be used by individual content providers and companies too small to build large databanks themselves.

The project participants recognised that the time was right to create such a system, but soon realised that the industry did not have the resources to fund it. So financial assistance from INFO2000 has helped to build a tool which will bridge the technological gap between users and providers.

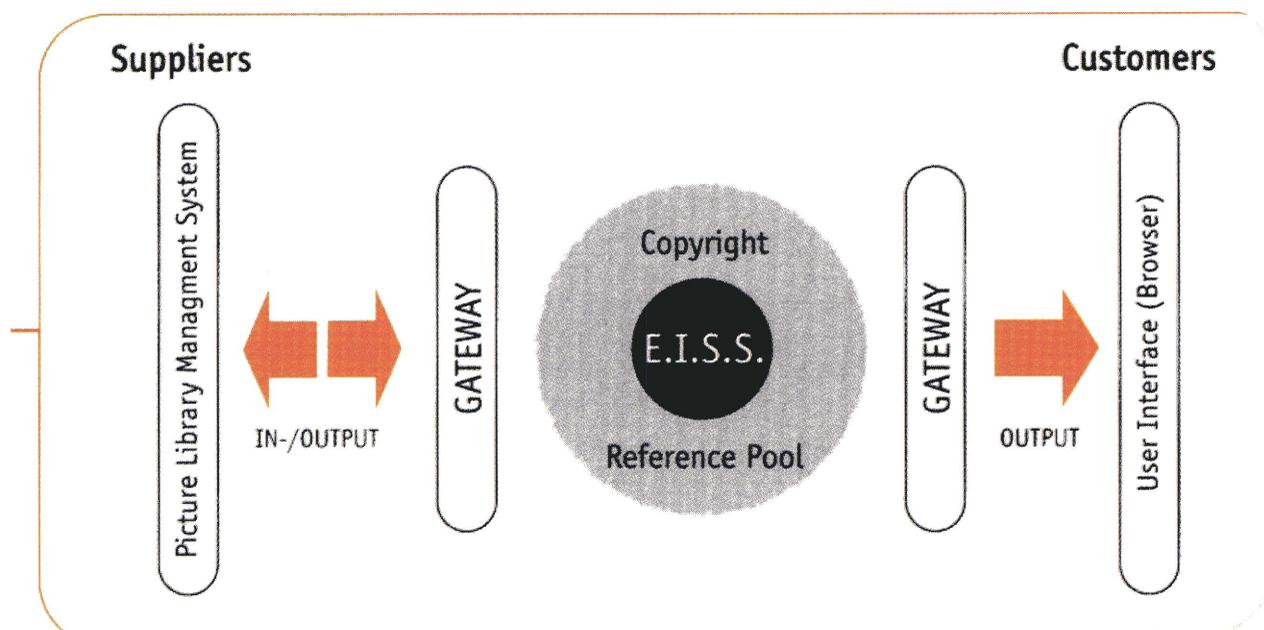
Doing business via EISS

Users can search for images using the EISS search engine and browser technology and view the materials in low resolution versions. The system also contains names and contact details for sources and authors, so users can contact the rightsholders. They can also check previous use of the specified material. EISS will only provide information on originators. The user will have to negotiate conditions of use and terms of delivery and payment with the originator or his/her rightsholder by conventional means. Says Wedekind "theoretically it would be possible to store high-resolution data in special storage. This high-resolution data could then be delivered directly on receipt of a password or day code from the rightsholder after negotiation to use the material.

The EISS databases can be accessed by authors and providers through an infrastructure of EISS Service Centers with servers and gateways. Because open standards are used, existing image databases can link their inhouse systems through gateways to the EISS databases. The databases will be run on behalf of users by 'trusted third parties' such as telecommunications organisations or service companies. The EISS database itself will be managed by a board of members drawn from interested professional organisations. Users will pay the EISS service centres for a range of services such as scanning, digitising, and storing low resolution images on the database. The intention is to keep the rates charged for these services as low as possible, to stimulate use of EISS and enable the authors and originators to offer their work more widely.

Payment could also be made electronically. This is not one of the current goals of EISS, but it could develop for specific uses, such as for layouts and design work."

Wedekind stresses that the most immediate challenge of the project is to convince content providers of the benefits of EISS. "The photo industry is facing a total restructuring and authors are rather unsure what to do" she says. "It needs a lot of persuasive power to convince them that EISS is a good tool for them to keep control of their work. But this attitude is bound to change once the authors realise how eager their clientele is to get EISS rolling. This clientele, the publishers and advertisers, can hardly wait for the advent of EISS, because it will make life much easier for them."



Electronic Image Safe Service (EISS)

Visit EISS at <http://www.pira.co.uk/EISS/eiss.html>

Participants

Transglobe Agency GmbH, Hamburg, Germany
(co-ordinator)

Image Finder Systems AG, Zurich, Switzerland

IKAWIEN, Institute of Classical Archaeology,
University of Vienna, Austria

Pira International, Leatherhead, UK

Copy + Right e.V., Hamburg, Germany

Contact the co-ordinator

Marion Wedekind

manager/president

Eimsbütteler Chaussee 21-23

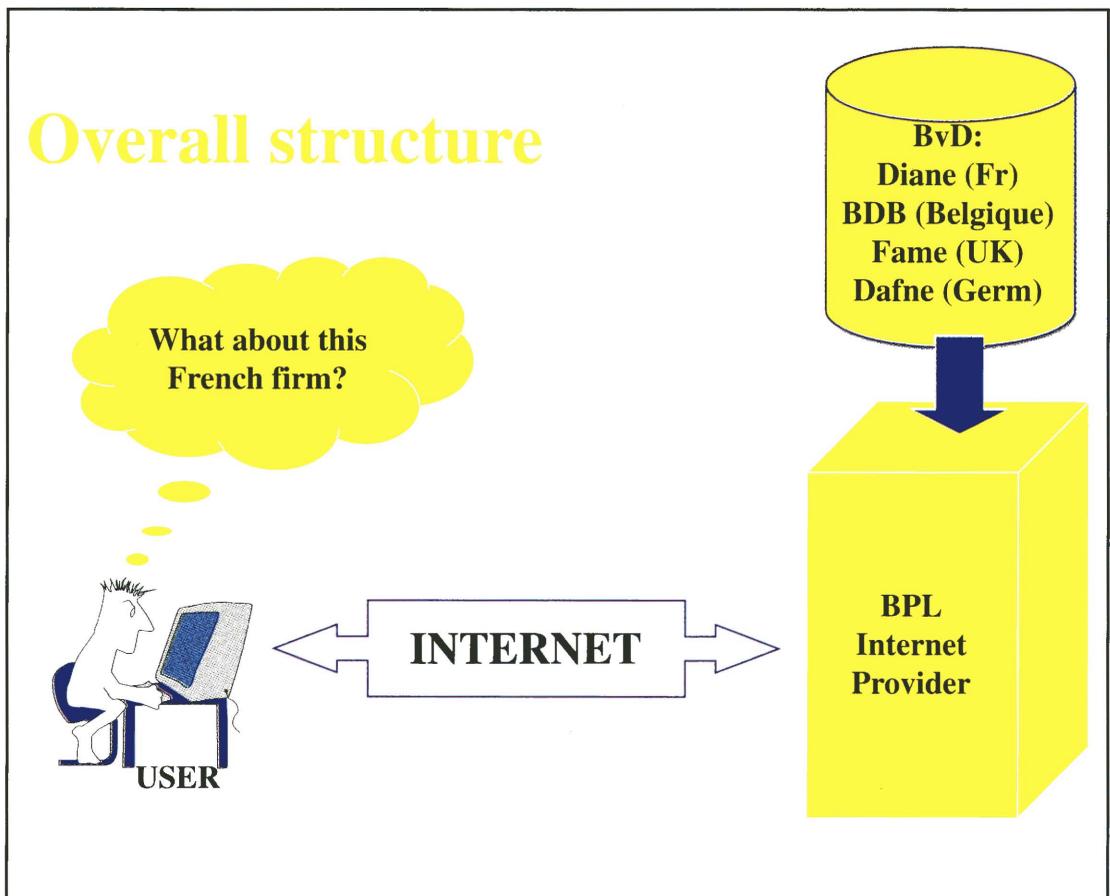
Hamburg, Germany

Tel: +49 40432 99 200

Fax: +49 40 43 31 21

Email: info@tg-online.com

Overall structure



Multimedia European Multicultural Internet Financial Consulting and Diagnosing in SMEs Contexts (PLEXUS)

Participants

Ordimega, Paris, France (co-ordinator)
Banque Populaire de Lorraine, Metz, France
Bureau Van Dijk - Management Consultants,
Brussels, Belgium
Forschungszentrum Karlsruhe GmbH, Karlsruhe,
Germany

Contact the co-ordinator

Patrick D. Senicourt
head
Ordimega
89 Avenue de Wagram
75017 Paris, France
Tel: +33 1 42 67 52 56
Fax: +33 1 42 67 00 06
Email: psenicourt@ordimega.com

Multimedia European Multicultural Internet Financial Consulting & Diagnosing in SME's Contexts

The objective of PLEXUS is to give small businesses easy access to the financial data they need when considering partnerships, joint ventures and co-operation with other European firms. With Plexus, they can access the information via the internet and customise it for their needs.

Plexus brings together two businesses with complementary strengths. Project co-ordinator Patrick Senicourt has been developing financial analysis software for SMEs (small and medium-sized enterprises) for many years. Bureau Van Dijk is a Brussels-based company which holds financial information on over 1 million European businesses. Together with their other consortium partners, they are combining their products to build an internet-based service for financial information search and analysis which will enable SMEs to get the financial information they need in a format they can understand and use.

Patrick Senicourt explains "Plexus is an interactive client consultation module which will enable an SME to access an internet server and complete a financial analysis in his or her own language and to local accounting and tax formats." Initially Plexus will be

available in English, French and German, and in addition to the system itself, an on/off-line computer-based training package will be available, with ten hours of tutorial to help users get the most out of the service.

A Plexus enquiry has three main steps. It will take just a few minutes to access the internet provider and select a target company for study from the database. Then, the financial data will be brought up on screen allowing the user to make a quick evaluation using figures and graphs. The third step involves in-depth analysis of the material according to the user's need and the complexity of the company under evaluation. Users will pay for the service either on a pay-per-use basis, or by a variety of subscription options.

