## **Electronic Commerce: A New Economic and Policy Area**

## By Georges Ferné

Email: <u>Georges.FERNE@oecd.org</u> Georges Ferné has been with OECD since the late 1960s, working on a number of science and technology related questions, including Information Technology Development Policies, University/Industry Research Policies, Social Sciences Policy, etc. His recent work has addressed questions relating to the economics of the information society, including standardisation in information and communications technologies, case studies on the impacts of information technologies on employment, and opportunities and challenges of electronic commerce. He is currently involved in policy analysis of the systemic relations between innovation and intellectual property rights at international level. Georges Ferne is the Executive Secretary of the International Council for Science Policy Studies (ICSPS), a body under the aegis of ICSU.

The 'Sacher Report' ("Electronic Commerce: Opportunities and Challenges for Government", OECD, Paris, 1997, ISBN 92-64-15512-0), which the OECD has just published, assesses current developments in electronic commerce and presents a new aspect of the issue by setting out priorities for government action. Its originality is derived from the fact that it expresses the point of view of senior executives from twenty major international firms in retail distribution, banking and finance, food, automobile, chemic als and multimedia, all leading users of electronic commerce. The group, an ad hoc body chaired by John Sacher, Executive Director of leading UK retailer Marks and Spencer, was invited by the OECD to compile this independent report. The group members con sulted nearly 100 top decision-makers from 80 companies and organisations currently playing a leading role in the expansion of electronic commerce: users, suppliers and vendors of computer and telecommunications equipment, network services and software, a few public bodies, and more.

Electronic commerce has a broader sense than that accorded to its usual meaning – purchases made over networks by end-consumers. There are also transactions between firms which organise their supply and distribution chains with the support of public and p rivate information infrastructures. These changes are affecting all sectors of activity. The OECD's Sacher Report notes, for example, that one large bank already carries out some ten million electronic transactions per day. Another bank indicated that abo ut 70 % of its transactions are already automated. A major retailer reported that the entire volume of its business with suppliers, amounting to over \$10 billion, is carried out electronically. An important European car manufacturer reported that it maint ains electronic links with over 800 suppliers, supporting transaction volumes of close to \$7 billion in 1996; and a US aerospace company reported that 60 % of orders for spare and replacement parts are fully automated, enabling delivery to any part of the world in less than 24 hours.

Electronic transactions can involve three groups of actors: business, government and individuals. At present, the bulk of electronic commerce is still conducted business-to-business or, to a lesser extent, business-to-government in connection with public procurement and customs and excise formalities. In spite of the still embryonic nature of electronic commerce, the authors of the Sacher Report are convinced that it will assume a position of major economic importance in the near future, and that the consequences will be dramatic for business endeavour s of all kinds. The Report points out that the figures cited for the projected growth of Internet users are not reliable (estimates of the current number of Internet users, for example, vary between 30 and 50 million). It goes on to argue that the use of new information and communications technologies opens up new possibilities of direct, general interfaces between each consumer and a growing range of products, thanks to data-transmission networks and, especially, the spectacular growth of the Internet i n recent years.

The definition of electric commerce therefore encompasses all types of commercial transactions based on the electronic processing and transmission of data, including text, sound and visual image. The difficulty and scale of the challenges facing governments stem from the fact that the electronic market-place is still far from being complete and that the

technology is evolving rapidly and its direction is, in many respects, unpredictable. To a large extent it will be necessary to rely on market forces to s hape the new patterns of commercial behaviour while safeguarding the claims of government and the interests of consumers and citizens.

Three features of electronic commerce (e-commerce) are likely to modify traditional market behaviour and have an impact on the effectiveness of regulatory frameworks:

- e-commerce gives firms direct access to distant markets and promotes the globalisation of commercial activity by opening up new opportunities for achieving economies of scale and by facilitating international rationalisation of production and distributi on;
- it provides a new vehicle for the delivery of intangible products, blurring many of the current distinctions between domestic and foreign firms to a point where it becomes very difficult to determine where a transaction has actually been carried out, a nd under which jurisdiction it falls.
- the growth of electronic commerce is being supported by the Internet, which has established a basic networking paradigm that could eventually allow the entire spectrum of commercial activities to be conducted electronically.

