

**ELECTRONIC COMMERCE**

# CREATING EUROPEAN-STYLE ELECTRONIC COMMERCE. HAS OUR TIME RUN OUT?

**EXPERTS ESTIMATE THAT ELECTRONIC COMMERCE ON THE INTERNET WILL INCREASE TO OVER US\$100 BILLION WORLDWIDE BY THE YEAR 2000, A TWENTY-FIVE-FOLD INCREASE IN FOUR YEARS. CAN EUROPE AFFORD TO MISS THIS MARKET?**

The business enthusiasm is there, so is the consumer interest. But the key obstacle to the rapid economic development of electronic commerce in Europe remains the high cost of telecommunications - which has created slow user 'uptake' of Internet services.

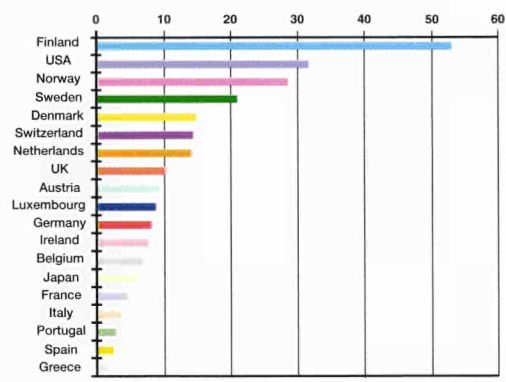
In this fast-moving world, Europe's competitors are aggressively positioning themselves, and building a decisive lead over their European counterparts, particularly in the field of Internet-based commerce. This has not yet led to visible economic disadvantages, as the development of electronic commerce is still in its infancy. But time is running out.

In Europe, Internet-based electronic commerce already offers considerable opportunities, for established and new players. A growing number of European small and medium-sized enterprises (SMEs) are capitalising on the unprecedented opportunities for access to global markets which the World Wide Web offers. Large economic sectors, such as the direct marketing industry in Europe, and notably the mail-order business (with a total turnover of ECU 37 billion in 1994), are actively incorporating the Internet in their marketing and fulfilment strategies.

But Europe's true breakthrough is still to come. To make the visions of network services, net shopping and electronic cross-border consumer services a reality,

Europe must become the heartland of electronic commerce.

The technical conditions for electronic commerce in Europe are excellent. In several European countries, the penetration of cable TV - a major link between the consumer and new digital services in the years to come - is extremely high. But Europe lags behind the US in the uptake of the Internet, with certain exceptions such as the Scandinavian countries. One reason for this could be the still extremely high telecommunication tariffs in Europe. For example, a 64 Kbps ISDN line in the US costs US\$ 200/month compared to tariffs ranging from US\$ 500 - US\$ 3,000/month in the EU. For European users accessing the Internet through local telephone, the difference is no less striking - an hour of local calls over the month may amount to



Number of Internet hosts per 1,000 inhabitants

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The Esprit Programme of DG III is publishing in its new call two cross-sectoral themes: "IT for mobility" and "Electronic commerce"

The objective of the thematic call "IT for Mobility" is to foster or accelerate the development of applications, systems and appliances which use Information Technologies to enhance physical or virtual mobility.

Electronic commerce has a wide scope and covers the whole spectrum of technologies, services, applications and business processes to support business-to-business, business-to-consumer and business-to-administrations interactions. The general objective of this call is to improve business performance and promote business innovation through RTD. ■

More information can be obtained from the Esprit helpdesk, Fax +32 2 2968388, e-mail: [esprit@dg3.cec.be](mailto:esprit@dg3.cec.be), <http://www.cordis.lu/esprit/src/mobility.htm>, <http://www.cordis.lu/esprit/src/ecomhome.htm>

