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CONSUMPTION TAXATION OF ELECTRONIC COMMERCE: PROBLEMS, POLICY IMPLICATIONS AND PROPOSALS FOR REFORM

Jinyan Li*

INTRODUCTION

Taxation of e-commerce has been a hot topic in international and Canadian tax literature.¹ Most of the literature has been devoted to international income tax issues, valued added tax (VAT) in the European Union, and state and local sales taxes in the United States.² There is a relative poverty in the literature in respect of the Canadian Goods and Services Tax (GST) as it applies to e-commerce.³

This article provides a technical and policy analysis of the GST in the context of e-commerce and suggests some options for reform. Part I describes the types and nature of e-commerce transactions. Parts II and III examine the current GST system and the extent to which it is challenged by the rise of e-commerce. Part IV discusses how e-commerce transactions are currently treated under the GST. Part V explores the various approaches to consumption taxation in an e-commerce environment. The article concludes that since the

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1. An excellent survey of this literature is found in Richard M. Bird, "Taxation and Electronic Commerce" (paper on file with the author, unpublished as of March 10, 2003).
2. For example, Richard Doernberg, Luc Hinnekens, Walter Hellerstein and Jinyan Li, *Electronic Commerce and Multijurisdictional Taxation* (The Hague, Kluwer Law International, 2001).
3. Arthur Cockfield, "Canada's GST E-commerce Policy (Or How to Catch The Big Fish)", *Internet and E-commerce Law in Canada* (March 2002), p. 1; Alex Easson, "Electronic Commerce: Some Consumption Tax Issues", *Canadian Current Tax*, October 1998; Hendrik Swaneveld and Carol Felepchuk, "GST/HST and E-commerce: The Canadian Approach" 05/02 *Tax Planning International e-commerce* 3; Jim Vincze and Randy Schwartz, "Canada Keeps Apace with E-commerce Taxation" (2000), 21 *Tax Notes Int'l* 767; and Dennis A. Wyslobicky, "E-commerce Case Study: Sales Tax Implications" 2000 *Ontario Tax Conference* (Toronto, Canadian Tax Foundation, 2001), tab 16.

GST has had a bad reputation in Canada and its integrity is now threatened by growing online cross-border shopping, the government should take advantage of the opportunity presented by e-commerce to reform the GST.

I. ELECTRONIC COMMERCE

1. Concept and Typical Transactions

There are not yet universally agreed definitions of "electronic commerce" or "e-commerce". The concept has been defined as "the exchange of goods or services . . . using electronic tools and techniques";⁴ "the use of computer networks to facilitate transactions involving the production, distribution, and sale and delivery of goods and services in the marketplace";⁵ "the delivery of information, products, services, or payments by telephone, computer, or other automated media";⁶ or "transactions carried over computer-mediated channels that comprise the transfer of ownership or the entitlement to use tangible or intangible assets".⁷ For the purposes of this article, e-commerce is narrowly defined as buying and selling goods and services on the Internet.⁸

E-commerce transactions may be categorized according to: (a) the method of delivery, such as digital transactions (those involving goods and services that can be delivered digitally so that the whole process of marketing, ordering, distributing, payment, delivery and after-sale service is done online) or non-digital transactions (those involving tangible goods or services that require physical delivery or performance, while other elements of the

4. The United States, Department of the Treasury, *Selected Tax Policy Implications of Global Electronic Commerce* (Washington, D.C., U.S. Government Printing Office, 1996) (hereafter "U.S. Treasury E-commerce Paper").

5. Howard E. Abrams and Richard Doernberg, "How Electronic Commerce Works" (1997), 4 *Tax Notes Int'l* 1573.

6. Canada, *Electronic Commerce and Canada's Tax Administration: A Report to the Minister of National Revenue from the Minister's Advisory Committee on Electronic Commerce* (Ottawa, Queen's Printer, 1998), at 1.2 (hereafter Minister's Advisory Committee Report).

7. Statistics Canada, *Electronic Commerce Definition Project, A Reality Check to Defining Electronic Commerce*, Ottawa, 1999. See also U.S. Census Bureau, *Government Statistics: E-commerce and the Electronic Economy*, June 15, 2000 (available in PDF format at <<http://www.census.gov/eos/www/papers/estatstext.pdf>>) (hereafter U.S. Census Stats).

8. For a discussion of a broader notion of e-commerce, see Jinyan Li, *International Taxation in the Age of Electronic Commerce: A Comparative Study* (Canadian Tax Foundation, forthcoming in May 2003); and Doernberg *et al.*, *supra*, footnote 2, ch. 2.

transaction are completed digitally); or (b) the participants involved in a transaction, such as business-to-consumer (B2C) transactions, business-to-business (B2B) transactions, or intrafirm transactions. B2C e-commerce has considerable potential, as the Internet could become a gigantic virtual shopping mall. However, most e-commerce — over 80% of all e-commerce transactions — occurs on a B2B level. There is also significant activity that occurs at the business-to-government level in connection with public procurement, administrative functions (such as customs and excise), and government services in general. In addition, telecommunications services — whether viewed as a separate category of economic activity or as an integral and essential component of e-commerce — are central to any consideration of the taxation of e-commerce.

For the purpose of discussion of consumption taxation of cross-border e-commerce transactions, the following four types of transaction are discussed:⁹

(a) Online Shopping of Tangible Goods

Retailers in Canada, the United States and other countries are increasingly looking to the Internet as a valuable retail outlet because of its global reach, convenience and low cost. Retail websites and web portals (*i.e.*, cyber malls) have been created, inviting shoppers all over the world to shop 24 hours a day, seven days a week. Potential online shoppers are those who are time-strapped, or who want better value and fewer hassles than those associated with the conventional shopping experience, along with greater choice. Even though Internet retailing still represents a small fraction of total retailing,¹⁰ Internet shoppers have a wide variety of shopping alternatives and products from which to choose. They can access sites that specialize in books, computer goods, groceries, music, magazines, sporting goods, candles, flowers, and a range of other products. Virtually everything can be purchased over the Internet; even automobile purchasers can get “everything except a way to kick the tires”.¹¹

9. See Doernberg *et al.*, *ibid.*, ch. 5. See Organisation for Economic Cooperation and Development (OECD), *Consumption Tax Aspects of Electronic Commerce* (2001) at para. 26 (report from Working Party No. 9 on Consumption Taxes to the Committee on Fiscal Affairs) (Paris, OECD) (hereafter OECD Consumption Tax Report).

10. U.S. Census Stats, *supra*, footnote 7.

11. Larry Armstrong and Kathleen Kerwin, “Downloading Their Dream Cars: Car buyers are using the Internet to snag great deals”, *Business Week* (March 9, 1998), pp. 93-94.

E-commerce enables merchants to reach customers who had been previously beyond their reach because of geographical restrictions. In a physical world, merchants could not sell products in a foreign market without a local physical presence (such as a retail store) or local sales agents, because distant selling through mail order is limited to the type of goods that could be sold. Through the Internet, businesses located in one country can sell products or provide services to virtually anyone in the world.

(b) Online Shopping of Digital Products

Information that can be digitised can be sold and delivered online. Digital goods typically include the digitised versions of computer software, text, sound and images. A vast wealth of information is available on the Internet, some of it in public databases. An increasing amount of information, however, is appearing in commercial databases that are supported by access fees, subscriptions or advertising revenue. Service providers of full-text and bibliographic databases, such as Lexis, a legal service provider, have created large computerized databases that can be accessed by customers, who can either read the information on screen, print, download or e-mail it. Other databases include reference works, investment research tools, travel guides, buyer's guides, real estate listings, and Internet search services, such as Yahoo and Google.

Electronic interactive games and many other forms of entertainment are now available online. The development of wider broadband and telecommunication devices has increased, and will continue to increase, the speed with which these forms of entertainment are downloaded.

(c) Online Shopping of Services

Because of the ability of the Internet to communicate and transmit information, including images and sound, it has become a new medium for providing services. Services will continue to be a fast growing area of e-commerce,¹² and cross-border trade in services is already a fast-growing sector in world trade.¹³

12. In 2000, worldwide spending for online services was \$22 billion, with projections that this figure will triple to \$69 billion in 2005: eMarketer, "IDC: Internet Services Spending to Triple by 2005", quoting International Data Corporation (available at <http://www.emarketer.com/estatnews/enews/reuters/06_25_2001.rwntz-story-bcnettechInternetservicesdc.html>).

13. U.S. Treasury E-commerce Paper, *supra*, footnote 4, at 3.2.6.

Many types of services that were traditionally provided face-to-face are now available via the Internet, telephone or other means of communications. Examples are advertising, travel, financial services, education and banking.¹⁴ Professional services, such as law and accounting services, are now available on the Internet. All major international accounting firms and law firms have a presence on the web. The services of other professionals, such as doctors, consultants and engineers, can also be offered online. For example, doctors in one country can work with doctors in another in treating a patient. Medical records of the patient and three-dimensional images of the patient's internal organs and body parts can be transmitted electronically so that physicians in different countries can view, manipulate and analyse the information and prescribe treatment.¹⁵

(d) E-Commerce Intermediary Services

E-commerce intermediary services include services that facilitate different groups of buyers and sellers engaged in e-commerce. A notable example is Internet connectivity service, such as that provided by Internet service providers. Several other types of intermediary services are described in an OECD Technical Advisory Group report on the characterization of income from e-commerce,¹⁶ which include web hosting services, application hosting, application service providers, online auction services, online shopping portals, sales referral programs, data warehousing, data retrieval services, and data delivery services.

2. Special Characteristics

Compared with traditional commerce, e-commerce has several special features. To begin with, e-commerce recognizes no national boundaries. This borderless nature is best demonstrated by the

14. Previously, offshore banking services were mainly used by multinational companies and certain wealthy individuals. Through the Internet, offshore banking services can be available to virtually anybody and most banking services can be provided offshore. However, there are some banking and investment products that are not likely to be moved offshore. These include loans secured with property (house, cars, etc.), regulated retirement savings plans, and payroll payments.

15. Don Tapscott, *The Digital Economy: Promise and Peril in the Age of Networked Intelligence* (New York, McGraw-Hill, 1996), pp. 125-27.

