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Taxation Treatment of Information Service Provision

By

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Introduction

The business of Internet Service Providers (ISPs) requires labour, computers and (typically leased) bandwidth. All these elements are generally competitively available both within countries and internationally. The fact that there are few physical or human capital inputs that are specific to ISP services means that the business is highly competitive, again both within and between countries. It also means that the location of service providers is extremely sensitive to the costs and benefits specific to production locations. ISPs can efficiently provide services to one country from another, implying that national taxation and subsidy policies materially affect ISP location. In consequence, this paper argues that ISP services should be GST-exempt, just as are financial transactions in New Zealand.

Background

A recent study by Boles de Boer, Enright and Evans[1] reveals that real costs of Internet service delivery are lower in New Zealand than Australia, and that this is reflected in cheaper consumer prices and greater penetration of the New Zealand market. Given the low barriers to entry for Internet Service Providers (ISPs), and the ever-decreasing marginal costs for provision of all telephony services, including international calls, this might indicate that a potential exists for New Zealand-based ISPs to enter the Australian market providing lower cost services directly using New Zealand-based servers. Indeed, the platform for such a service may already exist, with some point to point calls in New Zealand already being routed via Australia. Technically, there is no barrier to point to point calls in Australia being routed through New Zealand and, on the way, a New Zealand ISP. And if this can be achieved in Australia, then the potential exists to exploit this relative cost advantage in many other foreign markets.

However, the ability for New Zealand-based ISPs to lever off this comparative cost advantage and develop a significant export market is to some extent blunted by the current lack of clarity about how Inland Revenue intends to treat New Zealand-based service provision to foreign-based consumers for Goods and Services Taxation. (GST). Lack of precision in section 11 2(e) of the Goods and Services Tax Act 1985 is the source of this confusion. This section provides

[1] Boles de Boer, David; Christina Enright and Lewis Evans. 2000. *The Internet Service Provider Markets of Australia and New Zealand*. NZISCR Working Paper http://www.iscr.org.nz/research/ This paper builds upon the earlier work

for zero rating of exported services if the service is provided in New Zealand and directly in connection with tangible property situated in New Zealand at the time the service is performed.

Normally it could be expected that, as the ISP information transfer is provided to a non-resident who ultimately consumes the information in an offshore location, the service provision would, like other exported goods and services, be zero-rated. However, the actual information transfer, as distinct from consumption of the information the transferred message contains, takes place in New Zealand. Furthermore, it is also unclear whether the electronic transfer services on a server constitute services provided directly in relation to tangible property. Thus it is also possible to accept an interpretation that consumption has occurred in New Zealand, and that GST at the rate of 12.5% should be levied. Precedents for both types of treatment exist. Zero rating has been allowed in the telecommunications industry for electronic transfers down a fibre-optic cable to a foreign recipient. It is noted, though, that this does not specifically separate out the transfer of information between providers or sites in New Zealand from the transmission of data out of the country, as it assumes one company provides the entire service. However, the provision of education services to a person physically in New Zealand (effectively an information transfer, but to a human recipient rather than an electronic one) is levied for GST at the 12.5% rate, even though the recipient eventually leaves New Zealand at the conclusion of the information transfer process. That is,although the ultimate benefit of the information transfer is consumed offshore when the student leaves New Zealand, it is presumed for the purpose of GST that consumption has occurred at the point of productionwithin New Zealand[2].

This dilemma is not unique to New Zealand, and has been the subject of OECD policy development discussions[3] in order to get international standardisation of taxation treatment of electronic transactions. It is also acknowledged that the New Zealand Inland Revenue Department (IRD) is currently deliberating upon which treatment approach it will take with respect to ISPs. However, the speed of development in the ISP industry threatens to overtake such policy-making. The type of treatment adopted even in the interim may have significant

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of Christina Enright. 2000. *Strategic Behaviour of Internet Service Providers in New Zealand.* Victoria University of Wellington Master of Business Administration Research Paper. http://www.iscr.org.nz/research/

[2] GST News March-April 2000: "services performed in New Zealand for a private consumer, which have been contracted by a non-resident outside New Zealand, are no longer eligible for zero-rating". Specifically, in the example: "A non-resident parent contracts with a New Zealand school to educate the parent's non-resident child in New Zealand. The education service is liable for GST at 12.5%, as it is consumed in New Zealand."

[3] For example, the United States 1997 policy document *A framework for Global Economic Commerce* (http://www.ecommerce.gov/framewrk.htm) stresses the central role of both the OECD and the WTO in establishing consistent international taxation policy.

impacts upon the strategic development of this industry, and the ability of New Zealand-based ISPs to develop export markets, particularly to Australia, which is both feasible and advantageous given that significant cost advantages for New Zealand providers already exist.

