HWWA HAMBURG

DISCUSSION PAPER

Telecommunications-Related Services: Market Access, Deeper Integration and the WTO

Carlos A P Braga
Carsten Fink
Bernard Hoekman

HWWA DISCUSSION PAPER

158

HWWA-Institut für Wirtschaftsforschung-Hamburg
2002
ISSN 1616-4814

The HWWA is a member of:

- Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz (WGL)
- Arbeitsgemeinschaft deutscher wirtschaftswissenschaftlicher Forschungsinstitute (ARGE)
- Association d'Instituts Européens de Conjoncture Economique (AIECE)

Telecommunications-Related Services: Market Access, Deeper Integration and the WTO

Carlos A P Braga
Carsten Fink
Bernard Hoekman

This paper has been prepared within the Research Programme "International Trade and Competition Regimes" of HWWA. It is a contribution to the Research Project "Trade, Investment and Competition Policies in the Global Economy: The Case of the International Telecommunications Regime". The Project is jointly conducted by HWWA and the Institute of International Affairs (IAI), Rome, and it is sponsored by Volkswagen Foundation.

An earlier version of the paper was presented at the International Conference "Trade, Investment and Competition Policies in the Global Economy: The Case of the International Telecommunications Regime" organized by HWWA and IAI in Hamburg, 18 and 19 January 2001.

HWWA DISCUSSION PAPER

Edited by the Department
WORLD ECONOMY
Head: PD Dr. Carsten Hefeker

Hamburgisches Welt-Wirtschafts-Archiv (HWWA)
Hamburg Institute of International Economics
Öffentlichkeitsarbeit
Neuer Jungfernstieg 21 - 20347 Hamburg
Telefon: +40-428 34 355
Telefax: +40-428 34 451
e-mail: hwwa@hwwa.de
Internet: http://www.hwwa.de/

Carlos Alberto Primo Braga
Senior Economist
Telecommunications and Informatics
The World Bank
e-mail: Cbraga@worldbank.org

Carsten Fink
Development Research Group
The World Bank
1818 H Street NW
Washington, DC 20433
Tel.: 001 202 473 3924
Fax: 001 202 522 1159
e-mail: Cfink@worldbank.org

Bernard Hoekman
Chief of the Development Research Group
The World Bank
1919 Pennsylvania Avenue N.W.
Washington, D.C. 20433
Tel.: 001 202 473 1185
Fax: 001 202 6769 810
e-mail: Bhoekman@worldbank.org

Contents

List of Tables

Abstract

Liberalization and regulatory reform of telecom markets has emerged as a high profile policy issue. This paper analyzes how the multilateral system under the World Trade Organization can help developing countries in promoting their own information infrastructures. We focus on a specific "regime" issue that has attracted increasing attention in recent years: the extent to which the WTO should pursue a "deeper integration" agenda, using telecommunications and activities that rely heavily on telecommunications as a specific case.

Zusammenfassung

Die Liberalisierung und Reform der Telekommunikationsmärkte ist zu einem wichtigen politischen Thema geworden. Dieser Beitrag analysiert, wie das multilaterale System - unter der Welthandelsorganisation - Entwicklungsländern bei der Förderung ihrer eigenen Informations-Infrastruktur helfen kann. Wir konzentrieren uns auf eine spezifische "Regime"-Frage, die in den letzten Jahren zunehmend Aufmerksamkeit erregt hat: In welchem Maße die WTO ein Programm der "tieferen Integration" verfolgen sollte, das Telekommunikation als spezifischen Fall betrachtet.

JEL Classification: FO2, F13, L96, 019

Keywords: International Economic Order, Trade Negotiations, Telecommunications Services, E-Commerce

I. Introduction

Telecommunications are at the core of the emerging global networked economy. Access to services provided by modern information infrastructures allows countries to explore innovative ways to deliver social services and to enhance the productivity of their economies. It also facilitates cross-border trade in services, providing firms with incentives to slice up the value chain geographically and opening new opportunities for countries to benefit from international specialization.[1] Market opportunities for cross-border transactions are expected to expand at an even faster pace in the coming years with the continuous expansion of the internet and of e-commerce.