16. OECD Technical Advisory Group on Treaty Characterization of Electronic Commerce Payments, *Tax Treaty Characterisation Issues Arising from E-commerce: Report to Working Party No. 1 of the OECD Committee on Fiscal Affairs* (Paris, OECD, 2001), Annex 2.

terms used to describe this new business vehicle/environment: "global information infrastructure", "information superhighway", "Internet", "world wide web", and "cyberspace". All of these expressions suggest that business conducted over information networks blurs national borders. The term "cyberspace" even suggests that electronic commerce may be happening in a whole new world.¹⁷

E-commerce ignores distance. The global nature of e-commerce means that distance is no longer a barrier to trade and national boundaries are no longer relevant. A transaction can take place between people anywhere in the world. The vendor does not have to set up a production facility or a sales outlet in a foreign country in order to sell products. The physical location of the supplier, service provider or buyer of the goods or user of the services has become less important. When digital information or services are involved, national boundaries become even less relevant.

E-commerce requires no physical presence, or at most a minimal one. A significant difference between e-commerce and traditional commerce is that the former is conducted largely digitally. Digital goods and services cannot only be traded electronically, but also delivered by that means. For example, a medical specialist living in the Bahamas can examine, diagnose and advise patients, or even participate in the surgery of a patient in Canada, through electronic images and communications. Where e-commerce involves physical goods, a physical presence (such as the production and delivery of the goods) is still required, but other components of the transaction are conducted electronically.

E-commerce also allows distant parties to interact easily. The multimedia capability of the Internet and other new technologies enable people in different locations to interact with each other through voice, text and/or image. It allows traditional interactive services to migrate to cyberspace.

E-commerce requires few traditional intermediaries. One significant characteristic of electronic commerce is that it may eliminate or significantly reduce the significance of intermediaries, such as

17. The U.S. Treasury E-commerce Paper, *supra*, footnote 4, at 7.2.3.1, used this expression: Electronic commerce, on the other hand, may be conducted without regard to national boundaries and may dissolve the link between an income-producing activity and a specific location. From a certain perspective, electronic commerce doesn't seem to occur in any physical location but instead takes place in the nebulous world of cyberspace.

distributors, sales representatives, brokers and lawyers or other professionals, in the delivery of products, services and information from the ultimate producer to the ultimate consumer. This process has been called "disintermediation". The process is more serious in digital transactions. For example, although a book sold on the Internet still needs to be printed, packaged, warehoused and shipped to the customer, the sale of a book in digital form can be delivered directly online and read in the digital form and thus disintermediates the traditional product distribution chain. Some intermediaries will remain. For example, financial institutions are critical players in electronic commerce, as they provide the means of exchange, at present mostly via credit card. New intermediaries will appear, such as agencies that provide security for electronic commerce transactions, agencies that provide authentication or identification of transacting parties, and transaction managers (network service providers that provide transaction services to users).

Finally, e-commerce co-exists with traditional commerce. Although e-commerce has been developing at an explosive speed and is positioned to grow rapidly, it will never totally replace conventional commerce. There will always be people who want to smell the fish before buying it.¹⁸ The parallel existence of e-commerce and traditional commerce creates possibilities for alternative structuring of transactions. The question is then, how can electronic commerce be dealt with in tax policy without creating distortions of trade? This question is particularly acute under consumption taxes, such as the GST in Canada.

II. THE GOODS AND SERVICES TAX

The GST was introduced on January 1, 1991 to replace the Federal Sales Tax, which had been in existence since 1924.¹⁹ The GST was one of the most remarkable tax initiatives in Canadian history, although politically speaking it was one of the most unpopular

18. For a discussion of the Internet's impact on business strategies, see Michael Porter, "Strategy and the Internet" (2001), 79 Harv. Bus. Rev. 62 at pp. 64 and 74 respectively.

19. This tax was imposed at the manufacturers' level, and was plagued with problems from its inception. For an overview of these problems, see Neil Brooks, *The Canadian Goods and Services Tax: History, Policy, and Politics* (Sydney, Australian Tax Research Foundation, Research Study no. 16, 1992), at pp. 5-8.

policies ever implemented by the federal government.²⁰ "All in all, no tax in recent Canadian history has been as maligned as the GST."²¹

The legislative framework for GST is found in Part IX of the Excise Tax Act.²² The GST applies to virtually every domestic supply of goods, services and intangible property, as well as the importation of most goods, services and intangible property. The federal tax rate is 7%. In three Atlantic provinces where provincial sales taxes are harmonized with the GST, the combined rate is 15%.

1. General Concept and Policy Framework

The GST is a type of consumption tax. From an economic viewpoint, consumption taxes are imposed on the consumption of goods and services. The tax burden is distributed according to consumption expenditure patterns. Strictly speaking, however, the GST deviates from a "pure" consumption tax for the following reasons. First, although the tax is intended to be borne by the consumer, the consumer is not taxed directly. Instead, "taxable persons" are all producers and distributors who manufacture and trade in taxable goods and services.²³ Each taxable person has to remit that part of the total tax, collected by the retailer from the final consumer, that equals the tax rate times the value added by that taxable person. In this way, the GST is similar to the VAT in the EU.²⁴ Second, the tax base of the GST is not consumption per se, but rather expenditures on taxable goods and services. Consumption of self-produced goods or services is not taxable. Finally, the purchase of taxable goods and services at the retail stage is treated as the moment of consumption. In other words, the GST is not a tax on current consumption, but a tax on the purchase of consumption items. As a result, a durable good, such as a car or television set, is deemed consumed when it is bought, not when it is used throughout a period of time.

20. Brooks, *ibid.*, at p. 1.

21. Richard M. Bird, David Perry and Thomas Wilson, "Tax System of Canada" (1995), 10 *Tax Notes Int'l* 152 at p. 171.

22. R.S.C. 1985, c. E-15, as am. (hereafter the ETA). Unless otherwise stated, statutory references in this article are to the ETA.

23. In economic reality, however, the incidence of GST may be borne by businesses that supply the taxable goods and services.

24. It thus produces the same overall burden as a single stage tax, because the sum of the value added taxes at these various production and distribution stages is equal to the tax on the retail sales price.

The design of the GST is influenced by the principle of destination and three key policy objectives. The principle of destination (as well as the principle of origin) determine the jurisdiction of a country in taxing cross-border transactions. Under the destination principle, tax is imposed where the goods and services are sold and presumed to be consumed for personal use. Imports are taxed and exports are not. Under the origin principle, tax is imposed where the value is added to those goods and services. Goods are taxed where they are produced, and services are taxed where they are rendered. Imports are not taxed and exports are. The origin principle has the disadvantage of taxing exports and exempting imports. The result is that tax burdens on imported goods or services and locally produced goods or services are not necessarily the same, notably when the country of origin applies a different rate. The origin principle is not used except in the EU for intra-EU trade.²⁵ If the country of origin follows the destination principle, the imports will be tax-free in the country of consumption. That will put domestic suppliers at a competitive disadvantage. The destination principle, on the other hand, encourages exports and subject imports to the same tax burden as locally produced goods or services. The destination principle is consistent with GATT and WTO principles.²⁶ As long as GST or VAT on imports is equivalent to GST or VAT on like domestic supplies, there is no violation of GATT.²⁷ The Canadian GST and most VAT systems rely on the destination principle. It is therefore important to determine whether goods and services are provided for domestic consumption or are exported.

The policy objectives of raising revenue, equitable treatment of taxpayers, neutrality and administrative efficiency provide criteria for evaluating the GST system. Raising revenue is the original purpose of any taxation. GST is no exception. As illustrated by the

25. For further discussion, see Frances Vanistendael, "A Proposal to Tax at the Destination Country's Rate without Clearing" (1995), 1 EC Tax Rev. 45.

26. General Agreement on Tariffs and Trade (GATT) in 1948, later incorporated into the Marrakesh Agreement Establishing the World Trade Organization (more commonly referred to as the WTO Agreement). For further discussion, see Jalil Kasto, *The Function and Future of the World Trade Organisation: International Trade Law between GATT and WTO* (Kingston, Kall Kwik, 1996), at pp. 8-9; and Jeffrey S. Thomas and Michael A. Meyer, *The New Rules of Global Trade: A Guide to the World Trade Organisation* (Toronto, Carswell, 1997), p. 56.

27. Member states of EU follow the destination principle with respect to external trade.

following table, the GST has been an important source of revenue to the government:²⁸

Year	GST Revenue (billion)	% of Federal Budget Revenue
1991	\$2.57	2.15
1993	\$18.6	14
1999	\$21	13.8
2002	\$26.9 (forecasted)	15.4

Tax equity is a fundamental principle of taxation. This principle is often analysed in terms of horizontal equity (similarly situated taxpayers should be taxed the same) and vertical equity (taxpayers with higher incomes should pay higher tax). In the context of consumption taxation, because the tax rate is proportional and low-income individuals generally consume a greater proportion of their income, the GST is regressive. It violates vertical equity, despite the attempts to exempt necessities from the tax base and to provide a GST refund to low-income families.²⁹

Neutrality is another fundamental principle of taxation. In the context of consumption taxation, it means that the tax should not interfere with or affect a consumer's choices — for instance, the choice between purchasing from a domestic supplier or a foreign one, the choice between purchasing over the Internet or from a neighbourhood convenience store, or the choice between present and future consumption. Moreover, the tax should not encourage or discourage the consumption of goods or services, or different types of goods or services.

The principle of administrative efficiency requires that compliance costs for taxpayers and administrative costs for tax authorities be minimized as far as possible. If a tax is difficult to administer or if compliance burdens are excessive, no matter how perfect it may appear in theory or design, the tax will fail to serve its intended function as a reliable source of revenue. In addition, opportunities for tax avoidance and evasion should be minimized. In the context of GST, the transitional cost in establishing the administrative system and compliance system was very high. Since then, the compliance cost of the GST has been reasonable. The most attractive feature of the GST is its built-in anti-evasion mechanism:

28. See Department of Finance, *The Federal Budget*, December 10, 2001, Table 7.6, Budgetary Revenues, and Department of Finance, *Fiscal Monitor* (monthly).

