



Directorate-General for Research

WORKING DOCUMENT

ELECTRONIC COMMERCE

AND

TAX BASE EROSION

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Directorate-General for Research

WORKING PAPER

ELECTRONIC COMMERCE

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TAX BASE EROSION

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EXECUTIVE SUMMARY

In the fast-emerging market of electronic commerce, which is expected to be worth at least 200 billion ecu at world level by the year 2000, the tax authorities find themselves in a rather ambiguous position. On the one hand, tax administrations could benefit from the new information technologies because these very technologies will increase efficiency, opening up new possibilities to exchange information in a more timely and secure way, and improving the quality of their dealings with tax payers. On the other hand, electronic commerce, commercial transaction over open networks such as the Internet, could open new possibilities for tax evasion and avoidance, endangering the tax revenue base. Bruce Stokes has stated, "But for all its vast potential, the cybermarketplace is little more than a lawless frontier, lacking rules and accepted business practices to deal with fundamental issues of access, privacy and taxation."¹

This briefing examines whether there is any evidence, for both 'direct' and 'indirect' taxes, that electronic commerce leads to tax base erosion and the establishment of businesses in tax havens.

The briefing also looks at the impact that the growth of the Internet and electronic commerce may have on the collection of taxes. It conveys that the use and characteristics of the Internet as a medium for electronic commerce makes it inevitably difficult for tax authorities to prevent tax base erosion. An analysis is made of the problems which make electronic commerce over the Internet so difficult to tax. This includes the Internet's lack of physical location and central control, the problems with auditing and enforcement, the use of electronic money and encryption and the problems associated with mirror servers and disintermediation. A discussion of existing tax law gives an overview of why direct and indirect taxation rules may provide loopholes in the age of electronic commerce. Some Internet characteristics are examined to show where the loopholes exist and why the current indirect and direct tax laws are not 'watertight'. Anecdotal evidence and the use of statistics provide evidence as to whether the phenomenon of tax base erosion as a result of electronic commerce really exists. The conclusion indicates how governments and tax authorities might react to the problems posed by the internet. The concept of a 'bit tax' is examined and solutions are suggested as to how tax authorities might be advised to respond to the problems they currently face in monitoring transactions and tax collection.

- Summary of conclusions

There appears to be little statistical evidence that major tax bases (household income taxes, corporation income taxes and consumption taxes) have been eroded. Overall, taxes have risen, not fallen, over the past several years, and although tax rates have tended to converge over time there remains substantial variation across countries. However, anecdotal evidence shows that changes are taking place. Quantifying those changes is not without difficulties. No one has yet been able to measure exactly how much revenue governments have lost as a result of companies avoiding taxes, individuals becoming tax exiles or people buying goods over the Internet. However, it is evident that the nature of electronic commerce on Internet provides the opportunity for tax evasion.

¹ Bruce Stokes, "*Trade Friction in Cyberspace*", **National Journal**, 7/11/98, page 1634

From the indirect tax point of view, the provisions of the Sixth VAT Directive can lead to undesirable tax effects and can provide possibilities for tax avoidance which could lead to distortion of competition within the European Union. The major, and rapid advancements in telecommunications technology have introduced many new products and means of delivery, as well as significant changes in the way international business is being conducted. Tax legislation was generally written some time before these changes. The present system of VAT on Internet sales is still difficult to interpret. The distinction between goods/services/intangibles is becoming vague. One reason why taxation issues are so complex in connection with electronic commerce is that e-commerce includes both goods, services and so-called virtual goods (electronically delivered goods).

As regards direct taxes, it has been suggested that the fiscal concept of permanent establishment is ill-adapted to electronic commerce. Those who take that position have argued that a rule based on physical presence is meaningless in the electronic commerce environment.² The principle of physical presence comes under pressure where a business is able to exploit a market in a country without establishing a significant physical presence there.

Speed, multiplicity, and decentralisation of cross-border transactions put pressure on the concepts of taxation. Electronic commerce transactions and the development of Internet networks will challenge even the most efficient tax collection and enforcement regime, both under direct and indirect taxation. The Internet allows significant anonymity. The use of an Internet site can be untraceable to the actual user or even to the user's country. Registration requirements are minimum, as is proof of identity. An added difficulty for tax authorities is weak traceability. Even where some electronic traffic has been discovered, encryption keys may prevent a tax administration from knowing the content of the message or communication. For either reason, Internet transactions may leave no "audit trail". The sites can also be shifted very quickly, so that tax administrations may have difficulty keeping up with the trail even if it can be found. Perhaps the most significant audit concern derives from the potential of e-money (electronic money). The untraceability of Internet transactions means that e-money could function essentially like cash that is kept at home rather than put on deposit at a bank.

Perhaps the most acceptable outcome will be for the tax authorities to find new intermediaries to work for them as collectors. The hubs of the electronic economy, the equivalents of the ports and airports in the industrial era, will be telecommunications switches and computer servers. The most effective way forward would be for the tax authorities to team up with the companies who provide these nodal points in the new economy. At the moment, Internet service providers and telecommunications companies decline to play such a role. Mervyn King, the deputy governor of the Bank of England says, "the idea that Microsoft and British Telecom may have a more important role in payments systems in the future than Midland or Barclays Bank is not one to be dismissed lightly". The tax-collection divisions of these international corporations could become indispensable partners to the world's tax authorities in the electronic era.³

² OECD, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, "*Electronic Commerce: A Discussion Paper on Taxation Issues*", 17 September 1998, page 24

³ Charles Leadbeater, "*Goodbye, Inland Revenue*", *New Statesman*, 3 July 1998, page 29

As yet, electronic commerce is modest among consumers. Consumer purchases in cyberspace are comparatively small, probably no more than \$4 billion this year, but growing rapidly. World on-line consumer sales are forecast to reach only \$7 billion by 2000. That is just 0.1% of American consumer spending. In 30 years time, however, 30% of consumer activity could be taking place on line, says John Neilson of Microsoft's interactive services division.⁴ If workable international tax laws have not been developed by then the Net will make a big dent in sales taxes.

⁴ **The Economist**, "Disappearing Taxes; The tap runs dry; Taxes slip through the Net", 31 May 1997, page 18

INTRODUCTION

Charles Leadbeater predicts that taxes as we know them are doomed. He says, “the growth of the Internet and electronic commerce, combined with the globalisation of trade and production and shifts in the job market spell the end for the 20th century’s tax system.⁵ The erosion of the world’s tax base will be one of the greatest forces for social and political change in the first half of the next century, far more important than the Euro. This is a subject talked about by governments and tax lawyers, but there is virtually no public understanding of it.⁶ The OECD has stated that “electronic commerce has the potential to be one of the great economic developments of the 21st Century. Electronic commerce and the information and communication technologies which underlie this new way of doing business will provide opportunities to improve the global quality of life and economic well being and have the potential to spur growth and employment in industrialised, emerging and developing countries.”⁷

The structure of our economies is shifting from the production, distribution and consumption of tangibles to intangible goods and services. The value added throughout the entire production and distribution process can easily be traced and located in the case of tangibles, but not in the case of intangibles. As a consequence, Luc Soete and Karin Kamp state that increasing parts of the value added in production and distribution are considered invisible and hidden in an “...unmeasured but not unnoticed increase in consumer surplus”.⁸ It is generally believed that new communication technologies may result in an erosion of a nation’s tax base. The producers of visible and easily traceable goods have to pay VAT which they pass on via prices to customers while those who are using new communication technologies may be able to avoid these taxes. This leads to the conclusion that electronic markets are likely to reduce tax revenues. However, there is no reason why the production of intangibles should escape VAT as intangibles are subject to VAT.

The major, and rapid advancements in telecommunications technology have introduced many new products and means of delivery, as well as significant changes in the way international business is or can be undertaken. Tax legislation was generally written some time before these changes, and its application to these new circumstances is not necessarily clear.

All modern tax systems and tax treaties make distinctions among three basic categories of income (as well as other, of course): the sale of personal property, the provision of services, and the furnishing of intangibles, including intellectual property rights. In an era of the Internet, these distinctions are blurring.⁹

⁵ Charles Leadbeater, “*Goodbye, Inland Revenue*”, **New Statesman**, 3 July 1998, page 27

⁶ William Rees-Mogg, “*Tax Exiles on the Web*”, Opinion, **The Times**, 26 Feb 1998

⁷ **OECD**, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, ‘*Electronic Commerce: A Discussion Paper on Taxation Issues*’, 17 September 1998, page 4

⁸ Hanno Beck and Aloys Prinz, “*Should All the World be Taxed?*”, Taxation and the Internet? **Intereconomics** - Review of International Trade and Development, March/April 1997, Volume 32, page 89

⁹ David R. Tillinghast, Internet; “*The Impact of the Internet on the Taxation of International Transactions*”, **International Bureau of Fiscal Documentation**; Bulletin, November/December 1996, page 524

However, some authors are of the opinion that the Internet does not really create new problems for the proper application of international tax concepts.¹⁰ Reference is made to the mail-order business where income flows out of the buyer's jurisdiction to the seller's, the latter having not established a physical presence in the former's country. The same can be said about home shopping channels. However, it is the view of Lejeune, Vanham, Verlinden and Verbeken¹¹ that the concepts used in modern tax systems and treaties about which tax practitioners thought there was an international consensus are no longer adequate. The way in which they are defined is no longer appropriate since they were conceived in an era in which international trade consisted of the physical shipment of tangible goods or the physical movement of persons to perform services at different locations.¹²

THE GROWTH OF ELECTRONIC COMMERCE AND THE INTERNET

The Internet is able to connect millions of computers. This means that national and geographic boundaries have been transcended and have become irrelevant.¹³ The Internet enables the marketing and supply of certain goods and services to peoples homes. Via computer and telecommunications technology it is now possible to order and pay for goods electronically. Electronic commerce is currently relatively small and will continue to be so in the near future, but it is growing very quickly (over 200 per cent annually). When compared to benchmarks such as mail-order shopping, credit card transactions and traditional retail trade, it is clear that while important, electronic commerce is at an embryonic stage where technology and the dynamics of the market are still casting its basic shape. This suggests that policies should be crafted with caution and in recognition of the evolving nature of electronic commerce.¹⁴

The two most important differences made by the Internet or private communication networks are speed, the near-simultaneous transmission of information and the increased mobility of activities and the effective removal of physical boundaries. The speed of communication allows individuals as well as companies and assets to be more mobile, less tied to any particular jurisdiction. With the Internet, cross-border transactions are easier, from the tax administrator's perspective they are harder; harder to identify, harder to trace, and harder to quantify. Thus, it is the speed, multiplicity,

¹⁰ Horner, F. M., and Owens, J., "Tax and the Web: New Technology, Old Problems", **Bulletin of International Fiscal Documentation** 11/12 (1996), at 516

¹¹ Ine Lejeune, Bart Vanham, Isabelle Verlinden, Alan Verbeken, International; "Does Cyber-Commerce Necessitate a Revision of International Tax Concepts?", European Taxation, **International Bureau of Fiscal Documentation**, January 1998

¹² Tillinghast, D. R., "The Impact of the Internet on the Taxation of International Transactions", **Bulletin of International Fiscal Documentation** 11/12 (1996), at 524

¹³ Ine Lejeune, Bart Vanham, Isabelle Verlinden, Alan Verbeken, International; "Does Cyber-Commerce Necessitate a Revision of International Tax Concepts?", European Taxation, **International Bureau of Fiscal Documentation**, January 1998

¹⁴ Measuring Electronic Commerce, OECD/GD(97)185

and decentralisation of the cross-border transmissions that are involved that put pressure on the concepts of taxation.¹⁵

The crucial point, for users and regulators alike, is that there is no central controller of the Internet, and the system does not reside in any particular place or, in a sense, in any place at all. The Internet allows people to transfer all kinds of information between their computers, including text, computer data, pictures and, increasingly, voice and video.¹⁶

According to one estimate, 60 million people in 160 countries were using the Internet by the end of 1996, and the number of users is expected to double each year. The US Commerce Department estimates that at least 100 million individuals worldwide were connected to the Internet by the end of 1997 and that consumer sales are currently worth around 6 billion dollars annually.

Internet retail sales are projected to reach 20 billion dollars by 2000 and business-to-business transactions could reach 300 billion dollars by 2002.¹⁷ More than four-fifths of this business will be company-to-company transactions, as more and more firms source parts and services in cyberspace, to save time and money. Hewlett-Packard Co. claims to have reduced its procurement cycle from two weeks to days by soliciting bids and signing contracts electronically. The Internet's core economy, comprising hardware, software, content and on-line trade, was worth around 2.2 billion dollars in 1997. By 2000, this core economy is expected to be worth 45.5 billion dollars.¹⁸

It has been estimated that by 1996 there were more than 250,000 commercial Internet sites and that the number is growing quickly. It should therefore be of little surprise that revenue authorities are becoming interested in Internet Commerce.¹⁹

As yet, electronic commerce is modest among consumers. Consumer purchases in cyberspace are comparatively small, probably no more than \$4 billion in 1998, but growing rapidly. World on-line consumer sales are forecast to reach only \$7 billion by 2000. That is just 0.1% of American consumer spending. In 30 years time, however, 30% of consumer activity could be taking place on-line, says John Neilson of Microsoft's interactive services division.²⁰ If workable international tax laws have not been developed by then the Net will make a big dent in sales taxes.

¹⁵ Frances M. Horner and Jeffrey Owens, Internet; Tax and the Web: "New Technology, Old Problems", **International Bureau of Fiscal Documentation**; Bulletin, November/December 1996, page 516

¹⁶ Neil Russ, Buddle Findlay, AIC Conference, Electronic Banking and Payment Systems, Taxation Issues in Electronic Trading - Nationally and Internationally, 22 April 1997

¹⁷ **Oxford Analytica Brief**, International: Internet Taxation, 20 October 1998: 4

¹⁸ **Oxford Analytica Brief**, International: Internet Law, 6 October 1997: 5, page 1

¹⁹ Neil Russ, Buddle Findlay, AIC Conference, Electronic Banking and Payment Systems, Taxation Issues in Electronic Trading - Nationally and Internationally, 22 April 1997

²⁰ **The Economist**, "Disappearing Taxes; The tap runs dry; Taxes slip through the Net", 31 May 1997, page 18

In a survey published early in 1997 by CommerceNet, an industry consortium, and Nielsen, a media-research firm, 73% of Internet users had used the Web for shopping in one way or another in the past month. According to projections by International Data, a Massachusetts consultancy, by 2000 46m consumers in America alone will be buying on line, spending an average of \$350 a year each.²¹ Dell sells \$5 million worth of computers, 15 per cent of its business, every day over the Internet, and hopes to have half of its sales on line in three years. However, this rapid growth has not been accompanied by a corresponding evolution of the legal framework in which the Internet operates.

