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Issues in Cross-Border Electronic Trade in Services

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Introduction

E-commerce as part of a “new economy” has been found to be an important driver of economic growth. Sustainable long-term growth of the “new economy” is attributed to the use of information networks through information and communication technologies, as well as to favourable policies encouraging innovation, entrepreneurship and human resource development (Sidorenko and Findlay (2001)). There are potentially large economic benefits to developing countries through participation in the global economic commerce, including e-commerce. The global Internet economy is estimated to reach US\$4.5 trillion by 2004 (OECD (2001a)). Most of it is taken from of business-to-business (B2B) transactions, accounting for up to 80% of total electronic sales.

The international vision on the “new economy” has been shaped by the Charter on Global Information Society adopted at Okinawa summit of G8 in July 2000. In their 2000 Declaration, the APEC Leaders said:

We commit to develop and implement a policy framework which will enable the people of urban, provincial and rural communities in every economy to have individual or community-based access to information and services offered via the internet by 2010. As a first step toward this goal we aim to triple the number of people within the region with individual and community-based access by 2005.

The “new economy” is now a strategic priority for regional capacity-building in APEC member countries. Realising a vision of the scope and scale of that laid out in the Leaders Brunei Declaration will clearly require a package of actions that apply across all the pillars of APEC. Key elements of the work program include liberalisation of the telecommunications sector and a capacity building program to establishing the right policy environment and the skills to work within the new e-economy. Policies beneficial for development of information economy include support for higher education in mathematics, engineering and computer science; promotion of Research and Development, safeguarding intellectual property rights, and providing standardisation, quality assurance and regulations stimulating knowledge-based economy. Studies of new economy include OECD (2001b), OECD (2002), and APEC (2001), and Dunt and Harper (2002) on the Australian economy.

In this paper we review some issues in the treatment of e-commerce in the WTO. In the next section we review a definition of e-commerce which is now in common use. We then examine some issues in the negotiating process to date, with a focus on market access issues, and we then review specific questions in relation to infrastructure, intellectual property and consumer protection. The final section contains comments on options for the next steps in work on e-commerce, including scope for cooperation at the regional level.

Definition of e-commerce

The WTO work program on electronic commerce was adopted in September 1998. The definition of the electronic commerce included “the production, distribution, marketing, sale or delivery of goods and services by electronic means”. Technological infrastructure necessary is also included in the working program on e-commerce.

In work which aims to identify the origins of what is new or different about e-commerce, Mann (2002) says that e-commerce is a shorthand term which refers to a ‘complex amalgam of technologies, infrastructures, processes and products’ (p. 315). She argues that the consequence of this package is the creation of a global market called ‘the Internet’. Mann refers to three basic elements of e-commerce

- The institutions and technologies that create the network which supports the Internet
- Services that connect the internet to the traditional marketplace
- Protocols, laws and regulations that govern conduct and relationships.

Mann refers to the consequences of these elements for innovation. The effects are evident in new processes, products and markets. Process innovations affect the ways that existing transactions are organised. Product innovations include the creation of new industries or formats of exchange. Market innovations include new markets made possible by the reduction in transactions costs. As a consequence many activities are can now be traded across international borders where previously this was not possible. There are many examples of services which fall into this category: some services still require direct contact (eg a haircut) but others can be traded in this way (eg medical diagnosis).

Similar developments had occurred in earlier periods, as Thompson (2002) points out. However a significance difference is that the framework of e-commerce is open and not proprietary. This feature has driven its growth, but also creates some special issues in intellectual property and in consumer protection to which we refer again below.

WTO work programs

Electronic commerce comprises goods, services and intellectual property components, hence the WTO bodies involved in the e-commerce work program include Council for Trade in Services, Council for Trade in Goods, Council for TRIPs and the Committee for Trade and Development. The work program on e-commerce within the Council for trade in Goods takes into account deliberations of other intergovernmental organisations such as OECD, UNCITRAL, UNCTAD and the World Bank (WTO (2000d)). It creates opportunities through trade creation and facilitation and through network effect. At the same time it presents challenges of consumer protection in cross-border disputes, ensuring online security and dealing with international fraud activities.