29. For further arguments, see Brooks, *supra*, footnote 19, at pp. 68-103.

a tax collected using the invoice method offers the opportunity to cross-check returns and invoices; each taxable person has an incentive to ensure suppliers do not understate GST on their sales invoices because each taxable person is able to credit GST paid on inputs against GST paid on sales; and to the extent that a taxable person is able to evade the GST, only the tax on that person's value added will be lost, since GST on its business inputs will still have been collected by its suppliers.³⁰ On the other hand, however, because GST on business inputs is refundable to businesses registered for the GST, serious frauds have been reported in Canada. For example, a single prosecution in 2002 involved 18 people charged in an alleged \$20 million scam involving the GST refund.³¹

2. Structural Features

This section discusses only the major structural features of the GST. A detailed analysis of the technical details is beyond the scope of this study.³²

(a) Taxable Goods and Services

The GST applies to taxable supplies of goods and services made in Canada, except for the supply of goods and services that qualify as zero-rated supplies or exempt supplies. Zero-rated supplies include goods exported out of Canada and most services provided to non-residents of Canada. Exempt supplies include certain health care services; certain supplies by government, non-profit organizations and charities; child and personal care services; educational services; financial services; and supplies of residential real estate. The question whether a transaction constitutes a "taxable supply of goods and services" that is "made in Canada" is determined on the basis of (1) the characterization of the transaction as a supply of "property" (tangible or intangible), "real property", "telecommunications services", or "other services" and (2) and "place of supply" rules.

30. Brooks, *ibid.*, at p. 138.

31. "MPs Claim GST Fraud Is Widespread", <<http://www.InvestmentsMagazine.com>> (visited on January 13, 2003).

32. For a discussion of the detailed technical aspects of the GST, see CCH, *Canadian Goods & Services Tax Reports*, looseleaf ed. (Toronto, CCH); Stikeman, *Canada Goods and Services Tax*, looseleaf ed. (Toronto, Carswell); Natasha Menon, *A Practical Guide to the Goods and Services Tax*, 2nd ed. (Toronto, CCH, 2002); and Alan Schenk, *Goods and Services Tax: The Canadian Approach to Value-Added Tax* (Toronto, CCH, 1991).

(b) Supplies Made in Canada

The “place of supply” rules are tied to the characterization of transactions. They can be summarized as follows:

- (1) Tangible personal property is considered to be supplied in Canada when it is delivered or made available to a recipient in this country.
- (2) Intangible personal property (such as copyrights and patents) is considered to be supplied in Canada if the property may be used in whole or in part here, or relates to real property, goods ordinarily situated in Canada, or services to be performed here.
- (3) Real property and related services are considered to be supplied in Canada if the relevant property is located here.
- (4) Telecommunication service is considered to be supplied in Canada if payment is for a terminal or station situated in Canada. For long distance telephone charges, the place of supply is based on the so-called “two out of three” rule: whenever two or more of the following three elements are performed in Canada, the place of origin, place of termination and billing location.
- (5) Other services are considered to be supplied in Canada if the service is performed in whole or in part in this country. In addition, an overriding rule deems a supply of tangible personal property or service to be made outside Canada if the supplier is a non-resident that is not registered and who is not required to be registered to collect the GST.

Special rules apply to supplies by mail or courier. A supply of prescribed tangible personal property (generally, books, magazines and other reading materials) that is made by a registrant is deemed to be made in Canada as long as it is sent by mail or courier to a recipient at a Canadian mailing address. Non-residents of Canada that solicit orders for most books and magazines in Canada, or that offer to supply such property by mail or courier to a Canadian address are deemed to be carrying on business in Canada. Therefore, as long as they make taxable supplies over \$30,000, they are required to register for GST.³³ The effect of these rules is that suppliers of foreign publications imported by mail or courier must collect GST from customers directly, rather than the customers paying tax

33. ETA, *supra*, footnote 22, ss. 143.1 and 240(4).

upon importation. This is why subscription notices from U.S. magazines, for example, make reference to the GST when quoting prices for Canadian subscribers.

Goods and services imported into Canada are generally subject to the GST. Importers of tangible personal property, unless the supply is zero-rated, are taxed at the point of importation. Services imported into Canada are not subject to GST at the border, but the recipient of the service is required to self-assess the tax in situations where the recipient would not otherwise be able to recover the tax as an input tax credit. Examples of such situations include purchases by consumers. When products are electronically delivered to a Canadian resident consumer by a non-resident supplier, the self-assessment mechanism applies when the supplies are characterized as either "services" or "intangible personal property".

(c) Registrants and Taxable Persons

As mentioned earlier, although final consumers are taxpayers under the GST, in the sense of bearing the economic effect of the tax, technically the GST is collected by the suppliers of taxable goods and services. Under the GST, every person³⁴ who makes a taxable supply in Canada in the course of a commercial activity carried on by the person in Canada is required to register, unless: (1) the person is a "small supplier",³⁵ (2) the only commercial activity of the person is making supplies of real property by way of sale otherwise than in the course of a business, or (3) the person is a non-resident person who does not carry on any business in Canada.³⁶

GST registration is not required of non-residents unless they are deemed to be resident in Canada or are carrying on business here. A non-resident supplier is deemed to be resident in Canada if it maintains a permanent establishment in Canada. A non-resident that does not have a permanent establishment in this country will be required to register only if it carries on business in Canada. The meaning of "permanent establishment" and "carrying on business in Canada" for GST purposes will be discussed in more detail below. Specific

34. A "person" is defined as an individual, partnership, corporation, trust or estate, or a body that is a society, union, club, association, commission, or other organization of any kind: ETA, *ibid.*, s. 123(1).

35. The registration requirement is subject to a *de minimus* threshold rule for small suppliers (annual taxable supplies less than \$30,000).

36. ETA, *supra*, footnote 22, s. 240(1).

mandatory registration is required of non-resident performers (including persons giving seminars and organizing an event with an admission fee in Canada) and non-residents who supply prescribed property (mainly publications) for delivery by mail or courier to a location in Canada.

Every person who has registered for GST (or a GST-registered person) is required to impose and collect tax on taxable supplies in Canada. Such registration requirement is central to the administrative fabric of the GST, as directly collecting the tax on every taxable transaction from millions of final consumers is costly and unreliable.

(d) Computation of GST

In determining the amount of tax to be remitted by a GST-registered person, it is necessary to determine (1) the output tax, which is in turn determined by applying the rate of tax to the value of any taxable supply; and (2) the offset of input tax against output tax to determine the net GST payable.

The value of supply is the basis for determining output tax. It is generally the total of all payments or consideration that the supplier receives or is entitled to receive as a result of the supply. Typically, it is the invoiced price. The tax rate is 7% under the federal GST and 15% under the Harmonized Sales Tax, which presently applies in three Atlantic provinces. In addition, exports and certain other supplies are taxed at a zero rate. A zero rate means that, while no GST is due on the supply, the supplier remains entitled to claim any tax incurred in making that supply and is therefore entitled to a refund of that input tax even if there is no output tax against which to offset the input tax.

The GST is designed to tax the value added by each supplier. The mechanism for achieving this is the input tax credit system, under which any GST incurred is repaid to that person through allowing input tax to be set off as a deduction or credit against output tax collected during the same period. As a result, a supplier of goods and services is required to remit GST only on the net amount. Inputs are typically factors used in manufacturing or production. Input tax is the GST paid on goods and services purchased for business purposes by taxable persons. If the amount of input tax exceeds that of the output tax for the same period, a taxpayer is entitled to receive a refund of the excess. Because input tax is deducted by only taxable

persons, not final consumers or persons making exempt supplies, it is the latter parties that pay all the GST on every item purchased.

3. Non-resident Suppliers

The term “non-resident” is defined in s. 123(1) of the ETA simply as a person who is not resident in Canada. However, the ETA does not define residency in the case of individuals, and the facts and circumstances test adopted for income tax purposes is generally applicable for GST purposes.³⁷ A corporation that is incorporated or continued in Canada is automatically considered to be a Canadian resident for GST purposes.³⁸ Furthermore, a permanent establishment of a non-resident is a deemed resident of Canada in certain circumstances in respect of the non-resident’s activities that are carried on through that establishment. The characterization and treatment of non-residents for GST purposes have serious consequences.

Where a supplier of taxable goods or services is a non-resident, there are three main consequences: (1) supplies made by a non-resident are deemed to be made outside Canada,³⁹ (2) no input tax credits are available to unregistered non-resident suppliers, and (3) a non-resident is not required to register for the GST unless it is carrying on business in Canada or has a permanent establishment here.⁴⁰

Voluntary registration is available to non-residents who in the ordinary course of carrying on business outside Canada regularly solicit orders for the supply of tangible personal property for export to, or delivery in Canada, or have entered into an agreement for the supply by the person of services to be performed in Canada or intangible personal property to be used in Canada.⁴¹ A non-resident

37. For a discussion of “residence” under the Income Tax Act, see Li, *supra*, footnote 8, ch. 4.

38. This test also applies in the context of income tax: *ibid.*

39. The general rules are overruled by the following rule: a supply of personal property or a service made in Canada by a non-resident is deemed to be made outside of Canada and therefore the non-resident is not required to collect and remit the GST, unless it is made in the course of a business carried on in Canada by the non-resident or the non-resident is registered in Canada. See ETA, *supra*, footnote 22, s. 143(1).

40. Every person who is engaged in a commercial activity in Canada is required to register (ETA, *ibid.*, s. 240(1)). However, this requirement does not apply to a non-resident person who does not carry on any business in Canada. Because a permanent establishment of a non-resident is considered to be a resident of Canada, a permanent establishment must register.

41. ETA, *ibid.*, s. 240(3)(b).

may also prefer to voluntarily register for GST if input tax credits are available in cases where a non-resident purchases a taxable good or service and the purchase does not qualify as a zero-rated supply. The GST paid by the non-resident is refundable only if the non-resident is registered under GST.⁴²

Non-residents selling goods and services to Canadian customers are not required to register if they do not carry on business in Canada. As a result, the non-residents have no obligation to collect and remit the GST and the Canadian customers must pay GST upon importation of goods. In the case of services and intangible personal property, the Canadian customers must self-assess GST in certain situations.