This newsletter is also available on the ISPO  
Web: <http://www.ispo.cec.be>



Editorial by  
**Günter Rexrodt,**  
German Minister  
of Economics

**GOOD NEWS FOR GLOBAL INFORMATION**

Two recent developments are bringing in a new era in information networks. The first is the Information Technology Agreement that was concluded in Singapore late last year - this reduced tariffs on 90% of IT equipment and will affect 10% of total world trade in goods and services. The second determining factor is the landmark WTO agreement in February 1997, which liberalised the telecom market, opening up 90% of the global market to competition. With these agreements concluded, the important political steps have been taken to ensure a market-driven development of the infrastructure, which will lead to global cost reductions. It is now time for the focus to shift from the infrastructure to the use of the networks and to the users. It is this shift that will ensure full exploitation of the potential benefits of the global networks, particularly in relation to new job creation. A modern information infrastructure, the Internet for example, knows no national borders; its outstanding feature is its truly global dimension. The potential for effective national rules that govern the use of this infrastructure is seriously constrained. To bring this potential to life, governments must be prepared to work together at an international level, with a common understanding, to further develop the establishment and use of Global Information Networks. A deciding milestone along this road was the "G7 Information Society Conference" in Brussels (February 1995). The eight Core Principles agreed upon at that time, have become guiding principles for the leading industrial nations in their national strategies and action programmes. A further step in the direction of international cooperation was taken with the conference "Information Society and Development" in South Africa (May 1996). To further international cooperation, the German Government and the European Commission have undertaken to organise a ministerial conference in Bonn July 6-8, 1997, entitled "Global Information Networks: Realising the Potential". The objective of this meeting is to strengthen and extend the cooperation of industrialised countries to pave the way for the transition to the Information Society, building on the "Core Principles" of the Brussels "G7 Information Society Conference". On the basis of the collective experience gained from the diverse national attempts to regulate the access to and use of Global Information Networks, the time seems ripe to examine the possibilities for international cooperation. This will broaden the basis of common understanding and determine necessary future steps in the international arena. The Bonn conference will deal with the most pressing challenges to international cooperation and the free flow of information across borders: Building Confidence, Empowering the User and Developing Commerce and Content. In this context, issues such as security, confidentiality, actors' responsibility, privacy and electronic commerce will be dealt with. These are important to reap the benefits of the emerging infrastructure. The political impulse from this conference will stimulate the use of the rapidly emerging global networks. ■

For further information on the conference please visit <http://www.bmwi-info2000.de>

**ELECTRONIC  
COMMERCE**

between ECU 30 and 300, compared with as little as US\$ 3 in the USA.

To promote electronic commerce across the European Union, the European Commission is currently preparing a European Electronic Commerce Initiative to help raise public awareness of the economic opportunities of electronic commerce and to help abolish remaining barriers to greater Internet access. The expansion of electronic commerce should be essentially market-driven, and EU intervention should concentrate not on funding expansion - but encouraging the market to develop.

Europe's single market has already proved its worth for traditional forms of business. It must now be put to work for the benefit of electronic commerce. It is essential to avoid obstacles created by different and mutually incompatible national regulations, and move to 'electronic commerce without frontiers'. Leveraging the critical mass of the single market in the global commercial environment is an absolute requirement for the preservation of Europe's future competitiveness.

The European Union can be an important catalyst in shaping the international rules that will make the global market place a reality. In the perspective of impending international negotiations it will be essential for the Member States to adopt a common outlook. This is true for the international negotiations currently underway on security and encryption, barriers to trade, taxation and electronic payment systems. The decisions taken at these discussions will drastically affect Europe's future industrial success. To make itself heard internationally, Europe must speak with one voice. In this respect, the European Electronic Commerce Initiative can provide an important impulse for finding consensus on critical questions in Europe.

The proof exists today. We can see the benefits that many forward-looking companies are reaping from electronic commerce. The goal for Europe must to identify and dismantle the obstacles to this progress, as a matter of urgency. Action must be taken now - in the regulatory and technological fields, and in the promotion of a more favourable business environment.

The window of opportunity is still open. It's up to European policy-makers to take the next step. ■

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**BANGEMANN  
CHALLENGE**

**BANGEMANN  
CHALLENGE:  
MORE WINNERS....**

Continuing our round-up of Bangemann Challenge winners which started in the last issue of *IS News*, here are the cities that won top marks for their projects in Road Traffic Management, Air Traffic Control, Health Care, Electronic Tendering, Public Administration and City Information Highways.

More information on the Bangemann Challenge awards winners can be found at:  
<http://www.stockholm.se/bm/awards/index.html>

**ROAD TRAFFIC MANAGEMENT**

**Rotterdam: road traffic management system**

With the TeleRing information service, the Dutch Road Administration is making big progress toward reducing traffic jams and pollution and making drivers less nervous on the Rotterdam ring road. This telematics-based service has several features which work together to improve road conditions. A set of traffic lights regulates the flow of traffic onto the motorway at two strategic entry points; an incident system is being tested; information boards along the motorway give drivers details about the nearest available parking spaces and public transport services.