In this paper, two scenarios and their consequences upon the strategic development of ISPs are discussed. Scenario 1 posits the imposition of GST at 12.5% on ISP services provided in New Zealand to foreign consumers, while Scenario 2 examines the effect of zero-rating such provision. However, by drawing parallels to the taxation treatment of financial transfers, a third scenario suggests that the efficient solution to this dilemma might be to exempt electronic transfers of information from GST, thereby avoiding a potentially significant imposition of transaction costs upon ISPs. Such a policy has the capacity to play a significant role in enabling New Zealand ISPs to develop their export base and encouraging foreign ISPs to relocate to New Zealand.

Scenario 1: New Zealand ISP Services to Foreign Consumers are Taxed at 12.5%

Two immediately significant consequences arise out this scenario:

- Firstly, with respect to the Australian market, the GST component erodes the advantage of cheaper New Zealand provision, and effectively encourages the Australian consumer to consume dearer (and hence less efficient, in the global market sense) Australian services.
- Secondly, any incentive for New Zealand-based ISPs to develop export markets for their services is effectively removed by the presence of this tax, as it raises the price above marginal cost and leaves New Zealand providers disadvantaged with respect to foreign domestic providers who can sell at a tax-free price (or at a tax rate that prices the foreign product lower than the tax-inclusive price of the New Zealand-sourced one, even though the marginal cost in real terms of the foreign product is higher).

However, a third consequence of even greater long-term significance potentially emerges from this scenario. If a New Zealand-based ISP can provide services to foreigners, what is there preventing a foreign ISP offering services to New Zealand residents on foreign-based servers, transferring the information in another legal and taxation jurisdiction, thereby avoiding GST completely? While a New Zealand consumer may pay GST on the telephone connection to the ISP, GST on the ISP's component of value added would be exempt, as the payment relates to a service which is performed outside of the New Zealand GST jurisdiction. As the relative cost of the telephone call to the cost of the information transfer service diminishes, then such a GST-exempt service provider would have a real cost advantage over New Zealand-based providers. As the total volume of information transfer by ISPs increases, this advantage might even be sufficient to entice existing New Zealand-owned ISPs to locate their servers offshore in a jurisdiction where no value-added tax is charged (such as Pakistan[4]), maintaining the relative cost advantage and effectively depriving IRD of the GST revenue they currently derive from New Zealand consumers of the services these ISPs provide, not to mention company tax and the ancillary benefits the New Zealand economy derives from the presence of these businesses[5].

This scenario raises the issue that the special nature of the information product now makes it possible for providers of information transfer services to avoid output-based taxes in the same way that historically income taxes have been avoidable by changing residency. The difficulties of tracking such end use across borders mean that it is easier to proxy *production* for *consumption* with respect to taxation of these services, in an endeavour to capture any ultimate liability of the end user. This appears to be the rationale behind the taxation of export education services. However, the incentives arising out of such proxying policies actually encourage the production of domestically-consumed and exported services to move offshore. It is difficult to see how this treatment is in the best long-term interests of New Zealand.

Scenario 2: New Zealand ISP Services to Foreign Consumers are Zero-rated

Scenario 1 implies that the export industry for ISPs will be stunted if GST is applied to information transfers performed on a New Zealand server where the information is subsequently exported. While the obvious answer might be to zero-rate such service provision, this also raises issues about the nature of the information product and services surrounding its procurement, dissemination and consumption, given that zero-rating the exported services also means that the domestic consumption would still be liable for the tax.

[4] Pakistan currently has no consumption tax. This example is not intended to imply that there is currently any infrastructural advantage that would constitute a cost-based advantage over New Zealand.

[5] It is noted that this taxation treatment may also have a significant impact upon the development of New Zealand's export education industry. Although the Ministry of Foreign Affairs and Trade considers this as one of the country's premier export development growth industries (one which already rivals the wine industry in terms of value of services provided), the GST treatment of services provided in New Zealand threatens to limit the extent to which this industry can grow, and provides similar incentives for providers to move offshore (*New Zealand Exports of Education Services: A research report compiled by the Trade and Economic Analysis Division of the Ministry of Foreign Affairs and Trade*, Ministry of Foreign Affairs, May 2000; and Instone, Annette. *The Economic Benefit Derived from Exporting Education*. Victoria University of Wellington MBA577 Research Paper, June 2000).