Lynwood S.Bell, the President of Hansa.net Global Commerce Inc., an offshore company that specialises in giving advice in tax avoidance, says that ...“the physical location or residence of your business has become more, not less, important since the dawn of electronic commerce. Location affects economics, tax, regulatory compliance, supply sources and many other elements. Location may be the single most significant decision to be taken in international Internet based trade and commerce. Companies that choose wisely will have major price and competitive advantages over those that do not.”²² Hansa.net state that “taxes are an option in e-commerce. The statement that the only certainties are death and taxes, no longer applies.”²³

- The US Market

The US electronic commerce market is the most developed in the world. Only about 10% of the “.com” domains are outside the US. Nearly two thirds of all US companies will have started conducting e-commerce by the end of 1998. This private engagement into electronic commerce is coupled with widespread use of the Internet among the US population. 56 million adults claim to use the Internet and a further 16 million expressed the intention to go on line before the end of 1997. The amount of people sending money on line had gone up to 8.7 million at the end of 1997.²⁴

In the United States, 18% of all households are now on-line and the proportion is likely to reach 38% by the end of 2000. According to some estimates, one in four US customers may purchase cars over the Internet by 2001. A recent survey forecast that 15-20 million US households would buy groceries valued at around \$85 billion on-line by 2007. On-line shopping is currently a minority activity, even amongst longtime Web users, but US on-line sales of \$1.1 billion for Christmas 1997 suggest that sales will rise sharply, led by household products and clothing. A recent study indicates that by 2002, US consumers will spend \$12.5 billion per annum on line, compared with spending of \$3.5 billion dollars among European customers.²⁵

The US already boasts more than 250,000 cyber companies using the Internet commercially. Travel services and flower distribution are particular success stories. Travel services currently amount to

²¹ **The Economist**, Electronic Commerce, “*In search of the perfect market*”, 10 May 1997

²² See <http://www.hansa.net/hansa2.htm>

²³ See <http://www.hansa.net/ecom.htm>

²⁴ Intelliquist survey, quoted by NUA Internet surveys, <http://www.nua.ie>.

²⁵ **Oxford Analytica Brief**, International: Electronic Commerce, 30 January 1998: 4

more than half of electronic commerce. The Internet Advertising Bureau (IAB) announced an advertising revenue of \$91 million in June 1997. It is interesting to note the growth in consumer and financial services and the decline of computer advertising spending since the fourth quarter of 1996.²⁶

- *The European Market*

The number of Internet hosts in Europe increased from 33,665 in 1990 to 2 million at the end of 1995, and the number of users in 1995 was estimated at between 25 and 50 million persons.²⁷ Although electronic commerce is not yet widespread in Europe, it is growing fast and is expected to reach some \$20 billion by 2000. However, this market will not be equally spread throughout the Union. The UK is by far the largest electronic commerce market in Europe today and it is forecast to remain so until 2000. Although 30% of British companies have a web site (twice the European average), only 17% of the companies are buying and selling over the Net. The numbers are expected to be 40% buying and 30% selling in 1998.²⁸

European companies have generally failed to invest in the infrastructure necessary to conduct electronic commerce (while 42 per cent of US capital investment goes to information technology. British firms for example, allot only 15 per cent of their investment to computers and telecommunications equipment). As a result, the European electronic-market is undeveloped, up to a year behind that in the United States, according to Gordon Ballantyne, director of Dell's European Internet services. However, EU consumers are hungry for the bargains and the choices afforded them on the Net. A European who hits on the Dell Web site, for example, is twice as likely to make a purchase as is an American browser, which suggests that Europe is a fertile electronic-commerce market for the companies that get there first.²⁹

²⁶ See <http://commerce.net./stats/advert.html>.

²⁷ Hanno Beck and Aloys Prinz, "Should All the World be Taxed?", Taxation and the Internet? **Intereconomics** - Review of International Trade and Development, March/April 1997, Volume 32, page 87

²⁸ Alain Steward, "Easier access to world markets", **FT** - IT, 3 December 1997, p.8.

²⁹ Bruce Stokes, "Trade Friction in Cyberspace", **National Journal**, 7 November 1998, page 1634

Figure 1:

Turnover in Electronic Commerce (Billion ECUs)

	1995	1996	1997	1998	1999*	2000*	2001*
Benelux	0.01	0.05	0.22	0.70	1.92	3.69	5.32
France	0.00	0.01	0.11	0.51	1.89	4.64	8.29
Germany	0.00	0.02	0.18	0.83	3.03	7.42	13.20
Italy	0.00	0.03	0.16	0.53	1.50	3.00	4.52
Nordic	0.01	0.08	0.38	1.15	2.93	5.15	6.71
Spain	0.00	0.01	0.04	0.15	0.51	1.17	2.01
UK	0.02	0.15	0.65	1.97	4.90	8.42	10.58
Rep of Ireland	0.01	0.04	0.21	0.69	1.95	3.85	5.72
Total	0.05	0.39	1.93	6.53	18.63	37.34	56.36

Source: EITO 1997

* Estimate

USE OF THE INTERNET FOR COMMERCIAL PURPOSES

There are two primary ways in which the Internet is being used for commercial purposes. First, the widely used graphical manifestation of the Internet, the World Wide Web, is being used for information dissemination by retailers and wholesalers. The Internet provides an unprecedented medium for the distribution of product information. Advertising is relatively cheap, and has the potential to reach literally millions of consumers. It is easy to advertise on another person's site, via a banner link, or to offer an advertisement to a person searching the Internet using words relevant to the goods or services being advertised. Internet advertising can also have more subtle advantages over the traditional forms. For example, electronic catalogues often allow the user to search for the item they want. One well known (in cyber-space) Internet bookseller allows its user search more than one million books, while another retailer indexes more than 185,000 music titles. Furthermore, such catalogues may interactively notify a consumer when an item they want is released or comes into stock.

The second way in which the Internet is used for commercial purposes is through the actual sale of products and services. Once a consumer identifies something to purchase over the Internet, he or she can instantly contract with the supplier with the click of a button. The ability to make purchases in this way is being enhanced through the development of electronic payment mechanisms such as electronic cash and home smart-card systems. These systems reduce the risks associated with transmitting credit card details over the Internet.

In the case of physical goods it is obviously necessary to use a post or courier system to deliver the goods. However, there are a number of products that can be delivered electronically. Examples of products currently available to download over the Internet include computer software and photographic images. As data transfer speeds increase it may become viable to deliver products electronically such as high quality music and video.

In addition to digital “goods” (if indeed they are defined as a good or service; see below), an increasing variety of services are being offered over the Internet. On-line databases are a good example of an Internet service. Instead of purchasing an encyclopaedia on CD-ROM, a consumer may choose to pay a fee to access the information via the Internet. One advantage of such a system is that, unlike a CD-ROM, an on-line database can be easily updated. A range of financial services is also being offered over the Internet including accounting services, banking facilities and securities trading.³⁰ The Internet is currently being used for the sale of the following services:

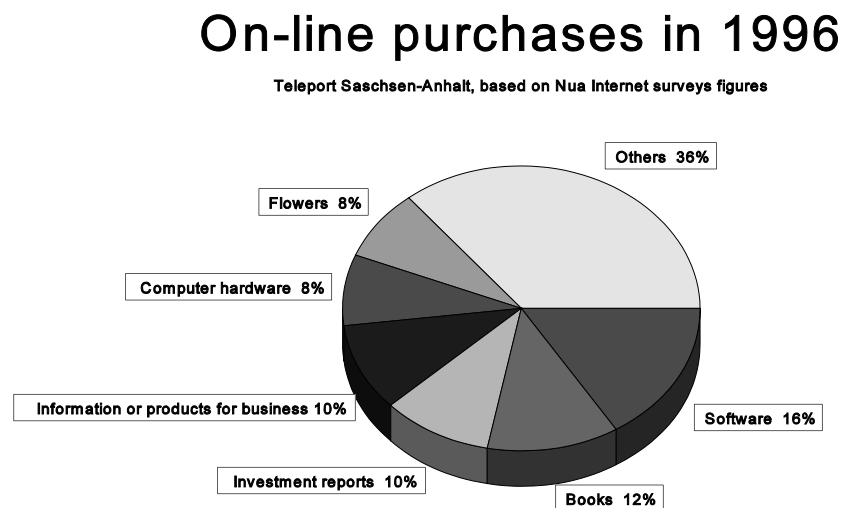
- the provision of information
- consultancy and advice
- copyright and licences to use computer software
- advertising
- design (for example, of a web site)

In business to consumer commerce the largest segment is in fact intangibles like entertainment and software. For some time now, many firms have sold and delivered intangible goods or services via the Internet, mostly related to software, hardware, marketing, accounting services, and the like. Increasingly, businesses are now selling tangible goods and services on the WWW, including everything from books, plane tickets and travel packages, to clothing, flowers and fast food. Other areas where activity is large, but poorly understood, is on-line gambling and ‘adult’ entertainment. Most of the gambling activity is on sites located in off-shore havens such as Granada.³¹ In the pie chart below, one can clearly see which businesses are taking advantage of the electronic commerce:

³⁰ Neil Russ, Buddle Findlay, AIC Conference, Electronic Banking and Payment Systems, Taxation Issues in Electronic Trading - Nationally and Internationally, 22 April 1997

³¹ OECD, Measuring Electronic Commerce, Paris, 12-13 June 1997

Figure 2:



CHARACTERISTICS OF THE INTERNET THAT MAKE IT INEVITABLY TIRESOME TO TAX ADMINISTRATORS

There are two fundamental differences between the current Internet environment and the pre-Internet situation.

In the first place, the geographic location of the server may be impossible to trace physically, e.g. if mirror servers are used. The customer may therefore be unaware of the location of the server. Similarly, the server used by the purveyor may be unable to identify the physical location of the customer. Consequently it may be impossible to identify the parties engaged in the transaction.

In the second place, classification of income is made more difficult by the sale of digitised information over the web such as computer programs, literature, videos and music. One can ask whether the sale of these items should be characterised as a sale of goods or services.³²

- The Internet's lacks of physical location and central control

The Internet pays little respect to artificially created national borders. This fundamental characteristic of the Internet has been described as “radical decentralisation”, and it stems from the fact that there is little technical difference between an Internet transmission within one country or between countries. Not only does the Internet lack a physical location, it also lacks any real form

³² Ine Lejeune, Bart Vanham, Isabelle Verlinden, Alan Verbeken, International; “Does Cyber-Commerce Necessitate a Revision of International Tax Concepts?”, European Taxation, **International Bureau of Fiscal Documentation**, January 1998

of central control. The problems stemming from the trans-national nature of the Internet are heightened by the weak correspondence between Internet “addresses” and geographical locations. Often a URL, which is a unique Internet address, or an e-mail address will not give a reliable indication as to the location of the person using that address. For example the e-mail address of a vendor may end in “.au”, indicating an Australian address, but the person running the company may access that e-mail account from anywhere in the world.

The lax control on Internet name allocation means that it would not be difficult to register a name in one country while actually operating it from another country. A further complication arises through the use of mirror sites. A mirror site works by storing an identical copy of the original site’s computer information on another computer, often in a different country. This is done in order to cut down Internet traffic and therefore speed up the delivery of information by allowing an Internet user to access information on a computer physically close to that user, or to take advantage of differing cost structures of telephone networks and Internet service providers. However, mirror sites means that an Internet consumer may be completely unaware that he or she has been transferred from a computer in one country to another somewhere else in the world. The taxation issues associated with the use of mirror sites may be extremely difficult to resolve. One such issue is whether a mirror site should be considered a “permanent establishment” in the country in which it is situated for tax purposes.³³

- Problems with auditing and enforcement

Electronic commerce transactions and the development of Internet networks will challenge even the most efficient tax collection and enforcement regime, both under direct and indirect taxation. The Internet allows significant anonymity. The use of an Internet site can be untraceable to the actual user or even to the user’s country. Registration requirements are minimum, as is proof of identity. An added difficulty for tax authorities is weak traceability. Even where some electronic traffic has been discovered, encryption keys may prevent a tax administration from knowing the content of the message or communication. For either reason, Internet transactions may leave no “audit trail”. The sites can also be shifted very quickly, so that tax administrations may have difficulty keeping up with the trail even if it can be found. It is easy to arrange the untraceable use of an Internet site. The correspondence, furthermore, between the Internet address (the computer ‘domain name’) and the location where the activity is supplied, carried out or consumed is tenuous.³⁴

- The use of electronic money

Perhaps the most significant audit concern derives from the potential for significant use of e-money (electronic money) arrangements for transactions. Through e-money, the Internet can take bank secrecy to an extreme. The untraceability of Internet transactions means that e-money could function essentially like cash that is kept at home rather than put on deposit at a bank. The tax

³³ Neil Russ, Buddle Findlay, AIC Conference, Electronic Banking and Payment Systems, Taxation Issues in Electronic Trading - Nationally and Internationally, 22 April 1997

³⁴ Jeffrey Owens, “What Chance for the Virtual Taxman”, **The OECD Observer**, No.208, October/November 1997, page 17

authorities may never know about such sums. However, e-money would not have many of the disadvantages that would be present in holding cash outside a banking institution. Holding large amounts of cash presents a security risk, and normally cash would only be transferred in person. With e-money, there are no physical bank notes, and the security could be assured by the provider of the e-account. E-money is also readily transferable. The account provider would be the electronic equivalent of a bank, albeit one located juridically in cyberspace (an “e-bank”). Physical banks generally are required to report on cash issue and deposits, particularly in the OECD area where bank secrecy is generally discouraged. Such requirements do not yet extend to e-banks.³⁵

Electronic money and Internet payment systems pose fundamental questions. The technologies are being developed by a host of different players in the market including software companies, credit card companies, and banks. They may involve effective creation of money, and they will certainly generate serious difficulties with respect to the collection of taxes. This is because when goods and services can be ordered and paid for anonymously in a global market place, taxation authorities are going to have an interesting time determining exactly what was the taxable event, and who was the taxable (legal or natural) person. It would seem logical that companies who issue pre-paid smart cards should have to abide by the same rules and regulations as conventional credit institutions, and also be subject to the same monitoring procedures imposed by Central Banks and other monetary authorities. The basic principle has already been advocated by the European Monetary Institute (EMI) and the Bank for International Settlements.

It seems very desirable that central banks or other financial regulatory authorities should have the ability to control not only those issuing e-money, but also those receiving it. The difficulties facing regulatory authorities in this field have led to some suggestions that digital money should only be issued by Central Banks.³⁶ It seems prudent that if institutions other than banks are allowed to issue this kind of money, an authorisation system and an administrative control regime should also be introduced that would oblige them to provide the national authorities with certain information in order to avoid, as far as possible, tax evasion and capital flight.