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**AIR TRAFFIC CONTROL**

**Bremen: Better throughput means faster information access for air traffic controllers**

This project has upgraded the Value Added Network (VAN) of the air traffic control system at Bremen airport. The new features are rapid on-line access to data to be exchanged between incoming pilots and traffic controllers. The most important data - aircraft position data and notices of when an aircraft enters or leaves a controller's area of responsibility - are

displayed on a screen and can be printed out. This data can be exchanged through the Bremen VAN with air traffic controllers in any other location. Future plans include harmonisation of this system with European standards and integration in different air traffic control networks.

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**HEALTH CARE**

**Edinburgh: on-line information for home maternity care**

With the help of a special unit consisting of a portable computer, medical monitoring system, and telematics link, midwives can provide advanced care in expectant mothers' homes, previously only available in the hospital. Using the Telematic Maternity and Newborn Management System (MAMS), midwives and general practitioners can examine expectant mothers in their homes and connect to the hospital for more detailed diagnostics by plugging the unit into the patient's telephone connector. As necessary, scanned images of the foetus are transmitted directly to specialists in the hospital, for review by a specialist.

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**Stockholm: Digital bedside patient information for more efficient medical care**

The Bedside project uses digital storage of patients' information to reduce paperwork and increase the quality of care in hospitals. At the women's clinic at Löwenströmska Hospital in Stockholm, the medical staff uses PCs and notebook computers to review patients' medical records, prescribe medicine, administer drugs or record the results of tests. The Bedside service is ready for implementation in nursing facilities across Sweden, and could be used in all of the country's 7000 nursing wards.

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**ELECTRONIC TENDERING**

**Stockholm: on-line tendering for all city suppliers**

The STELHA project aims to make all large-scale purchasing and ordering of goods and services for the city of Stockholm an on-line process. This promises to reduce paperwork and the cost of administration, and make the tendering process more open and efficient. A nursing home, three schools and a borough council administration are participating in a pilot test. The plan is that all the city's transactions with its suppliers will be electronic in the near future.

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## PUBLIC ADMINISTRATION

### Bologna: low-cost information links for all citizens

In Information Society terms, the City of Bologna is among the most advanced in the world. Since 1995 it has provided free access to a city-wide network - the IPERBOLE network - of electronic services. For the cost of a local call, citizens have access to e-mail, local news, services on the city's Web server, access to Internet databases and full Internet access - all for the cost of a local telephone call. The number of users is expected to increase from 3000 to 15000 in the coming years. Upcoming services include the purchase of tickets for events, hotel bookings, electronic payment for services, etc.

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### Manchester: electronic meeting points address key issues faced by this city's population

A series of Electronic Village Halls created by Manchester City Council ensure that every citizen in this area has equal access to the Information Society, regardless of their social or financial level. The Halls are public locations where people can drop in to access local information services and the Internet free of charge. Each Hall has a different focus - one gives advice and services for local SMEs, another deals with women's issues - especially re-insertion into working life, one Hall acts as a teleworking centre, another is specialised in ethnic minority issues. Four Electronic Village Halls are operational today and a further eight will be created in the near future.

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## CITY INFORMATION HIGHWAYS

### Antwerp: fibre optics for citizens' services

A city-wide fibre optic network is already bringing advanced telematic services to 30 public bodies. One of the first applications to run on the Metropolitan Area Network (MANAP) was the connection of telephone exchanges of the city's administrative buildings: at the moment, some 18 digital telephone exchanges are linked, resulting in a huge financial saving. Other applications will include videoconferencing and the installation of 10 multimedia computers in a cyberlab where the city can create its own Web pages.

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### Edinburgh: community associations bring Information Society to all

In Edinburgh, several community organisations have cooperated to build their own network. The goal of this project, which began in 1994, is to give

community and voluntary service groups free access to all types of electronic services. The service is structured at three levels: Craignet, a wide area network, which is a 'backbone' network on which many local community information services in the area can run; OneNet a worldwide electronic bulletin board service which currently has three million users; and an Internet World Wide Web site. Today an estimated 150 community groups and 700 individuals use the service regularly.

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## SPECIAL AWARDS

A special category of Bangemann Challenge awards recognises the potential of electronic information services to promote better social integration.