In order to benefit from the process of globalization with its attendant "splintering" of the production chain, enterprises must have access to efficient telecom inputs. It is therefore not surprising that liberalization and the regulatory reform of telecom markets has emerged as a high profile policy issue, including in the multilateral trading system. A noteworthy development in this regard was the adoption of the General Agreement on Trade in Services (GATS) as an outcome of the Uruguay Round of multilateral negotiations (1986-94) and the Agreement on Basic Telecommunications that was negotiated in 1997. The 1996 Information Technology Agreement complemented the services agreements by providing a mechanism for a subset of interested WTO members to commit to the elimination of tariffs on a large number of IT products. Negotiations to expand the coverage and reach of the GATS were launched in 2000.

This paper analyzes how the multilateral system — under the World Trade Organization — can help developing countries in promoting their own information infrastructures. We focus on a specific "regime" issue that has attracted increasing attention in recent years: the extent to which the WTO should pursue a "deeper integration" agenda, using telecoms and activities that rely heavily on telecoms (primarily e-commerce) as a specific case. Until the Uruguay Round, the focus of the GATT was largely limited to the reduction or abolition of discrimination against foreign products or producers. The approach was one of negative or shallow integration: agreement not to do specific things (for example, raise tariffs above bound levels, and most important, not to use policy measures to discriminate against foreign products — the national treatment rule) or to do things in a certain way if a government decided to pursue a policy (for example,

1 Some developing countries are already actively exploring such opportunities in the international market for back-office services (e.g., Caribbean nations) or software development services (e.g., India). For further details see UNCTAD and World Bank, *Liberalizing International Transactions in Services: A Handbook* (Geneva: United Nations, 1994).

undertake an injury investigation as part of an antidumping action). This approach is more difficult to use to address differences in domestic regulatory regimes. Instead, positive or deep integration may be required: agreement to pursue common policies, to harmonize.[2] Shallow integration has been (and continues to be) the bedrock of the trading system; it does not require governments to take action, but imposes disciplines if they do.

Two questions are explored. First, what is the need for deeper integration from a market-access or contestability perspective? Second, what should be the role of the WTO in this area, that is, where should it focus attention? The relevance of the WTO in the telecom area (as with other sectors) is primarily market-access related, and much remains to be done in terms of traditional "shallow integration" (elimination of discrimination against foreign providers). However, there are a number of important policy issues that are relevant for telecommunications and related activities that may require "deeper" integration. Such integration poses difficult challenges for developing countries in particular, as they may not be able to satisfy the regulatory requirements that are preferred or sought by high-income countries. This creates a danger that subsets of countries pursue regulatory convergence agreements that exclude poorer nations, thereby potentially hollowing out the MFN principle. Whether there is a need for harmonization (regulatory convergence) should be left to specialized bodies to determine. If any such harmonization (international standards) is agreed, it is important that developing countries have a voice in the process and that they are assisted in attaining the agreed standards when this is necessary for effective market access. Such assistance should be provided by donors and development agencies, not by the WTO. If there are no internationally agreed standards on regulatory measures, the WTO should support regulatory competition and ensure that regulatory differences are not used as pretexts for discriminatory treatment.

The plan of the paper is as follows. Section I reviews the main benefits that the WTO offers for countries pursuing telecommunications reform. Section II discusses the pros and cons of using multilateral rules to promote deep integration and the implications of this debate for the expansion of international telecom-related services, in particular e-commerce. Section III offers some concluding remarks.

2 *J Tinbergen*, *International Economic Integration* (Amsterdam: Elseviers, 1954); *R Lawrence* and *R Litan*, 'The World Trading System After the Uruguay Round,' *Boston University International Law Journal* 8 (1991).

II. The WTO and Telecommunications Policy Reform

Telecom services are an essential input into the production of other goods and services. Producers depend increasingly on telecom services to deliver their output to end users. The internet, by leveraging the value of voice connectivity, suggests that the economic significance of networking is bound to increase substantially. Needless to say, access (connectivity) is only part of the equation. The availability of basic skills (digital literacy) and relevant content (localized in terms of languages and cultural traditions) are other critical requirements for countries to benefit fully from modern information infrastructures. In what follows, however, we will only focus on connectivity issues — specifically, the regulatory environment and the role that the WTO can play in helping countries promote market-oriented reforms.