One of the major difficulties in the growth of digital money may precisely be the preoccupation of the Central Banks or the European Central Bank with regard to these problems. It might be prudent and advisable, at least at the initial stages, to impose the above mentioned authorised institutions, under the supervision of the public administrations. Given the non-existence, slowness or vagueness of legal regulations, the adoption of voluntary codes of conduct seems to be the most advisable solution. This would entail, in effect, establishing a code that is voluntarily assumed by those agents that wish to offer their products or services through the network. The idea, then, is to appeal mainly to self-regulatory mechanisms.³⁷

³⁵ Frances M. Horner and Jeffrey Owens, “*Internet; Tax and the Web: New Technology, Old Problems*”, **International Bureau of Fiscal Documentation**; Bulletin, November/December 1996, page 522

³⁶ Report by MEP John Stevens, “*Electronic Money and Economic and Monetary Union*”, Committee on Economic and Monetary Affairs and Industrial policy, A4-0417/97

³⁷ **Working Document to the STOA Panel**, “*Technological innovation and Money*”, February 1997, PE 166.483

Although it may be possible to rely on banking records to audit Internet commerce, the development of electronic money systems may eventually defeat this form of paper-trail. In an unaccounted e-money system electronic “token” money circulates between vendors and consumers outside the traditional financial institutions. The most obvious example of an unaccounted e-money system is the Mondex smart card system. The only time a Mondex card interacts with the traditional financial institutions is when it is first issued or when it is later deposited into a bank account or converted back into real money. In between those events, the value stored on a Mondex card may be used even more anonymously than cash, leaving no trail for the revenue authorities to follow.³⁸

For these reasons, Horner and Owens state that the communications revolution ‘is enough to make a good tax administrator shudder’.³⁹

EFFECT OF THE INTERNET ON TAX COLLECTION AND ADMINISTRATION

In the future the state’s ability to collect taxes will become increasingly more difficult. A growing share of transaction will be conducted over the Internet, leaving no physical trail. Experiments with electronic cash will be well under way. Advances in information technology and communications will allow production to be ever more international. Traditionally large employers, banks and building societies have acted in effect as subcontractors to the Inland Revenue docking our wages or the interest on our savings. Charles Leadbeater predicts that the private-sector tax collection machine will not exist in the future. He states that “between 1979 and 1997, the number of self-employed grew from 1.9 to 3.3 million. At the start of 1996 there were 3.7 million enterprises in the UK, an increase of 1.3 million since 1980. Of these, 2.5 million had no employees. Micro-enterprises employing fewer than five people accounted for 89 per cent of all businesses in 1994.”⁴⁰

Opportunities for tax avoidance and tax arbitrage arise whenever you tax different items at different tax rates. If there is no real distinction between items, or you can easily substitute one item for another, taxpayers have an incentive to favour whichever item is taxed the least. The more numerous and diverse the characteristics and attributes of particular items, the easier it is to tax them differently. This applies both to specific and to general consumption taxes that impose different tax rates on different consumer items.⁴¹ Some competition between tax regimes may be a good thing, if it encourages governments to show more discipline in their tax and spending policies. However, one day globalisation and electronic commerce could make a sizeable dent in

³⁸ Neil Russ, Buddle Findlay, AIC Conference, Electronic Banking and Payment Systems, Taxation Issues in Electronic Trading - Nationally and Internationally, 22 April 1997

³⁹ Frances M. Horner and Jeffrey Owens, “*Internet; Tax and the Web: New Technology, Old Problems*”, **International Bureau of Fiscal Documentation**; Bulletin, November/December 1996, page 516

⁴⁰ Charles Leadbeater, “*Goodbye, Inland Revenue*”, **New Statesman**, 3 July 1998, page 27

⁴¹ Malcolm Gammie, “*The Tax Base; The Global Future of Income Tax*”, **International Bureau of Fiscal Documentation**; Bulletin, November/December 1996, page 477

a country's total tax revenues. These forces have already made a big impact on the way the burden of taxes falls on the population.⁴² This is what rules out the option of inaction.

TAX LAW CONCERNING ELECTRONIC COMMERCE

IN EUROPE

The application of existing taxation principles to electronic commerce is not always clear and these principles therefore have to be adapted and in some cases replaced by new concepts. One reason why taxation issues are so complex in connection with electronic commerce is that e-commerce includes both goods, services and so-called virtual goods (electronically delivered goods).⁴³

Direct Taxation - Corporate Income Taxes (Permanent Establishment)

There have been few direct tax developments. Corporation tax legislation may not need amendment. However, the interpretation of the law and its effect on electronic commerce does not appear to have been undertaken as yet. The lack of clear rules and their application to electronic commerce transactions gives rise to a number of complex issues, predominantly relating to bilateral treaty positions regarding permanent establishments and withholding taxes.

Tax conventions generally provide that business profits of non-resident enterprises may only be taxed in a country to the extent that they are attributable to a permanent establishment that the enterprise has in that country. Article 5 of the OECD Model Tax Convention defines the term "permanent establishment".⁴⁴

In most jurisdictions a non-resident entity will only be taxable if it is generating profit from activities within that jurisdiction. In general, this will require a business presence and the concept of "effectively connected income". The UK rules, as an example, require that a company not resident in the UK will only be taxable in the UK if it carries on a trade in the UK through a branch or agency (s.11 ICTA 1988). "Branch or agency" is defined as "...any factorship, agency, receivership, branch or management".

⁴² **The Economist**, "The disappearing taxpayer", 31 May 1997, page 11

⁴³ Erika Mann, "Electronic commerce and indirect taxation", **European Parliament Working Document**; Committee on Economic and Monetary Affairs and Industrial Policy, 1 September 1998, page 2

⁴⁴ **OECD**, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, "Electronic Commerce: A Discussion Paper on Taxation Issues", 17 September 1998, page 23
Summary

Traditional principles of international income tax are closely tied to the question of physical presence. Under Article 7 of the OECD Model Treaty, a country can tax an enterprise's business profits attributable to a permanent establishment located in that country, regardless of the enterprise's country of juridical residence. Article 5 of the OECD Model Treaty gives a definition and some guidance on what amounts to a permanent establishment "a permanent establishment is a "fixed place of business through which the business of an enterprise is wholly or partly carried on". However, certain types of limited presence are not sufficient to draw an enterprise within the taxing jurisdiction of a country. A permanent establishment does not include "the use of facilities solely for the purpose of storage, display or delivery of goods or merchandise belonging to the enterprise". (Paragraph 4a of Article 5 of the OECD Model Tax Treaty). Essentially a PE requires either:

- A fixed place of business through which the business of an enterprise is wholly or partly carried on (subject to exceptions), or
- A dependent agent who has, and habitually exercises, an authority to conclude contracts in the name of the non-resident.

The principle of physical presence comes under pressure where a business is able to exploit a market in a country without establishing a significant physical presence there. The mail-order business is a classic example of this strategy. Through mail solicitations and perhaps even telephone contact, a manufacturer might be able to sell its products rather effectively without setting foot across a border.

With Internet transactions, one encounters the same type of pressure on the physical presence test as in the mail-order business, but with two striking differences. First, the disadvantages brought about by lack of presence in the country are greatly diminished. Second, there is a real ambiguity about what presence actually means when a computer network is involved. Many people have discussed whether a Web page on the World Wide Web which accepts customer orders is capable of constituting a presence of a company in a country. This is based on the theory that it acts as a type of dependent agent that can conclude contracts on behalf of the company. Horner and Owens say that “it is almost surely not. The Web page itself, while perhaps an asset, cannot itself accept orders. The order acceptance would be done by an executive in some other location, albeit over the Internet. And in any event, a Web page might not be considered a fixed place of business. It would seem that the permanent establishment concepts of the Model Convention would not be able to turn a Web site into a permanent establishment.”⁴⁵

Thus, with no change in traditional tax concepts, a company might locate all its skilled personnel in a tax haven, and provide consulting services to high-tax European countries, without ever creating a permanent establishment.

Non-resident Internet Service Providers (ISP) may own or use a server in a location, and the question arises as to whether this could represent a taxable presence in that location. It is generally believed that the mere presence of a server should not constitute a permanent establishment and that in the absence of any individuals a server is unlikely to constitute a branch or therefore, a permanent establishment.⁴⁶

It has been suggested that the concept of permanent establishment is ill-adapted to electronic commerce. Those who take that position have argued that a rule based on physical presence is meaningless in the electronic commerce environment.⁴⁷

Once again, the communications revolution can be seen as putting pressure on the traditional concept of residence-based taxation. Horner and Owens say, “the potential explosion in the number of cross-border transactions that will occur as a result of the Internet and private networks will require that tax administrations will have to handle effectively those cross-border transactions which generate tax consequences. This will include information that can be digitized, such as

⁴⁵ Frances M. Horner and Jeffrey Owens, “*Internet; Tax and the Web: New Technology, Old Problems*”, **International Bureau of Fiscal Documentation**; Bulletin, November/December 1996, page 518

⁴⁶ Arthur Andersen Report, *Laws of the Internet, Direct and Indirect Taxation*, January 1998

⁴⁷ **OECD**, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, “*Electronic Commerce: A Discussion Paper on Taxation Issues*”, 17 September 1998, page 24

books, music, computer programmes and images. They all can be transferred and sold electronically.⁴⁸

- Transfer Pricing

Horner and Owens state that “the communications revolution presents no problems, no fundamentally or categorically different dimensions, for transfer pricing. However, it has the potential to make some of the more difficult transfer pricing problems more common. The communications revolution just presents all the old problems more quickly. Everything is more mobile, faster and more complex.”⁴⁹

Experience of dealing with transfer pricing matters in the field of electronic commerce is so far fairly limited and it is not easy to come to firm conclusions without a close examination and factual description of the elements of electronic commerce. It may also be difficult to perform a detailed examination of the factual background at such an early stage in the development of the business of electronic commerce.⁵⁰

Indirect Taxation - VAT (The Sixth VAT Directive)

Conceptually, the fundamental issues to be addressed by the administrators of indirect taxes (principally VAT and sales taxes) are the same as those to be addressed by those drafting direct tax law. These questions are:

- In which country should the tax be levied (where the supplier belongs, the customer belongs, or elsewhere)?
- From whom should the tax be collected (supplier or customer)?
- What is the nature of the item purchased i.e. should an item be classified differently if delivered electronically instead of in a tangible format?

To answer these questions the vendor will need to determine whether he is a supplier of goods or services. The primary VAT legislation covering the EU members states is contained in the VAT 6th Directive.

Place of taxation rules are used to determine where a supply should be taxed. The risk of double or unintentional non-taxation arises from differences in the rules in use by Member countries and elsewhere. Double taxation and unintentional non-taxation distort competition between overseas and local suppliers and threaten the tax base of the country where the consumer belongs. The lack of symmetry in existing consumption tax systems in respect of cross border trade is highlighted by electronic commerce. Suppliers in one tax jurisdiction can relatively easily supply digitised products to private consumers in another jurisdiction. Risks to the proper taxation of such

⁴⁸ Frances M. Horner and Jeffrey Owens, “*Internet; Tax and the Web: New Technology, Old Problems*”, **International Bureau of Fiscal Documentation**; Bulletin, November/December 1996, page 518

⁴⁹ Ibid.

⁵⁰ **OECD**, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, “*Electronic Commerce: A Discussion Paper on Taxation Issues*”, 17 September 1998, page 27

transactions could be reduced if consensus were to be reached on the rules that determine the place where supplies should be taxed, namely the place of consumption.⁵¹

For consumption taxes the implications of electronic commerce can be examined in relation to three broad categories of transaction, namely:

- a) supplies of physical goods to both business and private consumers,
- b) supplies from business to business (and domestically exempt organisations such as public bodies and charities) of services and intangible property; and
- c) supplies from business to private consumers of services and intangible property.

At present the vast majority of e-commerce based supplies falls into the first two categories. The third category of transactions (supplies of services and intangible property to private consumers) while currently small in volume presents potentially the greatest tests to effective administration of consumption taxes particularly when the products are delivered on line across international borders. Currently, with a few isolated exceptions, there are no provisions for the collection of consumption taxes on these supplies.⁵²

- Off-line Delivery

For many, the Internet provides an advanced advertising medium which allows orders to be taken, but does not alter the logistics of delivering the product to the customer. For these suppliers, VAT will apply to sales in the same way as previously, although it will be necessary to consider the implications of selling to a much wider market. A UK supplier shipping solely from his UK manufacturing plant will face the following four possible VAT scenarios:

- He ships the product to a customer in the UK, and therefore charges UK VAT.
- He ships the product to a customer outside the EU, and may therefore zero rate the sale as an export.
- He ships the product to a business customer in the EU, under cover of an invoice which quotes the customer's VAT number - the sale may therefore be zero-rated.
- He ships the product to a customer in the EU who does not provide a local VAT number - UK VAT must be charged until such time as such sales to that country exceed the local threshold which requires the vendor to register for and charge local VAT.

Thus, the Website used to sell the products will need to correctly display prices and show how to determine whether VAT invoices will need to be issued, and how these should be formatted. On pricing, it is clearly difficult to design a system which can inform the customer of the VAT-inclusive price that he must pay in circumstances where VAT must be charged and collected, and yet the customer must agree to a fully delivered price approval for the correct credit card charge to be made. The Internet increases the possibility of more complex chains of transactions as well. This is known as triangulation.

- On-line Deliveries

⁵¹ Ibid.

⁵² Ibid.

If you make a charge for an on-line delivery, there are a number of questions which will determine whether you must charge VAT or sales tax. The type of product may determine whether the supply is one of goods or services. For example, an off-the-shelf software package is a supply of goods, whereas customised software specifically designed for the customer is a supply of services. The supply of information is also a supply of services.

Thus, the VAT treatment of goods and services is fundamentally different and a distinction must be drawn to identify where, when and by whom VAT should be paid. The following are key factors in determining this:

- The location of the customers - sales tax or VAT will be chargeable in either the supplier's country, the customer's country, both or neither depending on the rules in the countries concerned.
- The identity of customers - are they private individuals, businesses or non-profit making concerns such as charities?⁵³

- *Supplies of Goods*

The difficulty created by electronic commerce is that it creates a new method of delivery. Products that traditionally had to be delivered on a physical medium (disc, tape or paper) can now be cost-effectively supplied over much greater distances electronically. This creates the difficulty with the goods or services question in EU VAT law. Article 5 of the EU 6th Directive defines the supply of goods as: "the transfer of the right to dispose of tangible property as owner". If an electronic transaction is to qualify as a supply of goods presumably there must be a "tangible property", and the "right to dispose" of this property must have been transferred.

Within the EU there are essentially three mechanisms for taxing a supply of goods:-

- a) The vendor charges VAT at the rate applicable in the country (normally) where the goods are when they are allocated to the customer. If the goods are exported from the EU then the sale may be zero rated.
- b) The Customs authorities levy VAT on import of the goods as they pass Customs control at the EU border.
- c) The customer accounts for acquisition VAT in the country where the goods are received through the mechanism of his VAT return. This requires that he is a taxable business receiving goods from a supplier who has despatched the goods from another country.

If an electronic delivery is regarded as a sale of goods the following unique practical difficulties arise as a consequence:-

- i) To qualify for zero rating, an export of goods must be evidenced by appropriate paperwork (bill of lading, posting certificate etc). Where the item is sold electronically through the normal retail channel backup materials such as invoices to other parties in the retail chain may continue to exist. No such evidence is likely to be available for an electronic delivery directly to an end user purchasing software using a credit card. Indeed, the vendor will rarely have any evidence as to the location of his customer. Even a billing address (if obtained) is not determinative of the customer's residence or his location at the time of downloading. However, if EU vendors are denied the benefits of zero rating their competitive position in the global market will suffer.

⁵³ Mike Loten, "Doing Business on the Internet", **The Tax Journal**, Thursday, 20 June 1996, page 19

ii) Import VAT (where due) is payable to Customs as a condition of the goods being allowed to enter the EU. No mechanism exists to enable the authorities to prevent electronic imports pending payment of import VAT. In its absence, non-EU suppliers will have a tax advantage over EU vendors.