Thompson (2002) argues that there were three main issues which the WTO had to consider:

- Do the existing core agreements (GATT, GATS and TRIPS) apply to electronic commerce and are there any gaps or ambiguities (and so do they need to be supplemented by new specific agreements or a horizontal approach)
- Is there a need for specific trade-related regulatory guidance in areas like consumer protection and data privacy so that ‘nascent national measures do not become, unwittingly or deliberately, unnecessarily restrictive of trade’
- What further liberalisation would support the growth of the Internet.

The following material includes a review of the treatment of these issues in the core agreements to date (with the exception of the TRIPS which is discussed in a later section), as well as proposals for further liberalisation. Some of the regulatory issues are considered in a later section.

The Council for Trade in Goods have addressed issues related to market access in products related to e-commerce; valuation issues, import licensing procedures, custom duties, standards for e-commerce, rules of origin and classification issues (WTO (2000a)). It recognised that a genuinely difficult issue related to electronic commerce is custom valuation treatment of carrier media such as laser disks or tapes, containing digitised information (software, DVD or music CDs), and also treatment of the digital products delivered exclusively through electronic means. The extent to which content of the transmission can be separated from the transmission carrier service remains subject to disagreement. The GATT rules could be applied to digital products as far as the content of the product could be characterised as goods, or a close substitute to goods in question. If custom import duties are imposed on a physical carrier, then there is an effectively more favourable treatment for electronic deliveries that are not subject to duties (WTO (1998) and WTO (1999a)). Of course, elimination of import duties on the products that lend themselves to digitised delivery would be the first best outcome.

A significant issues has been whether items exchanged through the Internet should be treated as goods or services. Discussion was conducted on the definition of “like” products in respect to e.g. electronic downloads of music and software. Some members suggested that if an electronic supply of the digitised product happens on a personal distribution basis, the transaction represents services and is covered by GATS. Others argued that it should be treated as a good, and covered by the GATT, on the grounds of equivalence with the hard copy. Some members questioned whether importation takes place at all in case of cross-border supply of digital products (and hence, the question of custom duties become redundant as no physical imports are actually crossing the border).¹

Mattoo and Schuknecht (2002) explain why the treatment is important. They point out that in the GATT national treatment (treating foreign products no less favourably than domestic products) is a general obligation but applies only to internal measures like taxes or regulations and not to border measures like tariffs. In the GATS, national treatment applies to all measures affecting supply but it is not a general obligation and only applies to sectors which have been scheduled. A member’s internal tax regime should be consistent with their commitments, but if a sector is not scheduled foreign suppliers could be subject to discriminatory internal taxes. They also point out that the

¹ Goods ordered over the internet but delivered physically are not subject to this debate – the GATT applies to them.

GATT contains a general prohibition of quantitative restrictions but such measures are only prohibited in the GATS in sectors where specific commitments have been made. As a result, items can be treated differently as a good or a service. Mann (2002) then notes that treatment under the GATS could be less liberal than under the GATT. She also suggests that the WTO might be able to sidestep the classification issue if members followed the more liberal treatment when relevant of either the GATT or the GATS.

Panagariya (2000) argues against an entirely new discipline for internet trade, on the grounds that the necessary rules can be found in existing agreements. The 'real contest' he says (p. 961) is between the GATT and the GATS. He supports treatment under the GATS, first on the grounds that a physical counterpart may not always exist, and second that a definition applied across-the-board minimises issues in the application of dispute settlement processes.

Since the Ministerial Declaration on Electronic Commerce², there has been a standstill on custom duties on electronic transmissions. The Doha Ministerial Declaration 14 November 2001 in its para 34, *Electronic Commerce*, calls for standstill to continue until the Fifth Ministerial:

34. We take note of the work which has been done in the General Council and other relevant bodies since the Ministerial Declaration of 20 May 1998 and agree to continue the Work Programme on Electronic Commerce. The work to date demonstrates that electronic commerce creates new challenges and opportunities for trade for members at all stages of development, and we recognize the importance of creating and maintaining an environment which is favourable to the future development of electronic commerce. We instruct the General Council to consider the most appropriate institutional arrangements for handling the Work Programme, and to report on further progress to the Fifth Session of the Ministerial Conference. We declare that members will maintain their current practice of not imposing customs duties on electronic transmissions until the Fifth Session.

Mattoo and Schuknecht (2002) question whether the commitment is valuable, given existing GATS commitments, which may already prohibit discriminatory taxes or which may not inhibit the application of discriminatory internal taxes as a substitute measure. They are also concerned that limitations on the application of duties might divert WTO members into less efficient forms of protection (where such instruments could be applied).