The term “carrying on business in Canada” is undefined in the ETA. The meaning of this phrase is generally determined with reference to case law developed in the context of income tax. These principles generally require a facts-and-circumstances analysis — looking at the place of contract and where the operations that lead to profits are carried out.⁴³ In determining the place where operations take place, the courts generally take into account a number of factors, including the place where agents or employees of the non-resident are located, the place of delivery, the place of payment, the place where purchases are made, the place from which transactions are solicited, the location of an inventory of goods, the place where business contracts are made, the location of a bank account, the place where the non-resident’s name and business are listed in a directory, the location of a branch or office, the place where the service is performed, and the place of manufacture or production.⁴⁴ In summary, when determining whether a business is carried on in Canada, the ultimate determination is a question of fact. The place of physical assets and the location of human agents are generally key factors. An isolated speculative transaction may constitute a “business”, but such business cannot be “carried on”, because the phrase “carrying on business” generally denotes some continuity in the business activity.

“Permanent establishment” is defined for GST purposes to include a fixed place of business of a person, including a place of management, branch, office, factory or workshop, and a mine, oil or

42. ETA, *ibid.*, s. 169(1).

43. Li, *supra*, footnote 8, ch. 4.

44. These judicial criteria have been accepted by the CCRA. See, for example, CCRA technical information bulletin, *infra*, footnote 70.

gas well, and other places of extraction of natural resources through which the non-resident person makes supplies.⁴⁵ This concept is also borrowed from income tax law.⁴⁶ On the basis of existing jurisprudence, the place of business requires a certain physical space and that the functions carried on through the place of business must be an essential and significant part of the business activity of the non-resident person as a whole.

III. E-COMMERCE CHALLENGES

1. A Changing World

The GST is a relatively new tax in Canada. However, its design and conceptual framework were modelled on the VAT, which was introduced when world trade was largely physical. Tangible goods were moved across borders. International trade in intangibles and services existed, but was not nearly as important as now. Telecommunications services were delivered utilizing dedicated links and supplied by either government-owned or government-regulated monopoly carriers. Cross-border shopping was largely limited to travelers or mail order. As mentioned earlier, the world of e-commerce is very different: cross-border trade in intangibles and services is made easy; digital information products can be traded and delivered in digital means; and telecommunications services and other services are growing rapidly across national boundaries. Such a changing world poses challenges for the application of the GST in terms of characterization of transactions, determination of place of supplies, and collection of taxes by non-resident vendors.

The above-mentioned difficulties are not new, but they are exacerbated in the context of e-commerce. For example, today's online cross-border shopping is not fundamentally different from traditional cross-border shopping.⁴⁷ Richard Bird *et al.* described traditional cross-border shopping as follows:

Encouraged by a favourable exchange rate [in the early 1990s], Canadians flocked across the U.S. border to stock up on goods and services that were free not only of GST but of Canada's high excise taxes. When they came home, many of them probably, as the survey suggests, also evaded customs duties

45. ETA, *supra*, footnote 22, s. 123(1).

46. For a discussion of the meaning of permanent establishment in income tax law, see Li, *supra*, footnote 8, chs. 3 and 9.

47. J. Stephen Ferris, "The Determinants of Cross Border Shopping: Implications for Tax Revenues and Institutional Change" (1999), 53 Nat'l Tax J. 801.

by failing to declare their purchases. It became a weekend ritual for some in cities such as Toronto to take the one-hour drive across the border, stock up with alcohol, tobacco, chickens, and clothing, fill up the car with cheap U.S. gasoline, drive home and brag to the neighbors about all the money they had saved by breaking the law.⁴⁸

Online cross-border shopping no longer requires the physical drive across the border; all it takes is a click of the mouse, and anything can be bought. What remains the same in an online shopping environment is the tax savings. Moreover, because online shopping blurs transaction categories and geographic boundaries, application of existing GST concepts and rules becomes more difficult.

Tax frontiers become elusive. Application of the principle of destination requires "fiscal frontiers" to establish the point of export or import. Actual tax frontiers are traditionally used for this purpose. E-commerce limits the effective use of tax frontiers and obscures the point of "export" or "import" for goods and services. Tangible goods traded through electronic means still need to be delivered through traditional means (ground, sea or air transportation or courier delivery). Such goods must clear customs. Intangible goods and services in e-commerce do not pass through customs. Because it is physically impossible to know when intangibles and services are imported, there are generally no rules requiring customs to collect tax on the provision of such supplies. Tax collection is done by the recipient on a self-assessment basis or by the provider. Online shopping of intangibles and services is expected to grow rapidly, which will further decrease the use of customs in collecting tax.

Place of supplies becomes obscure. Under the principle of destination, only supplies made in Canada are subject to the GST. E-commerce challenges the viability of the place of supply rules by obscuring the location of a supply and blurring the distinction between "goods", "intangibles" and "services" and types of services. In other words, applying the existing place of supply rules to e-commerce transactions may be like "pinning the clouds down".⁴⁹

The existing place of supply rules look to the place of delivery of goods, performance of services, and use of intangible personal property in determining whether a supply is made in Canada.

48. Bird, Perry and Wilson, *supra*, footnote 21, at p. 169.

49. Lyric in the song entitled *Maria* in the movie *The Sound of Music* written by Oscar Hammerstein II.

These rules are difficult to apply to online transactions involving digital products or services. For example, where is the place of supply if a customer resident in Country A downloads computer software from a server located in Country B (a tax haven) owned by Company X, a resident in Country C, and the customer installs the software in her laptop computer and uses it when she travels to Countries Y and Z? If we assume that software is classified as intangible property and the place of supply is where the property is used, is the place of use in Country A where the software was physically downloaded, or Countries Y and Z where the software is used? Similarly, if a person resident in County D subscribes to online services provided by a firm in Country E and can access the services anywhere in the world, where is the supply of the online services?⁵⁰ Under existing rules, services are supplied in the place where they are performed. When services are delivered online, where is the supply made? Is it where the human being inputting and processing the information is located, or where the computer server that stores and delivers the information is located, or where the customer actually downloads the information?

Blurring transaction categories in an e-commerce environment also makes the current place of supply rules difficult to apply, as these rules are tied to the characterization of transactions. In digital transactions, the dividing line between goods and services is increasingly blurred. Traditionally, the term "good" is generally linked to a physical object and physical means of delivery, and the word "service" is often defined to be things other than property or money.⁵¹ Where a "good" such as a book, newspaper, standard software, photograph, map or movie is digitised, it can be delivered online and no longer requires a physical object or physical delivery. Digitised products may be classified as: goods,⁵² intangible property (where customer obtains the right to make copies for commercial distribution), or services.

Similarly, the convergence in information technology industries makes the distinctions between different types of services difficult.

50. These "place of supply" issues in VAT are similar to those with "source of income" issues in income tax. See Doernberg *et al.*, *supra*, footnote 2, at pp. 168-300; and Li, *supra*, footnote 8, ch. 12.

51. For example, ETA, *supra*, footnote 22, s. 123.

52. Generally speaking, information products downloaded from the Internet are not goods, unless they have specifically defined as such in the legislation. For example, Ontario specifically defines software to be tangible personal property even if it is delivered electronically; Retail Sales Tax Act, R.S.O. 1990, c. R.31.

All these blurring characterizations raise the question of viability of the traditional distinctions in the world of e-commerce. For example, electronic content providers and suppliers of telecommunications converge to provide telephone services, television broadcasts, cable and/or satellite delivery, Internet access, as well as electronic content. Internet-phone (or telephony) is a good example of where traditional telecommunication service is "bundled" with Internet access. With appropriate software and microphone-equipped computers, Internet users can make long-distance telephone calls using the Internet, avoiding paying fees to telecommunications carriers for using their telecommunication network. More recently, technologies exist to allow people without computers to use phones to make Internet calls. The so-called gateway services enable someone to call a number from an ordinary phone and get a connection to the Internet. A computer digitises the voice, breaks it into packets and sends them to another gateway at the receiving end that switches the call back to the phone system.⁵³ Are software providers now suppliers of telecommunication services?

For GST purposes, physical presence matters. Not only are physical controls at borders crucial, but also physical (tangible) goods are treated differently from intangibles and services. More importantly, the registration requirement is tied to the concept of permanent establishment, which in turn is based on physical presence (*i.e.*, fixed place of business). All of these physical requirements are ill fitted for e-commerce transactions, since e-commerce requires no or little physical presence.⁵⁴

The growth of e-commerce has raised difficulties for tax administration in general.⁵⁵ Enforcement of the GST in the e-commerce context raises three additional difficulties. First, invoices are the primary information source for Canada Customs and Revenue

53. See Warren Caragata, "The Bits and Bytes of Voice", *Maclean's* (August 24, 1998) at p. 35.

54. It is true that border controls will not become totally irrelevant even in a world of e-commerce. Not all goods and services can be traded and delivered electronically. When tangible goods cross borders, border tax adjustment can still be made. When people travel across countries, customs checks are still necessary. But e-commerce is undoubtedly going to reduce the relevance of border controls as more goods and services are traded on the Internet.

55. These difficulties have been well described elsewhere. For example, Minister's Advisory Committee Report, *supra*, footnote 6; Australian Tax Office, *Tax and the Internet: Discussion Report of the Australian Taxation Office Electronic Commerce Project* (Canberra, 1997).

Agency (CCRA) to verify a GST-registered person's GST computations. In an e-commerce environment, suppliers of goods and services are able to operate from anywhere in the world, in many cases without a physical address, which could diminish the ability of businesses to obtain suitable invoices, and with that the ability of the CCRA to verify the necessary details of transactions. Where suppliers are outside Canada, it is difficult for the CCRA to enforce record-keeping requirements and to gain access to documents located outside Canada.

Second, border enforcement is becoming difficult, not only because of the increasing number of cross-border purchases, but also the conversion of traditional tangible goods into digital goods or services. As mentioned earlier, this affects the CCRA's ability to collect GST at the border.