Traditionally, customs operations at national borders have enabled tracking of imported and exported goods between legal jurisdictions. Where a good imported into a country is subject to any form of consumption tax, it is at this point that the presence of good can be detected, and tax liability tracking begun. Similarly, where the good is being exported, its departure can be recorded, and any internal taxation liability incurred can be cancelled. Import and export of services, due to their intangible nature, has been less easy to track. Provisions such as New Zealand's, tying taxation exemption to the movement of physical personal property across the border, have enabled some level of parity in the taxation treatment of goods and services. However, the success of these mechanisms relies upon the passage of some physical item (for example, a research report) through a point where its movement can be monitored. GST liability is recorded at each provision and consumption point in the chain of movement of any items, with commercial transactions netted off against each other resulting in a total liability paid only in respect to the final consumption. When goods pass over a border, provision is zero-rated in the exporting country to prevent any consumption liability being incurred in the jurisdiction in which the item is *not* being consumed. Similarly, if the importing country imposes a consumption tax for which the item is leviable, initial liability can be determined when the item enters. This proxies the *provision* liability of the supplier.

However, electronic transmission of information between taxation jurisdictions cannot be captured in this manner, as it is not tangible property, and it does not pass through a monitoring post in its movement. The only points where it can be tracked are at the origin of the transmission, and at the destination. Thus, the points at which the movement can potentially be recorded are *provision* in the country of origin and *consumption* in the country of destination.

If a service is zero-rated in the country of origin, then the net effect of provision to a business in a destination country with a non-zero consumption tax is neutral if the service becomes an input item into further production. However, if the service is provided direct to a consumer (as it is assumed the ISP services to Australians would be) in a country with a non-zero consumption tax (as Australia has been from 1 July 2000), then the ability to capture the consumption of the service is crucial, as this is the only point in which the liability in the importing country can be incurred. While theoretically this is possible, practically it is extremely difficult, as all recipients of such a service would effectively have to register, report and collect tax from themselves for the ISP service consumed. Independent measuring, monitoring and verification of such usage is virtually impossible, and the transaction costs of attempting to institute such a structure are potentially prohibitive. Thus, both the incentive and the ability exist for end consumers to avoid liability for consumption tax on such imported information services. The only avenue available for the consumer country to extract the tax is to require the ISP in the provider country to levy the tax on production, thus effectively forcing the ISP to become a tax collector for a foreign jurisdiction. By extrapolation, the more countries the ISP exports to, the more governments for which it becomes a tax collector.

This too has implications for the development of ISP exports. There is little incentive for exporting ISPs to support such a regime. Firstly, levying the tax will increase their price just as the New Zealand tax does. Although the end price may still be less than that of domestic providers, the potential market will be smaller as the increase in price will reduce the number of consumers for whom the tax-inclusive price is lower than their individual marginal benefit. Export may still be attractive, but may not be as lucrative as if the tax was not charged. Secondly, transaction costs for the provider associated with collecting taxes and reporting to foreign governments will also increase, lowering the margins available from exporting, and further reducing the incentives for ISPs to develop export markets.

Thirdly, and not insignificantly, is the questionable ability of the government of the country of consumption to enforce collection and payment of the tax from a legal entity in the country of production. Such a process effectively amounts to taxation by a government of service provision by a corporate citizen of another country, over which it has no legal jurisdiction or powers of enforcement. While treaties between governments of individual countries may be used to enforce collection and payment by ISPs on a quid pro quo basis, the success of this relies upon all governments participating in such treaties with each other. As long as any jurisdiction exists which does not participate in such treaties, the same incentives as scenario 1 provides will encourage ISPs to move their operations offshore to tax-free locations to avoid compliance. The price advantages of such provision for end consumers, in what otherwise appears to be a competitive market, are obvious, with consequent erosion of the customer base of any provider who elects to remain in a taxing jurisdiction.

Fourthly, the issue of whether there is sufficient information available to determine the physical location of the end consumer of ISP services raises the question of whether it is even feasible to levy taxes to customers despite the existence of registration and billing details stating a specific country of residence. When a connection is made to an ISP, the identity of the user is known, but the country of origin of the call may not, especially if it is passed through multiple countries as part of the telecommunications switching process or caller identification suppression is specifically invoked[6]. Billing details might indicate the usual country of residence of the user, but not the country of consumption for that particular call. Hence, while the ISP can record that a transfer has occurred, to whom it was delivered, and the country of production for taxation purposes, it may be impossible to unequivocably identify the jurisdiction of consumption and thus the government to whom the tax is payable.

Should ISP Services be Exempt?