It would be extremely difficult to impose custom duties on any electronic transaction even if it were technically feasible to do so. Electronic transactions are not classified in the Harmonised System (HS), and most of the value of the transaction is represented by its content/intellectual property. Mattoo and Schuknecht (2000) calculate that revenue loss from the duty-free e-commerce would be small even if all delivery of digitisable media products moved online, as these products are responsible for less than 1% of total revenue collection in all studied countries. At the same time, trade in digitisable media products represents a substantial component of cross-border e-commerce: OECD (2002) reports that books, music and software represented 45% of spending over the Internet by Australian households, including both domestic and international purchases.

² WT/Min(98)/DEC/2

As noted above, a feature of e-commerce is the package of products and processes involved. Key inputs obviously include information technology products. In respect of market access, the Information Technology Agreement (ITA) provides a useful starting framework that can be extended to include more inputs into e-commerce. Further work on the extent of commitments under the ITA would be of value in this context

Within the Council for Trade in Services (WTO (1999b) and WTO (1999c)), participants have developed a common understanding that electronic delivery of services can occur within any of the four modes of supply, and are covered by the commitments in the particular sector according to the technological neutrality principle (meaning that once the commitments are made eg to allow cross-border supply of services, the supply is allowed in any technologically feasible form including post, telephone, facsimile, and electronic communications). All general obligations imposed by GATS, such as MFN, transparency and disciplines for domestic regulation, as well as sector specific commitments, are applicable to e-commerce activities. The following areas of disagreement were identified:

- classification of cross-border electronic delivery of service as Mode 1 or Mode 2;

(Suggestions were made that if the services is rendered through an e-mail from the service provider to a customer, the transaction belongs to Mode 1. If the service eg download is obtained by the customer accessing the Web page of the provider hosted on the server abroad, this transaction arguably can be classified as Mode 2 – “supplied in the territory of one Member to the service consumer of any other Member”).

- classification and scheduling of new services arising through e-commerce;
- classification of Internet-related services and their relationship with the commitments in the telecommunications agreement;
- classification of digital products as goods or services;
- custom duties and valuation, etc.

The WTO Committee in Trade and Development focussed on developing the technical assistance programs to promote participation of developing countries in e-commerce activities (WTO (2000e)). Exclusion of certain developing countries from access to encryption and internet security (digital certificate) technology due the US trade restrictions was criticised in Cuba’s submission (WTO (2001)). Global cooperation in anti-terrorism activities has added a new dimension to and interest in these technological and capacity building issues.

The EU approach treats all electronically delivered digital products as services, bringing them under the umbrella of GATS. The US approach is different, tending towards GATT disciplines for “virtual products” (i.e. those digital products that can be copied into physical medium and are tradable in both physical and electronic form, such as books, music, video and software).

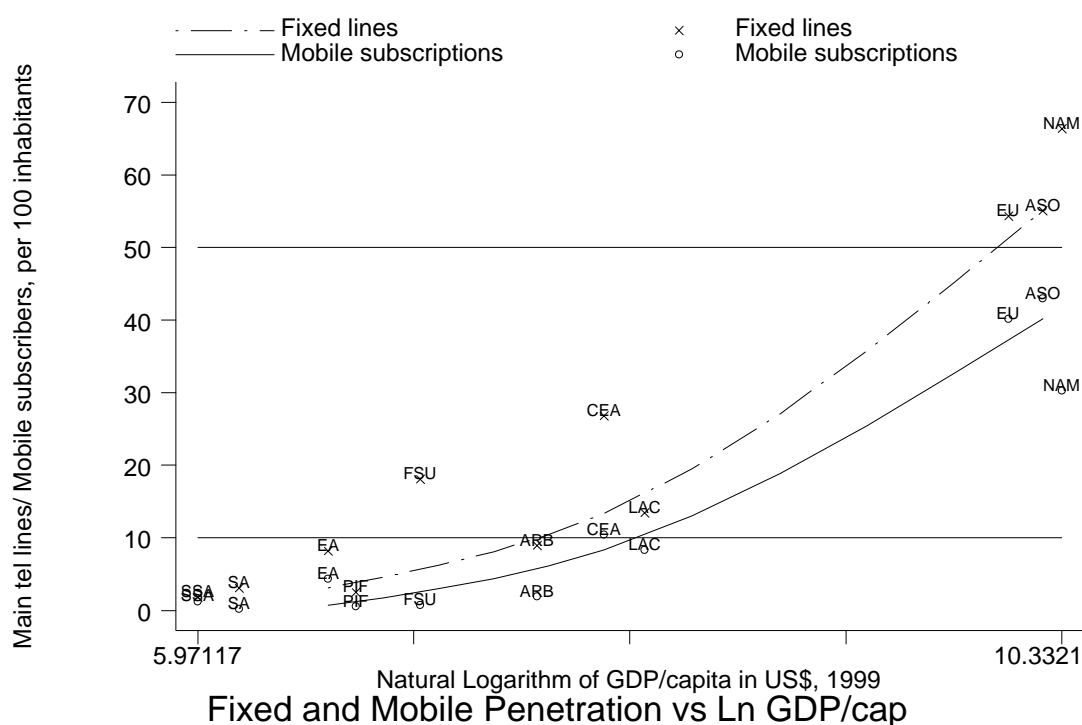
Disagreements on treatment of e-commerce within the WTO are now being addressed on the bilateral level. Thus, the United States-Singapore Free Trade Agreement (USSFTA) signed on 6 May 2003 contains Chapter 14 *Electronic Commerce* . The