Risks and potential of being ahead of the market

The consortium commissioned an independent analysis which suggested a good potential market for Plexus in the initial target areas of France and Germany. However, there are risks associated with implementing a system dependent on very new technology. How quickly will the potential SME users equip themselves for communication via the internet? When will the transfer speed rate reach an efficient level, and will the expected payment mechanisms for small transactions develop as quickly and smoothly as hoped? The consortium has no control over these issues, which could affect the rate of take-up of a product for which there is a clear need. With no known direct competitors, the consortium faces the risks as well as

the benefits of being ahead of the market. Even taking into account the existing resources of the two content providing partners, which represent around twenty years of work, the development of the Plexus system is expensive and time-consuming. Says Senicourt "there are difficulties in working at a distance and the involvement with the European Commission adds another layer of administration. But as a consortium we have great respect for and confidence in each other's skills." The support from INFO2000 does not solve all the financial headaches either, as bank guarantees must be provided which are onerous for the small businesses involved.

A multimedia approach to marketing

Another important area of the project is the marketing plan. The presence of the partners Forschungszentrum Karlsruhe and Banque Populaire de Lorraine will be valuable for marketing Plexus to SMEs and their banks, advisors and consultants. "Banque Populaire will provide a first showroom for Plexus to the European banking system" says Senicourt, "while Forschungszentrum Karlsruhe has wide experience with SMEs." Bureau van

Dijk has outlets in most European countries and in addition, the internet itself is an invaluable marketing tool which should allow the consortium to reach a very wide audience.

All in all, the consortium is enthusiastic about Plexus and convinced it will accelerate business evaluation, negotiation and decision making for its future users.

Polar Perspectives

POLAR PERSPECTIVES tells the stories of the Arctic and Antarctic in a wide-screen presentation of satellite-derived images and animations.

Polar Perspectives brings multimedia into the exhibition hall, and science into the art gallery! The Polar Interactive Theatre has made its debut at an exhibition at the Kunst- und Ausstellungshalle der Bundesrepublik Deutschland (KAH) in Bonn, Germany as part of a major exhibition, Arktis-Antarktis about polar science, history and ecology.

Satellite data has been used by consortium partners Planetary Visions Ltd and Zentrum für Luft- und Raumfahrt e.V., to produce stunning animations, visualising the polar regions from space. The Polar Interactive Theatre combines these animations with eight documentary films projected onto three large video screens, to surround the visitor with the polar environment. The visitor can select which stories he or she would like to see from an interactive console. The topics are: ozone depletion, polar topography, sea ice fluctuations, the ice ages, animal migration, magnetic

poles, ice shelves and polar seasons. Video, stills, animation, music and voice are used to present these specialised subjects in a way that is attractive to a general and a professional audience. With such a huge amount of material available to the project from consortium partners Alfred-Wegener-Institut für Polar- und Meeresforschung and Deutsches Klimarechenzentrum it was difficult for the production team to decide which material to keep.

The Polar Interactive Theatre uses the most advanced multimedia technology and production skills to create animations of a unique quality. The animations themselves are complemented by the advanced video work - editing the presentation for three video screens has been a complex task for London-based Binary Interactive Solutions. To show the finished result, a multi-stream hard-disk video playback system from Tektronics is being used.

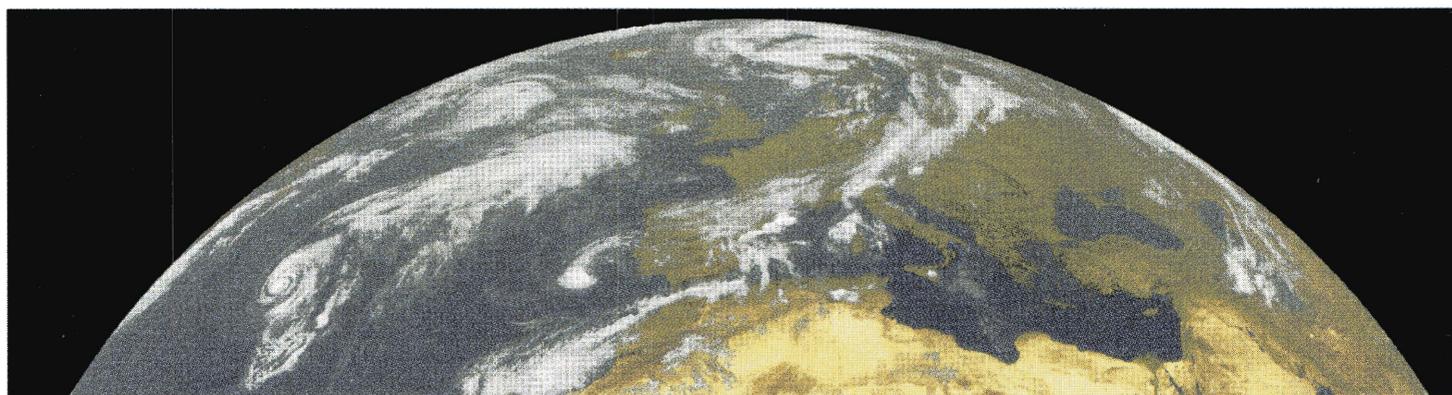
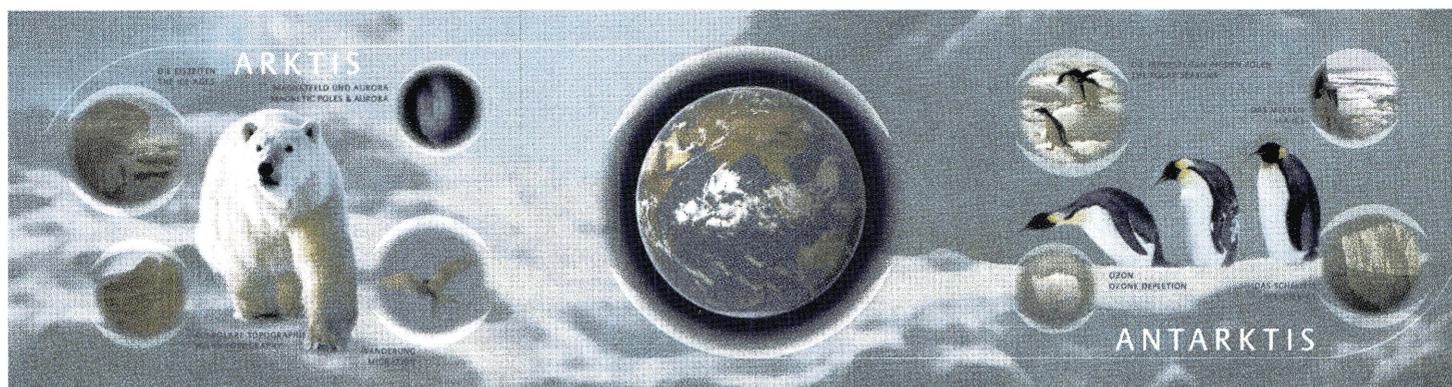
Bonn exhibition will be the first of many opportunities to see the Polar Interactive Theatre

The Bonn exhibition will provide the first show-case for the work, which the consortium is confident will prove a commercial success as well as a cultural one. There is sure to be great demand from other cultural and scientific institutions to present the project. The soundtrack for the first version is in German and English, but local language translations will be added as needed.

The consortium has also decided to produce a related CD-ROM, a Polar Internet Service, a Visualisation Library and a Geoinformatics Conference. The visualisation library will make the exceptional computer graphics of Polar Perspectives available for use by documentary film-makers, multimedia

developers and print publishers. The conference is a forum for promoting the use of multimedia and new visualisation methods in geographic information. It will provide an opportunity for professional users of geographic information to discuss co-operation and markets for advanced geoinformatics on an international level.

The Polar Internet service and the CD-ROM will bring the material to everyone who wants to see it. Links to educational programmes for schools and universities will also be developed. In these ways, the consortium will continue to promote the content it has developed, to educate, inform and delight.



Polar Perspectives (Arctic2)

Visit Polar Perspectives at <http://www.kah-bonn.de/1/16/0.htm> (German version) and www.kah-bonn.de/1/16/0e.htm (English version)

Participants

Kunst- und Ausstellungshalle der Bundesrepublik
Deutschland, Bonn, Germany
(co-ordinator)

