Policy Brief

OECD

Electronic Commerce

How does the OECD contribute to policy analysis and debate on electronic commerce?

How to build trust for users and consumers?

How to establish ground rules for the digital marketplace?

How to enhance the information infrastructure for electronic commerce?

How to maximise the benefits of electronic commerce?

For further reading

Where to contact us?

Summary

Electronic commerce is a central element in the OECD's vision of the tremendous potential that our networked world now holds – potential for economic growth and more jobs, for the expansion of world trade and improved social conditions. The OECD's analysis has permitted a broad-based policy reflection on the establishment of an adequate infrastructure, as well as the elements that would provide a favourable environment for electronic commerce and the digital economy.

Such commerce is inherently transborder, and its successful development depends to a large extent on transborder solutions based on policy co-ordination between countries and between stakeholder constituencies. Specific policy recommendations have emerged in areas as diverse as telecommunications infrastructure and services, taxation, consumer protection, network security, and privacy and data protection.

Electronic commerce has become a priority area for many international organisations, particularly since concerns about the "digital divide" have brought the issues connecting information and communication technology (ICT) and development policies to the front burner. However, the policy challenges it poses require the broad analysis and public-private sector dialogue for which the OECD is well suited. ■

How does the OECD contribute to policy analysis and debate on electronic commerce?

Action plans setting out the policy requirements for meeting the rapid development of ICT and electronic commerce, and for reaping and sharing the benefits, have been developed in a co-ordinated work programme involving almost all parts of the Organisation and most of its working committees. Outside the OECD, some of the most visible events have been a series of high-level OECD conferences, most recently, the Emerging Market Economy Forum on

Observer oecd

Organisation for Economic Co-operation and Development

Electronic Commerce in Dubai, U.A.E., in January 2001.

The OECD's work programme still, to a great extent, follows the "OECD Action Plan for Electronic Commerce" endorsed by Ministers in Ottawa in 1998, along the following thematic lines:

• Building trust for users and consumers.

• Establishing ground rules for the digital marketplace.

• Enhancing the information infrastructure for electronic commerce.

• Maximising the benefits of electronic commerce.

A significant change in priorities in the OECD's e-commerce work is the move towards outreach to non-Member countries. This has involved greater attention to non-Member countries in all work areas in the Action Plan but important activities have started in the domains of ICT and electronic commerce policies for emerging market and developing economies. This included the Global Forum *Exploiting the Digital Opportunities for Poverty Reduction*, which was held at the OECD in March 2001. The OECD also contributes to the work of the Digital Opportunity Task Force (*Dot. Force)* set up in line with the Okinawa Charter on the Global Information Society by the G8 at their summit in July 2000.

"*OECD-Dubai 2001*", the OECD Emerging Market Economy Forum on Electronic Commerce, took place in Dubai, U.A.E. 16-17 January 2001, and was the first of its kind to be held outside the OECD's own membership. It was preceded on 15 January by two parallel events: the Public Voice Conference, organised by civil society

groups, and a Business-Government Forum, organised by the business community.

At this meeting it was acknowledged that accessing and using information and knowledge are fundamental for the economic growth and social development of the emerging market and developing economies as well as for the OECD Member countries. The matter is now a priority issue at the highest political level. ∎

How to build trust for users and consumers?

Trust is central to developing e-commerce. It largely hinges on assuring consumers and businesses that their use of network services is secure, reliable and verifiable. Similarly, consumers want control over the collection and use of their personal data, and assured access to appropriate redress mechanisms. Businesses need a framework that is predictable and workable for global transactions. Creating the appropriate level of confidence requires a mixture of trustworthy technologies, appropriate regulatory and self-regulatory arrangements and an educated public. The mechanisms for redress and the role of law enforcement must also be clarified to ensure that there is an appropriate and effective response to misuse or abuse.

Consumer protection

The OECD *Guidelines for Consumer Protection in the Context of Electronic Commerce*, completed in December 1999, are now available in the languages of all OECD coun-

tries. They represent international consensus on the core characteristics of an effective global approach to consumer protection for online business-to-consumer transactions. Subsequently the OECD has worked on implementing a number of discrete elements of the Guidelines:

• Alternative Dispute Resolution (ADR) mechanisms, especially for cross-border business-to-consumer disputes

• A review and workshop assessing the first year's progress in implementing the Guidelines

• A study of the types of protections associated with payment cards

• Dissemination of information to foster informed decision-making and consumer awareness.