concept of a “digital product” has been introduced, defined as “computer programs, text, video, images, sound recordings and other products that are digitally encoded, regardless of whether they are fixed on a carrier medium or transmitted electronically”. Article 14.3(1) imposes duty-free electronic trade in digital products. The customs value of an imported carrier medium carrying a recorded digital product is to be calculated based on the value of the medium alone. MFN and NT principles apply. Article 6 excludes broadcasting services from the scope of application (new services such as interactive digital TV seem to be falling within the definition of digital products). Whether this forms a useful precedent or not is a topic for further work.

Telecommunications infrastructure and policies for e-commerce

Availability of the telecommunications infrastructure is the necessary component of e-commerce. Despite the difference in network architecture and design, most of the “last-mile” connections to the Internet in the industrialised countries have been achieved through the standard telephone copper wire. Fixed and mobile penetration rates are found to increase with per capita income (Figure 1), and cross-country differentials are very large.

Figure 1. Fixed Lines and Mobile Subscribers per 100 inhabitants, by Income and Region



Source: ITU 2001

Provision of distance education depends on the availability, accessibility, affordability and quality of the telecommunications infrastructure. Distance education is more valuable in the most in rural remote areas, which are also the areas most disadvantaged in availability of technological and communications infrastructure. Physical impediments to connectivity are exacerbated by the high cost of access to (broadband)

Internet, which is the most important deterrent from use of the ICT in the developing countries. More investment into network capacity and hardware, and improvement in network architecture would solve this problem. Current Internet interconnection and pricing arrangements should be revised in order to improve accessibility by the developing countries.

Telecommunication policies are lubricants essential to the smooth functioning of this market. In most countries, the telecommunications market developed as a natural monopoly and started with one public monopoly provider. The losses resulting from the monopoly pricing, low efficiency and high costs of regulations are well documented for a number of countries, and lack of competition was found to contribute to inflated access prices. Since the 1980s, the telecommunications sector underwent a major restructuring and liberalisation in most industrialised countries, and the tendency continued world-wide. The incumbent telecommunications provider was partially or fully privatised, with differing degrees of foreign investment allowed. Competition was introduced, and an autonomous regulator created, with government sometimes retaining a stake in the incumbent operator. The formal monopoly operator can use its existing market power to hinder the new entrant. Hence, competition policies have to be developed and enforced by an independent regulator.

In most developing countries, the telecommunications sector is still monopolistic. Market access and national treatment restrictions are present. Interconnectivity between the incumbent operator's network and that of new entrants' is usually an obstacle to the telecoms deregulation and liberalisation processes.

A Universal Service Obligation (USO) is often imposed on a monopoly or incumbent company by the government to extend access to telecommunications to remote areas and to other consumer groups that would not be served by the market alone. The concept of the Universal Service differs between countries, with most of the developing countries targeting universal access of some kind (e.g. pay phone within 20 km of most communities in Burkina Faso vs. fixed telephone connection countrywide to each household in Australia, USA and UK). The Universal Service/Access Obligation is a useful vehicle to ensure government's commitment to provision of digital opportunity to people in rural area. USO funding can be provided by the government through general taxation, or by a special levy on telecommunications providers operating in the market, to cover the net losses of the incumbent operator responsible for the USO. Cost-based pricing of services and interconnection charges contribute to better cost recovery of service extension. The USO can be put up for competitive bidding, with more efficient companies winning the funding to provide a USO to specific geographic areas. There is a wealth of research and knowledge about best practices in funding USO and incentive regulations accumulated in Australia. This knowledge can be successfully shared with policy-makers and regulators from the developing countries to assist them in formulating optimal regulatory framework for efficient operation of telecommunications sector.