Alfred-Wegener-Institut für Polar- und
Meeresforschung, Bremerhaven, Germany

Binary Interactive Solutions Limited, London, UK

Deutsches Klimarechenzentrum GmbH, Hamburg,
Germany

Deutsches Zentrum für Luft- und Raumfahrt e.v.,
Wessling, Germany

Dyring Production AB, Uppsala, Sweden

Planetary Visions Limited, Cowfold,
West Sussex, UK

Contact the co-ordinator

Dr Wenzel Jacob
director

Kunst- und Ausstellungshalle der Bundesrepublik
Deutschland

Friedrich-Ebert-Allee 4

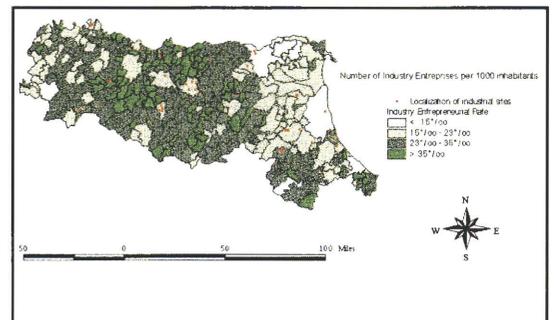
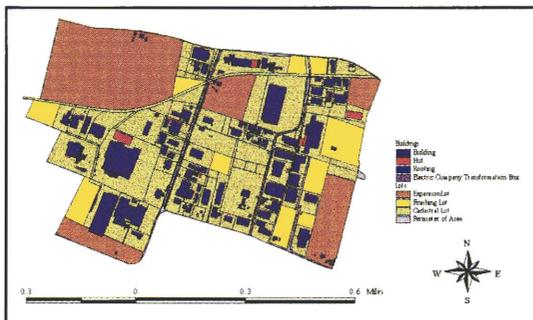
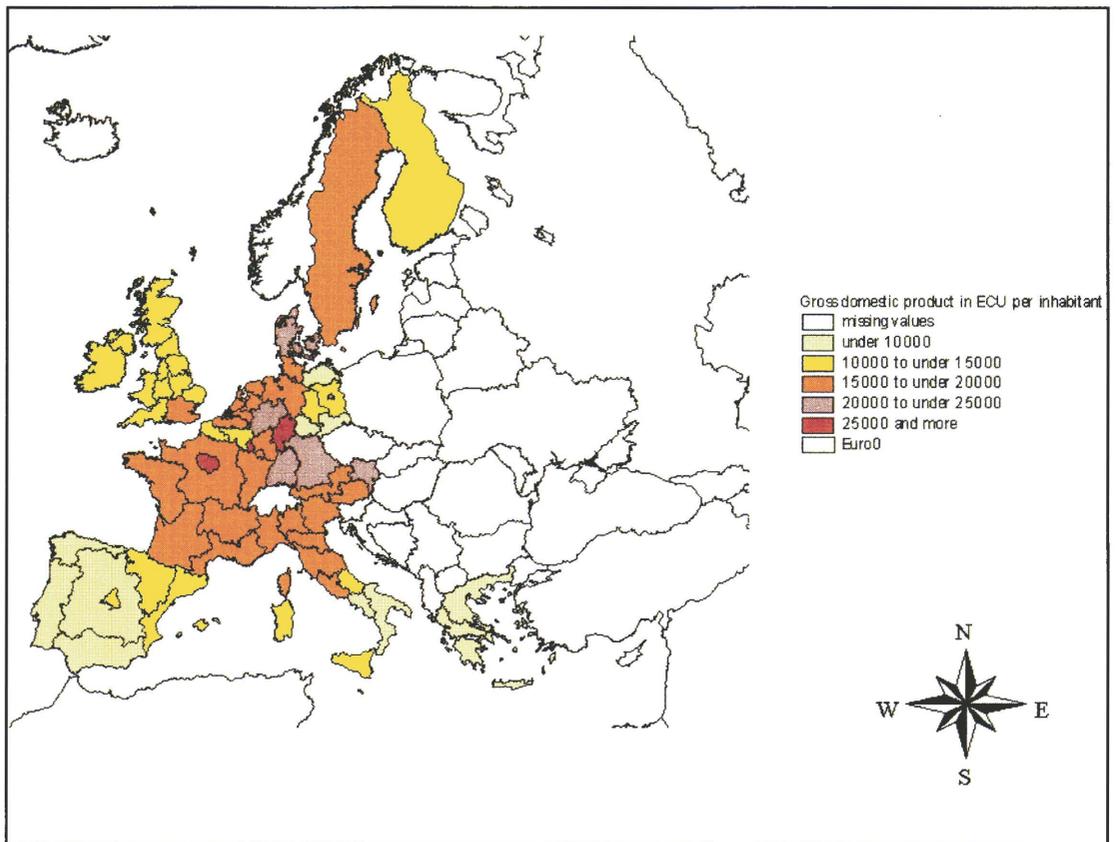
Bonn D-53113

Germany

Tel: +49 228 9171-0

Fax: +49 228 9171-231

Email: arktis@kah-bonn.de



Territorial Multimedia Information System on Industrial Areas (TEMISIA)

Visit TEMISIA at <http://thales.iacm.forth.gr/temisia>

Participants

ERVET - Politiche per le Imprese - Spa, Bologna, Italy (co-ordinator)
 Österreichisches Institut für Raumplanung, Vienna, Austria
 Welsh Development Agency, Cardiff, UK
 Foundation for Research and Technology - Hellas, Heraklion, Greece

Contact the co-ordinator

Roberto Montanari
 ERVET
 Via Morgagni, 6
 1-40122 Bologna, Italy
 Tel: + 39 51 6450411
 Fax: + 39 51 222352
 E-mail: rem@ervet.it
 web address: <http://www.ervet.it>

Territorial Multimedia Information System on Industrial Areas (TEMISIA)

The TEMISIA project team is developing a web-site to promote investment in European industrial areas. One exciting aspect of this project is the innovative combination of geographic information system (GIS) tools and web functionality.

TEMISIA (Territorial Multimedia Information System on Industrial Areas) will be a rich source of data not only on individual investment opportunities in various European locations, but also on the geographic and economic characteristics of each area. During the implementation phase, the team is focusing on developing content for the four areas represented by

the project partners - Crete in Greece, Emilia-Romagna in Italy, Niederösterreich in Austria and Wales in the UK. "Eventually we want to promote any European industrial area or site that has defined an inward investment policy" says operational project manager Roberto Montanari.

Early market analysis has identified 60 potential information providers to TEMISIA

To attract as many end-users as possible the web-site must be freely accessible, so funding will eventually need to come from the areas promoted by TEMISIA. Early market analysis has identified 60 organisations such as regional development agencies, industrial site developers and local administrations that have shown

interest in becoming potential information providers to TEMISIA. The team also plans to seek funding from sponsor organisations, such as banks, consultants and other business service providers operating in the selected areas.

Harmonising data for presentation by TEMISIA is a major objective and challenge

One of the main objectives of TEMISIA is to add value by presenting data in a standard format so that it can be compared and used by visitors to the web-site. This data organisation task has already presented quite a challenge, says Montanari: "The differences in administrative organisation across Europe are quite stark and reorganisations may not respect previous geographic boundaries, giving problems with obtaining consistent data over a number of years" he says. Dealing with different data formats, harmonising the information presented and proactively managing the site will involve a major commitment, the team recognises. TEMISIA will provide a range of services to its information providers including running the site, regularly updating the data and promoting it to end-users.

As well as viewing tables of comparable data, the TEMISIA user can create thematic maps and query the system to understand which areas meet his or her needs. Then he or she can select information and overlay it on a map of a particular area to understand more clearly the propositions and opportunities presented (the data and maps can also be easily downloaded into reports and proposals). To achieve this, the project team needed a web-enabled geographic information tool, but the one they planned

to use for the prototype development was late to market. This fundamental problem was only solved in time for the INFO2000 programme evaluation when the Greek partner organisation, The Foundation for Research and Technology, itself developed the necessary software - called GAEA Map Server. Sourcing the maps needed in digital format has already thrown up some formidable copyright barriers.

Montanari says, however, that good collaboration between the international partners has made it possible to resolve all these issues. "The strength of our alliance is that the TEMISIA idea is directly relevant and useful to each of the partners, and as a group we have not been afraid to let the concept evolve" he says.

During the implementation phase the TEMISIA team will be working on a number of aspects in parallel. Montanari has a list: "We need to do user testing and revise the prototype; develop the data content for Crete, Niederösterreich and Wales and start to contact our future clients to enrich the TEMISIA content still further." An international conference to promote the web-site to end users is also on the agenda.

Alpine Guide Italia – Deutschland – Austria (AIDA)

AIDA is a multimedia Alpine touring guide. Tourists can use the guide to plan their trip, collect information and see pictures and video-clips of places along their route.

This internet-based guide helps tourists plan their excursions in Alpine regions of France, Germany, Austria and Italy by providing detailed maps combined with information about distances, walking conditions, bed and breakfast facilities and other valuable data. Through an easy-to-use graphical interface, routes can be selected as fixed tours or according to individual

specifications (such as the degree of difficulty, the distances between stops, and so on). Pictures and video-clips are available of particular tourist attractions and beauty spots. Once selections have been made, the user can print out or store maps, elevation profiles, lists of stop-overs and other data to make their own tour-books.

Adding time-critical information and weather reports

Users will be able to enrich the static data distributed on CD-ROM by linking to a web-site for weather reports, avalanche warnings and the like, and to update some of the map details. AIDA has been developed using the internet-programming language Java, so eventually the complete product could be delivered over the internet. For the time being, speed of data transfer is too slow to make this an efficient

way to transfer the large amounts of data required for the maps themselves.

An interface will be developed for data-transfer to a hand-held GPS (global positioning system) receiver, so users can check if their actual path is still on the route suggested by AIDA.

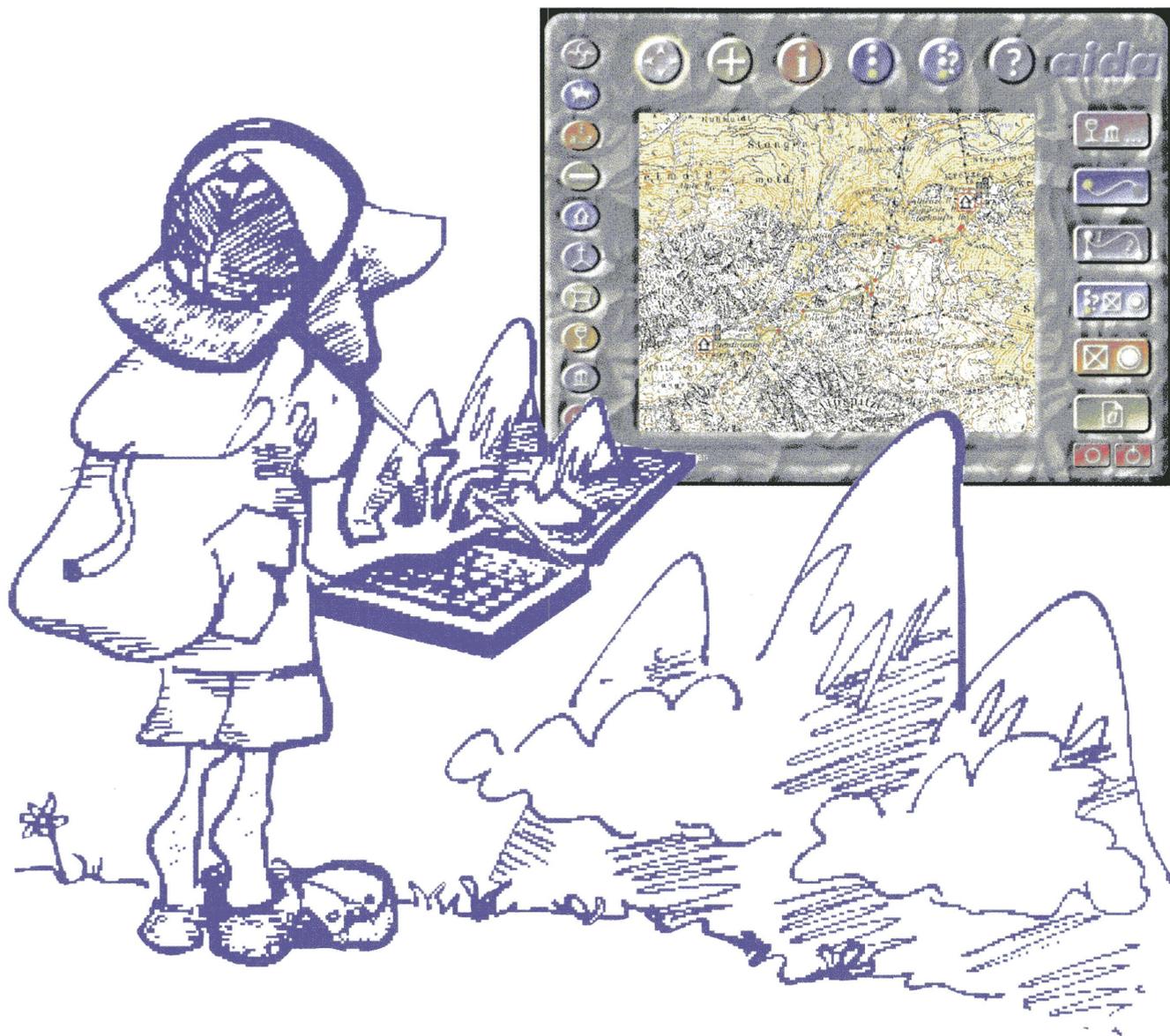
Harmonising data on cross-border regions

AIDA combines high quality digital maps acquired from the national mapping agencies with tourist database information and data specially provided by the European Alpine Clubs. Initially AIDA will cover three Alpine regions (Germany/Austria, Austria/Italy and France/Italy) with four CD-ROMs for each region.