This raises the question of whether information transfer services should be subject to consumption tax at all, as the cost of the effort involved in ensuring equal treatment on a global basis may in fact eventually exceed the value of the service provided, notwithstanding the difficulties posed in identifying the point of ultimate consumption[7]. In the final analysis, the value of the service of transferring information is insignificant compared to the potential value of the information transferred[8].

In New Zealand, provision of financial services (that is, services associated with the movement of financial capital) are GST-exempt. The original justification for this exemption was that the

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[6] For instance, when I contact my ISP, I can do so by connecting the computer modem to any of my telephone lines. If I enact my ability to suppress caller identification, then the ISP does not know which of my lines I am using. One of these may be located offshore, and as I initiate the call, the ISP has no right to access information which would identify the country of origin.

[7] It would appear that this philosophical approach underpins the Australian taxation policy of not imposing a 'bits' tax due to the potential such a tax would have in impeding uptake of e-commerce by both consumers and businesses. ("The government's decision not to impose a 'bits' tax on the internet already provides an incentive to e-commerce take-up." National Office for the Information Economy. 1998. *A Strategic Framework for the Information Economy.* Canberra: Commonwealth of Australia. p 17). It is noted, however, that this policy has been inconsistently interpreted into the Goods and Services Tax Act 1999, where Division 85-10 (b) defines "provision of access to global information networks" as "telecommunications supply". Division 85-1 specifically includes telecommunications supply (and hence internet access) that is "effectively used or enjoyed in Australia (as) included in the GST system". This decision, combined with the difference in GST rates between New Zealand and Australia (12.5% v 10%) means that taxation differentials are already potentially influencing location of ISP supply, and exposing ISPs in both countries to the problem of collecting and accounting for taxes on domestic consumers domiciled in different legal jurisdictions. Furthermore, if one interprets "time spent on the internet transferring information (collected as part of the ISP charging mechanism)" as a proxy for "bits of information transferred (not currently collected as part of ISP charging), then the GST process has effectively imposed a proxy 'bits' tax in contradiction to the Information Economy strategic intent. Not only is this impeding uptake of e-commerce, but it is also potentially influencing the incentives facing consumers when selecting an ISP.

[8] Indeed, in New Zealand, the falling real cost in real terms of ISP services since 1996 means that the GST take on such services, on a per user basis, has been decreasing (Enright, 2000). Furthermore, the moves by some ISPs towards cross-subsidising domestic internet access supply from other income (e.g. advertising) is resulting in many cases in "free" – and consequently untaxed – supply to domestic customers anyway.

costs of compliance[9] outweighed the net amounts of tax collected from end consumers. The same justification may apply for movements of information, as the predominant users of ISP services are in fact businesses who can net off the input and output components of the tax. The real increase in taxable value comes from the ability of the firm to convert the information received into other goods and services which are then on-sold in a form which can be more easily measured and monitored for taxation purposes. To some extent, this parallels the manner in which transfers of financial capital merely facilitate the creation of more value as a result of their ultimate productive application. Increasing the costs of moving capital due to high taxation compliance costs potentially inhibits incentives to invest, and results in some investment being diverted into non-productive accounting and monitoring functions in order to satisfy taxation reporting obligations. Imposing additional costs or limiting the uptake of such information transfer services may amount to the same disincentives to information-related investment.

Perhaps the time has come to accept that, if information transactions are to be the equivalent to capital transactions as the currency of the information age, then information movements too, should qualify for tax exemption, thereby placing such transfers on an equal footing with financial movements. This is not intended to trivialise the very real problem of determining the jurisdiction of, or taxing the products of, transactions conducted over the internet, such as the sale of goods and services. The emphasis is rather that the outcomes of these transactions should be distinguished from the method by which the order was made. For instance, we do not expect New Zealand Post to be responsible for the taxation outcomes of mail orders. Thus, the effect of this change would be to refocus taxation effort upon the *content* of the information transferred, not upon the comparatively small value of the *transfer* itself.

As an intangible item, information as a good poses a challenge to quantifiably-based regimens such as output taxation, which rely upon the ability both to measure the quantity of the good bought and sold, and to calculate the monetary value of the transaction. When information is transferred, the vexing question facing taxation authorities is how to value that exchange. As the information itself is intangible, and in many cases its value is only realised subsequent to its exchange in conjunction with other processes such as human interpretation, in practice the tendency has been to use as a proxy for taxation assessment purposes the only thing about

[9] The vast majority of banking transfers are business to business transactions, where GST payments (if required) would be eventually netted to zero. Compared to this, the potential GST value extractable from non-registered end consumers was insignificant. It is noted, however, that political intervention to achieve parity between the non-

information which *is* measurable, monitorable and verifiable: the process of transferring it. Hence, for instance, databases contained on floppy disks have been valued for customs purposes at the purchase price of a blank disk, and ISPs are obliged to collect and account for GST on services to customers on the basis of minutes of usage rather than the value of information provided.