International trade in telecommunications opens up domestic markets to foreign providers and increases its competitiveness. Alternative measures of impediments to trade in telecommunications services have been constructed based on the WTO GATS commitments and the actual implemented policies. Telecommunications policies appear to be the least restrictive in industrialised countries, and the most restrictive in the developing countries including Sub-Saharan Africa, South Asia, Pacific Islands and

Arab states. Various studies suggest that higher teledensity (number of fixed lines or mobile subscriptions per 100 inhabitants) is linked to the more liberal policy index. It is obviously so among the regional aggregates, since regions with more liberal policies are enjoying higher teledensity.

The Internet owes its rapid development partially to the “hands-off” regulatory environment. Liberal functioning of Internet Service Providers (ISP), including a transparent licensing requirement, is important to maintain growth of Internet penetration. More legislative activities are currently being undertaken in the Internet area, including the regulatory framework for e-commerce, secure transactions, copyright and intellectual property on the Web, Internet gambling, and pornography. Singapore, for example, requires all Internet service and content providers to hold a Singapore Broadcasting Authority license. Malaysia has recently expressed its intention to introduce an Internet “code of content” similar to the Singaporean code of practice.³ Coordination of Internet policies and sharing the best practice rules can be useful actions to consider.

The EU proposed a cluster approach in negotiating liberalisation of “e-commerce infrastructure services” such as telecommunications, computer-related, advertising, distribution and payment services (WTO (2000b)), all of which are commercially linked in the e-commerce value chain. The problem with this approach is that there are many goods and IP components to the e-commerce sector as well.

The cluster approach to e-commerce encompassing both goods and services is developed more fully in OECD (2001a). The core e-commerce goods and services subsectors are identified as follows:

- telecommunications basic infrastructure, value added and support services;
- telecommunications and IT equipment and support services;
- Internet access, hosting and design services;
- Online payment processing systems;
- Delivery (post and courier) services;
- Transport services;
- Distribution services;
- Other services (legal, advertising, market research, photographic).

The USA (WTO (2000c)) also emphasised the need to encourage investment into telecommunications network capacity, including through ensuring that an appropriate competition regimes are in place to control monopolistic practices of incumbent operators. The 1997 Reference Paper on Basic Telecommunications provides important tools to ensure access to essential telecommunications infrastructure. Liberalisation of

³ South China Morning Post, May 30, 2001. *Malaysia Mulls “Code of Content” for Net*. REUTERS, Kuala Lumpur

basic telecommunications services and accepting competition provisions of the Reference Paper should be encouraged. Market commitments in value-added services are also of great importance, as well as the need for introduction of pro-competitive regulation of VA services. The US submission recognised that other sectors are complementary to the telecommunications services in e-commerce chain. They are distribution, advertising, express delivery services, computer and related services, and financial services. Relevant sector-specific proposals should treat liberalisation of these sectors in a concomitant manner.

Protection of Intellectual Property Rights (IPRs)

Intellectual property rights protection is an important issue concerning provision of content products for e-commerce. Private sector involvement is contingent upon the ability of content developers to protect their intellectual property. IP management has been found a significant problem area in joint education projects, where local partners participated in development of the product. Making information freely accessible by requires careful examination of compliance with the Digital Copyright legislation which is necessary in the environment with growing attention from author's rights protection societies and collection agencies.

Recognition of intellectual property rights was found to be a factor promoting trade and investment in IP-intensive sectors. The Berne Convention for the Protection of Literary and Artistic Works (1971, Paris Act) and the Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (1961) are at the core of Australian international commitments in copyright. Australia also has international obligations under the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement.

Rapid advancement of ICTs presented the WIPO with the challenge of developing new norms and standards for international copyright protection in the Internet age. The issues of digital media and internet are dealt with in the WIPO Copyright Treaty (WCT) and the WIPO Performance and Phonograms Treaty (WPPT). The new treaties explicitly address wire or wireless network transmission of the material, including through Internet, and rights of communication to the public (Article 8):

“... authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them”.