At first, problems were also encountered with researching the specialist local data. It proved much too costly to research this independently, so the contribution of the Alpine associations, as well as the local tourist information offices, is invaluable. This data still needs to be edited, a task undertaken by consortium partners Mapgraphic Edition and Sparrer.

The biggest challenge of this project has been the need to standardise the data available from the different national mapping agencies for the cross-border regions covered. This has been the task of the GIS working group of the Universität der Bundeswehr München, led by Professor W Caspary. Monika Mösbauer, a group member, comments "we had to adjust all the heterogeneous data so they could be processed on a common basis in the application." Five types of data were involved - raster and vector mapping information, elevation grid, specialist data from the Alpine Clubs (cross-country ski courses, huts and so on) and tourist data.

AIDA will be one of the first commercial applications of official digitised geographic data. Says Monika Mösbauer "for some time now, all European countries have been spending a great deal of money on capturing basic data in digital form. Unfortunately, almost no commercial use is made of this data. The AIDA Multimedia Touring Guide uses the official collection of geographical data and standardises them across national borders. The user gets a uniform, transnational stock of information at his or her disposal."



Alpine Guide Italia - Deutschland - Austria (AIDA)

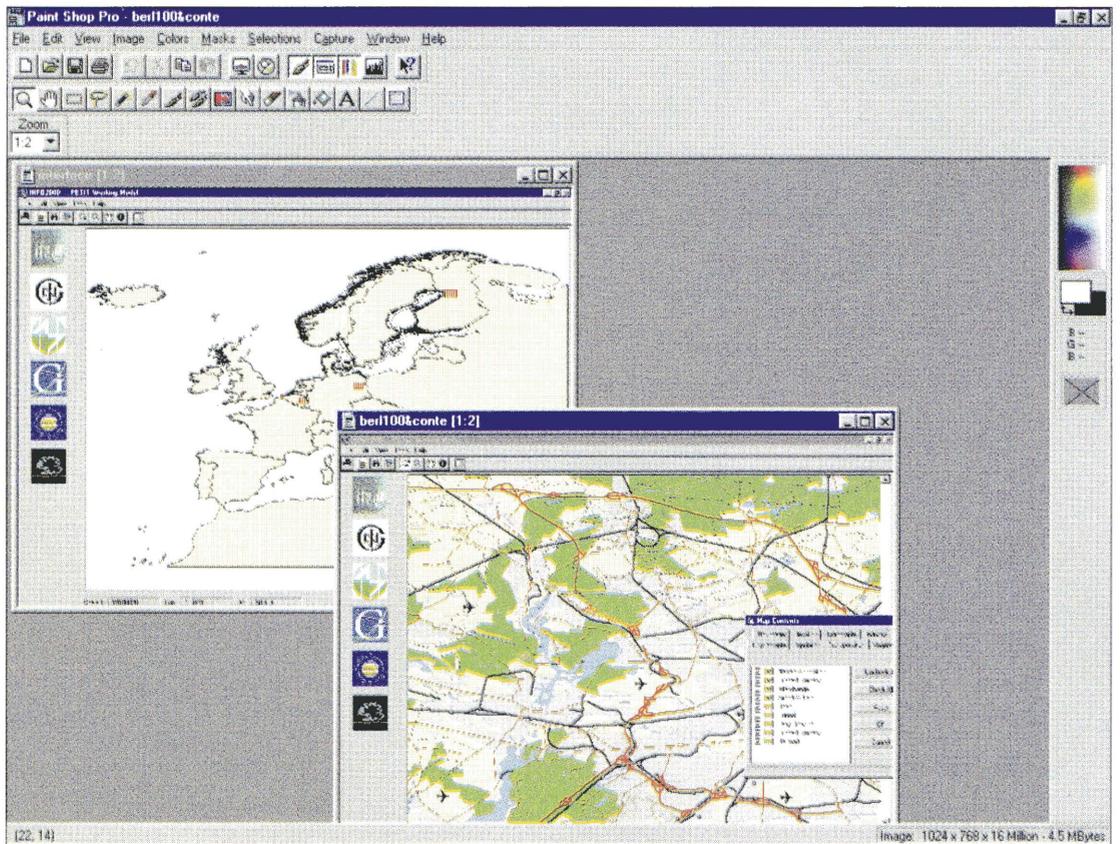
Visit AIDA at <http://habicht.bauw.unibw-muenchen.de/inggeo/agis/aida.htm>

Participants

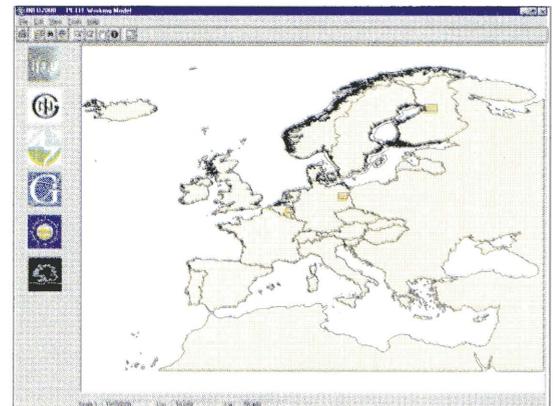
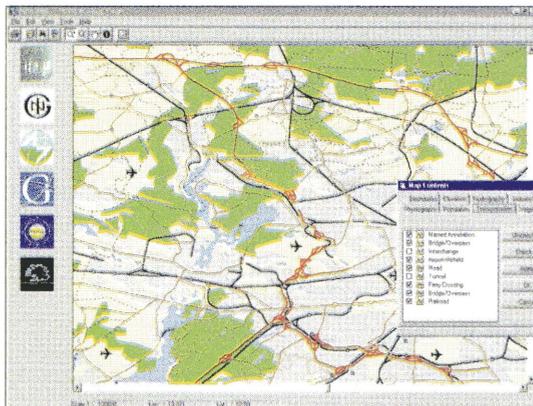
Huber Kartographie, Munich, Germany (co-ordinator)
 Universität der Bundeswehr München,
 Arbeitsgruppe GIS, Munich, Germany
 Gräfe und Unzer, Munich, Germany
 Mapgraphic edition, St. Paul, Italy
 Sparrer Kartographie, Munich, Germany

Contact the co-ordinator

Franz Huber
 Huber Kartographie
 Dürstrasse 1
 D-80992 Munich, Germany
 Tel: +49 89 14160-31
 Fax: +49 89 14160-37
 Email: Hermann.Lechner@compuserve.com



picture courtesy of NATO VMap



Pathfinder Towards the European Topographic Information Template (PETIT)

Visit PETIT at <http://www.megrin.org/petit/petit.html>

Participants

MEGRIN, Saint-Mandé, France (co-ordinator)
 Institut Géographique National, Paris, France
 Ordnance Survey, Southampton, UK
 Topografische Dienst Nederland, Emmen, The Netherlands
 The Data Consultancy, Reading, UK
 Générale d'Infographie, Le Pecq, France
 Institut für Angewandte Geodäsie, Frankfurt am Main, Germany
 Institut Géographique National, Brussels, Belgium

Contact the co-ordinator

Olav Eggers
 project manager
 MEGRIN GIE
 6-8 Avenue Blaise Pascal
 Cité Descartes
 Champs sur Marne
 F77455 Marne-la-Vallée Cedex 2
 Tel: + 33 1 64 15 32 78
 Fax: + 33 1 64 15 32 19
 Email: olav.eggers@megrin.org

Pathfinder Towards the European Topographic Information Template

PATHFINDER TOWARDS THE EUROPEAN TOPOGRAPHIC INFORMATION TEMPLATE (PETIT) is a project to assess the market requirements for pan-European digital map information.

MEGRIN, the co-ordinating organisation for the PETIT project, was established in 1993 by 19 national mapping agencies to carry out projects of common interest. These include defining and preparing standardised map information covering Europe from the different data-sets held by the

national mapping agencies (NMAs). "Since the creation of pan-European core data-sets is one of the INFO2000 Programme's main objectives, PETIT was a perfect candidate for the programme" suggests Pasi Pekkinen, project manager for the first phase of the PETIT project.

A complex project with a straightforward objective

PETIT is a technically and organisationally complex project, but behind it is a straightforward objective. Pekkinen explains: "at the moment there are few international geographic data-sets, so if you want information for a project or event that crosses European boundaries you have to go to a number of NMAs to get the data you need. The data you get may not always be consistent across borders, but even if it is, the process can be extremely time-consuming and complicated. What we want to do with the PETIT project is to produce a set of basic

European topographic data which is not application specific, for users to test in their own applications."

The plan is to make the test-data available on CD and via a demonstrator site on the World-wide Web to facilitate testing by as wide a user base as possible. Potential users include commercial publishers and producers of map-related products and agencies involved in pan-European planning, including the European Commission.