A new commercial sphere is emerging, and in the process raises many economic, political, social and cultural issues: the effects on competition and competitiveness, effects on prices, modification of the nature and role of intermediaries, the emergence of new banking and financial channels, influence on the mobility of companies, impact on consumer behaviour, implications for the institutional structures that regulate and facilitate commercial activities, sweeping changes in the definition and organisatio n of work, consequences for linguistic balances, and more. By and large, the role of infrastructure and information in job creation and productivity is only now beginning to be imagined. Electronic commerce could generate new activities and new jobs, but it could also modify the structure of skills required, the way they are used, the relations of complementarity and competition between firms, and the criteria used in national and international strategies to determine the geographical location of industri al and commercial activities.

## The Sacher Recommendations

The Sacher Report cites three priority areas for government action. Governments should support the growth of electronic commerce by providing the flexible, open-ended infrastructure it requires. The Report recommends that electronic infrastructure services like telecommunications, television and data networking, as well a s the regulatory regimes for them, be permitted, even encouraged, to converge. The objective is to obtain managed network facilities that are responsive to diversified commercial demands in a standardised international technical and regulatory environment .

Governments will also have to raise the visibility of electronic commerce. They need to promote new partnerships with the private sector in order to co-ordinate technical, economic and political choices. Governments are invited to appoint a Chief Inform ation Officer whose role would be to maintain a dynamic dialogue with private actors. Such exchanges would help to harmonise the principles guiding electronic commerce and adapt the public sector to the new environment. This would constitute what the Re port calls an 'electronic administration' in tune with new developments in the private sector. In government itself, the priority should be to ensure the rapid acquisition of the professional and technical skills required in the electronic market-place and to make continuous changes in regulatory practices. Badly conceived deregulation or re-regul ation can provide new forms of protection to existing monopolies or curb technological advances, and be worse than the status quo. Governments should urgently clarify the legal definitions, practices and structures pertaining to electronic commercial act ivities. They must set out the legal principles applicable to a whole range of matters, from consumer protection to fraud and crime prevention and intellectual property, electronic identity, the definition of residence, liability, auditing, and the contr ol, unauthorised use and protection of databases.

The issue of taxation is crucial. The Sacher group opposes taxing the process of data exchange (the 'bit tax') as being unworkable and potentially discriminatory to e-commerce activities and to normal business communications. It proposes approaches base d on consensual principles relating to the source and destination of products, whether tangible or intangible, and to the residency of companies. \*\*

The Sacher Report focuses on new forms of constraints as regards the development of e-commerce. E-commerce represents a new market-place, with new actors and intermediaries who have already gained a foothold. The traditional division of responsibilities between the private and public sectors does not hold. There is, too, the growing importance of users in economic and technological choices. This has an impact on the way policies are framed. The legislative and commercial frameworks of commerce are n ot necessarily appropriate. No one knows whether they will be adapted or whether they will have to undergo radical change. The OECD has already undertaken to assist policy-making at international level in the relevant areas -- cryptography, consumer pro tection, fiscal policies, access issues and various aspects of law enforcement.

The OECD recognises that the economies of its Member countries will rapidly become integrated into the global "information economy" where most goods and services will become more information-intensive. The development of electronic commerce will play a k ey role in this process. As a result, there is scarcely a part of the OECD Member governments not actively concerned and these questions now figure on policy agendas at the highest political level as well as being familiar to citizens at all levels. The OECD endeavours to grasp and analyse these issues in order to provide member countries with the policy analysis and advice needed in the new economic landscape. Responding to the challenges will require international co-operation between the public and p rivate sectors.

An OECD conference, "Dismantling the Barriers to Global Electronic Commerce," is the first step towards building that international co-operation. It will take place on November 19-21, 1997, in Turku, Finland, and will bring together policy makers in gove rnments and private sector leaders and international organisations active in the field of electronic commerce. They will assess the present situation and discuss the possible actions to remove barriers and promote the development of electronic commerce.

An OECD symposium, "A Borderless World -- Realising the Potential of Global Electronic Commerce" is scheduled to take place in Ottawa, Canada, in the second half of 1998. A consensus on general principles for the operation and use of global information networks for electronic commerce may be reached at this meeting. Further information can be found on the OECD's Internet site -- http://www.oecd.org. 4 6 6