To achieve a balance between the copyright owners' interests and those of the users, an arrangement similar to “fair dealing” in print work is extended to educational and research institutions making available electronic copies of works and broadcasting to their students. The statutory license scheme for educational institutions is extended to incorporate electronic sources.

Measures recommended by the Register of Copyrights included development of more effective digital licensing, technological protection of the work, the use of electronic copyright management information, online licensing system, limiting access to the online resources to the registered students, password and firewall protection, TCP/IP addresses/domain names screening, and encryption. The next stage of technical measures of copyright protection includes limiting downloads or further electronic

distribution capacity (e.g. proprietary viewer technologies to allow viewing but not printing of the document). New generation technologies allow it to embed information in digital works to identify and track its consequent usage. Digital watermarking can be used as a search object to identify unauthorised users of the protected digital work. Fair use remains a technology-neutral exemption principle for educational purposes use of copyright material. In order for digital copyright management systems to be functional, coherent technical standards for Internet delivery are to be adopted.

Even though developing countries are increasingly committing themselves to protect IP rights by joining WIPO and WTO TRIPS, cases of software piracy and computer hacking are well documented there, and a more efficient enforcement is important. The Business Software Alliance¹ provides further information on the scope and costs of piracy.

The *Council for Trade-Related Aspects of Intellectual Property Rights* recognised that e-commerce activities include a high proportion of IP content, hence IPRs enforcement is beneficial for development of e-commerce, with participation in the WIPO “internet” treaties to be encouraged. The technologically neutral formulation of the TRIPs allows it to treat e-commerce activities within the existing framework (WTO (1999d)). The IP council focused its activities on definition of publication, right of reproduction and communication, right holders and other IP management issues related to e-commerce. At present, major forms of IPR protection with respect to digital products including software are trademarks, copyrights, database protection and patents for computer programs (the latter precludes reverse engineering/ decompilation and may limit interoperability and development of new add-ons) (Maskus, 2001). Enforcement of distribution and copying rights by the copyright holders is particularly difficult in the online environment, but is essential for continuing investment into content products for e-commerce.

Consumer Protection

International activities in consumer protection related to cross-border electronic commerce are summarised on OECD (2003). Consumer Sentinel (a US-Canadian consumer complaint database) recorded 15,000 cross-border complaints in 2001, amounting to the losses of US\$30 million by consumers. About 13% of the 2001 consumer complaints included a cross-border component.

E-finance

Consumer protection in B2C remains a major issue of cross-border trade in financial services. Asymmetry of information between providers and consumers of financial services necessitates regulation of the sector, and the cross-border aspect of the relationship adds the complication of multiple jurisdictions. Often consumers lack knowledge and experience to make informed decisions about financial products offered by foreign financial services providers. Quite often online finance activities are conducted for fraud or tax evasion purposes. Supervisory authorities have adopted the following approaches to deal with the cross-border trade issue (Corbett and Sidorenko 2002):

- The cross-border trade is prohibited or discouraged;

- Activities are permitted, subject to the (non-discriminatory) application of host country rules and supervision;
- Activities are permitted, with implicit or explicit reliance on the home country's regulation and supervision;
- Activities are permitted, subject to reliance on a combination of host-and home country rules and supervision.

Panagariya (2000) suggests that the choice of options in consumer protection is related to the choice of classification of the mode of supply. If internet transactions are classified as mode 1 (cross border supply), the transaction is deemed to have taken place where the buyer resides and so the regulatory regime in the importing country applies. Under mode 2 (consumption abroad) he suggests that the regulatory regime in the supplier economy prevails. A country putting more weight on consumer protection might prefer a mode 1 classification. One with more interest in market access might prefer a mode 2 classification.

Telemedicine

Cross-border supply of health services (called e-health or telemedicine) is becoming increasingly feasible due to the recent developments in the information and communications technology (ICT). Health care services supplied cross-border include direct clinical services (diagnostics, laboratory testing, consultations), continuing professional education, consumer health information services, professional back up services and management of health care delivery. Consumer (patient) protection regulations remain the major impediment to B2C telehealth (direct consultation from a doctor to a patient). Doctor-to-doctor consultations and other B2B forms of telemedicine including for medical education and professional development are more widespread.