"By reducing the technical challenges we increase the organisational complexity"

The prototype data-set will provide a block of data covering parts of England, France, Belgium, the Netherlands and Germany. At time of writing, MEGRIN is awaiting results from work by a NATO group on a military project for world map coverage called NATO VMap. Says Pekkinen "We may be able to use this work. If we can, it will decrease the technical demands on the PETIT project, but there will be a corresponding increase in the organisational complexity, because of the need for negotiations with the individual military agencies involved as well as the NMAs." - In fact, copyright issues represent the major

challenge for the PETIT team, since ultimately between 15 and 30 countries will become involved. "Having good partners within the consortium and direct links to the 34 NMAs in Europe is critical" says Pekkinen, "but these issues are still a challenge!"

The prototype data will be ready for market testing in October '98, and one of the consortium partners, The Data Consultancy, will be responsible for ensuring it gets to as many potential users as possible. Whether or not a small fee will be charged for use of the data is yet to be decided.

A feasibility study leading to a detailed business case

The purpose of PETIT is not, at this stage, to produce a commercial product, but to define a product that will actually be useful to the market. This is important, says Pekkinen, because of the high costs and complexity of the proposition "we have to

know that the end-result is what is wanted." In addition, the project will also specify how to produce such a product and how to market, price and distribute it. In sum, a detailed business case for a European topographic data-set.

European Spatial Metadata Infrastructure

The ESMI project will establish a one-stop shop for sharing data about geographic information via the World Wide Web. The European Geo Market Square will stimulate the use of geographic information in the region.

We all use geographic information constantly, holding simple maps and plans in our heads and more complex ones on paper. Governments, businesses and individuals are also making increasing use of digital geographic information for a wide variety of tasks, such as planning, building, maintenance, insurance issues, marketing and

logistical tasks. As well as these end-users, there is a growing industry of private and public publishers of computer-based geographic information. But finding the right information at the right time can be difficult. How do you know what is available across a geographic region like Europe and how do you access it?

Linking users and providers of European spatial information

ESMI, a consortium of partners from four European countries, sets out to help with these problems in two ways. Firstly, the consortium is building an infrastructure to link the various users and providers of European spatial information. Secondly, the group is developing tools and mechanisms to deliver the metadata via an interactive service on the World Wide Web. (Metadata is data about data, or a description of the information itself - for example, which data sets exist and how to locate them.)

The primary user market encompasses governmental organisations on different levels, research and educational institutions, and the private sector. The widest view of the user market is the domain of all Internet users, currently estimated at fifty million and with continued growth. Providing information about geographic data will stimulate its use among current and new users.

Geo Market Square shows what is available

The web service will offer a user interface, based on browser technology, in all European languages. All metadata columns (the search fields) will be presented in any language listed. This interface will connect users to the Geo Market Square, where different "shops" will show what is available. Technically, the user connects to a communication gateway, capable of transmitting an enquiry to the different web servers in the distributed infrastructure. Users will be able to have instant access to listings of geographic information available, conduct searches based on keywords and geographic references, get acquisition information about purchase and licensing requirements for the data on offer, and look at sample data. Hyperlinks to other metadata services will ensure overview of the market.

clearinghouse. There is a number of existing metadata initiatives for geographic information in Europe. They do not communicate so there is some duplication which gives rise to inconsistency. ESMI has the objective to link these existing and future metadata systems.

ESMI will make technical instruments available to the national bodies for setting up national clearinghouses and integrating these clearinghouses into a European

Professor dr Henk Scholten, chief executive officer of GEODAN IT, is co-ordinator of the project. "The concept of the Geo Market Square is based on the vision of a one-stop shopping place where all needs can be satisfied. Every user finds what the market offers. To facilitate the user in finding the best solution for a problem, the Geo Market Square is enhanced with search capabilities, like a catalogue. In this catalogue geographic data are described by metadata. After finding interesting metadata, such as geographic extent, price, availability, precision, etcetera, the user can easily decide which 'shop' to go to."



ESMI

European Spatial Metadata Infrastructure (ESMI)

Visit ESMI at <http://esmi.geodan.nl>

Participants

GEODAN IT BV, Amsterdam, The Netherlands
(co-ordinator)

European Umbrella Organisation for Geographical
Information (EUROGI), Amersfoort, The Netherlands

CNIG, Lisbon, Portugal

MEGRIN GIE, St Mandé, France

LISITT, University of Valencia, Valencia, Spain

Contact the co-ordinator

Betty Bonn, senior consultant
Geodan IT BV

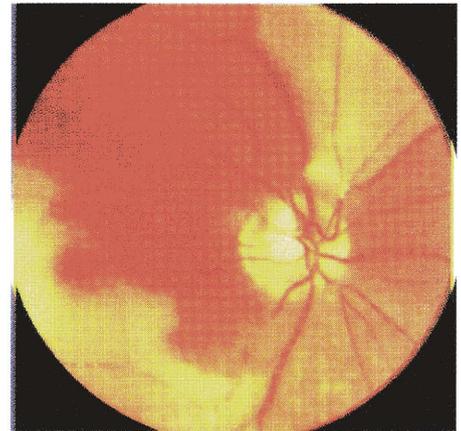
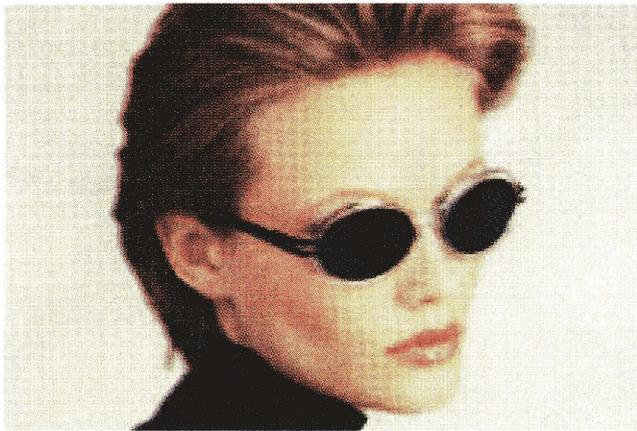
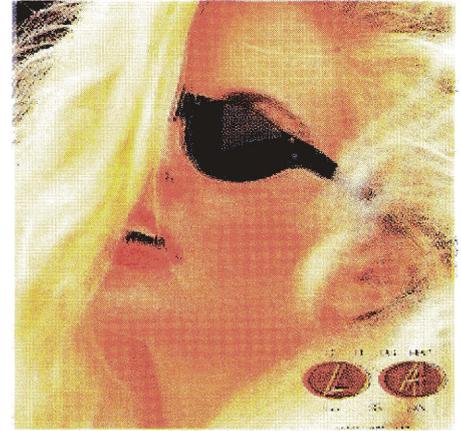
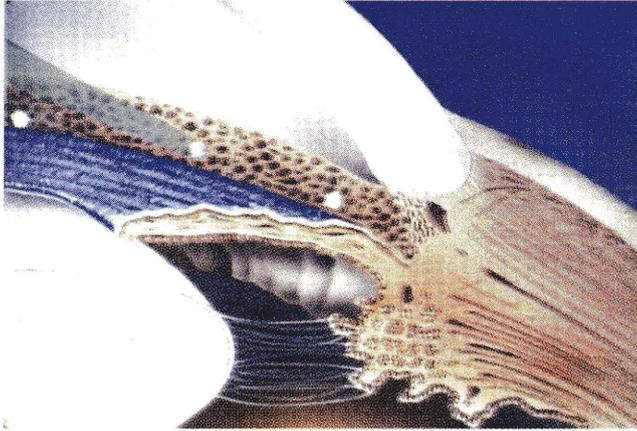
Jan Luijkenstraat 10
Amsterdam

The Netherlands NL-1071 CM

Tel: +31 20 5707300

Fax: +31 20 5707333

Email: betty@geodan.nl



Optical Professional Trade and Individual Multimedia Information Service for Europe (OPTIMISE)

Visit eyeworld at <http://www.eyeworld.com>.

Participants

Radcliffe Interactive/Radcliffe Medical Press,
Abingdon, Oxford, UK (co-ordinator)

Ariete Salute s.r.l., Milan, Italy

The College of Optometrists, London, UK

International Resource Centre, The International
Centre for Eye Health at the Institute of
Ophthalmology, University College London, UK

Lavaredo s.r.l., Pieve di Cadore, Italy

Oxford Computer Services, Oxford, UK

Contact the co-ordinator

Peter Ashby

managing director

Radcliffe Medical/Radcliffe Interactive

18 Marcham Road

Abingdon

Oxford, UK

Tel: +44 1235 537040

Fax: +44 1235 528830

Email: pashby@magiceye.win-uk.net

Optical Professional Trade and Individual Multimedia Information Service for Europe

OPTIMISE is a one-stop shop for information about eyes and eyewear which meets a growing demand for easily-accessible, up-to-date healthcare information.

When the idea of OPTIMISE was conceived in 1996, the internet was still a very new communications channel, but members of a small team at Radcliffe Medical Press in Oxford, UK set up a sister company, Radcliffe Interactive, because they saw the internet's potential as both a commercial and health-education medium in the context of eyecare. Peter Ashby, project co-ordinator and managing director of Radcliffe Interactive recalls the dilemma: "The complexity of dealing with diverse suppliers of IT and multimedia services, many with immature

businesses, stood in the way of our making a clear business case. However, if the tremendous opportunities were not taken, they would certainly be missed. A catalyst was needed." The catalyst came from a group of eyewear manufacturers who were being pushed for this type of information reference and communications tool by their US sales outlets, while funding from INFO2000 enabled the concept to grow in scope. Now Radcliffe Interactive has succeeded in bringing together the content providers and key communicators needed for success.

An interactive website for eyecare professionals, patients and the public

OPTIMISE is a large project with several components, but its core will be an interactive website at www.eyeworld.com. Says Gillian Nineham, project manager "the internet was chosen for its immediacy, interactivity, unlimited space and ability to address many different audiences in many languages. In addition, by using passwords and Personal Identification Numbers, we can provide specialist material and facilitate payments amongst discrete groups." Eyeworld.com will provide the various professional groups with information tailored to their specific interests and responsibilities. The range of information is wide, including detailed technical and medical research papers, news pages and specialist product and equipment catalogues. There will also be interactive discussion groups, on-line conferences, training material and links to other specialist sites selected for their relevance and quality. In the future, intelligent agent searching (where the system learns the type of information the user requires and automatically selects it) will deliver further and highly personalised benefits.