Many developed and developing countries have been undertaking significant regulatory reforms that focus on fostering the competitive provision of telecom services. To a significant extent, these reforms have been driven by changes in technologies that have facilitated the provision of services at much lower cost and allowed competition to emerge in markets that were traditionally regarded as natural monopolies.

A key dimension with respect to telecom infrastructure and service provision is the contestability of markets, determined by the extent of liberalization and entry/exit regulation. This will determine how attractive a market is for investors. Moreover, allowing foreign providers to contest a market is an important source of new technology and know-how. The challenge for policymakers is to enhance domestic and foreign competition while ensuring that the need for regulation of service providers is satisfied. This requires that the case for liberalization be distinguished from the need for regulation or regulatory reform. Regulation to achieve efficiency and equity objectives should be in place and strengthened where necessary and should apply equally to domestic and foreign providers.

A. Possible roles for the WTO

What can and should the WTO do to be supportive in the reform process? The WTO potentially has three major functions: fostering liberalization (that is, increasing market access opportunities for foreign suppliers), facilitating convergence in regulatory regimes, and enhancing the credibility of policy reform by making specific commitments that are subject to binding dispute settlement procedures.

1. Fostering liberalization

Depending on local circumstances and political constellations, governments may face more or less opposition to reforms that aim at increasing competition on telecom markets. Although often supported by the manufacturing sector, which has an interest in having access to a wide array of efficiently produced services inputs, final consumers may oppose liberalization due to concerns about a reduction in geographical coverage. Labor unions may be concerned about the potential for large-scale layoffs, and those in society who have benefited from subsidized access to services may resist a change in the status quo that is expected to raise prices or restrict supply.

Thus, governments may be constrained in implementing reforms that would benefit society at large because of the opposition of politically powerful vested interests. International trade agreements offer a potential way for breaking domestic deadlocks by mobilizing groups to support reform. The traditional *raison d'être* of the GATT is that groups that would benefit from better access to export markets are induced to throw their weight behind import liberalization — i.e., fight the import-competing interests that benefit from protection. This reasoning is typically applied to goods trade, but is, in principle, equally relevant for services trade. One difference, however, is that for many countries, export interests in services are generally weaker than in goods industries. In OECD countries, for example, the ratio of exports to output is on average over six times less for services than for goods. In many instances, potentially tradable services are simply not traded at all across border; the barriers — whether natural or man-made — are prohibitive. As a result, the number and political weight of import-competing sectors may greatly exceed that of export-oriented service sectors interested in obtaining access to foreign markets.

However, export interests encompass the supply of services through commercial establishment in foreign markets. Indeed, fostered by growing domestic competition, major telecommunications operators around the world have aggressively pursued international expansion strategies by taking equity stakes in foreign service providers or entering foreign markets on a greenfield basis, as foreign governments have awarded competitive service licenses. On the import side, businesses increasingly demand access to competitively priced and high quality telecom service inputs if they are to be able to contest global markets. Indeed, those that liberalize first may generate a strategic advantage — creating further incentives to pursue domestic reforms. Opposition to reform has also been muted as the gross negative impact on labor employed in the

sector has been limited (given that foreign entrants will often use FDI as the entry mode and employ mostly nationals).

Although such dynamics will apply independent of the WTO — and have in fact underpinned telecom reform in many developed and developing countries — multilateral trade negotiations can be a useful mechanism to underpin reform processes by overcoming domestic political economy constraints.

2. Facilitating regulatory convergence

International agreements can also be helpful in providing focal points for regulatory reform, providing templates for domestic policy measures that are welfare enhancing. An example is supporting the implementation of pro-competitive regulatory regimes. This is particularly important in the case of network-type services such as telecoms, where there is a need to deal with problems of access to networks, interconnection, and universal service.

International disciplines on regulatory principles can also support the traditional exchange of market-access commitments described above. The lack of pro-competitive regulation (or the discriminatory application of regulatory measures) "behind the border" can forestall competition from new entrants in otherwise open markets. Thus, regulatory commitments may be regarded as necessary to ensure that market-access commitments are meaningful.