• An "Inventory of Consumer Protection Laws, Policies and Practices in OECD Member countries".

Privacy protection

Privacy protection is a critical element of trust. The 1980 OECD Privacy Guidelines are still universally accepted as providing the basic principles of protection of personal data and transborder data flow. The thrust of the OECD's work is to provide practical guidance on implementing the Guidelines. The OECD Online Privacy Policy Generator promotes transparency by helping web sites create privacy policy statements. Other work included an inventory of instruments for privacy protection, an analysis of contractual solutions and an exploration of online alternative dispute resolution mechanisms. Current activities include examining and encouraging the use of privacy-enhancing technologies, promoting user education and

awareness about online privacy issues and the tools available to users for protecting privacy. Work is also being undertaken on the issue of privacy and security related to genetic testing data.

Security and authentication

That international collaboration is needed regarding security and authentication has been underlined repeatedly in international fora such as the G8 and in OECD Ministerial meetings. The OECD continues to examine policy and regulatory issues related to the development of secure information and communication infrastructures and technologies while promoting information exchange among public and private sector actors.

In response to a Ministerial mandate, the OECD has prepared a report on progress in Member countries in the area of electronic authentication, which examines how national policy and laws are currently implemented. The aims are to facilitate legal recognition, party autonomy, technology neutrality, global authentication mechanisms and user confidence, and to ensure that there is no legal discrimination in relation to different types of authentication technology.

The OECD also started reviewing the 1992 *OECD Guidelines on Security of Information Systems* and the 1997 *OECD Guidelines on Cryptography Policy* and is discussing areas where international policy measures might be appropriate in addressing emerging ICT threats, such as viruses or cracking. ◼

How to establish ground rules for the digital marketplace?

Existing legal and commercial frameworks that govern how businesses transact with each other, with consumers and with governments were designed in a nondigital age. Consumers and businesses are looking to governments to ensure that the rules of the game are equivalent to those of the physical world to the extent possible, and – where it is absolutely necessary to introduce new or changed rules – to ensure that these are transparent and predictable.

Taxation

Revenue authorities have an important role to play in realising the full potential of e-commerce. Their twin objectives are to provide a fiscal environment within which e-commerce can flourish while also ensuring that e-commerce does not undermine the ability of government to raise the revenues required to finance public services for their citizens.

The Ottawa *Taxation Framework Conditions* are increasingly accepted worldwide as providing a sound basis for ongoing work. They set out the taxation principles which should apply to electronic commerce – neutrality, efficiency, certainty, simplicity, effectiveness, fairness and flexibility – and outline agreed conditions for taxpayer service, tax administration, consumption tax and international taxation norms. Since they were agreed

in 1998 five business-government Technical Advisory Groups (TAGs) provided input into the development of these principles, covering Business Profits, Consumption Tax, Income Characterisation, Professional Data Assessment and Technology. In February 2001, the OECD published a report on progress on its website:

- For *consumption taxation* the report makes a number of recommendations on how to apply the place of taxation rules and considers mechanisms for achieving this with minimum burdens on business.

- On *international direct taxation issues* the report clarifies issues around Permanent Establishment and the characterisation of income. This will provide international business with the certainty they are looking for.

- In the field of *tax administration* it is recognised that revenue authorities will need to improve their international co-ordination and co-operation.

Whilst work remains to be done on some of the policy issues the focus of much of the ongoing work is on practical tax administration issues such as verification of customer location and status. The future work programme will also consider ways of simplifying tax systems and using technology to assist tax collection.

A major global conference on tax administration was held in Montreal in June 2001 with senior tax administrators from over 100 countries present. There was general agreement that the Ottawa Taxation Framework Conditions lay a strong foundation for developing global tax standards and best practices for e-commerce.