- Supplies of Services - Art 9(1) of the 6th VAT Directive

The place of taxation of a supply of services will vary depending on the type of service being supplied. Generally, services are covered by Article 9(1) of the 6th Directive:

“The place where a service is supplied shall be deemed to be the place where the supplier has established his business or has a fixed establishment from which the service is supplied or, in the absence of such a place of business or fixed establishment, the place where he has his permanent address or usually resides.” However, some supplies, such as licences, information, and now telecommunications⁵⁴, are taxable under Article 9(2)(e) of the Directive.⁵⁵ If the supply meets the conditions in Article 9(2)(e) the place of supply is deemed to be where the service is received, with the customer liable to pay the tax under the reverse charge procedure set out in Article 21.⁵⁶

⁵⁴ See ECOFIN Conclusions of 6 July 1998 on electronic commerce in indirect taxation

Prior to this Telecommunication services were taxed at the place of establishment of the service provider (Article 9(1) of the Sixth VAT Directive). This posed two fundamental problems. First, a non-telecom company established outside the Community had no place of establishment inside the EU and therefore was not subject to VAT. Despite this community based operators were caught in the VAT net for all services provided, inside or outside the Union. Second, all a Community based customer had to do to avoid VAT was to use the services of a telecom company established outside the territory of the Union. The situation posed an intolerable competitive burden on EU based telecom operators.

⁵⁵ Article 9(2)(e) of the 6th Directive states that:

“The place where the following services are supplied when performed for customers established outside the Community or for taxable persons established in the Community but not in the same country as the supplier, shall be the place where the customer has established his business or has a fixed establishment to which the service is supplied or, in the absence of such a place, the place where he has his permanent address or usually resides:

- transfers and assignments of copyrights, patents, licences, trade marks and similar rights,*
- advertising services,*
- services of consultants, engineers, consultancy bureaux, lawyers, accountants and other similar services, as well as data processing and the supply of information,*
- obligations to refrain from pursuing or exercising, in whole or in part, a business activity or a right referred to in this point (e),*
- banking, financial and insurance transactions including reinsurance, with the exception of the hire of staff,*
- the services of agents who act in the name and for the account of another, when they procure for their principal the services referred to in this point (e).”*

⁵⁶

1) if an EU customer is not a taxable person, then the supply reverts to Article 9(1) and is taxed where the supplier belongs.

2) If a service listed in Article 9(2)(e) is used and enjoyed in the EU, but is treated as supplied outside the EU by the correct application of Article 9(2)(e), then Article 9(3)(b) can be used to bring the supply into the scope of EU VAT: ie

“the place of supply of services, which under this Article would be situated outside the Community, as being within the territory of the country where the effective use and enjoyment of the services takes place within the territory of the country.”

This variation is intended to avoid the possibility of distortion of competition arising from non or double-taxation of

On 17 March 1997 the Council adopted 15 parallel identical derogations as requested simultaneously by all Member States to derogate telecommunications from the 6th VAT directive.⁵⁷ EU countries have been required to introduce VAT legislation by 1 July 1997 radically changing the place of supply rules for telecommunications services. It is generally accepted that provision of access to the Internet must be treated as falling within the definition of a telecommunication service. Therefore, Member States will treat access to the Internet as a telecommunication service. This change was required to eliminate distortions in competition which arose under outdated rules which assumed the requirement to maintain a considerable “on the ground” presence in order to supply a service. Therefore, the new legislation, introduced by every state during the first half of 1997, moved telecommunications into Article 9(2)(e) so that tax is applied either:

- where the customer (if an EU taxable person) belongs (under the principles of Article 9(2)(e));
- where the service is used and enjoyed (if Article 9(3)(b) applies); or
- where the supplier belongs (if the previous options do not apply).

Article 9(3)(b) cannot be applied to supplies of goods.⁵⁸

Therefore, the following summary illustrates the complicated process involved in deciding how to tax the supply of a service:

- a) If a customer is established outside the EU, the service is deemed to take place in the country of the customer and so no (EU/Member State) VAT is charged.
- b) If a customer is a VAT-registered taxpayer established in a different state to the supplier and those services are part of the customer’s economic activity, the customer’s local VAT rate applies and is paid to the customer’s national administration.
- c) If a customer and supplier belong to the same Member State, the local VAT rate applies and is paid/deducted through the national administration.
- d) If the supplier is outside the Union and neither a) nor b) above apply and in reality the service is consumed in the EU, the VAT of the country of final consumption applies.

- Problems with the Current System

Differences in the definitions of services and intangible property applied in Member countries lead to uncertainty about the tax treatment of such supplies provided by overseas businesses. These differences may also open up opportunities for tax avoidance and evasion. Convergence of the definitions of relevant supplies would make it easier for taxpayers to comply with tax requirements generally and would help the development of electronic commerce.⁵⁹

these services resulting from the otherwise correct application of Article 9(2)(e). This clause has been specifically invoked for telecommunication services, which are now included in Article 9(2)(e). (Arthur Andersen Report, Laws of the Internet, Direct and Indirect Taxation, January 1998)

⁵⁷ The Council Decision of 17 March 1997 applies to all telecom services provided after 1 January 1997 and shall apply until 31 December 1999 or until the date of entry into force of the Commission’s proposal for a Council Directive, if earlier.

⁵⁸ Arthur Andersen Report, Laws of the Internet, Direct and Indirect Taxation, January 1998

⁵⁹ OECD, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, “*Electronic Commerce: A Discussion Paper on Taxation Issues*”, 17 September 1998, page 19

The Internet is ideally suited to transactions involving, for example, advisory services or entertainment services provided to private individuals. Consider, for example, legal advice given by a US consultant to a Dutch private individual. No VAT will be due, because the place where the service is deemed to be supplied would be the US. Such advice would normally be taxable in the Netherlands if provided by a Dutch consultant. The Internet, therefore, could have adverse effects on economic neutrality and easily lead to trade distortions.⁶⁰

IN THE US

The United States and Australia are the only OECD members which do not currently levy a national consumption tax. As consumption taxes play a particularly important role in the EU, negotiations on an Internet tax framework within the OECD and the WTO have made only modest progress, with resolution of the more difficult issues postponed for further study.⁶¹

In the United States, most government revenues are raised through corporate and personal income taxes, although modest sales taxes are important to many states, and municipal governments typically impose property taxes. Therefore, in regard to government revenues, forgoing taxes on Internet transactions is not a significant sacrifice. The loss of sales tax revenues may be more than offset by increased employment and higher personal and corporate income tax revenues created by the expansion of Internet-based business.⁶²

About 45 US States impose retail sales taxes (RSTs). The States can only impose sales taxes on transactions completed within their borders and can collect use-taxes only on tangible products from vendors with a “physical presence” in the state. Therefore, out-of-state vendors are favoured. Services are taxed on a selective basis, and intangible products tend not to be taxed. In order to find solutions to the problems that US states are facing, the Internet Tax Freedom Act has been under discussion. This is designed to institute a breathing period for finding a satisfactory domestic solution to the problem of recuperation and enforcement of inter-state local sales taxes. On 23 June 1998, a 3-year moratorium on Internet access taxes, bit-taxes and multiple or discriminatory taxes on electronic commerce was approved to prevent new or special taxes on electronic commerce. The proposed moratorium would offer the opportunity to set up an enforceable clearing-house system for attributing indirect taxes to those states where taxes are due. The moratorium is also meant to balance the national interest, i.e. competitiveness of the growing electronic market place, and the importance of guarding against the erosion of the state and local taxes.

The Bill contains a declaration that the President should seek bilateral and multilateral agreements through WTO, OECD, the Asia Pacific Economic Cooperation Council, and other appropriate international fora to establish that commercial transactions using the Internet are free from tariff and taxation. However, Section 8 of the Bill is not to be interpreted as saying that electronic commerce should be tax exempt. The US authorities and business community agree that existing

⁶⁰ **Caught in the Web**, “*The Tax and Legal Implications of Electronic Commerce*”, chapter 6, page 101-103

⁶¹ **Oxford Analytica Brief**, International: Internet Taxation, 21 October 1998

⁶² *Ibid.*

tax arrangements such as VAT continue to apply (in a non-discriminatory way) to electronic commerce.

SOURCE VS. RESIDENCE-BASED TAXATION

The US Treasury advocates a shift to residence-based taxation of Internet transactions. Residence-based taxation could jeopardise revenue sharing between the United States and other OECD members under the OECD tax model agreement. Due to the current US export advantage in Information Technology services and know-how, other OECD members states might suddenly find themselves in the unusual position of source states, which may tax company profits only under strict conditions of Article 5 of the OECD Model Agreement on taxation. These states would forego source-based taxation without being able to increase revenues from residence-based taxation.⁶³

Two additional factors are likely to exacerbate this effect. First, every product that can be sold in digital form (television, radio, movies, music, magazines and books) and highly paid services that can be performed on line without physical presence can avoid (foreign) tax. Secondly, treaties eliminate or reduce the withholding tax on royalties, so that the export of know-how is also virtually free from foreign taxes. While the other countries' exporters in traditional sectors still need permanent establishments and subsidiaries that expose them to US taxation, US exports in a key sector of the global economy become non-taxable outside the US. This result jeopardises the historical compromise on which bilateral treaty networks are based (i.e. sharing revenues between countries and the reciprocity of treaty benefits). Eliminating source-based taxation of income derived from telecommunication, software, services and licensing of intangibles is likely to improve the US competitive position. Although it appears that the Treasury department may be correct in asserting that the development of electronic commerce will make it increasingly difficult for source countries to impose income taxation, its advocacy of residence-based taxation is unlikely to be accepted in other countries.

RESULTS OF THE OTTAWA CONFERENCE (7-9 October 1998)

A conference of ministers from the 29 OECD countries held in Ottawa on 7-9 October reached agreement on a number of general principles to guide the taxation of electronic commerce. These principles state that:

- National tax systems should be neutral between Internet-based and conventional commerce.
- In taxing Internet-based transactions, governments should be guided by the same principles that are applied to conventional commerce: taxes should be proportionate to ability to pay, tax rules should be simple and certain, and the costs of compliance should not be excessive.
- Existing taxes will apply to transactions where goods are purchased over the Internet but delivered physically (such as cars, compact disks and airline tickets). To avoid double taxation, taxes will be levied in the country where the good is consumed rather than where it is produced.
- Digitised products (such as software and music downloaded from the Internet) will not be treated as goods for tax purposes, and will thus not be subject to tax.

⁶³ Reimar Pinkernell, Commentary to the US Treasury discussion paper, <http://pweb.uunet.de/pinkernell.bn/taxnet.htm>

The exemption for digitised products in part reflects the formidable obstacles which national tax authorities would face in trying to levy consumption taxes on ‘virtual’ items downloaded by consumers directly from overseas Internet sites. Nevertheless, the Ottawa agreement represents a softening of the European Commission’s previous position, which had sought to impose VAT on both goods and services purchased over the Internet.⁶⁴

TAX EVASION OR TAX AVOIDANCE?

It is generally accepted that it is quite proper to avoid tax but not to evade it.⁶⁵ The Finor Organization which “offers international clients, both private and corporate, confidential incorporation and administration services to offshore companies worldwide” states that: “no-one wants to pay more tax than is absolutely necessary, and with Governments worldwide becoming more and more greedy and bureaucratic, it’s no wonder that too many people are looking for a ‘way out’, not just the rich nowadays. Some people call it selfish or immoral but we and the overwhelming majority call tax avoidance (not tax evasion) good planning. Indeed several renowned British Law Lords and US Senators have gone on record in the past stating that:

‘No man in the country is under the smallest obligation, moral or other, so to arrange his legal relations to his business or property as to enable the Inland Revenue to put the largest possible shovel in his stores. The Inland Revenue is not slow - and quite rightly - to take every advantage which is open to it under the taxing Statutes for the purposes of depleting the taxpayer’s pocket. And the taxpayer is in like manner entitled to be astute to prevent, so far as he honestly can, the depletion of his means by the Inland Revenue.’ - UK Law Lord Clyde

‘There is nothing sinister in so arranging one’s affairs as to keep taxes as low as possible. Everyone does so, rich or poor; all do right. Nobody owes any public duty to pay more than the law demands; taxes are enforced exactions not voluntary contributions!’ - US Judge Leonard Hand.

However, the same peers have also gone on record to say: “It is also the Government’s duty to ensure that it collects the maximum tax it legally can.”⁶⁶

TAX BASE EROSION

In view of the above, tax-base erosion can take the form of legal avoidance or illegal evasion. Taxes can be illegally avoided, in which case it is referred to as evasion. For example, income may be under-reported, business expenses may be misclassified or consumption taxes may go unpaid. In addition, taxes can be avoided or evaded by shifting the taxable location of the activity to other jurisdictions.⁶⁷

⁶⁴ **Oxford Analytica Brief**, International: Internet Taxation, 21 October 1998: 5

⁶⁵ See <http://www.hansa.net/faq.htm>

⁶⁶ See <http://www.finor.com/index.html>

⁶⁷ **OECD Economic Outlook**, “Tax-base erosion”, June 1998, at 164-5

Changes in technology (notably information, communication and transportation technology) as well as liberalisation of commercial and financial transactions have increased the scope for tax avoidance and evasion through the choice of location of economic activity. Business functions can be moved to low-tax jurisdictions and bank accounts and other financial assets can be held offshore.⁶⁸ Financial capital (our savings) can be shifted around the world within seconds, often several times a day. Industrial capital is also highly mobile. A couple of years ago Jurgen Schrempp, the chairman of Daimler-Benz, warned members of the German upper house of parliament that the price of keeping the company's factories in the country would be a tax bill of zero.⁶⁹

Activities that require only a screen, a telephone and a modem can be located anywhere. This will make it harder for a country to tax businesses much more heavily than their competitors. Of course, not all firms can decamp to a low-tax country-and even those that can might hesitate to leave because tax is just one element in a firm's calculation about where to locate. German firms face some of the highest rates of tax in the world but most of them stay put, rather than fleeing en masse to, say, Sudan.⁷⁰

However, improvements in electronic commerce are likely to make the base for consumption taxes, such as the VAT or sales taxes, more geographically mobile and harder to trace. In general, the location of economic activity depends on many factors, of which taxation is one.⁷¹

EVIDENCE OF TAX EVASION/EROSION RESULTING FROM E-COMMERCE

It has been estimated that in the US the use of the Internet by individual consumers accessing mail order companies, exempt from sales taxes, has meant a reduction in state sales taxes revenues of over \$3 billion in 1995.⁷²

The Internet may drain governments' tax revenues either by making evasion easier or by encouraging economic activity to shift to lower-tax countries. The economic principles at work are fairly clear. What is less clear, however, is their practical impact. Anecdotal evidence shows that changes are taking place. But quantifying those changes is hard. No one has yet been able to measure exactly how much revenue governments have foregone as a result of companies avoiding taxes, individuals becoming tax exiles or people buying goods over the Internet. It is clear, that tax nets are already torn, so globalisation and new technology are making worse a problem that already

⁶⁸ **OECD Economic Outlook**, "Geographical mobility of tax bases", June 1998, at 166

⁶⁹ Charles Leadbeater, "Goodbye, Inland Revenue", **New Statesman**, 3 July 1998, page 27

⁷⁰ **The Economist**, "Disappearing Taxes; The tap runs dry", 31 May 1997, page 17

⁷¹ **OECD Economic Outlook**, "Geographical mobility of tax bases", June 1998, at 167

⁷² Luc Soete and Karin Kamp, "The 'Bit Tax': the case for further research", 12 August 1996
<http://www.ispo.cec.be/hleg/bittax.html>

exists. Even in America, where tax evasion is thought to be smaller than in Europe, a guessed-at 15% of total personal taxable income is concealed from the taxman.⁷³

- *The Anecdotal evidence*

Any shift towards carrying out transactions on line will pose a severe challenge to existing systems for tax collection. The increased scope for tax evasion offered by Internet transactions will hit tax regimes which rely on value-added tax systems particularly hard. The belief that electronic commerce via the Internet causes tax base erosion can easily be illustrated by the growing quantity of literature on the subject. A small proportion has been reproduced in Annex 1.