Finally, Canadian purchasers are currently required to self-assess the GST. However, only business purchasers are apparently in compliance, since any input tax on importation would be creditable against the purchasers' own output tax, and businesses generally have a system of assessment and payment of the GST in place. The self-assessment mechanism loses its charm in the case of individual consumers. Individual consumers bear the burden of the GST and non-compliance with the self-assessment requirement results in tax savings. There are no or very few incentives for consumers to comply with the self-assessment requirement. Even if individuals want to comply with self-assessment, there is currently no efficient compliance mechanism to enable them to self-assess and pay GST and to allow the CCRA to audit returns and tax payment. The postage cost of \$0.70 for remitting a GST payment to the CCRA on a \$10 online purchase is relatively excessive (amounting to more than half the tax payment). It is also difficult to make GST payments in small amounts through financial institutions, due to a lack of procedures set up by the CCRA. There are also difficulties in identifying those who have imported services or digital goods, and difficulties in relying upon consumers knowing that they must comply with the self-assessment requirement.

2. Tax Policy Implications

If e-commerce transactions (especially transactions where products are provided by electronic means) cannot be effectively taxed under the GST, there are significant policy implications in terms of

revenue loss, distortions between Canadian businesses and foreign online businesses, and erosion of the integrity of the GST system.

Revenue losses are real and will worsen with the expansion of cross-border B2C digital transactions. Based on data published by Statistics Canada, online shopping by Canadians was \$417 million in 1999, \$1.1 billion in 2000, and \$2.2 billion in 2001.⁵⁶ The rate of online shopping has increased significantly and that growth is expected to continue in 2002. In 2001, about 35% of online shopping (*i.e.* \$770 million) was in the form of purchases from foreign websites. Sixteen percent of online shopping households purchased travel arrangements, and ordered tickets for concerts, ballet, sporting events or movies.⁵⁷ Regardless of the portion of B2C digital transactions, it is reasonable to expect several millions of dollars of GST were uncollected.⁵⁸

In addition to the loss of tax revenue, GST-free cross-border online shopping causes inequity between consumers who purchase from local stores and those shopping online. More seriously, Canadian businesses would be put in an uncompetitive position because they must impose and collect the GST while their online foreign competitors do not.

The integrity of the GST system is closely associated with public perceptions of fairness and attitudes toward tax evasion. A 1994 survey indicated that 49% of Canadians might avoid the GST by having work done for cash, and 32% regarded GST evasion as acceptable.⁵⁹ There is no reason to believe that people who would avoid GST by paying cash would not avoid GST through cross-border shopping. Online shopping creates the same opportunities as in the case of the physical cross-border shopping in the early 1990s, where some Canadians had, for the first time, "entered the fiscal paradise of tax evasion and had enjoyed its fruits without paying any penalty".⁶⁰

56. "Canadians More Wired About Shopping on Net", *Globe and Mail* (September 20, 2002), p. B1. \$2.2 billion online shopping represents only a tiny portion of Canada's total \$621 billion in overall personal spending in 2001.

57. *Ibid.*

58. Assuming that 16% of the cross-border shopping was B2C digital transactions and the 7% GST was uncollected, \$8.6 million revenue would be lost. The amount of revenue losses associated with taxing remote consumer sales under the U.S. states and local sales taxes was estimated to be US\$12 billion a year by 2003. See General Accounting Office, United States, "Sales Taxes: Electronic Commerce Growth Presents Challenges; Revenue Losses are Uncertain" (June 2000), pp. 20-21.

59. Bird, Perry and Wilson, *supra*, footnote 21, at pp. 167-68.

60. *Ibid.*, at p. 168.

Moreover, the lack of a collection process for small GST payments turns honest consumers into tax cheaters. The lack of a level playing field for Canadian businesses may force some businesses to relocate offshore or find other ways of minimizing GST.⁶¹ The integrity of the GST would thus be further eroded.

3. Canada's Response

Even faced with these challenges, Canada is not prepared to bring in new rules specifically tailored to e-commerce. In this respect, the Canadian response to the e-commerce tax problem is different from the EU, which has recently introduced a new directive to require non-EU suppliers of "electronically supplied services" to register and collect VAT on sales to consumers in the EU.⁶²

It was clear from the beginning that Canada recognized the important role of the OECD in orchestrating the process of developing an international consensus on the framework conditions of the taxation of e-commerce. The Minister's Advisory Committee on E-commerce⁶³ and the CCRA's GST and electronic commerce discussion paper⁶⁴ clearly endorse the tax principles adopted by the OECD Ministerial Conference in Ottawa:⁶⁵ neutrality, efficiency, certainty and simplicity, effectiveness and fairness, and flexibility.⁶⁶

The CCRA also has adopted the following OECD framework conditions for consumption tax: (1) the rules for determining where consumption tax accrues should result in taxation in the jurisdiction of consumption, (2) supplies of digitised goods are "not goods" in

61. Some U.K. firms have already decided to move to a tax haven to avoid the VAT because their U.S. competitors were treated more favorably under the EU-VAT. See Eileen O'Grady, "Internet Service Provider Moving to Madeira to Reduce VAT Bill" (2002), 27 *Tax Notes Int'l* 788.

62. European Commission, "Council Directive, amending Directive 77/388/EEC as regards the value added tax arrangements applicable to certain services supplied by electronic means", May 8, 2002 (to be effective on July 1, 2003) (hereafter the EU Directive).

63. *Supra*, footnote 6.

64. Canada Customs and Revenue Agency, Excise and GST/HST Rulings, Policy and Legislation, "GST/HST and Electronic Commerce: A discussion paper for public comment on the administration of the Goods and Services Tax/Harmonized Sales Tax in an Electronic Commerce Environment", November 2001 (available at <<http://www.ccra-adrc.gc.ca/tax/technical/discussion-e.pdf>>) (hereafter CCRA Discussion Paper).

65. OECD, Ministerial Conference, "A Borderless World — Realizing the Potential of Electronic Commerce", held in Ottawa on October 8, 1998.

66. OECD Committee on Fiscal Affairs, Report *Electronic Commerce: Taxation Framework Conditions*, presented to OECD Ministers at the Ottawa Conference of October 8, 1998, doc. DA FFE/CFA (98) 38/REV3.

respect of customs duties and VAT/GST, (3) reverse charge or self-assessment should be considered by countries where this would give immediate protection to revenue and prevent distortion of competition for domestic supplies, and (4) countries should develop appropriate systems to handle the expected increase in importations of small packages in co-operation with the World Customs Organization. These principles have been reiterated in a Report by the Consumption Tax Technical Advisory Group (TAG) of the OECD⁶⁷ and a report on Consumption Tax Aspects of Electronic Commerce by Working Party No. 9 of the OECD Committee on Fiscal Affairs (the "OECD Consumption Tax Report").⁶⁸

The OECD Consumption Tax Report contains guidelines and recommendations for concerted approaches to the consumption taxation of e-commerce. Its conclusions are based on a consensus of the OECD Members and are not legally binding on them. The report encourages member countries to review existing national legislation to determine its compatibility and to consider any legislative changes necessary to align such legislation with the objectives of the guidelines. This report also made the following recommendations in respect of the definition of the place of consumption and the collection mechanism: (1) the place of consumption of tangible goods is governed by existing rules (*i.e.*, place of importation); (2) the place of consumption for tangible services may be the jurisdiction where services are actually performed; (3) the place of consumption of intangible services should, in principle, be the place where their actual consumption takes place, but the global nature of e-commerce and the mobility of present day communications would put in question the practicability of a pure consumption test. The report warned that the test would impose impossible compliance burdens on vendors and administrative difficulties for revenue authorities.

A further distinction is made between B2B and B2C transactions: (a) it suggests that the place of consumption for B2B transactions be the place where the recipient has located its business presence (that is, the establishment of the recipient to which the supply is made);⁶⁹

67. OECD Consumption Tax Report, *supra*, footnote 9.

68. *Ibid.*

69. The OECD Consumption Tax Report recognizes that in certain circumstances, tax authorities may use a different criterion to determine the actual place of consumption so as to ensure that the business structure or the mobility of communications is not used to avoid taxes by routing services through temporary establishments in non-tax or low-tax jurisdictions.

and (b) the place of consumption for B2C transactions should be the jurisdiction in which the customer has his or her usual place of residence. Some type of verification of residence is necessary. Pending the emergence of more fully developed technology-based options of verification, the report indicated that certain “less than perfect” interim options (such as credit card indicia) could be used, but made no further inquiry into their limitations.

IV. APPLYING CURRENT GST RULES TO E-COMMERCE

While no new GST rules have been introduced for e-commerce transactions, the CCRA issued a technical information bulletin, “GST/HST and Electronic Commerce” in July 2002.⁷⁰ It adopted many of the recommendations contained in a CCRA discussion paper published in November 2001.⁷¹ The information bulletin explains the CCRA’s interpretation of key provisions of the ETA relevant to e-commerce, and outlines how the CCRA’s administrative policies pertain to transactions made by electronic means. Given that online ordering of tangible goods creates no new issues, the bulletin does not deal with this type of e-commerce, and focuses instead on supplies delivered through the Internet — that is, the supply of digital goods and services. The bulletin deals with four major issues, which are discussed below.

1. Characterization

The characterization of transactions is fundamental to the application of the GST, as it affects the place of supply rules and the manner in which tax is collected. The information bulletin characterizes digital transactions as: (a) a supply of intangible personal property, (b) services, or (c) telecommunication services. The bulletin makes it clear that although e-commerce allows suppliers to electronically deliver certain products to their customers that have been traditionally regarded as tangible property (such as the digital version of a book), such supplies are not considered tangible property for GST purposes.⁷²

70. Canada Customs and Revenue Agency, B-090, “GST/HST and Electronic Commerce”, July 2002 (<<http://www.ccr-a-adrc.gc.ca>> under the heading “Technical Publications” under “more” in “Tax”) (hereafter CCRA Bulletin).