Business and non-member governments continue to participate in all this work through the continued TAG process. The TAGs are now streamlined into Consumption Taxes (CT), Compliance, Information and Technology (CID) and Business Profits (BP). Non-OECD participation has been strengthened through increased participation by non-member countries and business.

Trade policy and market access

The OECD plays a supporting role in international trade policy, providing analysis on a range of trade issues to complement discussions in the WTO. Work on e-commerce has focused on the trade policy and market access aspects of e-commerce.

The OECD has analysed WTO Members' commitments for services which can be supplied on-line, as well as the unilateral liberalisation measures aimed to promote e-commerce. It has studied the supply of "products" on-line, without prejudice to whether such products are goods or services. Finally, it has considered the role of on-line customisation in the e-commerce activities and, with a view to assisting WTO members in their preparations for the current services negotiations, the possibility of grouping taking a "cluster" approach to input services for e-commerce.

Competition law and policy

An OECD roundtable on Competition Law and Policy issues in electronic commerce focused principally on transaction matters. It explored the efficiencies of e-commerce marketplaces, as well as the risk that network effects may decrease competition among such marketplaces. It also considered how e-commerce marketplaces might facilitate collusion and the exercise of buyer power, and whether traditional anti-trust tools are sufficient to address competition issues online. A follow up roundtable on competition issues will likely take place in 2002 or early 2003 once competition agencies have acquired greater experience with both the infrastructure and transaction aspects of e-commerce.

The Joint Group on Trade and Competition Policy held a discussion on e-commerce. Attention centred on the need for: enhanced competition in telecommunications to facilitate lower priced access to the Internet; greater competition in international parcel delivery services; and streamlined customs procedures.

Electronic finance

The growth of e-finance led the OECD to undertake a study on the effects of electronic commerce on cross-border trade in *financial services*. The study, once completed, will deal with current trends as well as potential future developments. The OECD also began work on the implications of e-commerce in financial services for the implementation of the *OECD Codes of Liberalisation of Capital Movements and Current Invisible Operations*. Work also started on the implications of e-finance on *contract law* and on the issues raised by cross-border electronic delivery of *insurance* products. ■

How to enhance the information infrastructure for electronic commerce?

The development of electronic commerce is dependent on the availability and deployment of information infrastructures and universal and affordable access to markets and services appropriate for user-friendly electronic commerce applications. Effective competition in telecommunication markets is crucial, and this in turn depends on appropriate telecommunication policies and regulatory frameworks.

Access to and use of the information infrastructure

A competitive environment, within regulatory frameworks that provide the proper incentives and access to markets, best achieves user access to the right bandwidth at the right price. Emerging market and developing economies are finding, as have the OECD countries, that opening markets to competition increases investments and generates economy-wide benefits for consumers and businesses.

The OECD's recent work has covered a broad range of issues aimed at enhancing the information infrastructure, notably:

• Policy implications of changing information and network technologies and market demands, including the local loop and network convergence.

• Developments in pricing for access to broadband infrastructures.

- Internet developments and governance issues.
- Policy requirements for open international telecommunication markets.

The main reports prepared covered cellular pricing structures and trends, international refile of mobile traffic ("tromboning"), spectrum allocation (auctions versus "beauty contests"), institutional structures for telecommunications regulation, local access pricing and e-commerce, local competition and interconnection, access and local competition and retail price regulation for local telecommunication services. In addition to the regular topics (communication policy trends, markets, network developments, pricing and quality of service, trade), the *Communications Outlook 2001* covered Internet infrastructure, broadcasting and the international digital divide.

The Internet, governance and the Domain Names System

The OECD continues to develop Internet indicators, and new measurement tools in the area of Domain Names System and Internet traffic exchange, to assist self-governance and access issues. ■

How to maximise the benefits of electronic commerce?

The full economic potential of electronic commerce will only be realised through an environment facilitating its widespread use by businesses, consumers and institutions. The information infrastructure has the potential to link citizens to each other and to the world, and to foster social cohesion. A clear understanding of the needs of enterprises and citizens is needed.

Economic and social impact

The OECD has analysed the policy implications of the economic and social impacts of global electronic commerce since the mid-1990s. The OECD aims to improve measurement and analysis of the structure and volume of electronic commerce, deepen understanding of the impact of electronic commerce within and between businesses and determine how electronic commerce changes the level of employment and skill requirements.