Electronic commerce is still in its infancy. However, nowadays it has grown from a trickle into a stream. The anecdotal evidence in Annex 1 suggests that there are transactions that have been carried out on the Internet that have resulted in business profits and sales of goods and services going untaxed. Since electronic commerce transactions as a whole represent only a small fraction of business operations, these incidences cannot currently be significant. It would be difficult, at this point, to determine whether countries have experienced a noticeable erosion of their tax base.⁷⁴ In fact, there is little evidence that major tax bases (household income taxes, corporation income taxes and consumption taxes) have been eroded by electronic commerce. Overall, taxes have risen, not fallen, over the past several years, and although tax rates have tended to converge over time there remains substantial variation across countries.⁷⁵

The characteristics of the Internet make this trade easier to structure in tax-free or low-tax jurisdictions using tax havens and off-shore banking facilities, such as Switzerland. The ability to choose, or even disguise, the location of a transaction means the Internet will act as a tax haven for many corporate and individual transactions.⁷⁶ In tax-planning circles this process is called ‘the challenge of cyberspace’.

THE STATISTICS

Is there any evidence that the tax base is shrinking?

A cynic might argue that there is little evidence that governments are finding it hard to raise revenue. Total tax revenues in OECD countries climbed to a record 38% of GDP in 1996, up from 34% of GDP in 1980. There is no clear evidence that high-tax countries have seen smaller increases in their tax burdens in recent years, but it is important to remember that globalisation has begun to develop fully only in the past decade. Commercial development of the Internet is younger still. Its

⁷³ **The Economist**, *Disappearing Taxes; The tap runs dry*, 31 May 1997, page 18; F. Schneider, D. Enste, “*Increasing Shadow Economies all over the world - Fiction or Reality?*”, IMF Working Paper 1998

⁷⁴ **OECD**, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, “*Electronic Commerce: A Discussion Paper on Taxation Issues*”, 17 September 1998, page 25

⁷⁵ **OECD Economic Outlook**, “*Geographical Mobility of Tax Bases*”, June 1998, page 166

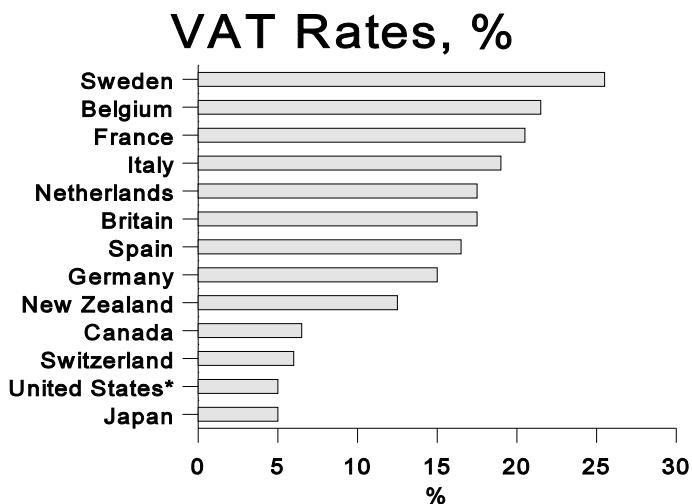
⁷⁶ Jeffrey Owens, “*What Chance for the Virtual Taxman?*”, **The OECD Observer**, No.208, October/November 1997, page 17

impact on taxes is unlikely to be measurable yet. Even if the Internet eats away just 10% of revenues one day, that would still have a huge impact in a high-tax country.⁷⁷

- Consumption taxes

Taxes on consumption now account for an average 30% of tax revenues in the OECD area and 27 of the 29 member countries use value added taxes (VAT). The two exceptions are Australia and the United States.⁷⁸

Figure 3:



Sources: OECD; Citizens for Tax Justice⁷⁹

*Average of state sales-tax rates, US does not have VAT

- Income tax / GDP

Between 1960 and 1996, despite increased opportunities for shifting some types of personal income offshore and an overall drop in its share in the tax mix (see figure 6), revenues from personal income tax still rose as a percentage of GDP. They almost doubled from 6.8% to 12.3% of GDP in OECD America (US and Canada). In the OECD Pacific region, they rose from 7.2% to 9.6% of total output. Similar figures of 7.0% in 1995 and 10.4% in 1996, are observed for OECD Europe.⁸⁰

- Corporate Income Tax

⁷⁷ **The Economist**, “Disappearing Taxes; The tap runs dry”, 31 May 1997, page 18

⁷⁸ Jeffrey Owens, “What Chance for the Virtual Taxman”, **The OECD Observer**, No.208, October/November 1997, page 18

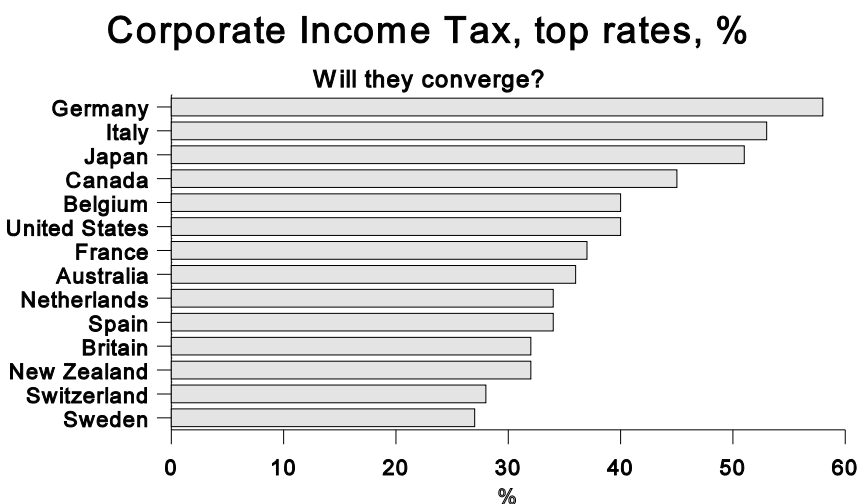
⁷⁹ **The Economist**, “Disappearing Taxes; The tap runs dry”, 31 May 1997, page 19

⁸⁰ Steven Clark and Flip de Kam, “OECD taxes revisited”, **The OECD Observer**, No. 214, October/November 1998, page 29

In the same period revenue from taxes of corporate income fell substantially in OECD America, from 3.9% to 3.0% of GDP. In OECD Pacific, the percentage fell slightly, to 3.9%, while in OECD Europe, it increased from 1.7% to 2.9%. But these unweighted averages tell only part of the story. In France, for example, corporate-tax revenues fell slightly, from 1.8% to 1.7% of GDP. Germany witnessed a much larger drop, from 2.5% to 1.4%. In contrast, the United Kingdom saw its corporate-tax revenues increase, from 2.2% to 3.8% of GDP. They rose also in the Netherlands, and more than double in Luxembourg, from 3.1% to 7.2%.⁸¹

Before the second world war, federal corporation tax in the US generated one-third of tax revenues. These days it is down to about 12 per cent. In the UK, too, corporation tax produces a smaller proportion of revenue. Mervyn King, deputy governor of the Bank of England, warned in 1996 that the effective tax rate on corporate income and profits was heading towards zero.⁸²

Figure 4:



Source: KPMG⁸³

- An overview of tax base trends

Over the past decade or so taxes on capital have already fallen sharply while those on labour have risen. In the future it will be harder to tax firms or high-earners at high rates because they are the most mobile. The implication is that unskilled labour will have to bear a greater burden.⁸⁴ Charles Leadbetter speculates that “as globalisation increases and the economy gradually dematerialises, we should expect taxes on corporations, capital and savings to yield less and less.”

⁸¹ Ibid.

⁸² Charles Leadbeater, “Goodbye, Inland Revenue”, *New Statesman*, 3 July 1998, page 29

⁸³ *The Economist*, “Disappearing Taxes; The tap runs dry”, 31 May 1997, page 17

⁸⁴ *The Economist*, “The disappearing taxpayer”, 31 May 1997, page 11

Liberalisation and globalisation, say Clark and de Kam may be responsible for recent changes in the tax mix in OECD countries. Although taxes on income and profits (which are relatively mobile tax bases) remain the largest source of revenue - 35% of the total tax revenue for OECD countries taken as a whole - their role gradually declined during the first half of the 1990s (see figure 6). This decline was matched by a growing weight on consumption taxes (which in 1996 yielded over 32% of total revenue) and of social-security contributions (25%), which may well be explained by growing difficulties encountered by authorities in taxing income from capital. Consumption taxes are already the single most important source of revenue in nine OECD countries - Greece, Hungary, Iceland, Korea, Mexico, Norway, Poland, Portugal and Turkey.⁸⁵

Figure 5:

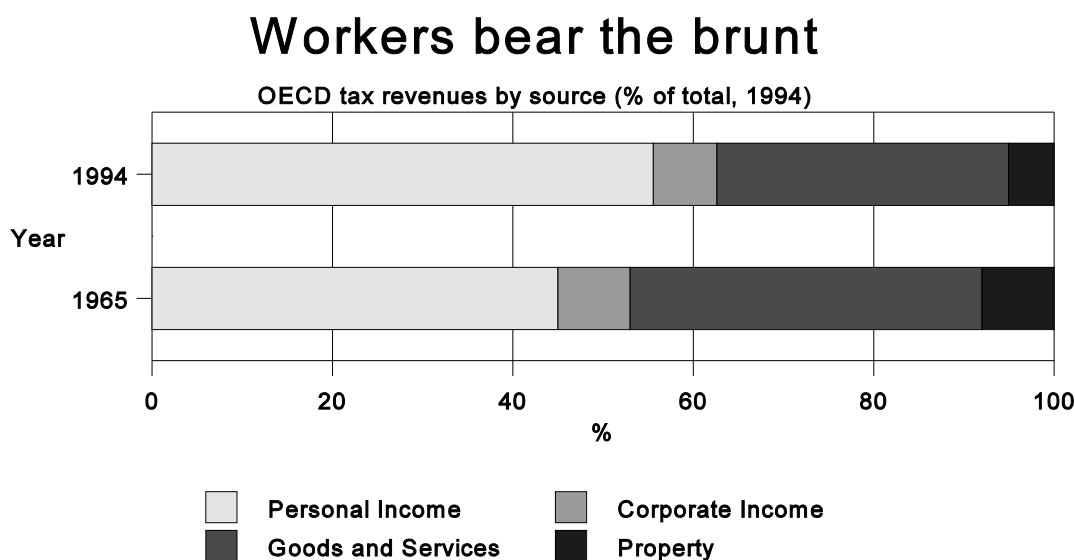


Figure 6:

Tax mix in the OECD area, 1970-96

% share of major tax categories in total tax revenue

	1970	1980	1990	1996	1970-96 (% points)
Personal income tax	27.8	31.3	29.4	26.8	-1.0
Corporate income tax	8.7	7.6	7.9	8.2	-0.5
Social Security:					
- employee contributions	6.2	6.7	7.4	7.8	1.6
- employer contributions	11.1	13.5	12.8	14.5	3.4
- other contributions	2.3	2.1	2.6	2.8	0.5
Payroll taxes	1.2	1.3	1.0	0.8	-0.4

⁸⁵ Steven Clark and Flip de Kam, "OECD taxes revisited", *The OECD Observer*, No. 214, October/November 1998, page 29

	1970	1980	1990	1996	1970-96 (% points)
Property taxes	7.0	5.2	5.6	5.4	-1.6
Consumption taxes:					
- general consumption	13.5	14.2	17.4	17.8	4.3
- specific goods	20.4	16.5	12.8	12.9	-7.5
- other consumption taxes	1.9	1.7	1.6	1.8	-0.1
Other taxes				1.2	
Total	100	100	100	100	-

Source: OECD⁸⁶

HOW DOES E-COMMERCE OVER THE INTERNET ENABLE TAX EVASION?

Mike Lotens a VAT manager in Arthur Andersen's Reading Office says that "the fact national taxing systems are not, on the whole, designed to cope with a multinational sales system means that there are potential loopholes to exploit. For example, an information service operated from Jersey can currently be provided to private customers in most countries VAT-free provided it is correctly set up."⁸⁷

If the consumer is in Essex and downloads software made in Seattle, marketed via a website in California and delivered by a server located in the Bahamas, where should this transaction be taxed and how can it ever be determined which government is entitled to the tax?⁸⁸

- *The Concept of 'place of supply'*

The concept of 'place of supply' is important in VAT systems. In broad terms, places of supply rules fall into two categories: those which depend upon the identification of a relevant establishment (the supplier's in some cases, the customer's in others) and those which are based on the place of performance or enjoyment. Since electronic commerce makes much more opaque the links between the place of supply, the place where the enterprise is located and that where the service is used or consumed, the Internet offers business consumers new opportunities to evade or avoid VAT by turning to suppliers who are not registered for it.⁸⁹

⁸⁶ **The Economist**, "Disappearing Taxes; The tap runs dry", 31 May 1997, page 18

⁸⁷ Mike Loten, "Doing Business on the Internet", **The Tax Journal**, Thursday, 20 June 1996, page 20.

⁸⁸ Charles Leadbeater, "Goodbye, Inland Revenue", **New Statesman**, 3 July 1998, page 28

⁸⁹ Jeffrey Owens, "What Chance for the Virtual Taxman", **The OECD Observer**, No.208, October/November 1997, page 17

However, it may be difficult or impossible to trace the location of the computer facility which the seller employed to deal with the customer. The server, the facility used to accept a customer's incoming call, may be located anywhere and many enterprises may have multiple servers at a variety of locations. The customer has no way of knowing which server is handling a transaction, and the server itself may not be able to tell where the customer is located. It has equally become much harder to ascertain where services are performed. Less and less often is it necessary for the service provider to go physically to the customer and often a single service may be performed by a combination of people in a variety of locations.⁹⁰ This problem could be solved with the help of credit card companies with authentication linked with taxation.

- Using the Internet to import goods from low-tax countries or tax havens which have no VAT and the distinction between digitised products that can be downloaded from the Internet and goods purchased over the Internet but delivered physically

At present, people who shop on the net mainly use it to order tangible products. Instead of buying a compact disc (CD) or video from a shop, you go on-line and buy it from a mail-order service in the US, which then posts the product to you. If you were buying in the high street, the purchase would attract VAT; over the Internet it almost certainly will not. In the Netherlands, for instance, many people buy CDs over the Internet from small foreign firms. Since the firms do not charge VAT, the CDs are cheaper. Last December, the Dutch government clamped down on this by ordering the post office to open suspicious packages. However, customs officers can hardly start opening all the post entering a country as sales over the Net expand. The expected upsurge in the volume of commercial consignments to private consumers could add significantly to the workload of customs authorities creating the need for additional resources to ensure effective collection of taxes due on these packages. Delays in delivery could hinder the growth of electronic commerce as a consequence. Many Member countries also have at present a de minimis relief for low value packages. This relief from customs duty and taxes allows many packages to escape taxation legitimately. The de minimis is set generally at a level which finds the balance between the cost of collection and the amount of tax which would otherwise be due.