71. CCRA Discussion Paper, *supra*, footnote 64.

72. CCRA Bulletin, *supra*, footnote 70. The classification as “goods” may make sense under the neutrality principle — same economic transactions should be taxed the same, irrespective of the method of distribution and delivery. A book bought from the local bookstore is taxed the same way as a book bought over the Internet. When the book is

In determining whether a digital transaction is a supply of intangible personal property or a supply of services, the CCRA will consider a number of factors. In general, if the nature of the agreement between the supplier and the customer is, in substance, for work (or work and materials), it is a supply of services. If the agreement is, in substance, for property (including a right or interest of any kind), it is a supply of intangible personal property.

The following factors are regarded as indicia of a supply of intangible personal property: (a) a right in a product or a right to use a product for personal or commercial purposes is provided, such as intellectual property or a right to use intellectual property (*e.g.*, a copyright), or rights of a temporary nature (*e.g.*, a right to view, access or use a product while online); (b) a product is provided that has already been created or developed, or is already in existence; (c) a product is created or developed for a specific customer, but the supplier retains ownership of the product; and (d) a right to make a copy of a digitised product is provided.⁷³

Factors that generally indicate that a digital transaction is a supply of services are: (a) the supply does not include the provision of rights (*e.g.*, technical know-how), or if there is a provision of rights, the rights are incidental to the supply; (b) the supply involves specific work that is performed by a person for a specific customer; and (c) there is human involvement in making the supply.⁷⁴

Based on the above factors, the information bulletin provides the following four examples of characterization. Electronic ordering and downloading of digitised products is a supply of intangible personal property.⁷⁵ Supplies related to online sales, such as advertising, online shopping portals, and online auctions, are characterized as supplies of services. Subscriptions to databases and websites,

printed by the customer or ordered via the Internet and physically delivered, the argument is very convincing. The classification as "goods" also poses little technical problem for Canadian GST purposes as the term "supply of goods" includes both a "sale" and a "lease" of tangible property. Furthermore, importation or exportation of goods requires boarder tax adjustment. When digital products are "imported" or "exported" on the Internet, they do not go through any country's customs. From this perspective, they are more like "intangibles" and "services".

73. *Ibid.*

74. *Ibid.*

75. This characterization also applies to "limited duration software and other digitized information licenses" and "subscription to a web site that allows the downloading of digitized products", both of which are described in the bulletin.

which typically involve a provider making digitised content available to customers for search, retrieval and use, are generally characterized as supplies of intangible personal property. And finally, information provided by electronic means may be characterized as a supply of a service or intangible personal property, depending on whether the customer is provided with a right to use the information. For example, online access to professional advice is a supply of services, whereas periodic online delivery of customized information to customers is characterized as one of intangible personal property.⁷⁶

Software maintenance contracts are characterized as supplies of intangible personal property if (a) the principal object of the supply is the provision of a software update delivered electronically, or (b) the technical support is essentially the supply of a right to use existing technical information in the form of online documentation and access to a trouble-shooting database and the interaction with the technician is incidental. However, if the technical support under a software maintenance contract is provided through interaction with technicians and the provision of any rights to documentation or databases is incidental, the supply would be characterized as a supply of a service, because it is of specific work performed for a specific customer. Similarly, application hosting, website hosting, and data warehousing are typically characterized as supplies of services. However, if the host entity is also the copyright holder and the customer is being provided with the right to use the software, although the supplier is also hosting the software application on its server(s) and providing technical support for the hardware and the software, then the supply is regarded by the CCRA as essentially the provision of a right to use software, and thus, a supply of intangible personal property.

Where a digital transaction is characterized as a supply of services, a further distinction must be made as to whether the supply constitutes a telecommunication service. This distinction is important because of the different place of supply rules for telecommunication services and other services. The information bulletin states that a supply is generally considered to be a supply of telecommunication services where its predominant purpose is to: (a) provide for the emission, transmission or reception of signs, signals, etc. (*e.g.*, voice or data) through a telecommunications

76. *Ibid.*

network or similar technical system; (b) make available a telecommunication facility for the emission, transmission or reception of signs, signals, etc. through a telecommunications network or similar technical system; or (c) provide a means through which other services or intangible personal property (e.g., content in a digitised format) are delivered, rather than to provide the services or intangible personal property.

A supply is not a supply of a telecommunication service where: (a) a telecommunication service is used or consumed by the supplier in making a supply of a service or property (other than a telecommunication service); (b) it includes the provision of a telecommunication service, but only as a means of delivering another service or property; or (c) it is incidental to the supply of another service or property. A supply of telecommunication services includes Internet access service, e-mail, voice telephony services provided through the Internet, electronic data interchange (EDI) transmission of income tax returns and web-based broadcasting. However, website hosting, the preparation and EDI transmission of income tax returns (if the predominant purpose of the supply is the preparation of the tax return, which is a supply of service), and the provision of digitised products are not supplies of telecommunication services.

2. "Supplies Made in Canada"

Because the GST applies to taxable supplies produced in Canada, it is important to determine whether a digital supply is made in this country. With respect to a supply of intangible personal property, the supply is made in Canada if it *may be used in whole or in part* (meaning whether it is allowed to be used) in Canada. In other words, a supply of intangible personal property could be considered as being made in Canada even if it is not actually used in here. To clarify whether a supply is capable of being used in Canada, written agreements or website references that include restrictions regarding the use of the supply will be considered. The restriction may be explained on the website through which a product is supplied.

A service is supplied in Canada if it is performed in whole or in part here. The information bulletin explains that, although "performed" is undefined in the ETA, the place where a service is performed is traditionally the place where the person physically doing the work is situated. Whether services are performed in whole

or in part in Canada is a question of fact. The information bulletin considers services to be performed at least in part in Canada where: (1) the service requires a person to perform a task and the person performing or physically carrying out the task is situated in Canada at the time the activity is done; (2) the service includes operations performed by a supplier's equipment (*e.g.*, a computer) and the equipment is located in Canada; (3) the supply involves doing something to or with a recipient's equipment by accessing it from a remote location, and the recipient's equipment is located in Canada (note: this does not apply to performing a service and then delivering the results electronically to the recipient's computer in Canada); or (4) any activity⁷⁷ related to the performance of the service is undertaken in Canada. Accordingly, supplies made in Canada include not only services performed physically by human beings in this country, but also services performed by computers located here, as well as the act of remotely accessing and manipulating a computer located in Canada. Such an interpretation of the place of supply of services is much broader than traditional thinking that services were performed at the place where human beings were located at the time of the performance. In a sense, the Internet is analogised as the extended limbs of the human being located outside Canada.

3. Exports

Supplies of intangible personal property or services made to non-residents are generally zero-rated as exported supplies. This includes supplies of website hosting and website design when provided by a GST-registered person. However, certain restrictions apply. For example, a supply of intangible personal property made to a non-resident is only zero-rated where the non-resident is not registered at the time the supply is made and the supply is one of intellectual property (which includes an invention, patent, trade secret, trade-mark, trade-name, copyright or industrial design) or any right, licence or privilege to use such property.

4. Non-resident Registration

Registration is crucial to the collection of GST. Non-residents are generally not required to register for GST purposes unless they maintain a permanent establishment in Canada or are carrying on

77. The CCRA Discussion Paper, *supra*, footnote 64, at p. 61.

business in Canada. The information bulletin explains the application of these concepts in an e-commerce context.

For purposes of the GST, the CCRA adopted the same definition of "permanent establishment" adopted by the OECD for income tax treaty purposes.⁷⁸ In essence, a website of a non-resident person does not, in itself, constitute a permanent establishment, since it does not meet the physical presence test. However, computer equipment, such as a server, that is at the disposal of a non-resident (*i.e.*, operated and owned or leased by the person), may on its own qualify as a permanent establishment of the person, provided that the server is located in Canada and the activities carried out by the person through the server are a significant and essential part of its business (*e.g.*, taking orders, processing payments, and delivering the digital goods or services).⁷⁹ This test is easily avoided by moving the server outside Canada. The information bulletin also clarifies that a Canadian Internet service provider that hosts a website of a non-resident person on its servers in this country will not generally be considered an agent of the non-resident and thus will not constitute a permanent establishment of the non-resident person.⁸⁰

The phrase "carrying on business in Canada" was also given a restrictive interpretation. According to the CCRA information bulletin, it is unlikely that a non-resident online vendor of digital goods and services would be considered to be carrying on business in Canada if it merely sells goods and services in this country without much physical presence here. The following example is given:

A non-resident corporation supplies downloadable audio files by way of sale. The non-resident has a web site on its own server located at its main office in the United States, and advertises its web site on the Internet. The advertisements are directed to the Canadian market. The web site and server are fully interactive: the Canadian customer may view product listings of music and other advertising, place orders (including payment for audio files selected), and download a copy of the purchased audio files without any contact with the non-resident's personnel. The place of contract is in Canada. The customer pays by credit card and an independent ISP located in Canada processes payments for the non-resident. Once the audio files are received by the customer, they may be used in Canada. All customer service and after-sales

78. OECD, Working Party No. 1 on Tax Conventions and Related Questions, "Clarification on the Application of the Permanent Establishment Definition in E-Commerce" (Paris, OECD, December 2000). The OECD adopted the proposals of Working Party No. 1 in the Commentaries on Article 5 of the OECD Model Convention.

79. CCRA Bulletin, *supra*, footnote 70, under "Non-Resident Registration".

80. *Ibid.*

support is provided by means of telephone or e-mail communication by the non-resident's personnel located in its main office in the United States.⁸¹

However, the non-resident person may be carrying on business in Canada if it owns a website stored on a server in Canada, advertises in Canadian newspapers, uses independent contractors located in Canada for after-sales support, or the ISPs processing payments are located in Canada.

All in all, non-resident vendors do not require a permanent establishment in Canada or need significant business operations here in order to sell goods and services to Canadian customers. Therefore, they are not required to register and collect GST on sales to Canadians. Although Canadian purchasers are required to self-assess the tax on purchases, non-compliance is difficult to detect, let alone prevent. Therefore, the information bulletin does little to address the problems of potential revenue loss, competitive disadvantages to Canadian businesses, and the distortions identified earlier in this article. Serious reform proposals need to be considered.