As a rule, the legal status of cross-border provision of telehealth limits direct provision of consultations to patients overseas. The technological neutrality principle implies that the same qualification and licensing requirement should apply for provision of medical consultations/ diagnostic via Information and Communication Technologies as for physical consultations. Professional indemnity insurance for cross-jurisdictional practices is largely unavailable. Privacy law may differ creating additional problems in cross-border exchange of personal health data.

Audio-visual content

A sector with cultural sensitivities and very few commitments in the GATS is audio-visual services. Australia and EU are reluctant to take liberalising steps in this sector, while the US and Japan are actively pursuing additional market access commitments in AV from their partners. Treatment of audiovisuals is complicated by the fact that these products are easily digitisable and hence lend themselves to electronic distributions. The EU position is to treat digitised products as services and hence keep them within the scope of GATS (but then excluded from commitments in the GATS). The US's position is that digitised products that can be downloaded and kept on a physical medium should be treated like their physical counterpart, ie as goods (hence evoking the GATT disciplines for goods that provide a more liberal market access to the US digital

products). Convergence between telecommunications, computer and audio-visual services due to technological progress and creation of new products/services such as video-on-demand and digital TV, with technology allowing to make and store digital copies of the programs, will exacerbate problems with treatment of audio-visual services in future (EBU (2003)).

In line with Mann's (2002) of a response to the classification problem, the US Coalition of Service Industries advocates that the products delivered electronically be afforded no less favourable treatment than similar products delivered in physical form.

Conclusions

Thompson (2002) argues that because of the character of the WTO work program on e-commerce, some aspects of which have been outlined here, the WTO has missed an opportunity to 'keep a new area of world trade "barrier free" from the start'. Thompson raises three questions about the treatment of e-commerce in the WTO:

- Do the existing core agreements (GATT, GATS and TRIPS) apply to electronic commerce?
- Is there a need for specific trade-related regulatory guidance in areas like consumer protection and data privacy?
- What further liberalisation would support the growth of the Internet?

She challenges the position that the existing agreements in the WTO were adequate, and notes that even with respect to the application of existing agreements, many issues remain unresolved. She is also concerned about the risk of regulation that is unnecessarily restrictive.

The importance of consideration a package of activities and policies in relation to e-commerce is a common theme of work on international exchange via the Internet. Thompson points to gains from liberalisation of sectors like IT equipment, logistics and freight, telecommunications, and distribution systems for 'cartelised' products such as airline tickets and brand name goods.

Thompson notes that nothing has been done about a 'horizontal text or WTO annex on pro-competitive regulation and open markets for e-commerce'. A successful defense of the status quo (both the existing agreements and, by implication, the "reciprocal concessions" approach to removing barriers in the WTO process), she says, will not keep these new markets open. The risk is that, as governments build new regulations for the Internet market place, new barriers will emerge which will take time to dismantle.

Are there options for dealing with e-commerce even within the existing architecture?

Mann (2002) suggests that a horizontal approach might still be possible, for example if negotiators agreed to consider impediments to particular modes of supply, which could then include e-commerce. Mann suggests work to complement the horizontal approach by establishing a new working group to coordinate the activity. Further she suggests that the regional forums including APEC can support this work, for example, by canvassing issues that will confront the WTO, by working up model schedules and by

engaging in dialogue with the private sector. The project on e-APEC is particularly relevant in this context.

The proposal to try to maintain a horizontal approach is an interesting one, and it remains contentious. It also raises further questions. It leads to points for consideration in relation to the treatment of both investment and the movement of people in the WTO, and to the question of whether there is an argument for dividing the GATS along the lines of modes of supply.

Bibliography

APEC (2001). *The New Economy and APEC*, Asia-Pacific Economic Cooperation. October 2001.

EBU (2003). *Audiovisual services and GATS negotiations. EBU contribution to the public consultation on requests for access to the EU market*, European Broadcasting Union. 17 January 2003.

Dunt, E. and I. Harper (2002), "E-Commerce and the Australian Economy", *The Economic Record*, September: 327-342.

Mann, Catherine (2002), Electronic Commerce, the WTO and Developing Countries, in Bernard Hoekman, Aaditya Mattoo, and Philip English, *Development, Trade and the WTO: A Handbook*, The World Bank, Washington

Maskus, K. (2001). Intellectual Property Protection and Capital Markets in the New Economy. *PAFTAD 27*. Canberra.