Goods delivered by mail pose problems enough. Policing products down-loaded electronically (i.e. music and videos) will be even trickier. Small companies cannot be expected to collect VAT from customers and then remit the revenues to all the relevant tax authorities in every country in the world. If, as in Canada, customers are supposed to make their own assessment of VAT payable on anything purchased over the Internet, there will be big leaks.⁹¹

Charles Leadbetter states that "this leakage of VAT could turn from a trickle to a torrent as more products become intangible. Computer bytes and digital information, sounds and images do not have to pass through ports where they can be scrutinised by customs officers. They can be transmitted down telephone lines and by satellite to personal computers. Our homes will become increasingly like mini-factories, equipped to replicate software, download videos, reprint books,

⁹⁰ David R. Tillinghast, "Internet; The Impact of the Internet on the Taxation of International Transactions", International Bureau of Fiscal Documentation; Bulletin, November/December 1996, page 524

⁹¹ **The Economist**, "Disappearing Taxes; The tap runs dry; Taxes slip through the Net", 31 May 1997, page 18

make compact disks. This trade will escape the taxman - unless he is installed as a program on a semiconductor put in every computer sold in the UK, a prospect that would alarm civil libertarians.”⁹²

- *Physical checks on the amount of production by cross-checks on inputs and outputs become impossible when a program can be downloaded over the Internet in seconds. Thus, audit trails will disappear*

Where products are delivered over telecommunications networks the tax authorities will find it hard to catch tax dodgers. This is because there will be no means of cross-checking on a firm’s tax return the purchases of inputs with claimed output. If a firm sells software on floppy disks then the number of blank disks purchased can be used to verify sales. However, if the software is sold electronically, there is no corroborating evidence.⁹³

This dematerialisation of trade will remove one of the tax authority’s most useful cross-checks on assessments; inputs and outputs. In the production of software and videos, as long as the company distributes software on floppy disks or videos in plastic boxes, the tax authorities can check the number of blank disks or tapes the company purchases and can use that as a guide to how much software or videos it sells. However, when a program or video can be downloaded in seconds over the Internet, like Adobe Acrobat or Netscape Navigator, there is no physical check on the scale of the trade.⁹⁴ In the future, the audit trails will disappear into cyberspace.

- *Electronic money*

In the context of electronic commerce, cash-like electronic payment systems or unaccounted electronic payment systems, represent the same types of concerns as physical cash does in conventional commerce. However, unaccounted electronic payment systems raise additional concerns in that they can be used to conduct transactions over large distances, unlike physical cash, and they do not have the bulk of large quantities of physical cash, making the value easier to conceal.⁹⁵

Electronic money is likely to make tax evasion easier. At present, tax inspectors can check reported income and spending against bank accounts or credit card statements. By contrast, electronic cash, like paper cash, can be anonymous, untraceable and a good deal more convenient for money launderers than lugging a suitcase stuffed with notes around the world. The job of tax collectors of the future will get even tougher when money itself becomes electronic. Tax havens, once the preserve of the rich, will soon be within reach of the average taxpayer armed with a personal

⁹² Charles Leadbeater, “Goodbye, Inland Revenue”, **New Statesman**, 3 July 1998, page 28

⁹³ **The Economist**, “Disappearing Taxes; The tap runs dry; Taxes slip through the Net”, 31 May 1997, page 18

⁹⁴ Charles Leadbeater, “Goodbye, Inland Revenue”, **New Statesman**, 3 July 1998, page 28

⁹⁵ **OECD**, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, “*Electronic Commerce: A Discussion Paper on Taxation Issues*”, 17 September 1998, page 16

computer and a modem.⁹⁶ According to Jeffrey Owens, head of the fiscal affairs division of the Organisation for Economic Co-operation and Development, “Internet banking will offer simple access, 24 hours a day, low transaction costs, a degree of anonymity and immediacy of transferability of funds.”

In a seminar conducted by the International Fiscal Association on 5 September 1996, Mervyn King, the chief economist of the Bank of England, predicted that in order to maintain their ability to regulate money supply, central banks will seek to exercise supervision over Internet payments and this may provide the taxing authorities with access to information.⁹⁷

While Revenue authorities do not have jurisdiction over the banking, finance and payment system sectors of the economy, they should express their views to the appropriate bodies to ensure that system providers operate their systems in a way that enables the flows of funds to be properly accounted according to prevailing legislation. In addition, Revenue authorities may seek limits on the values attached to unaccounted electronic payment systems.⁹⁸

- *The disappearance of intermediaries facilitates tax evasion (i.e. the shopkeeper no longer collects VAT)*

The Internet may also reduce the role of traditional intermediaries, such as bankers and brokers, who report transactions to tax authorities. These intermediaries help tax inspectors compare interest income declared by the individual with that paid out by the banks. By cutting out the middleman, the Internet removes this source of cross-checking.⁹⁹

The tax authorities might fondly hope that companies doing business over the Internet will help them by becoming the tax collectors of the future, just as large employers, banks and building societies were in the past. They are almost certain to be disappointed, at least to begin with as these companies are unlikely to wish to take on this role.¹⁰⁰ However, with the Internet giving many small traders direct access to international markets it is unrealistic to expect a small company that provides for example, on-line music world-wide, to remit taxes to scores of different governments.¹⁰¹ The feasibility of such an approach would need to be assessed in light of various technical and legal problems that would doubtless arise.

- *Trade over Intranets*

⁹⁶ Charles Leadbeater, “Goodbye, Inland Revenue”, **New Statesman**, 3 July 1998, page 28

⁹⁷ David R. Tillinghast, Internet; “*The Impact of the Internet on the Taxation of International Transactions*”, **International Bureau of Fiscal Documentation**; Bulletin, November/December 1996, page 526

⁹⁸ **OECD**, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, “*Electronic Commerce: A Discussion Paper on Taxation Issues*”, 17 September 1998, page 16

⁹⁹ **The Economist**, “*Disappearing Taxes; The tap runs dry; Taxes slip through the Net*”, 31 May 1997, page 18

¹⁰⁰ Charles Leadbeater, “Goodbye, Inland Revenue”, **New Statesman**, 3 July 1998, page 28

¹⁰¹ *Ibid.*

With trade being conducted over private-intranets, run by large corporations to organise their suppliers and distributors the problems could be exaggerated. Private intranets are now widespread in multinational enterprises (MNEs) and today are more important than public ones. The resulting 'internalisation' of transactions will make it progressively more difficult to identify the functions carried out by related enterprises. It will also allow more flexibility in the choice of organisation. MNEs may come to prefer branches to subsidiaries, resulting in different tax treatment under tax treaties. The fragmentation of economic activity compounds these problems. This is because the physical location of a given transaction becomes less important and it becomes more difficult to determine where it is carried out.¹⁰²

- Evidence from Hansa.net

The following extract appeared on the Hansa.net website advertising how it is possible to avoid tax on an 'e-commerce' transaction. It describes a transaction that passes through a server located in Anguilla avoiding any charge to tax:

“When a vendor presents his marketing material on a Web site, this is referred to as an ‘invitation to treat’. That invitation takes place at the server location; let’s say Anguilla. When a prospective purchaser wishes to buy, he makes his ‘offer’ by clicking on a shopping basket and presenting his credit card; again, on the server in Anguilla. When the vendor has validated his card he ‘accepts’ the buyer’s offer; again, on the server in Anguilla. Finally, the vendor sends a delivery order to the plant in Taiwan or some similar manufacturing site; “title” to the goods (covered by adequate insurance and shipping costs built into the price) transfers to the buyer as soon as the specific product is ascertained...and the transaction is complete.

All elements of the transaction: invitation to treat, offer, acceptance, took place in Anguilla and are therefore only subject to tax there. Anguilla has no tax. The title transfer took place at the plant or a warehouse and should not affect the transaction if carefully structured.”

All elements of the transaction/ invitation to treat, offer, acceptance, can be designed to take place in a tax haven and thus only be subject to tax there. The tax haven should have no tax.

Hansa.net’s program of “Location Optimized Commerce on the Internet” (LOCI), embodies seven essential elements that will allow you to make choices with respect to the level of business taxation to which you are subjected.”¹⁰³

COMPANIES’ ABILITY TO HIDE THEIR INCOME THROUGH INTERNET SALES

¹⁰² Jeffrey Owens, “What Chance for the Virtual Taxman”, **The OECD Observer**, No.208, October/November 1997, page 17

¹⁰³ See <http://hansa.net/ecom.htm>

It will be easy for large taxpayers, corporate or individual, to use the Internet to locate their transactions in low-tax countries.¹⁰⁴ In the coming decades electronic commerce, combined with the growing ease with which firms can shift their operations from one part of the world to another, will make it ever easier for people to flee countries where taxes are high, or to evade tax altogether by doing their business in cyberspace.¹⁰⁵

- *Enterprises selling over the Internet can hide their income, at least in part, as there is no inventory as traditionally defined.*

In Israel, for example, where the development of computer software is highly subsidised, officials claim to have indirect evidence that producers are avoiding taxes and royalty payments by sending programmes abroad for distribution.¹⁰⁶

- *The Internet makes it impossible to identify who has done what transaction in what place and gives the user the ability to choose or even disguise the location of the transaction.*

There is an inherent difficulty involved in the identification of the customer in electronic transactions, in particular with private consumers. The supplier is normally responsible for collecting and accounting for consumption taxes and may have limited means to prove the location of the customer. The supplier may also be beyond the fiscal jurisdiction of the Revenue authority where consumption takes place. Existing rules that are used to determine where tax is due, such as “effective use and enjoyment”, may no longer suffice. This problem raises the question of whether the rules to determine where a supply is deemed to be consumed need amending.¹⁰⁷

Traditional (paper) audit trails may disappear, and tax administrations will encounter difficulties tracing transactions because of the lack of links between electronic entities and their physical counterparts. Verification of the identity of taxpayers will become practically impossible. Individuals and entities engaging in electronic commerce will be able to establish an Internet address in almost any taxing jurisdiction regardless of the location of their residence or the source of their activities. Obtaining acceptable documentation of proof will become harder. Where books and records are maintained in a tax haven, for example, it is unlikely that the tax authorities will be able to gain access to them. Few countries have treaties with tax havens.¹⁰⁸

While the majority of enterprises engaged in electronic commerce adequately identify the legal entity operating the web site or electronic place of business, a small but significant percentage of web sites have inadequate identification for tax purposes. Revenue authorities, in common with

¹⁰⁴ William Rees-Mogg, “*Tax Exiles on the Web*”, Opinion, **The Times**, 26 February 1998

¹⁰⁵ **The Economist**, “*The disappearing taxpayer*”, 31 May 1997, page 11

¹⁰⁶ **Oxford Analytica Brief**, International: Internet Law, 6 October 1997: 5, page 2

¹⁰⁷ **OECD**, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, “*Electronic Commerce: A Discussion Paper on Taxation Issues*”, 17 September 1998, page 19

¹⁰⁸ Jeffrey Owens, “*What Chance for the Virtual Taxman*”, **The OECD Observer**, No.208, October/November 1997, page 17

other bodies, require appropriate mechanisms to allow tracing of the legal entity operating a business through a web site or other electronic place of business (e.g. through Internet Protocol (IP) number allocation records.)¹⁰⁹

Given the ease with which such sites can be located offshore, identification and registration requirements will require careful consideration. Revenue authorities should maintain their ability to secure access to information to identify taxpayers. This maintains taxation neutrality with physical business enterprises.¹¹⁰

- *The disappearance of intermediaries to collect taxes (banks record their customers transactions)*

Many taxes are collected by intermediaries (the shopkeeper collects VAT, the employer collects PAYE, banks record their customers' transactions and report some of them to the Inland Revenue). Disintermediation will remove convenient 'taxing points'. The elimination of 'middle-men' could force tax administrations to collect smaller amounts of revenue from a larger number of taxpayers, raising the costs of collection.¹¹¹ Information technology reduces the need for intermediaries. It is much harder to collect taxes once the intermediaries have disappeared. It is, for instance, harder to tax the self employed than the employees of large corporations, yet there is a steady growth in self-employment. Shifts of location and disintermediation will undermine the present tax base of the world.

- *Encryption*

The development of encrypted information may mean, furthermore, that governments have no access to the content of messages sent on the net. They will neither know what type of transaction is taking place nor be able to assess its value for taxation.¹¹² The encryption of Internet messages is likely to cover most tax-sensitive communications. There will be billions of messages, encrypted to whatever level their security requires. The world tax authorities will not be able to decipher more than a tiny proportion. For tax purposes, it must be assumed that the Internet will be opaque. For this reason, governments will try to outlaw encryption.

Thus, the process of relocation, disintermediation and encryption will make it impossible to identify most Internet transactions for tax purposes. That will make cross-border taxes virtually impossible to collect except on a voluntary basis. Governments will still be able to tax transactions which are local, transparent and concrete. They are already losing the ability to tax transactions that are transnational, opaque and abstract.¹¹³

¹⁰⁹ **OECD**, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, "*Electronic Commerce: A Discussion Paper on Taxation Issues*", 17 September 1998, page 15

¹¹⁰ *Ibid*, page 14

¹¹¹ Jeffrey Owens, "*What Chance for the Virtual Taxman*", **The OECD Observer**, No.208, October/November 1997, page 17

¹¹² *Ibid*, page 16

¹¹³ William Rees-Mogg, "*Tax Exiles on the Web*", Opinion, **The Times**, 26 Feb 1998

CONCLUSION

The taxation of electronic commerce should be administratively straightforward, non-distortionary and non-discriminatory. Electronic commerce, in particular the Internet, could have important implications for taxation. If the Internet transactions are not taxed, this would give the medium a considerable advantage over other means of commerce that are taxed. If a value-added tax (VAT) of 20 percent, or corporate income tax of 30-50 percent, could be circumvented via the Internet, the latter would be made more attractive for sellers and buyers alike. This is not in the interest of the general public.

Therefore, the question raised by these considerations is whether existing tax concepts can be adapted to the new technology or whether the technological changes require us to abandon traditional concepts and devise entirely new ones.

The Commission of the EU still has a continuing commitment to the introduction of a common VAT system based on taxation at origin and providing for a single country of registration where an operator would both account for and deduct tax in respect of all his EU VAT transactions (including the development of a clearing payment system). The Council Conclusions of 6 July 1998 follow the Commission communication called 'Electronic Commerce and Indirect Taxation' of 17 June 1998 (COM(98) 374 final). This clearly states that services, which are supplied via electronic commerce (including so-called virtual goods) should, without prejudice to the rules that will be applied within the EU, in principle be taxed at the place of consumption. The Council Conclusions are less clear concerning the tax status of the different services, particularly those mentioned in Article 9(2) of the 6th VAT Directive. VAT rules distinguish between different services, which become difficult to differentiate when all data is digitised. The Commission services are working on a report on the VAT services classification. The Council conclusions indicate that the main bottleneck concerning

indirect taxation and electronic commerce, may be the enforcement part and the development of administrative procedures to collect taxes among different (30 000) fiscal jurisdictions. Even with off-line services, involving the transfer of goods across borders, the increased volume of international traffic may well swamp the ability of customs authorities to collect tax.