### Amsterdam On-line/Amsterdam

This Internet-based service allows citizens to dialogue with local politicians, and play a more active role in the discussion of local concerns such as safety, city-planning, drugs policy, etc.

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### Telematic Services to the Public/Barcelona

The goal of this service is to give every member of the local population free and easy access to the Information Society - whether they own a computer or not. The service is provided through terminals located in public libraries. Information about some 20000 local community activities is given, and is updated weekly.

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### The Council's Telematics Strategy/London Lewisham

The telematics strategy developed by the town of Lewisham could serve as a model for other medium-sized European cities. This strategy covers all the important points required to ensure that citizens have equal access to the Information Society. Key features include: reflections on how local administrations can use information services to save costs and reengineer their administrative processes; and ideas for services for the less favoured members of the community - such as non-local language speakers, elderly and home-bound citizens, and sensory impaired people.

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## IS AND REGIONS

### GIVING THE INFORMATION SOCIETY A REGIONAL FOCUS

Diversity was the main characteristic of the recent conference on Europe's Regions and the Information Society - diversity of opinion, of experience, and of cultural approaches to providing electronic information services.

Rather than search for common conclusions, the aim of the meeting was to bring the regions together immediately after the adoption of the European Commission's Communication on "Cohesion and the Information Society" and thus to encourage them to continue their work in this area.

These are the main points covered by a panel of high-level speakers which included Martin Bangemann, European Commissioner responsible for telecommunications and industry, other high-ranking Commission officials, and leaders from a number of European regions:

**The Information Society's impact on regions' economy.** Information has become the fourth production factor after land, capital and labour. Telecommunications is essential to every business sector - from traditional industry to SMEs.

**The Information Society's impact on regions' competitive position.** The Information Society is bringing new opportunities for the less favoured regions to enable them to make a fast and direct transition from a relatively early stage of industrial development to a service economy. From the global perspective, it is important to look at Europe itself as a region.

**Awareness, partnership and regional strategies.** The Information Society is a tool for citizens, following a bottom-up development pattern. Regional and local authorities are the most appropriate layer of public administrations to deal with awareness activities.

**Liberalisation and universal service.** Mr. Bangemann underlined the importance of deregulation for the development of the Information Society, for the creation of both the necessary infrastructure and appropriate products. He touched on the question of universal services, and while acknowledging the importance of the provision of access to information services for all citizens, he gave Sweden and Finland as examples where the market had taken care of universal services by itself. He therefore saw little need to provide universal service provision by regulation.

On the liberalisation of telecommunications, the participants referred to the Member States' different timetables and to the results of studies indicating that faster liberalisation can create jobs. Some participants felt there was a need to respond to the fear that liberalisation and privatisation would lead to job losses in public utilities. Other participants stressed the importance of affordable access to broadband networks for applications such as tele-medicine, distance learning, etc.

**Dissemination of results; extension of projects.** 'Mainstreaming' concerns the dissemination and extension of current pilot projects. The main features of a successful implementation of structural support for the Information Society were given as: public/private partnership financing, more specific funding through programmes (as opposed to horizontal funds), application content adapted to the specific needs of each region; development and dissemination of best practices and reference projects, benchmarking of regions (how a region is situated compared to others), and political will to support changes. ■

The text of the Commission communication "Cohesion and the Information Society" can be found at: <http://www.ispo.cec.be/infosoc/legreg/docs/cohes1.html>



**ISPO CORNER**

**ISPO PROJECT PROFILE**  
**A CROSS-CULTURAL, INTERNATIONAL FORUM FOR CREATIVE WOMEN IN ART, DESIGN AND FASHION**

Women in the art, design and fashion world need an international, cross-cultural professional media platform to communicate their digital material interactively, exchange ideas and make new business contacts. The first such platform for direct and interactive communication between creative individuals – particularly women – and the public and private sectors, is the EU project *donna* – Art, Design & Fashion Online – Virtual Forum for Women – East-West, South-North.

The *donna* project aims to create a European professional information network for art, design and fashion, which offers creative women a forum to present themselves, exchange ideas, develop contacts with suppliers, customers, cooperation partners, and, in particular, the TV media. They can also display their products digitally and interactively and sell them internationally. *donna* is also concerned with billing-royalty-IPR handling, and a special concern will be the introduction of an electronic watermark to protect intellectual property rights and copyrights.