Mattoo, A. and L. Schuknecht (2000). "Trade Policies in Electronic Commerce." *Working Paper. The World Bank*. <http://econ.worldbank.org/docs/1133.pdf>.

Mattoo, A. and L. Schuknecht (2002), "Services and cross-border supply", in Sherry Stephenson and Christopher Findlay with Soonhwa Yi (eds), *Services Trade Liberalisation and Facilitation*, Asia Pacific Press, Canberra.

OECD (2001a). *Electronic Commerce: A Cluster Approach to the Negotiation of Input Services*. *TD/TC/WP(2000)33/FINAL*, Organisation for Economic Co-operation and Development. 15 June 2001.

OECD (2001b). *Measuring the New Economy: Trade and Investment Dimensions*. *TD/TC/WP(2001)23/FINAL*, Organisation for Economic Co-operation and Development. 19 October 2001.

OECD (2002). *Measuring the Information Economy*, Organisation for Economic Co-operation and Development.

OECD (2003). *Consumer in the Online Marketplace: The OECD Guidelines Three Years Later. Report by the Committee on Consumer Policy on the Guidelines for Consumer Protection in the Context of Electronic Commerce*. *DSTI/CP(2002)4/FINAL*, Organisation for Economic Co-operation and Development. 3 February 2003.

Panagariya, Arvind (2000). "E-Commerce, WTO and Developing Countries", *The World Economy*, 2000, pp. 959-978.

Sidorenko, A. and C. Findlay (2001). "The Digital Divide in East Asia." *Asian-Pacific Economic Literature* **15**(2): 18-30.

Thompson, Rachel (2002), "Electronic commerce and the WTO", Evian Group Compendium, September.

WTO (1998). *Work Programme on Electronic Commerce. Background Note by the Secretariat*, Council for Trade in Goods. World Trade Organization. 5 November 1998.http://www.wto.org/english/tratop_e/serv_e/w50.doc.

WTO (1999a). *Work Programme on Electronic Commerce: Information provided to the General Council*, Council for Trade in Goods. World Trade Organization. 26 July 1999.http://www.wto.org/english/tratop_e/serv_e/w50.doc.

WTO (1999b). *Work Programme on Electronic Commerce: Interim Report to the General Council*, Council for Trade in Services. World Trade Organization. 31 March 1999.http://www.wto.org/english/tratop_e/serv_e/w50.doc.

WTO (1999c). *Work Programme on Electronic Commerce: Progress Report to the General Council*, Council for Trade in Services. World Trade Organization. 27 July 1999.http://www.wto.org/english/tratop_e/serv_e/w50.doc.

WTO (1999d). *Work Programme on Electronic Commerce: Progress Report to the General Council*, Council for Trade-Related Aspects of Intellectual Property Rights. World Trade Organization. 30 July 1999.http://www.wto.org/english/tratop_e/serv_e/w50.doc.

WTO (2000a). *Chairman's factual progress report to the general Council on the Work Programme on Electronic Commerce.*, Council for Trade in Goods. World Trade Organization. 24 November 2000.http://www.wto.org/english/tratop_e/serv_e/w50.doc.

WTO (2000b). *Communication from the European Communities and Their Member States. Electronic Commerce Work Programme*, Council for Trade in Services. World Trade Organization. 30 November 2000.http://www.wto.org/english/tratop_e/serv_e/w50.doc.

WTO (2000c). *Communication from the United States. Market Access in Telecommunications and Complementary Services: the WTO's Role in Accelerating the Development of a Globally Network Economy*, Council for Trade in Services. World Trade Organization. 18 December 2000.http://www.wto.org/english/tratop_e/serv_e/w50.doc.

WTO (2000d). *Work Programme on Electronic Commerce. Activities of Intergovernmental Organizations Related to the Work of the Council for Trade in Goods. Background Note by the Secretariat. Addendum*, Council for Trade in Goods. World Trade Organization. 31 October 2000.http://www.wto.org/english/tratop_e/serv_e/w50.doc.

WTO (2000e). *Work Programme on Electronic Commerce. Contribution by the Committee on Trade and Development.*, Committee on Trade and Development. World Trade Organization. 13 November 2000.http://www.wto.org/english/tratop_e/serv_e/w50.doc.

WTO (2001). *Need for Unrestricted Global Electronic Commerce. Communication from Cuba*, World Trade Organization. 16 May 2001.http://www.wto.org/english/tratop_e/serv_e/w50.doc.