Funding an ambitious project

There is an expectation that web-based information will always be free, but, says Nineham, the medical profession is used to paying for high-quality medical publications and it is hoped eventually to build a critical mass which will allow for subscriptions to be charged for professional use of eyeworld.com. In the meantime, however, sponsorship will provide vital support for a large and ambitious project. The OPTIMISE team is being

The general user and eye patients will also have access to a range of information for their needs to include healthcare information about eye conditions as well as product information on a wide range of eyewear and eyecare. In the future they should be able to access the site from health centres and pharmacies as well as from home computers. One of the advantages of eyeworld.com, says Nineham, is that it will give smaller manufacturers - many of them based in Italy, France and Germany - an opportunity to market their products alongside those from dominant, often global or US, suppliers.

Additional services for manufacturers and other suppliers from eyeworld.com include intranets and back office systems that customise communications between suppliers, manufacturers, agents and points of sale.

Eyeworld.com clients and end users will be supported by catalogues on CD-ROM and floppy disks, which can provide higher quality images and video than is currently possible on the World Wide Web. The CD-ROMs will be web-aware, so users will be able to connect to the web during use to update information such as pricing.

guided by, amongst others, the strict rules of the London based College of Optometrists to ensure the correct balance between commercial interests and a reputation for independent publishing. The College of Optometrists is the lead partner in another EC initiative, for the European Diploma in Optometry. Radcliffe is a leader in providing training materials for the healthcare professions.

BreakIT Breast Cancer Pathology Information Kit

Continuous training is essential for today's doctors and health professionals as medical knowledge is constantly updated. The BREAKIT project makes the experience of breast cancer pathologists available and accessible for training and decision support in diagnosis and treatment.

Breast cancer is one of Europe's most distressing diseases. 58,000 women in the EU die as a result of breast cancer and an estimated 135,000 new cases are recorded annually. But early detection greatly improves the management of the disease and the long-term prospects of the patient.

The BreakIT consortium has built on an early co-

operation between Interactive Labs (part of the Giunti Publishing Group), the Institute of Cancer Research, the European Working Group on Breast Cancer Screening and the Italian Institute of Tumours to create a database of case studies classified and agreed by experts across Europe. By combining multimedia tools and Europe-wide co-operation, BreakIT has created a powerful aid to effective training and diagnosis.

An interactive tool for learning, decision support and knowledge exchange

The CD-ROM and Web based product has two main sections. Training and Assessment (TAS) provides audio-visual lessons covering all aspects of the diagnosis of breast cancer, including related skills such as preparation of specimens, samples and slides and classification techniques. In addition, "interactive consultation support toolkits" are available to enable

the user to recall expected prerequisites and access additional hypertextual information, a multilingual dictionary of medical terminology, the important Interactive Breast Atlas and the 3D Cancer Modeller which enable the user to layer, highlight, pinpoint and reconstruct typical anatomical structures and microscopic visible lesions.

More than 100 virtual case-studies have been classified by leading European pathologists

The Virtual Case Studies Repository (VCR) is the second section of BreakIT. It is a repository of relevant case histories including more than 500 different views of breast cancer slides presented in a fully interactive environment. This part of BreakIT is designed to provide decision support during diagnosis - and it is groundbreaking work, as project co-ordinator, Fabrizio Cardinali of Interactive Labs explains: "One of the problems that BreakIT seeks to address is the lack of case studies that have been debated, assessed and classified by a large panel of experts. During the definition phase we realised the need for support from an official body in this area." The European Working Group on Breast Cancer Screening includes 25 leading European pathologists who are working to classify the case studies included in BreakIT.

As well as the classification itself, multimedia makes this important body of knowledge widely accessible, and provides the user with a close-to-reality experience of each situation which is not possible to achieve in a text book or published paper.

BreakIT will also link to a dedicated web-site, where BreakIT user group members will be able to find details of training courses, conferences and publications. On-line discussions, teleconferencing and the use of "push" technology to keep users constantly updated on the latest developments may also be employed.

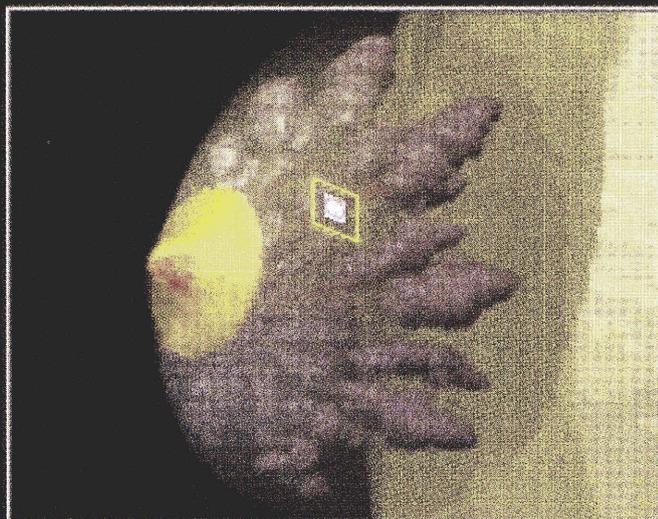
Different ways of marketing BreakIT which will be explored during the implementation phase. "We deliberately over-scaled the prototype" says Cardinali, "now it's a case of understanding what parts the market wants and packaging it appropriately." This involves negotiating with the specialised medical publishers and may involve separating the training section (TAS) from the case studies repository (VCR) or even bundling some of the material for distribution with microscope sales. In any event, BreakIT will become a valuable tool in hospitals, laboratories and universities. The material will also be linked to a Europe-wide programme of credits for continuous training.

Breast Cancer Pathology: Morphogenesis of Breast Cancer

breakit web

reference

The development of a tumor normally originates when the genotype of a normal cell is subject to modification



models test

scrapbook
notepad
dictionary

◀ Step 2 of 9 : Topographic Anatomy. ▶

main
help
status

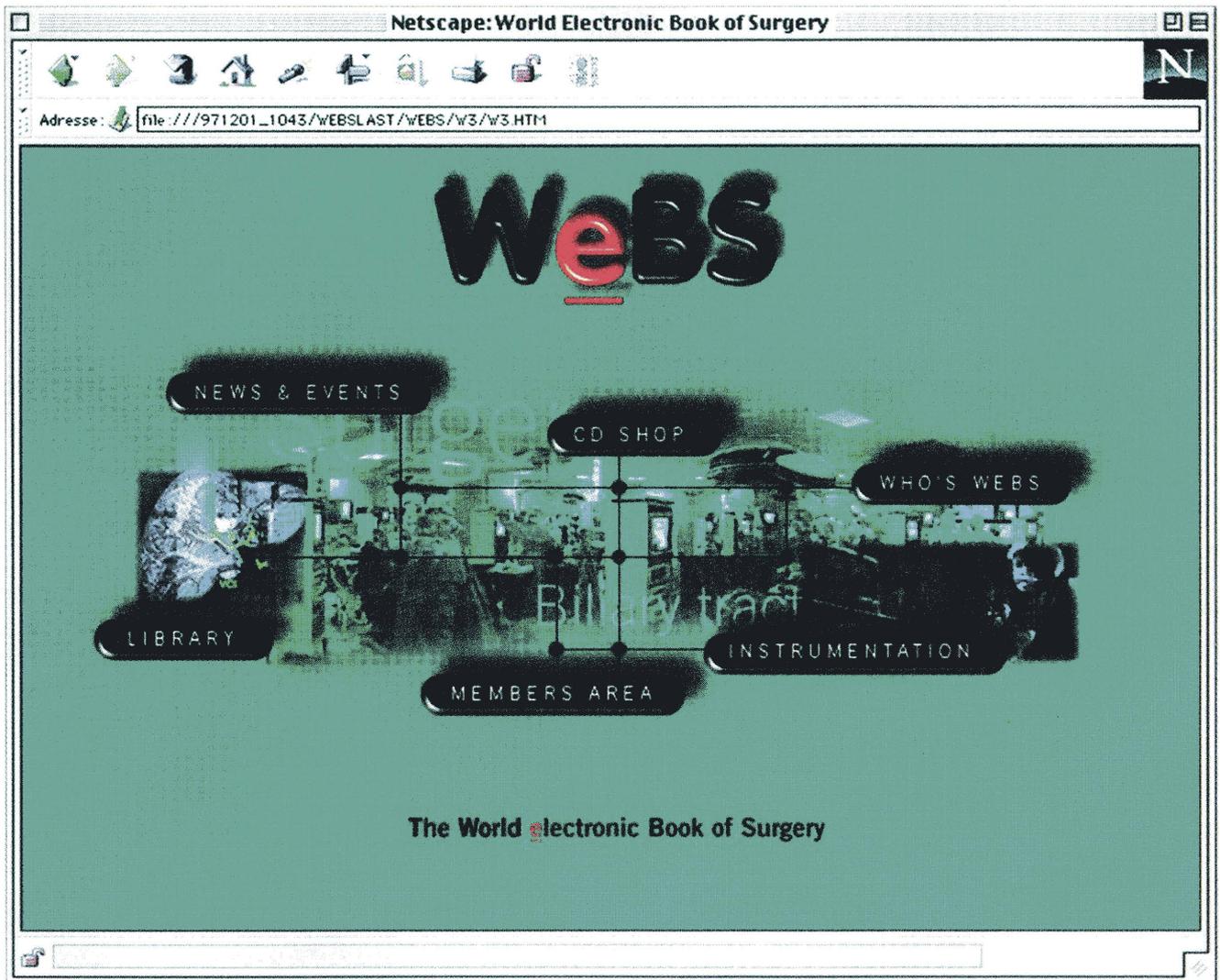
BreakIT Breast Cancer Pathology Information Kit

Participants

Interactive Labs S.r.l., Genoa, Italy (co-ordinator)
European Working Group on Breast Cancer
Pathology Screening, Liverpool, UK
Institute of Cancer Research, Sutton, UK
National Cancer Research Institute (Istituto Tumori),
Genoa, Italy

Contact the co-ordinator

Fabrizio Cardinali
head, new media design and development
Interactive Labs
Via al Ponte Calvi 3/15
Genova, Italy
Tel: + 39 10 2465178
Fax: + 39 10 2465179
Email: ilabs@pn.itnet.it



World Electronic Book of Surgery (WEBS)

Participants

Institut de Recherche contre les Cancers de l'Appareil Digestif (IRCAD), Strasbourg, France (co-ordinator)

Fraunhofer-Institut für Arbeitswirtschaft und Organisation, Germany

Interactive Labs S.r.l, Genoa, Italy

Imexpert - Ingenierie Multimédia Expert, Strasbourg, France

University of Vienna, Department of General Surgery, Vienna, Austria

Contact the co-ordinator

Jacques Marescaux

or the project manager

Yves Russier

IRCAD Hôpital Civil
F-67091

Strasbourg, France

Tel: +33 3 88 11 90 00

Fax: +33 3 88 11 90 99

Email: Secircad@ircad.u-strasbg.fr

World Electronic Book of Surgery

The World Electronic Book of Surgery (WEBS) will bring the skills of international experts to a wide audience of surgeons and other medical professionals.