Whereas once ISPs were also the owners and maintainers of the databases providing information to customers, increasingly they are becoming only the brokers bringing buyers and sellers of information together and carrying out the transfer process. The burgeoning growth of the Application Service Provider[10] (ASP) market, and the emergence of co-operative information-sharing services such as Napster[11], which enable interactive sharing of information between on-line computers without the involvement of a central server in the actual information transfer process, are reflections of this. Thus, any proxy using ISPs' transfer prices to also embrace information value is becoming increasingly unfounded. By focusing almost exclusively upon the role of measuring and monitoring movements, it is easy to lose sight of the real challenge: assessing the proportionate value of the information transferred in the goods and services ultimately created from its utilisation. For the ultimate taxable benefits come from the value information adds to the *end products*, rather than the role of the *messenger* in enabling this to occur. And it is the consumption of these *end products* that indirect taxes are typically designed to capture. Thus, the focus of taxation effort in an e-commerce environment would be more productively invested in addressing the usage of information rather than the usage of information transfer processes[12]. This was recognised in the exemption given to financial transfers – the parallel in information transfers is clear.

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liability of rent payments and mortgage interest payments by non-registered end consumers played a role in the original decision to exempt financial services.

[10] Application Service Providers (ASPs) provide contractual services to deploy, host , manage and rent access to an application from a centrally-managed facility. An ISP may either own the software, or itself have a contractual agreement with a software supplier to rent software to end users, or to operate it on behalf of the end user. For instance, in New Zealand Microsoft is introducing rental software through EDS(NZ), which is acting as an ASP. Access to such services may be achieved via ISP services.

[11] Napster software on end-user computers enables the user to search the directories of all other users with such software connected to the Internet at the same time, to share MP3 music files. The search process accesses the directories without having to pass through a central server. Hence, the exchange is a result of direct contractual agreement between the supplier and the recipient, without the involvement of any intermediary hosting process such as is required of web pages where downloadable files are held on a central server which acts as the broker between supplier and recipient.

[12] However, even here, the applicability and enforceability of consumption taxation in a global market where increasingly more and more transactions are occurring electronically and across borders must be questioned. Inability to determine the location of the consumer for ISP taxation poses the same difficulties in determining both the jurisdiction and liability for consumption tax on the end product as for the consumption of the process of transferring it.

Policy Implications for New Zealand

The opportunity exists for New Zealand policy-makers to address this tax issue not just from the perspective of securing ongoing revenues, but also from the perspective of putting in place a set of incentives which might also offer encouragement to develop an industry where there is a demonstrated natural advantage for the country. Exempting information transfers from GST would free the ISP from the burden of unproductive and costly administrative functions which have the potential to distort the behaviour of the industry, and not only encourage but also support New Zealand ISPs to develop export markets.

However, the effects of such a policy are not just confined to the ISP market. The country's national economy stands to benefit. New Zealand also has the opportunity to take an international lead in this matter. Such a move is generally in keeping with the principles advocated by the United States and the World Trade Organisation[13]. By forfeiting the potentially enormous monitoring and compliance costs of administering an unwieldy international consumption tax on information transfer, New Zealand may lose the tax revenue currently derived from private domestic consumers. However, it stands to gain the downstream economic effects not just of the development of its own ISP export business, but also those associated with the foreign ISPs who will have an incentive to relocate their businesses to New Zealand[14]. For in the end, these are the real and dynamic benefits to New Zealand from a modern economy. It would be counterproductive to jeopardise the evolution of such downstream and long-term developments built upon real cost advantages in the short-term pursuit of the relatively small', and likely declining, tax take on domestic ISP consumption and superficial taxation policy consistency

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[13] These principles support the adoption of taxation systems which are simple and transparent, easy to implement, and minimise burdensome record-keeping and costs for all parties. *A Framework for Global Electronic Commerce*. The White House, July 1 1997. http://www.ecommerce.gov/framewrk.htm.

[14] Instone and the MFAT report both note that the downstream consequences of English Language School students spending in New Zealand amounts to more than the value of their school fees. The GST on this end consumption spending would not be insignificant if such relocations brought additional economic activity to the New Zealand economy.