Charles McLure has said that “the issue of reform in indirect taxation caused by Electronic Commerce is even more urgent in the United States than in the EU. The European VAT system, even the troublesome exception-rich services of Article 9 of the Sixth (VAT) Directive, is believed to create greater consistency in the taxation of electronic and other commerce.”¹¹⁴

Consensus is necessary at an international level if Member countries are to ensure the effective application of consumption tax systems to electronic commerce that:

- a) prevents double and unintentional non-taxation;
- b) protects tax revenue generally;
- c) does not increase the opportunity for avoidance, evasion or fraud;
- d) minimises the cost of compliance for business; and
- e) does not hinder the development of electronic trade.¹¹⁵

- The changing tax base

If governments are to mitigate erosion of their tax bases and maintain their tax revenues, tax reforms are needed quickly. To achieve this the Committee on Fiscal Affairs (CFA) of the OECD reaffirms that the widely accepted general tax principles of neutrality, efficiency, certainty, simplicity, effectiveness, fairness and flexibility should apply to electronic commerce.¹¹⁶ The CFA also believes that at this stage of development in the technological and commercial environment, existing taxation rules can implement these principles, although new or modified measures are not precluded provided that they are intended to assist in the application of the existing taxation principles, and are not intended to impose a discriminatory tax treatment of electronic commerce transactions. In this context the CFA states that it is also important to avoid an unfair distortion of

¹¹⁴ Charles McLure, “*Internet taxation: economics, technology and law*”, Stanford University, 1998, <http://www.techlaw.stanford.edu/>

¹¹⁵ OECD, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, “*Electronic Commerce: A Discussion Paper on Taxation Issues*”, 17 September 1998, page 18

¹¹⁶ a) *Neutrality* - Taxation should seek to be neutral and equitable between forms of electronic commerce and between conventional and electronic forms of commerce. Business decisions should be motivated by economic rather than tax considerations. Taxpayers in similar situations carrying out similar transactions should be subject to similar levels of taxation;

b) *Efficiency* - Compliance costs for taxpayers and administrative costs for the tax authorities should be minimised as far as possible;

c) *Certainty and Simplicity* - The tax rules should be clear and simple to understand so that taxpayers can anticipate the tax consequences in advance of a transaction, including knowing when, where and how the tax is to be accounted;

d) *Effectiveness and Fairness* - Taxation should produce the right amount of tax at the right time. The potential for evasion and avoidance should be minimised and counter-acting measures should be proportionate to the risks involved, and

e) *Flexibility* - The systems for taxation should be flexible and dynamic to ensure that they keep pace with technological and commercial developments.

competition which would result from a de facto double or non-taxation of electronic commerce vis-a-vis fully taxed 'traditional' commerce carried out via conventional 'physical' means.¹¹⁷

- *How might governments react to the pressure that electronic commerce puts on tax regimes? The 'bit tax' - A Solution?*

Soete and Kemp state that today, the dominant issue should be how governments can adjust their tax base in line with the changing economic structure towards an information society and the increasing importance of information transmission for economic production and consumption. Shifting tax revenues on the basis of a tax on the individual electronic "bits" or "bytes" appears from the outset the most straightforward and logical taxing method.¹¹⁸

Luc Soete, an economist at the University of Limburg in Maastricht and the chairman of an independent committee appointed by the European Commission, in April 1997 submitted a report on behalf of the committee recommending a so-called "bit-tax". Some European politicians support such a tax, partly because Europe (with high rates of VAT) stands to lose the most from untaxed electronic sales. In America, which does not have a federal sales tax, the idea has been ridiculed.¹¹⁹

The 'bit tax' was proposed as a way to introduce a transmission based tax system. The tax is not related in any direct way to the actual "value" of a communication, but rather focuses on the transmission of information. The amount payable is calculated in terms of the number of 'bits' transmitted, whether transmission is at a constant rate over time as in a telephone communication, or in packages over the broadband as on the Internet. The 'bit tax' would require 'bit measuring' equipment on all communication equipment, similar to the use of electricity meters, one feature which has made the 'bit tax' method less than popular. The fact that certain communication methods, such as satellite communication, cannot be measured in "bits", may make this approach difficult to apply to all electronic transmissions. The 'bit tax' has been specifically rejected by the Commission of the European Communities.¹²⁰ The US Treasury has also expressed a preference for not introducing a bit tax in a White Paper on e-commerce.¹²¹

The idea of a "bit tax" was first put forward by Arthur Cordell and Thomas Ide in a Club of Rome report dated November 1994. Cordell proposed a tax of 0.000001cents/bits (or 1 cent per megabit), without anybody really knowing what the effect of this would be in terms of total government revenue or individual user or company cost. Elio di Rupo, the Belgian telecommunications minister, estimates that a tax of one per cent per bit would yield \$10 billion, about 4 per cent of Belgian

¹¹⁷ OECD, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, "Electronic Commerce: A Discussion Paper on Taxation Issues", 17 September 1997, page 4

¹¹⁸ Luc Soete and Karin Kamp, "The 'Bit Tax': the case for further research", 12 August 1996 <http://www.ispo.cec.be/hleg/bittax.html>

¹¹⁹ **The Economist**, "Disappearing Taxes; The tap runs dry", 31 May 1997, page 19

¹²⁰ Arthur Andersen Report, Laws of the Internet, Direct and Indirect Taxation, January 1998

¹²¹ "Logging on to Cyberspace Tax Policy: An Interactive Services Association Task Force White Paper", ISA State Taxation White Paper, No. 5, at 6 en 14

GDP.¹²² Di Rupo referred to a total figure of 10¹⁸ bits being transmitted in and out of Belgium at the Cordell rate. This would result in a substantial amount of additional government tax revenues.

At a recent data base conference, Lewis Platt, CEO and Chairman of Hewlett-Packard, indicated that HP used currently its intranet main backbone at a rate of some 5 terabytes a month (or 480 terabits a year). Assuming for a moment that these intranet bits could be monitored, this would imply that HP would pay a total “bit tax” bill of some \$4.8 million on total world wide revenues for HP in 1995 of some \$32 billion and profits of some \$5 billion. In other words a tax bill of less than 0.1% of current profits.

In theory, a “bit tax” could eliminate the advantages of traders trying to avoid income and consumption tax. However, a number of shortcomings to this proposal suggest that a bit tax may not be an appropriate instrument for taxing electronic commerce. First, the volume of data flow is difficult to measure accurately. Second, there is a problem with ascribing value to the data and to determining what is taxable and what is not. The taxation of all data exchange would not distinguish between high and low value products. It would even mean taxing data such as e-mail and information which is not part of a commercial transaction. To tax browsing and reading on the Internet would be like imposing a tax on reading a magazine or watching television. In short, a bit-tax would be a blunt instrument, blind to any subtlety in public policy considerations. Thus, the basic problem with a bit tax is that it is indiscriminate. It taxes not just on-line transactions but all digital communications. Hence it would stunt the growth of the industry. Moreover, on-line transactions would simply take place in a state or country where there is no such tax.¹²³

The reference to the idea of a “bit tax” has led to considerable reaction amongst the press, policy makers and individual Internet users. Such reactions range from immediate adherence and even proposals for implementation¹²⁴, to disbelief and disgust.¹²⁵ One press report described the “bit tax” as a new “Loch Ness” tax monster.¹²⁶ It is likely too, that the installation of “tax chips” in computers might lead to civil liberties objections, and in any case such a tax might depress and distort Internet commerce.

The Ottawa guidelines appear to rule out taxes directed specifically at the Internet, such as bit taxes and e-mail surcharges. The ‘European Initiative in Electronic Commerce’ adopted by the EU in April 1997 rejected, at least temporarily, the bit tax and other discriminatory Internet taxes. The EU now appears to have solidified its opposition to discriminatory tax treatment since the Ottawa declaration.¹²⁷

¹²² Charles Leadbeater, “Goodbye, Inland Revenue”, *New Statesman*, 3 July 1998, page 29

¹²³ *The Economist*, “Disappearing Taxes; The tap runs dry”, 31 May 1997, page 19

¹²⁴ As in the case of the Belgian Minister for Telecommunications Di Rupo at a conference on teleworking (see *Le Soir*, 11 June 1996).

¹²⁵ Luc Soete and Karin Kamp, “The ‘Bit Tax’: the case for further research”, 12 August 1996
<http://www.ispo.cec.be/hleg/bittax.html>

¹²⁶ See *Le Soir*, 11 June 1996

¹²⁷ *Oxford Analytica Brief*, International: Internet Taxation, 21 October 1998: 5

- How can tax authorities respond?

Some commentators have already suggested proposals for special tax rules restricted to electronic commerce, sometimes on the basis that special rules already exist for some types of business such as artists and athletes, international transport and, to a lesser extent, insurance companies. An obvious problem with that approach is that electronic commerce is not a particular type of business, as are international transport and insurance, but rather a new mode of production, marketing, distribution, payment, etc. Thus the different treatment of the means of carrying out these functions that would result from special rules for electronic commerce could affect almost all businesses.¹²⁸

From the indirect tax point of view the Sixth Directive is applicable. The provisions of the Sixth Directive can, however, lead to undesirable tax effects and seem to provide possibilities for tax avoidance which could lead to distortion of competition within the European Union.¹²⁹ The present system of VAT on Internet sales is still difficult to interpret. The distinction between goods/services/intangibles is becoming vague. To illustrate, the treatment of standard software was the subject of discussion in a VAT Committee meeting. It concluded that the supply of standard software is the supply of a good, whereas the supply of specific software is the supply of a service, falling within the scope of Article 9(2)(e) of the Sixth VAT Directive.¹³⁰ Definitions should be clear, precise and easy to apply, thus allowing a correct, uniform application within the Member States.

From a direct tax point of view, it is not yet clear under which circumstances the application of traditional tax concepts to electronic commerce would give rise to a permanent establishment, and if so, which transfer pricing method should be used to allocate the profits derived from these activities to such a permanent establishment. One cannot at present rule out that, on the basis of sovereignty principles, electronic transactions will be subject to double taxation. The best guarantee in order to avoid double taxation issues would in any case be to abandon the permanent establishment concept in favour of exclusive residence-based taxation. Moreover, transfer pricing issues would in this way be avoided as well.¹³¹

Horner and Owens state that “with regard to the traditional principle of residency and physical presence, it would seem unlikely that developed countries would embrace a change to taxation based on source (see above). Countries that are net capital exporters could lose substantial revenues under such a system. It is possible that these nations will simply accept the risk of tax base erosion inherent in the traditional approach, and retain the definition of presence in its current form.”¹³²

¹²⁸ OECD, Discussion Paper, Directorate for Financial, Fiscal and Enterprise Affairs; Committee on Fiscal Affairs, “*Electronic Commerce: A Discussion Paper on Taxation Issues*”, 17 September 1998, page 25

¹²⁹ Ine Lejeune, Bart Vanham, Isabelle Verlinden, Alan Verbeken, International; “*Does Cyber-Commerce Necessitate a Revision of International Tax Concepts?*”, European Taxation, **International Bureau of Fiscal Documentation**, January 1998, page 58

¹³⁰ *Ibid*, page 6

¹³¹ *Ibid*, page 58

¹³² Frances M. Horner and Jeffrey Owens, Internet; “*Tax and the Web: New Technology, Old Problems*”, **International Bureau of Fiscal Documentation**; Bulletin, November/December 1996, page 518

- *Administrative and compliance concerns*

It is important that acceptable control-systems are devised for taxation purposes by national authorities in co-operation. This might include identity verification, record keeping and transaction verification and information reporting. It might, however, be appropriate to solve many of these issues over time as associated technologies develop to respond to different needs in this area. As these technologies develop, government regulators will hopefully be in a better position to evaluate possible solutions. To develop new systems, standards, record keeping and reporting requirements at this point may only result in unnecessary complexity and ill-suited solutions. A control-system that would be based on the responsibility of credit card companies and the need for authorisation of paperless-electronic invoicing for transactions within the EU needs to be examined. A framework of co-operation between the EU and other countries could be created concerning international invoicing. Fiscal administrations could also provide for operators to use electronic VAT declarations and accounting. The law and administrative procedures related to taxation of e-commerce should be designed to minimise compliance costs.¹³³

- *How will the authorities be able to monitor the transactions performed via the Internet?*

One of the ideas suggested is to give the authorities access to the encryption key. This would allow them to have access in order to monitor what is going on in cyberspace. The key question in this respect will certainly be protection of data and compliance with privacy legislation. A suggestion has been made to use “digital notarization”, in order to verify that documents and accounts have not been altered.¹³⁴

- *The Internet service providers and telecommunications companies as the new intermediaries to act as tax collectors?*

Perhaps the most acceptable outcome will be for the tax authorities to find new intermediaries to work for them as collectors. The hubs of the electronic economy, the equivalents of the ports and airports in the industrial era, will be telecommunications switches and computer servers. The most effective way forward would be for the tax authorities to team up with the companies who provide these nodal points in the new economy. At the moment, Internet service providers and telecommunications companies decline to play such a role. Mervyn King, the deputy governor of the Bank of England says, “the idea that Microsoft and British Telecom may have a more important role in payments systems in the future than Midland or Barclays Bank is not one to be dismissed lightly”. The tax-collection divisions of these international corporations could become indispensable partners to the world’s tax authorities in the electronic era.¹³⁵

- *Changing the focus of taxation*

¹³³ Erika Mann, “*Electronic commerce and indirect taxation*”, **European Parliament Working Document**; Committee on Economic and Monetary Affairs and Industrial Policy, 1 September 1998, page 9

¹³⁴ Ine Lejeune, Bart Vanham, Isabelle Verlinden, Alan Verbeken, International; “*Does Cyber-Commerce Necessitate a Revision of International Tax Concepts?*”, European Taxation, **International Bureau of Fiscal Documentation**, January 1998, page 13

¹³⁵ Charles Leadbeater, “*Goodbye, Inland Revenue*”, **New Statesman**, 3 July 1998, page 29

In the coming years governments may be forced to shift the tax base from footloose factors of production, such as profits and savings, towards consumption and labour. Despite this it may become harder to tax the income from and the consumption of goods and services sold over the Internet. Thus, the labourforce is likely to bear a growing share of the tax burden. This would fall increasingly on those who are easiest to tax: immobile people, in regular employment, which means the moderately skilled people who make up the reasonably educated middle classes as opposed to more mobile skilled people.¹³⁶ The result of this would be a more regressive tax system. Is the solution to tax more heavily spending with an unavoidable physical presence such as property? Could the computer age return the post-industrial world to a pre-industrial tax system?¹³⁷

Governments may look to return to its Anglo-Saxon roots and tax property more heavily, but this would be difficult to apply fairly as manufacturing would be hit harder than services.¹³⁸ The challenge for tax administrations is to maximise the potential efficiency gains of the Internet and at the same time protect their revenue base without hindering the development of the new technologies.