V. REFORM PROPOSALS

Being a consumption tax imposed on both goods and services, the GST is sufficiently robust to capture the vast majority of e-commerce transactions. This is different from the complex web of sales taxes in the United States, which currently fail to tax many out-of-state sales. Taxation at the place of consumption is a sound principle in the e-commerce environment, since online shoppers actually live in the real world. Although there are practical difficulties in collecting GST where online vendors are located outside Canada, as suggested below, these difficulties can be overcome or minimized.

1. Customer-Based Place of Supply Rules

Given that the GST is a consumption tax imposed on domestic consumption, the place of supply rules should be adapted to ensure that purchases by Canadian customers are taxed under the GST. Unfortunately, the current place of supply rules are not always based on the location of the customers, but on the place of "use" in respect of intangible personal property, and the place of performance in

81. *Ibid.*

respect of services. Since e-commerce makes the identification of such places difficult, it makes sense to replace these tests with a test based on the location of the customer. The location of the customer can be based on the billing address, shipping address, or the declaration of his or her usual place of residence.

A precedent of a customer-based rule already exists in the ETA in respect of reading materials supplied by non-residents. Section 143.1 provides:

Notwithstanding subsections 142(2) and 143(1) [general place of supply rules], for the purposes of this Part, a supply of prescribed tangible personal property [e.g. reading materials such as books, magazines, newspapers, and other printed publications] made by a person who is registered . . . shall be deemed to be made in Canada if the property is sent, by mail or courier, to the recipient of the supply at an address in Canada.

A non-resident is required by s. 240(4) of the ETA to register if it solicits orders in Canada for the supply of magazines or books to be mailed (or sent by courier) to a recipient in this country, as long as the small supplier threshold (\$30,000) is exceeded. Sections 240(4) and 143.1 read together mean that a supply of reading materials made by a non-resident to a Canadian customer is taxable under the GST and the supplier must register. It might be possible to extend this rule to information products provided to Canadian customers through electronic means.

Furthermore, the customer-based place of supply rule may apply to supplies made by non-residents irrespective of whether the supply is characterized as a supply of “intangible personal property” or services. At present, the OECD, EU and certain countries with a GST (such as New Zealand⁸² and Singapore⁸³) characterize digital transactions as a supply of services. The CCRA characterizes such transactions as either intangible personal property or services.⁸⁴

2. Technology-Based Enforcement Measures

Once purchases made by Canadian customers are taxable under the GST, the next crucial issue is enforcement. For all intents and

82. Inland Revenue Department, New Zealand, *Guide to Tax Consequences of Trading Over the Internet* (Wellington, 2002), Part 3.

83. Inland Revenue Authority of Singapore, *Goods & Services Tax Guide on E-Commerce*, 3rd ed. (Singapore, 2002).

84. Although the CCRA approach maybe helpful in respect of supplies made to non-residents as it can be used to more precisely define whether an intangible personal property is exported, the distinction between intangible personal property and services is confusing and uncertain in terms of supplies made by non-residents to Canadian customers.

purposes, the ability to enforce GST on e-commerce transactions will determine the ultimate taxability of such transactions. In view of the global nature of e-commerce, the discussion of alternative policies and approaches to their taxation should focus on the issue of the jurisdiction to tax. A related question is the ability to enforce these jurisdictional rules in a digital environment. Unless there are adequate mechanisms for collecting and enforcing the GST for which the taxpayer is liable, the GST will not serve its purpose as a measure to raise revenue to finance government's expenditures. The risk of non-compliance is particularly high in digital transactions, because of the borderless, paperless and anonymous features of such transactions.

The adequacy of existing collection and enforcement mechanisms is a concern to both tax authorities and businesses. As was pointed out by the European Commission: "Compliant operators need the reassurance that they will not have to contend with predatory or unfair competition from operators who are not meeting the same tax obligations and will use this to extract an advantage. E-commerce is no different and operators here will have similar expectations."⁸⁵

Various proposals have been made towards improving collection and enforcement. The OECD report states that the most promising collection mechanism for B2B transactions lies in the reverse charge. For B2C transactions, however, technology-based options (including variants relying on a trusted third party or the use of digital certificates) offer genuine potential in the medium to longer term, but further work is required. In the short term, the most practicable application lies in a registration-based mechanism in a simplified form. However, registration is not acceptable as a long-term solution as there currently is no effective enforcement mechanism if the vendor fails to comply. International law does not provide for cooperation on tax issues or on multilateral enforcement of tax debts owed to other countries.

(a) Strengthening Self-Assessment

Self-assessment is the only mechanism currently available under the GST where goods and services are purchased from non-resident

85. European Commission, Explanatory Memorandum, point 3.2, cited in Doernberg *et al.*, *supra*, footnote 2, at p. 556.

suppliers that are not required to register for GST purposes. The OECD has recognized the merits of self-assessment

where business and other organizations within a country acquire services and intangible property from suppliers outside the country, countries should examine the use of reverse charge, self-assessment or other equivalent mechanisms where this would give immediate protection of their revenue base and of the competitiveness of domestic suppliers.⁸⁶

Self-assessment in an e-commerce environment is plagued with practical difficulties. There are also some criticisms of self-assessment on policy grounds. Placing the burden of complying with GST rules on the consumers of imported goods and services would tend to discourage the consumption of such services and distort consumption patterns towards domestically produced services. The self-assessment method is also perhaps the least effective way to subject B2C digital transactions to GST.⁸⁷ Moreover, in an e-commerce environment where a large number of individuals can purchase digital goods and services online, the application to private consumers brings within its scope an enormous number of persons and would establish an intrusive relationship between them and the tax administration that might be politically unacceptable.⁸⁸ That is why the EU concluded that “it is a relatively untried approach (at least for EU VAT) and it is difficult to see how it would work”.⁸⁹

Nevertheless, the current compliance system for cross-border B2C transactions is self-assessment. To improve compliance, the CCRA “should consider the feasibility of developing a new consumer self-assessment process that would make it easier to collect small amounts of tax from a large base of taxpayers”.⁹⁰

(b) Registration of Non-resident Suppliers — The EU Model

At present, non-resident suppliers are required to register for GST purposes only if they have a permanent establishment in Canada or are carrying on business here. The proposal of GST registration of non-resident suppliers would require non-resident businesses making supplies to Canada to register for GST purposes, and charge and

86. OECD Consumption Tax Report, *supra*, footnote 9.

87. New Zealand, “GST and Imported Services: A Challenge in an Electronic Commerce Environment,” June 2001 (online at <<http://www.taxpolicy.ird.govt.nz>>), 9.9.

88. Doernberg *et al.*, *supra*, footnote 2, at p. 557.

89. Commission Communication, June 1999, point 3.4.1, cited by Doernberg *et al.*, *ibid.*

90. Minister’s Advisory Committee Report, *supra*, footnote 6, Recommendation No. 40.

remit GST on the supplies they make. Non-resident suppliers would, thus, be treated in the same manner as Canadian suppliers for GST purposes. Technically, it can be done by adopting a place of supply rule on the basis of the location of customers, or replacing the current "permanent establishment" and "carrying on business in Canada" thresholds with a threshold of annual sales to Canadian customers (any amount exceeding \$30,000).⁹¹

This approach is used with some success in the EU with respect to supplies of telecommunications services, apparently owing to the following factors: (a) the relatively limited and identifiable number of companies involved in the supply of telecommunication services, and the ability to trace those companies, since to provide the services they must interconnect with local telecommunications suppliers; (b) compliance costs being limited by the need to register in only one EU country for the purposes of the all EU VAT; (c) the size and economic power of the EU; and (d) the incentives that telecommunication service providers have to comply with EU law.

As of July 2003, the EU will extend the registration requirement to non-EU suppliers in B2C digital transactions. Suppliers selling electronic goods and services from outside the EU to consumers inside the EU will be required to account for VAT in the same way as an EU-resident supplier. The non-EU supplier will be required to register only if it had sales to private consumers exceeding a specified threshold to be set by each member country. This proposal will operate alongside the self-assessment for B2B transactions. Registration of non-resident suppliers with sales above the threshold set by the member country in which they have registered represents a set of policy trade-offs. On the one hand, there is a desire to avoid imposing onerous administrative burdens on small business and a concern about stifling the development of cross-border e-commerce. On the other hand, there is the fear over loss of EU VAT revenue and of distortion of competition detrimental to EU providers to the Community market.⁹²

Although this approach appears to have been successfully applied to telecommunication services in the EU, there are difficulties associated with its general application to B2C transactions. Most

91. This proposal has been made by Arthur Cockfield, "Information Economics and Digital Taxation: Challenges to Traditional Tax Laws and Principles" (working paper on file with the author); and New Zealand, "GST and Imported Services", *supra*, footnote 87.

92. Doernberg *et al.*, *supra*, footnote 2.

importantly, it would impose significant compliance burdens on the non-resident supplier, which would need to have technical knowledge of the GST. Furthermore, as stated by the Minister's Advisory Committee on Electronic Commerce:

if the Canadian government attempts to force all non-residents who market products to Canadian residents to register as collection agents for Canadian consumption taxes, Canada must anticipate that other countries could respond by requiring Canadian vendors to assume reciprocal obligations. This would serve only to dampen the enthusiasm for doing business on the Internet.⁹³

However, it would be a mistake to underestimate the effectiveness of the EU's system of sticks and carrots in ensuring compliance by multinational enterprises and other important online suppliers with their obligations with respect to their B2C e-commerce transactions. As noted by Doernberg *et al.*, "the respectability factor looms as a significant force in inducing tax compliance".⁹⁴ Also, trading systematically with a country on a basis that is outside the law is likely to cause difficulties in obtaining an unqualified audit or clear prospectus, so that whatever the difficulties of enforcement, a respectability factor comes into play. Therefore, although there will always be niche players moving in and out of the market seeking advantage, who may well escape detection and avoid contact with the local tax authorities, many businesses are expected to comply with the requirement.⁹⁵ The sales threshold will also remove the registration and collection obligations from small suppliers.

The EU model is fundamentally sound and in accordance with the OECD position. The OECD has also suggested that the most viable collection mechanism in B2C transactions lies with a mechanism based on the registration of non-resident suppliers. If experience proves that the EU's approach is effective, Canada should consider adopting it.