The European Institute of Telesurgery (EITS) at Strasbourg is among the most renowned centres for the study of minimally-invasive surgery. The faculty of EITS is composed of some 450 international experts, who teach a range of general and specific courses to surgeons, doctors, nurses and other healthcare professionals. Since its establishment in 1994, EITS has trained over 2000 surgeons. Now the institute is co-ordinating a project in the INFO2000 programme which will bring this deep expertise to a much wider professional market via internet and CD-ROM. "We want to be ready for the virtual university of the future" says Pr Jacques Marescaux, President of EITS and co-ordinator of this project.

An interactive approach that accommodates a range of opinions

WEBS makes use of surgical procedures videos which have been produced to meet very high technical quality standards in EITS' own dedicated studio. Says Dr Yves Russier, executive manager of WEBS: "all operations are routinely recorded. We edit the films very carefully and add a detailed commentary. It can take several hours to produce just two minutes of film." In addition to the video, animated drawings created by the infographist of the project are used to further illustrate the procedures.

WEBS does not attempt to make surgery a science of absolutes - in cases where different experts prefer different approaches, both points of view will be explained, commented and illustrated.

As well as the opportunity to study the procedures in

Publication decision

The consortium is taking every opportunity to publicise WEBS at congresses and conferences; the experts involved are also excellent ambassadors for

The World Electronic Book of Surgery develops teaching, training and all pertinent information on minimally-invasive surgery. The core of the project is an encyclopaedia of surgical procedures which draws on international expertise and multimedia tools. It includes detailed anatomy and anaesthesia, and a selected, annotated bibliography as well as the operating procedures themselves. This present project concentrates on EITS' area of specialism, digestive surgery; it is planned to extend the work to other areas of surgery later.

close up, WEBS will offer users (students, surgeons, doctors and nurses) interactive self-testing on the procedures. The tests and accreditation procedures are being developed by The Department of General Surgery at The University of Vienna. They will provide the opportunity for the user to evaluate his or her knowledge of the preceding procedures. For example, a surgical video might stop and ask the user "what do you do next?"

The web-site will also provide a database of relevant articles and reviews selected by an Editorial Board composed of international experts. There will also be a year-book of international medical congresses and a forum where surgeons can exchange views, get advice and report new initiatives.

the project, says Dr Russier. At the end of the implementation phase, a decision will be taken about publication, which may be by subscription.

Information Context for Biodiversity Conservation

The objective of the INFORMATION CONTEXT FOR BIODIVERSITY CONSERVATION project is to link data on threatened species and habitats with information about responses by society to threats to biodiversity.

CONSERVATION is a multimedia tool for policy makers and everyone concerned with the conservation of species and ecosystems. Public domain information obtained from a range of organisations, including the project participants, will be made available on the

World Wide Web. There will also be a CD-ROM edition of the product. Contents include: threatened animals and plants; protected areas; societal threats and remedial strategies; web links to relevant organisations and documentation.

Inclusive information framework for unforeseen environmental threats

Nadia McLaren, project manager, is an environmental consultant who believes in the global need for wide vision in conservation issues. She says "a few conspicuous species, such as the large mammals, get a great deal of attention to their plight. But there is a much bigger story to be told. Millions of species and habitats are under threat." Correlating large amounts of normally incompatible information from multiple sources will make it possible to understand how the world's behavioural, social economic and biological contexts interact. This, in turn, will permit better decisions for sound environmental policy.

Anthony Judge of the Union of International Associations, project co-ordinator, explains: "the initial challenge was to link our data with that of others without using a rigid integrating framework. Together with our other data-holding partner, the World Conservation Monitoring Centre (WCMC), we have reframed the notion of integrating data through the extensive use of hyperlinks." WCMC's Jeremy Harrison adds "using the World Wide Web it is

possible to create an interlocking network of environmental information sources with access from one interface or page, or from multiple entry points."

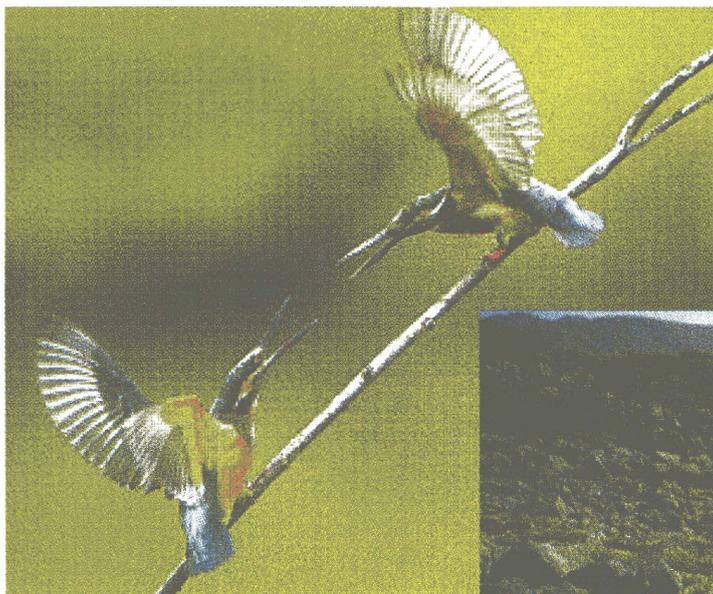
The partners believe this open and non-hierarchical approach to information management provides a much richer understanding of how vicious cycles of conservation problems are created, and can be broken by appropriate strategies. This strategy is designed to achieve maximum coverage with whatever resources become available. It is also consistent with ecosystem organisation.

As well as offering scientific research, Conservation will provide information on relevant international organisations and publications and will provide two-way links to external web-sites. The data will be delivered to facilitate user interaction, annotation and feedback to ensure further development of the information. Users will be able to discuss topics and contribute new sources of information. Such feedback would be channelled through a range of filters and made available to other on-line users.

A pragmatic approach to complex objectives

Although the objectives of this project are somewhat complex, the approach is pragmatic, based as it is on working with data as it becomes available using technology within a tight budget. This is possible because the team is at the forefront of technology use, despite such constraints as the developmental timescales of software tools (for example, in their requirement for a multilingual tool for data retrieval and on-line translation). User interfaces will be made available in several European languages. They will be supported by a multilingual thesaurus so that users can make foreign language query searches and use non-English subject categories to access data only available in English.

Project plans include a strategy for marketing Conservation. It will be launched at a major international conservation event. It will also develop progressively as modules over the World Wide Web. Ken Friedman of the Norwegian School of Management notes "we don't want to over-define Conservation too closely at this stage. It is an evolutionary process out of which specific products and services will develop. We will make this project increasingly more valuable through response to user feedback as a basis for improvements. It's a whole new approach to the interactive development of information products."



photography by
Takashi Yoshizawa



photography by
Hironori Okamoto

Information Context For Biodiversity Conservation (Conservation)

Visit at <http://www.uia.org/projects/i2000rep.htm>

Participants

Union of International Associations, Brussels,
Belgium (co-ordinator) <http://www.uia.be>
AIDenvironment, Amsterdam, The Netherlands
bennett@aidenvironment.antenna.nl

Institute for European Environmental Policy,
Arnhem, The Netherlands
<http://194.177.160.201/ieep/index.htm>

Norwegian School of Management, Oslo, Norway
<http://www.bi.no>

World Conservation Monitoring Centre,
Cambridge, UK <http://www.wcmc.org.uk>

Contact the co-ordinator

Anthony Judge
Union of International Associations
40 rue Washington
Brussels, Belgium
Tel: +32 2 640 1808
Fax: + 32 2 646 0525
Email: uia@uia.be

Written by Anne Querée
Designed and produced by
Asterisk, London UK

Printed in Italy

BELGIQUE/BELGIË

Moniteur belge/Belgisch Staatsblad
Rue de Louvain 40-42/Leuvenseweg 40-42
B-1000 Bruxelles/Brussel
Tél. (32-2) 552 22 11
Fax (32-2) 511 01 84

Jean De Lannoy
Avenue du Roi 202/Koningslaan 202
B-1060 Bruxelles/Brussel
Tél. (32-2) 538 51 69
Fax (32-2) 538 08 41
E-mail: jean.de.lannoy@infoboard.be
URL: http://www.jean-de-lannoy.be

Librairie européenne/Europese Boekhandel
Rue de la Loi 244/Wetstraat 244
B-1040 Bruxelles/Brussel
Tél. (32-2) 295 26 39
Fax (32-2) 735 08 60

DANMARK

J. H. Schultz Information A/S
Herstedvang 10-12
DK-2620 Albertslund
Tlf. (45) 43 63 23 00
Fax (45) 43 63 19 69
E-mail: schultz@schultz.dk
URL: http://www.schultz.dk

DEUTSCHLAND

Bundesanzeiger Verlag
Breite Straße 78-80
Postfach 10 05 34
D-50667 Köln
Tel. (49-221) 20 29-0
Fax (49-221) 202 92 78
E-mail: vertrieb@bundesanzeiger.de
URL: http://www.bundesanzeiger.de

ΕΛΛΑΔΑ/GREECE

G. C. Eleftheroudakis SA
International Bookstore
Panepistimiou 17
GR-10564 Athina
Tel. (30-1) 331 41 80/1/2/3
Fax (30-1) 323 98 21
E-mail: elebooks@netor.gr

ESPAÑA

Mundi Prensa Libros, SA
Castelló, 37
E-28001 Madrid
Tel. (34-1) 431 33 99
Fax (34-1) 575 39 98
E-mail: libreria@mundiprensa.es
URL: http://www.mundiprensa.es

Boletín Oficial del Estado

Trafalgar, 27
E-28010 Madrid
Tel. (34-1) 538 21 11 (Libros)/
384 17 15 (Suscripciones)
Fax (34-1) 538 21 21 (Libros)/
384 17 14 (Suscripciones)
E-mail: webmaster@boe.es
URL: http://www.boe.es

FRANCE

Journal officiel
Service des publications des CE
26, rue Desaix
F-75727 Paris Cedex 15
Tél. (33) 140 58 77 01/31
Fax (33) 140 58 77 00

IRELAND

Government Supplies Agency
Publications Section
4-5 Harcourt Road
Dublin 2
Tel. (353-1) 661 31 11
Fax (353-1) 475 27 60

ITALIA

Licosa SpA
Via Duca di Calabria, 1/1
Casella postale 552
I-50125 Firenze
Tel. (39-55) 64 54 15
Fax (39-55) 64 12 57
E-mail: licosa@ftbcc.it
URL: http://www.ftbcc.it/licosa

LUXEMBOURG

Messengeries du livre SARL
5, rue Raiffeisen
L-2411 Luxembourg
Tél. (352) 40 10 20
Fax (352) 49 06 61
E-mail: mdl@pt.lu

Abonnements:

Messengeries Paul Kraus
11, rue Christophe Plantin
L-2339 Luxembourg
Tél. (352) 49 98 88-8
Fax (352) 49 98 88-444
E-mail: mpk@pt.lu
URL: http://www.mpk.lu

NEDERLAND

SDU Servicecentrum Uitgevers
Externe Fondsen
Postbus 20014
2500 EA Den Haag
Tel. (31-70) 378 98 80
Fax (31-70) 378 97 83
E-mail: sdu@sdu.nl
URL: http://www.sdu.nl.