The OECD has developed a set of electronic commerce definitions and a list of priority indicators (based on perceived analytic and user needs) and is now working to apply these to operational surveys, to refine the list of indicators and to provide methodological guidance.

The OECD is also analysing the economic impacts of e-commerce, notably in the Electronic Commerce Business Impacts Project (EBIP). The focus of this project is on assessing the dynamics and impacts of business-to-business e-commerce at a sectoral level using a common methodology. This project attempts to shed new light on the ways in which e-commerce is transforming the organisation and operation of value chains as well as the implications of these changes for policy-makers.

The Information Technology Outlook 2000 examined the issue of e-commerce "readiness" across OECD countries. Ongoing work includes analysis of ICT skills and employment, the software sector and the "digital divide" as part of the 2002 edition of the *IT Outlook*.

A Workshop on "The Digital Divide: Enhancing Access to ICTs" was held in December 2000 and a brochure on "Understanding the Digital Divide" was prepared. A Workshop on "Broadband: Infrastructure, Applications and Use" is scheduled for December 2001.

E-Government

The OECD is continuing to review governments' efforts to use the Internet and other ICT to improve the provision of information and services and *strengthening government-citizen connections*. The OECD also launched a project aimed at creating a better understanding of how governments succeed in *management of major public ICT projects* and what lessons can be learned from past failures. Reports on these two projects are in preparation. E-Government is now an ever-present issue in national strategies for ICT and the OECD was a partner in the Naples *Third Global Forum on Governance* in March 2001.

Small and medium-sized enterprises (SMEs)

ICT offer considerable opportunities for SMEs to grow and to rationalise their business. Although SMEs increasingly use ICT for a variety of commercial and production-related purposes, there is generally a lack of awareness of the full range of their potential.

The OECD prepared a background report for the Conference "Enhancing the Competitiveness of SMEs in the Global Economy: Strategy and Policies" held in Bologna, Italy, in June 2000. This report identified major issues for policy action in view of promoting the use of ICT and electronic commerce among SMEs. Current work on SMEs focuses on the collection of statistics on the diffusion and use of electronic commerce, the analysis of the impact of e-commerce on the business activities of small firms; and best practice policies to promote the use of e-commerce.

Education and skills

There is enormous potential for the growth of electronic commerce in education and training – both in software, as yet only in its infancy, and in terms of the sector's key role in developing the knowledge, skills and intellectual basis for electronic commerce. There is a lack of good quality educational software and a lack of sound public-private partnerships in developing it. More progress seems to have been made in distance education, lifelong learning, and in corporate training. The report "*E-learning – The Partnership Challenge*" addresses these questions.

A related issue being intensively studied at the OECD is the cross-border demand and supply of post-secondary education through the use of new technologies. The OECD publication *Learning to Bridge the Digital Divide* stressed how important it is to empower people with appropriate educational, cognitive and behavioural skills and tools so that they can access information and knowledge efficiently, effectively and wisely.

ICT and territorial development

The OECD has published a report entitled *Information and Communication Technologies and Rural Development* . The principal concern is to establish access to high-bandwidth ICT infrastructure at an affordable cost in areas where telecom operators usually do not provide it because of the small market. Another is to create a sufficient level of awareness and training so that existing businesses make a first step towards e-commerce. Under these conditions, inward investment can help create activities such as multimedia content, software design or e-commerce. A study is also underway on ICT in urban areas.

Development co-operation

The OECD has issued a set of guidelines that address the needs for and constraints to capacity development for trade faced by developing countries. They include the areas of ICT and electronic commerce and a roadmap for effective donor policies and instruments to overcome those constraints.

In March 2001, the OECD held a Global Forum on Exploiting the Digital Opportunities for Poverty Reduction in collaboration with the UN, UNDP and the World Bank. The Forum examined the role of donors and other actors in helping to bridge the international digital divide, develop e-commerce and e-government, and use ICTs to spur progress towards agreed international development goals. The OECD Development Centre began researching e-commerce in developing countries when it prepared a background paper for the pre-Okinawa Conference on ICT and Development Assistance held in June 2000. It has continued its research and held seminars on the topic in 2001.