(c) Withholding of Taxes

Various proposals have been made to require third parties to withhold consumption taxes from payments for B2C transactions.⁹⁶

93. Minister's Advisory Committee Report, *supra*, footnote 6, at 4.3.1.

94. Doernberg *et al.*, *supra*, footnote 2, at p. 563.

95. Duncan Bentley and Patrick Quirk, "A Proposal for Electronic Transactions Tax Collection in the Context of Tax-Driven Reform of Banking Laws" (1999), 10 *J. Int'l Banking L.* 327.

96. Minister's Advisory Committee Report, *supra*, footnote 6, at 4.3.1. Duncan Bentley outlines an electronic tax collection system involving automated withholding by financial institutions for e-commerce transactions; see Duncan Bentley, "A Model for Electronic Tax Collection" (1999), 1 *Tax Planning E-commerce* 15.

This would place the obligation to collect and remit GST on the financial intermediary. It would facilitate tax collection, because the tax administration would likely exercise greater control over the financial intermediary (and its tax obligations) than over the private consumer or over the non-resident supplier.

However, the financial intermediary might not have all information needed for determining the appropriate tax, such as the location of the customer, the value of the transaction, and the nature of the transaction.⁹⁷ Identification of the residence of the consumer may be possible if a credit or debit card were employed, but not necessarily if electronic cash were used. Hence, a mechanism would need to be in place that would permit the financial institution to make such a determination. Wholly apart from the understandable lack of enthusiasm for this approach from the financial sector, it raises controversial issues regarding the availability of software for making the tax determination, the costs of developing such software if it is currently unavailable, and the costs of integrating the software into payment systems.⁹⁸ Furthermore, this approach might require compensating financial intermediaries for the high compliance burdens placed upon them. In order to create a level playing field for domestic and foreign financial intermediaries, it would be necessary to apply the withholding requirement to non-resident financial intermediaries and to introduce measures to ensure that financial intermediaries in jurisdictions that did not comply with the withholding mechanism were not used to avoid the withholding regime.

97. The Minister's Advisory Committee Report considered the tax withholding mechanism and identified its flaws as follows:

[S]uch an approach would represent a fundamental shift in the legal liabilities for tax collection, and also raises a number of important issues. For example, to apply Canadian sales tax structures, financial intermediaries would need to know, at the very least, the location of the supplier and the purchaser, the place of supply, whether tax had already been collected by the supplier, the tax status of the purchaser, and the nature of the products. . . . The feasibility of solutions that involve enlisting financial or transaction intermediaries in collecting sales tax for governments will depend on how electronic commerce processes and information gathering techniques and capacities expand.

See Minister's Advisory Committee Report, *supra*, footnote 6, at 4.3.1.

98. Commission Communication, June 1999, point 3.4.1.

(d) Technology-Based Solutions

The technological revolution that makes e-commerce possible and challenges the border-based national tax concepts and principles may also present possible solutions to the tax problems.⁹⁹ Technology-based solutions are possible in one of the following areas.

The emergence of a new e-section. As noted by Doernberg *et al.*, in the future there may appear a business sector devoted to assuming or facilitating the tax determination and collection function in connection with electronic commerce transactions by providing a link between supplier and customer. This sector would rely on the development of software that automatically provides the relevant information for proper tax calculation and remittance. This approach could be attractive to tax administrators, which would deal with a smaller number of intermediaries. However, it will take time before the technology and business models are developed to the point of being able to deliver a tax calculation and remittance mechanism capable of performing its function in real time and at acceptable costs.¹⁰⁰ Moreover, implementation of such a taxing regime involving “trusted third parties” would likely require an extensive network of international agreements.¹⁰¹

A technology-driven collection system, such as the Electronic Transactions Tax Collection proposal¹⁰² in the United States. U.S. companies specializing in tax compliance technology have developed prototypes of software systems that will determine, at the point of purchase, the applicable sub-national state sales tax due on each purchase effected through electronic means. In the course of the payment process, the applicable sales tax is charged to the purchaser’s credit card and transferred to the account of the tax administration of the sub-national state where the consumption occurs or is

99. For further discussion of technology-based solutions, see Doernberg *et al.*, *supra*, footnote 2; Bentley, *supra*, footnote 96; and Arthur Cockfield, “Transforming the Internet into a Taxable Forum” (2001), 85 *Minn. L. Rev.* 1171.

100. Doernberg *et al.*, *ibid.*, at p. 558.

101. The work plan of the Working Part No. 9 sub-group on electronic commerce for 2001-2003 includes an evaluation of how trusted third parties could efficiently support tax collection in relation to a larger set of transactions: <<http://www.oecd.org/EN/document/0>> (visited on January 13, 2003).

102. Bentley and Quirk, *supra*, footnote 95.

deemed to occur. As the process is automatic, the application of such a technology-based solution to cross-border tax collection would reduce or avoid the legal and political problems of shifting to the state of the supplier/exporter the responsibilities of calculating, charging, collecting, administering and reallocating the tax due to the countries of final consumption. By the same token it would also avoid the need for international agreements to create the necessary legal framework for cooperation among the tax jurisdiction concerned.

A technology-assisted geographical identification system and international tax clearing house. Given that businesses are interested in knowing where their customers live, new technologies can be, and are being, developed to have transactions geographically coded.¹⁰³ Technologies may also assist tax authorities in improving efficiency in identifying taxpayers. The OECD's uniform global tax identification initiative, if implemented, would enable national tax authorities to track taxpayers on a global basis.¹⁰⁴ Countries could enter into consumption tax treaties under which a business making an export would charge and collect GST on that supply and return that amount to the tax authority in the home country.¹⁰⁵ That authority would then pass the tax on to the revenue authority of the country in which the goods and services are purchased. This approach would require that both businesses and tax authorities have the necessary information to determine tax liability. It would require a network of agreements between nations, and a system of incentives to encourage the tax authorities in the exporter's jurisdiction to ensure compliance by the exporter. It would impose a compliance burden upon exporters, who would be required to have an understanding of the GST rules of the countries to which it was exporting.

In the long run, the solution to the problems of taxing e-commerce under the GST may "lie in harnessing the technology to provide an automated tax charging and collection mechanism".¹⁰⁶ To do that, international cooperation is a "must".

103. See *The Economist* (October 21, 2000), p. 78; and Michael Geist, "E-borders Loom, For Better or Worse", *The [Toronto] Globe and Mail* (June 28, 2001), p. B15.

104. OECD, "Report by the Technology Technical Advisory Group of the OECD" (Paris, OECD, 2001).

105. A similar idea was proposed by Cockfield, *supra*, footnote 99.

106. Inland Revenue, United Kingdom, *Electronic Commerce: The UK's Taxation Agenda* (London, 1999), at p. 6.27.

3. International Cooperation and Coordination

The nature of problems with respect to the taxation of e-commerce is such that international coordination and cooperation is necessary for any realistic solution. The nature of global trading over the Internet means that no single country can act unilaterally. This is particularly so for consumption taxes where the risks of overtaxation or unintended non-taxation are increased without international consensus.

There are some obstacles to achieving international tax coordination in the area of consumption taxes. To begin with, the United States has no VAT or any general consumption taxation at the federal level. The U.S. state and local sales taxes are very different from VAT. Therefore, it is difficult to coordinate the EU VAT or the Canadian GST with the American sales tax system. It means that U.S. online vendors (which dominate e-commerce) may find it difficult to comply with VAT/GST requirements. Moreover, there are currently no tax treaties governing consumption taxation (which is different from the over 2000 bilateral tax treaty network applicable to income taxation). The absence of such a treaty network makes it difficult for countries to find a legal basis for coordination and cooperation. On the other hand, in terms of the conceptual and policy framework, the VAT/GST in over 100 countries is highly harmonized. In this sense, obtaining international coordination is possible, especially when the EU and the OECD reach a consensus on key issues of the definition of place of consumption and collection mechanism.

The OECD may be the appropriate forum for developing a common understanding of the tax challenges of international e-commerce and seeking a consensus among its Member States. The OECD has already started the process of fashioning international agreements for strengthening cooperation in the administration and collection of consumption taxes necessitated by the advent of e-commerce. OECD member countries are e-commerce exporting countries and thus key to the implementation of the non-residents registration mechanism.

Canada's economy is small compared with the economies of other OECD countries. In the meantime, Canada is one of the most wired countries and has a growing e-commerce sector. Canada cannot act alone in e-commerce tax policy. In the past, this country has played an active role in developing OECD policies. This approach should continue. However, it is also wise for Canada to look to the

EU for guidance on GST, while keeping a close eye on the developments in the U.S. states and local sales taxes.

VI. CONCLUSION

As explained by Bird *et al.*, Canada has for many reasons not had a happy experience with the GST: the tax could have been better designed, better implemented, or better sold.¹⁰⁷ Given the revenue potential of this tax, a replacement is highly unlikely,¹⁰⁸ and a cleaned-up or reformed GST is more practical. The rise of e-commerce presents a golden opportunity for this country to reform the GST by redefining the place of supply rules and improving tax enforcement. In addition, the federal government should pursue further harmonization of the GST with provincial sale tax systems. Like U.S. states and local governments, Canadian provinces that have retail sales taxes face potential loss of revenue from B2C online shopping, since these taxes apply to sale of tangible goods and only limited services.¹⁰⁹ These provinces might be interested in ways of stemming the loss. As discussed elsewhere,¹¹⁰ a harmonized federal and provincial sales tax system will vastly improve the integrity and credibility of the Canadian consumption tax system.

107. Bird, Perry and Wilson, *supra*, footnote 21, at p. 171.

108. Despite the Liberal Government's promise to "replace" the GST by 1996, the tax stayed and became harmonized with the PST in three of the Atlantic provinces.

109. Examples are services to install, dismantle, repair, adjust and maintain tangible personal property.

110. For example, Bird, Perry and Wilson, *supra*, footnote 21, at pp. 171-72; and Pierre-Pascal Gendron, Jack Mintz and Thomas Wilson, "VAT Harmonization in Canada: Recent Developments and the Need for Flexibility" (1996), 6 VAT Monitor 332.