ÖSTERREICH

**Manz'sche Verlags- und
Universitätsbuchhandlung GmbH**
Siebenbrunnengasse 21
Postfach 1
A-1050 Wien
Tel. (43-1) 53 16 13 34/40
Fax (43-1) 53 16 13 39
E-mail: auslieferung@manz.co.at
URL: http://www.austria.EU.net:81/manz

PORTUGAL

Imprensa Nacional-Casa da Moeda, EP
Rua Marquês de Sá da Bandeira, 16 A
P-1050 Lisboa Codex
Tel. (351-1) 353 03 99
Fax (351-1) 353 02 94, 384 01 32

Distribuidora de Livros Bertrand Ld.ª
Rua das Terras dos Vales, 4/A
Apartado 60037
P-2701 Amadora Codex
Tel. (351-1) 495 90 50, 495 87 87
Fax (351-1) 496 02 55

SUOMI/FINLAND

**Akateeminen Kirjakauppa/Akademiska
Bokhandeln**
Pohjoisesplanadi 39/
Norra esplanaden 39
PL/PB 128
FIN-00101 Helsinki/Helsingfors
P./tfn (358-9) 121 41
F./fax (358-9) 121 44 35
E-mail: akatilaus@stockmann.mailnet.fi
URL: http://booknet.cultnet.fi/aka/index.htm

SVERIGE

BTJ AB
Traktorvägen 11
S-221 82 Lund
Tfn (46-46) 18 00 00
Fax (46-46) 30 79 47
E-post: btjeu-pub@btj.se
URL: http://www.btj.se/media/ue

UNITED KINGDOM

**The Stationery Office Ltd
International Sales Agency**
51 Nine Elms Lane
London SW8 5DR
Tel. (44-171) 873 90 90
Fax (44-171) 873 84 63
E-mail: jill.speed@theso.co.uk
URL: http://www.the-stationery-office.co.uk

ÍSLAND

Bokabud Larusar Blöndal
Skólavörðustíg, 2
IS-101 Reykjavík
Tel. (354) 551 56 50
Fax (354) 552 55 60

NORGE

NIC Info A/S
Ostenjoveien 18
Boks 6512 Etterstad
N-0606 Oslo
Tel. (47-22) 97 45 00
Fax (47-22) 97 45 45

SCHWEIZ/SUISSE/SVIZZERA

OSEC
Stampfenbachstraße 85
CH-8035 Zürich
Tel. (41-1) 365 53 15
Fax (41-1) 365 54 11
E-mail: uleimbacher@osec.ch
URL: http://www.osec.ch

BĂLGARIA

Europress-Euromedia Ltd
59, Blvd Vitosha
BG-1000 Sofia
Tel. (359-2) 980 37 66
Fax (359-2) 980 42 30

ČESKÁ REPUBLIKA

NIS CR — prodejna
Konviktská 5
CZ-113 57 Praha 1
Tel. (420-2) 24 22 94 33, 24 23 09 07
Fax (420-2) 24 22 94 33
E-mail: nkposp@dec.nis.cz
URL: http://www.nis.cz

CYPRUS

Cyprus Chamber of Commerce & Industry
Griva-Digeni 38 & Deligiorgi 3
Mail orders:
PO Box 1455
CY-1509 Nicosia
Tel. (357-2) 44 95 00, 46 23 12
Fax (357-2) 36 10 44
E-mail: cy1691_eic_cyprus@vans.infonet.com

MAGYARORSZÁG

Euro Info Service
Európa Ház
Margitsziget
PO Box 475
H-1396 Budapest 62
Tel. (36-1) 111 60 61, 111 62 16
Fax (36-1) 302 50 35
E-mail: euroinfo@mail.matav.hu
URL: http://www.euroinfo.hu/index.htm

MALTA

Miller Distributors Ltd
Malta International Airport
PO Box 25
LQA 05 Malta
Tel. (356) 66 44 88
Fax (356) 67 67 99

POLSKA

Ars Polona
Krakowskie Przedmiescie 7
Skr. pocztowa 1001
PL-00-950 Warszawa
Tel. (48-22) 826 12 01
Fax (48-22) 826 62 40, 826 53 34, 826 86 73
E-mail: ars_pol@bevy.hsn.com.pl

ROMÂNIA

Euromedia
Str. G-ral Berthelot Nr 41
RO-70749 Bucuresti
Tel. (40-1) 210 44 01, 614 06 64
Fax (40-1) 210 44 01, 312 96 46

SLOVAKIA

**Slovak Centre of Scientific and Technical
Information**
Námestie slobody 19
SK-81223 Bratislava 1
Tel. (421-7) 531 83 64
Fax (421-7) 531 83 64
E-mail: europ@tbb1.sltk.stuba.sk

SLOVENIA

Gospodarski Vestnik
Zalozniska skupina d.d.
Dunajska cesta 5
SLO-1000 Ljubljana
Tel. (386) 611 33 03 54
Fax (386) 611 33 91 28
E-mail: belicd@gvestnik.si
URL: http://www.gvestnik.si

TÜRKIYE

Dünya Infotel AS
Istiklâl Cad. No: 469
TR-80050 Tünel-Istanbul
Tel. (90-212) 251 91 96
Fax (90-212) 251 91 97

AUSTRALIA

Hunter Publications
PO Box 404
3167 Abbotsford, Victoria
Tel. (61-3) 94 17 53 61
Fax (61-3) 94 19 71 54

CANADA

Subscriptions only/Uniquement abonnements:
Renouf Publishing Co. Ltd
5369 Chemin Canotek Road Unit 1
K1J 9J3 Ottawa, Ontario
Tel. (1-613) 745 26 65
Fax (1-613) 745 76 60
E-mail: renouf@fox.nstn.ca
URL: http://www.renoufbooks.com

EGYPT

The Middle East Observer
41, Sherif Street
Cairo
Tel. (20-2) 393 97 32
Fax (20-2) 393 97 32

HRVATSKA

Mediatrade Ltd
Pavla Hatzá 1
HR-10000 Zagreb
Tel. (385-1) 43 03 92
Fax (385-1) 43 03 92

INDIA

EBIC India
3rd Floor, Y. B. Chavan Centre
Gen. J. Bhosale Marg.
400 021 Mumbai
Tel. (91-22) 282 60 64
Fax (91-22) 285 45 64
E-mail: ebic@giasbm01.vsnl.net.in

ISRAËL

ROY International
17, Shimon Hatarssi Street
PO Box 13056
61130 Tel Aviv
Tel. (972-3) 546 14 23
Fax (972-3) 546 14 42
E-mail: royil@netvision.net.il
Sub-agent for the Palestinian Authority:

Index Information Services

PO Box 19502
Jerusalem
Tel. (972-2) 627 16 34
Fax (972-2) 627 12 19

JAPAN

PSI-Japan
Asahi Sanbancho Plaza #206
7-1 Sanbancho, Chiyoda-ku
Tokyo 102
Tel. (81-3) 32 34 69 21
Fax (81-3) 32 34 69 15
E-mail: psijapan@gol.com
URL: http://www.psi-japan.com

MALAYSIA

EBIC Malaysia
Level 7, Wisma Hong Leong
18 Jalan Perak
50450 Kuala Lumpur
Tel. (60-3) 262 62 98
Fax (60-3) 262 61 98
E-mail: ebic-kl@mol.net.my

PHILIPPINES

EBIC Philippines
19th Floor, PS Bank Tower Sen.
Gil J. Puyat Ave. cor.Tindalo St.
Makati City
Metro Manila
Tel. (63-2) 759 66 80
Fax (63-2) 759 66 90
E-mail: ecopcom@globe.com.ph

RUSSIA

CCEC
60-letiya Oktyabrya Av. 9
117312 Moscow
Tel. (70-95) 135 52 27
Fax (70-95) 135 52 27

SOUTH AFRICA

Safto
5th Floor Export House,
CNR Maude & West Streets
PO Box 782 706
2146 Sandton
Tel. (27-11) 883 37 37
Fax (27-11) 883 65 69

SOUTH KOREA

Kyowa Book Company
1 F1, Pyhung Hwa Bldg
411-2 Hap Jeong Dong, Mapo Ku
121-220 Seoul
Tel. (82-2) 322 67 80/1
Fax (82-2) 322 67 82
E-mail: kyowa2@ktnet.co.kr.

THAÏLANDE

EBIC Thailand
Vanissa Building 8th Floor
29 Soi Chidlom
Ploenchit
10330 Bangkok
Tel. (66-2) 655 06 27
Fax (66-2) 655 06 28
E-mail: ebicbkk@ksc15.th.com

UNITED STATES OF AMERICA

Bernan Associates
4611-F Assembly Drive
MD20706 Lanham
Tel. (800) 274 44 47 (toll free telephone)
Fax (800) 865 34 50 (toll free fax)
E-mail: query@bernan.com
URL: http://www.bernan.com

**ANDERE LÄNDER/OTHER COUNTRIES/
AUTRES PAYS**

**Bitte wenden Sie sich an ein Büro Ihrer
Wahl / Please contact the sales office of
your choice / Veuillez vous adresser au
bureau de vente de votre choix**



OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg

ISBN 92-828-3714-9



9 789282 837146 >