Ensuring global participation

The OECD will continue to ensure dissemination of its work on electronic commerce outside Member countries in co-ordination with other international organisations such as the World Bank, the World Trade Organization (WTO), UN agencies and regional bodies such as APEC. Follow-up events will take place in the context of the OECD Global Forum on the Knowledge Based Economy and other programmes with non-Member countries. ∎

For further reading

■ **Competition Issues in Electronic Commerce**, 2000, **Series Roundtables on Competition Policy, #31** –
Available on internet: *www.oecd.org/daf/clp/Roundtables/e-com.pdf*

■ **Taxation and Electronic Commerce: Implementing the Ottawa Taxation Framework Conditions**, 2001.
ISBN: 92-64-18595-X, €65.00, US$57, 240p. Chapters also available individually at:
www.oecd.org/daf/fa/e_com/public_release.htm.

■ **For more information on the global conference**, **"Tax Administrations in an Electronic World"**
(Montreal, June 2001), see *www.ae-tax.ca/* – Conference – Press Room. For the "Post-Montreal Strategy",
see *www.ae-tax.ca/pressreleases/eng/post_montreal.htm*.

■ **Learning to Bridge the Digital Divide**, 2000 ISBN: 92-64-18288-8, €20, US$20, 140 p.

■ **E-learning – The Partnership Challenge**, 2001 ISBN: 92-64-18595-X, 65, US$57, 240p.

■ **Information and Communication Technologies and Rural Development,** 2001 **–**
ISBN: 92-64-18670-0, €30, US$27, 192p.

■ **Information Technology Outlook** 2000. ISBN: 9264171851, €73, US $72, 260p.

■ **Workshop on "The Digital Divide: Enhancing Access to ICTs", Paris, 7 December 2000:**
www.oecd.org/dsti/sti/it/infosoc/act/digital_divide/digital_divide.htm

■ **Understanding the Digital Divide** Available on Internet at: *www.oecd.org/dsti/sti/prod/Digital_divide.pdf*

■ **General information at**: *www.oecd.org/dsti/sti/it/*

**OECD publications can be securely purchased
from the OECD Online Bookshop**
www.oecd.org/bookshop

The OECD Policy Briefs are prepared by the Public Affairs Division,
Public Affairs and Communications Directorate.
They are published under the responsibility of the Secretary-General.

Where to contact us?

FRANCE
OECD Headquarters
2, rue André-Pascal
75775 PARIS Cedex 16
Tel.: 33 (0) 1 45 24 81 81
Fax: 33 (0) 1 45 24 19 50
E-mail: sales@oecd.org
Internet: *www.oecd.org*

GERMANY
OECD BERLIN Centre
Albrechtstrasse 9/10
D-10117 BERLIN
Tel.: (49-30) 2888353
Fax: (49-30) 28883545
E-mail:
berlin.contact@oecd.org
Internet: *www.oecd.org/
deutschland*

JAPAN
OECD TOKYO Centre
Landic Akasaka Bldg
2-3-4 Akasaka, Minato-Ku
TOKYO 107
Tel.: (81-3) 3586 2016
Fax: (81-3) 3584 7929
E-mail: center@oecdtokyo.org
Internet: *www.oecdtokyo.org*

MEXICO
OECD MEXICO Centre
Av. Presidente Mazaryk 526
Colonia: Polanco
C.P. 11560
Mexico, D.F
Tel.: (00.52.5) 281 3810
Fax: (00.52.5) 280 0480
E-mail:
mexico.contact@oecd.org
Internet: *www.rtn.net.mx/ocde*

UNITED STATES
OECD WASHINGTON Center
2001 L Street N.W.,
Suite 650
WASHINGTON D.C. 20036-4922
Tel.: (1-202) 785 6323
Fax: (1-202) 785 0350
E-mail:
washington.contact@oecd.org
Internet: *www.oecdwash.org*
Toll free: (1-800) 456 6323

The OECD Policy Briefs are available on the OECD's Internet site

www.oecd.org/publications/Pol_brief/