Participants include women from a wide variety of creative professions, such as art, design, music, literature, consulting, industrial production, fashion, TV, architecture, etc. While other women's networks exist, this is the first extensive forum that stretches across such as broad

geographic area. The initial plan is to create a European forum, but through the Internet it can be accessed instantly from any location in the world.

A series of new applications will be developed using a communications and information system, a professional media platform – HIS – Heuristics Interactive System, based on heuristics, i.e. intuition and learning capability. HIS also includes Internet and Intranet applications.

The *donna* project team is confident that many new partnerships will be created through this forum, as women artists, designers, fashion designers and fashion industry professionals come together. These partnerships will be both individual-public and individual-industry partnerships, and are expected to create new employment and career opportunities for women.

The *donna* project team will organise the Art, Design, Fashion & Industry Workshop to demonstrate successful women's best practice, define guidelines for a new business case in cultural economy and promote the individual-public-private partnership model.

*For further information, please contact:*

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 http://www.dcc-donna.dlr.de*

*Further information on the projects selected under the first ISPO call for proposals can be found at:  
 http://www.ispo/call/projhome.html*

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**This newsletter and previous issues are also available on the web at:** <http://www.ispo.cec.be/ispo/newsletter/index.html>

**CALENDAR**

**G7 pilot project: A Global Marketplace for SMEs First annual conference**  
 Bonn (DE)  
 7-9 April 1997  
 D3 Group c/o Empirica GmbH  
 Tel: +49 228 985300  
 Fax: +49 228 9853012  
 e-mail: Info@G7EC.DE  
<http://www.G7EC.DE>

**First European Conference on sustainable island development**  
 Minorca (SP)  
 23-26 April 1997  
 Consell Insular de Menorca  
 Fax: +34 71 366199  
 e-mail: eurisland@insula.org  
<http://www.insula.org/conf.htm>

**JENC8 - 8th Joint European Networking Conference**  
 Edinburgh (GB)  
 12-15 May 1997  
 JENC8 Secretariat, c/o TERENA  
 Tel: +31 20 6391131  
 Fax: +31 20 6393289;  
 e-mail: jenc8-sec@terena.nl  
<http://www.terena.nl/jenc8>

**Business Information in the Information Society**  
 Rome (I)  
 22-23 May 1997  
 Publica - Organizzazione & Strategia  
 Tel: +39 6 360011423  
 Fax: +39 6 36001144  
 E-mail: Publica@mbx.vol.it

**Stockholm IT Week**  
 Stockholm (SE)  
 26-30 May 1997  
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 e-mail: anette.holm@itweek.stockholm.se

**4th International Conference on Intelligence in Services and Networks**  
 Como (I)  
 27-29 May 1997  
 Roberta Gobbi, Italtel  
 Tel: +39 2 43887240  
 Fax: +39 2 43887989  
 E-mail: gobbi@settimo.italtel.it  
<http://www.dir.fh-sbg.ac.at/ACTS/IENM/CONCERTATION/ISN>

**EEMA '97 Electronic Commerce and Messaging in Europe**  
 Maastricht (NL)  
 15-18 June 1997  
 Tel: +44 1386 793028  
 Fax: +44 1386 793268  
 e-mail: cgibson2@attmail.com  
<http://www.eema.org>

**Online Cooperation International Conferences on Teleworking**  
 Berlin (DE) 23-24 June 1997  
 Singapore, 28 August 1997  
 ICEF  
 Tel: +49 30 3276140  
 Fax: +49 30 3249833  
 e-mail: 100770.3137@compuserve.com

**ISPO SECRETARIAT**

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Ireland	1800 553224
Italy	1678 76790
Luxembourg	0800 2929
Netherlands	060 222086
Portugal	0505 329635
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**MORE THAN 1,600 NEWSPAPERS NOW ON-LINE**

By 14 March 1997 1,644 newspapers had gone on-line worldwide, according to the constantly updated survey of The Editors & Publisher Co. 944 of these were dailies. The highest number of newspapers on the WorldWideWeb are US or Canadian (1,020), and 327 are European. Asia is home to 77 on-line-newspapers. And the numbers are growing day by day: every week on average a dozen newspapers decide to go on-line.

*More information under:*

<http://www.mediainfo.com/ephome/npaper/nphtm/stats.htm>