- A Final Thought

There are no clear or simple answers to the issues raised by the Internet. The tax systems of the world will be required to go through a period of readjustment which is only really just beginning. Countries will have to decide whether to rely on existing taxes or to adopt wholly new ones. If they choose to retain the existing systems, they will need to decide how the traditional concepts are to be applied to the Internet world.¹³⁹

It used to be said that only death and taxes were certain. In the future, it may be only death.¹⁴⁰ The best tax, from the state's point of view is one that is simple to collect. An effective tax system must feed upon the way an economy generates wealth and it must also bear upon things that people cannot easily hide.¹⁴¹ "The art of taxation", advised Louis XIV's treasurer, Jean-Baptiste Colbert, "consists in so plucking the goose to obtain the largest amount of feathers, with the least possible amount of hissing".¹⁴²

¹³⁶ Ibid, page 28

¹³⁷ **The Economist**, "Disappearing Taxes; The tap runs dry", 31 May 1997, page 19

¹³⁸ Charles Leadbeater, "Goodbye, Inland Revenue", **New Statesman**, 3 July 1998, page 28

¹³⁹ David R. Tillinghast, Internet; "The Impact of the Internet on the Taxation of International Transactions", **International Bureau of Fiscal Documentation**; Bulletin, November/December 1996, page 526

¹⁴⁰ Charles Leadbeater, "Goodbye, Inland Revenue", **New Statesman**, 3 July 1998, page 27

¹⁴¹ Ibid.

¹⁴² **The Economist**, "The disappearing taxpayer", 31 May 1997, page 11

ANNEX 1

OECD Economic Outlook, Geographical Mobility of Tax Bases, June 1998, page 166

One type of tax-base erosion that has attracted considerable attention and concern is the geographical mobility of tax bases. Changes in technology - notably information, communication and transportation technology - as well as liberalisation of commercial and financial transactions have increased the scope for tax avoidance and evasion through the choice of location of economic activity. Business functions can be moved to low-tax jurisdictions and bank accounts and other financial assets can be held offshore. There are numerous examples of avoidance reducing tax revenues and, in some cases, tax rates have had to be reduced in order to stem the revenue losses. Empirical research also supports the view that taxation influences international investment flows, although some studies find little effect (Liebfritz et al., 1997). And, as noted above, the pattern of convergence in OECD tax systems is broadly consistent with pressures stemming from mobility of capital and highly paid labour.

The effect of geographical mobility on tax bases raises a number of concerns. The first is the extent to which the overall revenue-raising power of the governments has been constrained. Theory offers a wide range of possibilities, with the most pessimistic being that tax rates and tax revenues will be forced progressively downwards, even to the point where it becomes impossible to collect revenues at all. There appears to be little evidence, however, that major tax bases - household income taxes, corporation income taxes and consumption taxes - have collapsed in this way. Overall, taxes have risen, not fallen, over the past several years, and although tax rates have tended to converge over time there remains substantial variation across countries. And within countries, where there are few formal barriers to geographical mobility, differentials of major taxes also seem to be significant and stable over time.

...improvements in electronic commerce are likely to make the base for consumption taxes, such as the VAT or sales taxes, more geographically mobile and harder to trace. In general, the location of economic activity depends on many factors, of which taxation is one.

Taxation of Internet Commerce Zak Muscovitch - Osgoode Hall Law School, Toronto, Canada, April 26th, 1996

...the special characteristics of the Internet, i.e. its lack of central control combined with its international reach., make it very difficult if not impossible to regulate the vast amounts of money that are expected to travel through it. The US Treasury Department's International Tax Counsel Guttentag has expressed concern that the Internet is being used for tax avoidance and other criminal shifting of income and has announced that the Treasury Department has set up a group to study this problem.¹⁴³

...but suppose a company, CyberBahama Corp, is operating a commercial web site that is hosted by a computer in a tax haven country. The ramifications to the concept of electronic-cross-border shopping could be very serious for government revenues. There would be no way for governments to collect sales taxes because of the lack of a treaty, and there would be no way to collect customs taxes because of the technical impossibility of customs checkpoints.

...The ramifications of tax haven countries getting into the Internet business are perhaps the most serious of all issues evolving from Internet commerce. Tax haven countries currently, are likely only used by sophisticated businesspeople and criminals. In the future however, individual consumers will be able to set up bank accounts with cyberlinks in the tax havens, and effectively circumvent the international banking system. ... the transfer of such currency could be completed directly between the banks and account holders through personal computers, thus never creating any traceable information trail that is accessible to revenue officials.

Nothing Fails Like Success: On-line Growth in the Offshore World By Arthur J. Cardell, Special Advisor, Information Technology policy, Department of Industry, Ottawa**On-line Offshore 98: Internet Based Electronic Commerce and the Offshore World April 27-30, 1998 The Grand Pavilion Hotel, Grand Cayman, Cayman Islands**

...with computer software, music, movies, magazines, business services including banking and financial transactions--all headed for electronic distribution governments everywhere are facing the threat of tax erosion.

¹⁴³ (See International Taxes: Internet use for Tax avoidance under Investigation, Daily Tax Report, (Taxation, Budget and Accounting), 16 February 1996)

In the on-line trading environment how will taxes be collected? Who will collect taxes? On whose behalf will taxes be collected and where will they be sent? With little evidence of a paper trail-- what a job for the tax collector.

... Little wonder that the major trading nations are worried about their tax base.

Participation in low tax jurisdictions is growing "exponentially". Investment by G7 countries in offshore jurisdictions increased by more than 500 percent between 1985-1994.

One web site (www.finor.com) interesting in locating new businesses offshore estimates 60,000 offshore businesses were incorporated in the Caribbean in 1995 and over 130,000 offshore companies were formed worldwide in the same year. Over the next three years they estimate another 500,000 offshore companies will have been incorporated worldwide.

Offshore entrepreneurs are showing the way to those who want to do business from a low tax location. Consider the web site of Hansa.net. Hansa.net offers "location optimized commerce on the Internet" so that "taxes are an option." Hansa.net offers a wide range of services to those who want to avoid taxes by locating offshore, but do business anywhere.

...Each day the Net carries more offers to "get rich by moving offshore." The web site "escapeartist" has a page "One Thousand and One Offshore Tax Havens and Banks." (Which also tells how to acquire a 2nd passport.) Or consider "The Offshore Money Book/ How to move assets offshore for privacy, protection and tax advantage" available from the web site of offshore-net.com. And if clicking through web pages to find a tax haven is too onerous don't worry, every few days an unsolicited email arrives. The most recent one offers a guide to offshore riches for US\$20 dollars. Caveat emptor!!

The promise of tax avoidance is not restricted to exotic islands. In December 1997, the US State of Montana completed regulations on a new law that would allow non-residents to protect their assets in Montana. The first state in the US to have such a law!

...Either directly, through offshore banks or other financial intermediaries, the Internet will allow more people everywhere how to participate in offshore commerce. The net and encryption clears the way for average citizens of OECD countries to use offshore financial centres (OFCs). Numbered bank accounts and on-line payment options open the prospect of tax avoidance to many.

...The OECD has underway a major review of tax avoidance. It is designed to "counter the distorting impact of harmful tax competition on investment and financing decisions and the consequences for national tax bases." It plans to convene a Forum on Harmful Tax Practices and will issue a report listing those countries deemed to be tax havens.

...The Canadian and Australian governments have gone public with their concerns. An official of Revenue Canada in a public speech (11 February 1998) said, "The fear is that electronic commerce will gravitate to offshore jurisdictions to take full advantage of corporate and bank secrecy laws, encryption and electronic cash to avoid and evade taxation in other jurisdictions."

...the OECD has stated,

"Governments cannot stand back while their tax bases are eroded through the actions of countries which offer taxpayers ways to exploit tax havens and preferential regimes to reduce tax that would otherwise be payable to them."

Strategy - Establishing Ground Rules For the Digital Marketplace..., 4 July 1998

(http://www.ottawaoecdconference.org/english/announcements/facts_taxation.html)

The anonymity and borderless nature of cyberspace poses new challenges to national taxation systems in Canada, and around the world. Issues under discussion include equity between taxation of digital, non-digital and paper-based transactions, and the extent to which electronic commerce may facilitate tax evasion.

The Virtual Taxman Cometh: Looming Taxation Issues for Internet Commerce by Lysbeth B. Chuck, CQ&A, Searcher, Volume 6, Number 5, May 1998

(<http://www.infotoday.com/searcher/may/story2.htm>)

A recent article in The Times of London did not exaggerate when it says that the decisions we make about taxation and cyberspace have the potential to "erode the world's tax base", a development that would "be one of the greatest forces for social and political change in the first half of the next century."

...Egghead Software announced in January that it would close all 80 of its remaining retail outlets, and shift its focus to selling software over the Internet. No one at Egghead was available to comment on what, if any, impact local sales tax issues had on the decision, but the Associated Press reported on 29 January 1998 that the move was expected to save the company several millions per outlet in expenses.

...The Clinton administration is betting that by maintaining a tax-free Internet environment, the US will become an attractive site for e-business. It's no sweat for the feds, who will lose only a potential new tax base, but won't lose actual revenue since consumption taxes in the US are collected at the local level. The governments of Germany and other VAT-dependant countries, on the other hand, worry about a big threat to their existing tax base.

...And, of course, the same situation described in discussing state taxation above applies to international e-commerce - companies may locate or relocate to low-tax or no-tax countries, and thereby affect national tax bases.

...All of which leads us back to the original point - the erosion of the global tax base, thanks to the Internet, spurred by the growth of e-commerce. In the Times article...William Rees Mogg's main point was that "the Internet is confronting governments with a stark choice: low tax or no tax."

...In short, "Taxation is not shaped by the free choice of political leaders, but by the realities of world competition. The new system of global trade is going to make much lower taxes inevitable for all countries which wish to remain competitive."

Rees-Mogg, William, "Tax Exiles on the Web," The Times of London, 26 February 1998

'Governments will still be able to tax transactions or benefits which are local, transparent, opaque and abstract...But it will be very hard to tax international bankers...

Taxing Cyberspace...An Eroding Tax Base (undated)

(<http://meritbbs.unimaas.nl/cybertax/taxbase.html>)

...At the consumer end, e-commerce makes the tracing of transactions and thus the taxing of goods and services sold and distributed via the Internet almost impossible. As a result, state and national governments' tax bases are, or are at risk of, being eroded. Historically, the goods we consumed were physical and therefore the production, distribution and consumption of these goods were easily taxable.

Electronic Commerce: The Challenges to Tax Authorities and Taxpayers - An informal Round Table Discussion between Business and Government (OECD) - Turku, Finland, 18 November 1997

...The challenges posed to tax systems by Internet Electronic Commerce are real and governments will need to focus on how to address them in a spirit of collective co-operation. The allocation of taxing rights must be based upon mutually agreed principles and a common understanding of how these principles should be applied. Even if such a consensus is achieved, governments may find that their ability to enforce taxation may be diminished. Without such a consensus, the Internet and other new communication technologies may pose a serious challenge to governments in maintaining their revenue bases.

...From the perspective of the tax administrator, these new communication technologies open up the possibilities to improve the administration of tax systems but also open up new avenues for tax evasion and avoidance. From the perspective of the tax policy maker, legislator and tax treaty negotiator, these developments may challenge many of the traditional concepts embedded in tax laws and tax treaties.

...Electronic money poses a tax evasion potential similar to that created by paper money which depends in part on the technological features of the particular electronic payment system at issue.

...Electronic money can also facilitate the use of offshore banking centres. It is now very easy to open a bank account, in another jurisdiction. Once an individual depositor can open accounts, transfer funds, make bill payments, and arrange personal loans without visiting a local branch, there may be little reason for a customer to prefer a local to a foreign institution, other things (such as security, deposit insurance, etc) being equal.

...In addition to facilitating tax evasion in the form of hidden cash deposits, the availability to consumers and businesses of secure offshore electronic financial intermediaries may have an impact on corporate tax revenues from the domestic banking sector.

...Tax havens and off-shore banking facilities will become more accessible. It will be increasingly easy for the "average" tax payer to use offshore financial centres. Already a number of traditional tax havens are offering numbered and coded bank accounts combined with such services as international wire transfers on-line and other on-line payment options. Whilst the principles which govern off-shore banking are similar to those which govern traditional banking, the ways in which banking over the Internet may operate in the future will make a crucial difference to the ability of tax authorities to counteract international tax evasion and avoidance.

Price Waterhouse LLP - Carol Dunahoo

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Letter to Joseph H Guttentag, International Tax Counsel, US Department of the Treasury

...it is important to bear in mind that electronic commerce industry is still in its infancy. Total Internet revenues - including revenues from access and on-line services, advertising, and product sales - is small, both in absolute terms and as a fraction of transactions through non-electronic channels. Therefore, the amount of tax currently at stake in

the electronic commerce arena is relatively limited. This should reassure tax authorities that they need not make immediate decisions in order to prevent tax base erosion.

...The Treasury Paper notes that the supposed ease of conducting electronic commerce activities from tax-favoured jurisdictions and the difficulty of determining the taxpayer's identity raises serious subpart F enforcement and compliance concerns.

Luc Soete and Karin Kamp, The "Bit Tax": the case for further research, 12 August 1996

(<http://www.ispo.cec.be/hleg/bittax.html>)

In the US, it is by and large by accident - the mail order companies local sales tax exemption - that electronic distribution is eroding local sales taxes, in Europe it is the levying of VAT on services (banking, insurance, telephone, etc) which is becoming avoided because of the global access and footloose location possibilities of such service providers through the Internet. At the same time, providers of goods and services using traditional means become less competitive since they must pay taxes on their visible and easily traceable goods or services.

The Disappearing Taxpayer, The Economist, 31 May 1997, page 18

The Internet may drain government's tax revenues either by making evasion easier or by encouraging economic activity to shift to lower-tax countries. The economic principles at work are fairly clear. What is less clear, however, is their practical impact. Anecdotal evidence shows that changes are taking place. But quantifying those changes is hard. No one has yet been able to measure exactly how much revenue governments have forgone as a result of companies avoiding taxes, individuals becoming tax exiles or people buying goods over the Internet.

Two things, however, can be said. The first is that tax nets are already torn, so globalisation and new technology are making worse a problem that already exists. Even in America, where tax evasion is thought to be smaller than in Europe, a guessed-at 15% of total personal income is concealed from the taxman. A cynic might argue that there is little evidence that governments are finding it hard to raise revenue. Total tax revenues in OECD countries climbed to a record 38% of GDP in 1980. And there is no clear evidence that high-tax countries have seen smaller increases in their tax burdens in recent years.

Electronic Commerce: The Taxing Problems by Nilesh K. Shah, KPMG Peat Marwick LLP, August 1997

(http://www.data.com/business_case/taxing.html)

If a buyer in the US makes a purchase from a company headquartered in the Netherlands doing business from a server located in Japan, where exactly does the transaction take place?

Few jurisdictions have begun to grapple with the issue, but they will, since many of them around the world are starved for revenues. And when they do, their tax authorities will discover the wonder land quality of the Internet. Two jurisdictions--the state of Florida and Tacoma, Wash.--recently tried to impose some level of taxation on e-commerce. But they quickly retreated because of pressure from the business community. Also, companies could simply pick up and "move" their Web sites to where there's little or no tax liability-- a distinct possibility, since no one has determined whether a Web site meets the legal definition of a "permanent establishment" for business purposes. Corporations have always gone jurisdiction shopping. But traditional commerce leaves a trail, like ports of entry and exit or payment data, so that value can be defined and revenue captured. True e-commerce doesn't necessarily leave this trail. A company that produces software in a country with high corporate tax rates can market it to customers next door through a Web site based in a low-tax jurisdiction. Distribution through the Internet could make the tax authority just another superfluous middleman. The world is full of tax havens, and the Internet will make it easier to create new ones.