Regulatory convergence becomes particularly relevant in the context of "deep integration" efforts. The negotiations on basic telecommunications illustrate the potential of using multilateral trade agreements for such an objective. A key question then is to what extent this is necessary, and if so, how far to go and how to approach the required rule making.

3. Enforcement: credibility and commitment

The provision of network services like telecommunications requires highly-specific sunk investments into mostly non-redeployable assets. Investors' business plans are typically stretched out over long time periods (up to 10 or 15 years) and many operators expect to incur substantial losses in the first years of services operation. Given these characteristics, it is important that market liberalization programs are credible. An

important potential beneficial role multilateral agreements can play is to enhance the credibility of a government's economic policy stance, both with respect to liberalization and to regulatory commitments. This can be very important for countries where there is a history of policy reversal.

One reason for the reluctance of governments to lock in reform programs is a perceived need to protect the incumbent suppliers from immediate competition — either because of the infant industry type of argument or to facilitate "orderly exit". One reason for the failure of infant industry policies is an inability of a government to commit itself credibly to liberalize at some future date — either because it has a stake in the national firm's continued operation or because it is vulnerable to pressure from interest groups that benefit from protection. The GATS offers a potentially valuable mechanism to overcome the difficulty of making credible promises to liberalize by allowing commitments to provide market access and national treatment at a future date. A pre-commitment to liberalize can also instill a sense of urgency in domestic reform and in efforts to develop the necessary regulatory and supervision mechanisms.

However, it can be noted that the credibility impact of WTO commitments depends on the probability that foreign export interests will contest violations of an agreement. The credibility payoff for small countries therefore may be limited, as exporters in large nations may have little interest in "suing" such countries.[3]

B. Telecommunications under the WTO

Telecommunications services were split between basic and value-added services during the Uruguay Round. By the end of the round, most commitments had been made for value-added services only (such as electronic and voice mail or electronic data interchange), and not for basic voice, data transmission, mobile telephony or satellite services. Negotiations on basic telecommunications recommenced in May 1994 with a deadline of 30 April 1996. In the run-up to the deadline, negotiations were deadlocked, as the US was of the view that offers on the table were inadequate, in part because the required "critical mass" of membership (to prevent free riding) had not been achieved. Following an extension of the deadline, negotiations were finally concluded successfully in February 1997. The additional time allowed a number of developing

3 *B M Hoekman* and *P C Mavroidis,* 'WTO Dispute Settlement, Transparency and Surveillance,' *The World Economy* 23/4 (2000).

countries to improve their offers and the major players to hammer out difficulties related to differences in prevailing market structures.[4]

1. Liberalization

Although only few countries committed to open their sectors beyond their existing policy at the time the negotiations were concluded, the basic telecommunications agreement is noteworthy in the extent to which countries made commitments to engage in future liberalization. Many developing countries used it as a pre-commitment device — they bound themselves to introduce competition at precise future dates (Table 1). This reflected a recognition that liberalization was in their interest. Ongoing technological developments — the internet, e-commerce — played an important role in the changing attitude towards increasing competition in the telecom sector.

4 Technical assistance from a group of bilateral donors and multilateral organizations also played a role in promoting the greater participation of developing countries.

Table 1: Developing Country Pre-Commitments in Basic Telecommunications

Country	Commitment
Antigua & Barbuda	International voice telephony to be opened to competition as of 2012
Argentina	No restrictions as of 8 November 2000
Bolivia	No restrictions on long distance national and international telecom services as of 27 November 2001
Chile	Limits on competition in national long distance services for a period of four years starting on 27 August 1994
Grenada	Reserved for exclusive supply until 2006, no restrictions thereafter
Jamaica	Reserved for exclusive supply until September 2013, no restrictions thereafter
Trinidad & Tobago	Reserved for exclusive supply until 2010, no restrictions thereafter (no restrictions on fixed satellite services as of 2000)
Venezuela	No restrictions as of 27 November 2000
Cote d'Ivoire	Monopoly until 2005, no restrictions thereafter
Mauritius	Monopoly until 2004, no restrictions thereafter
Morocco	Monopoly until 2001, no restrictions thereafter
Senegal	Abolition of monopoly by 1 January 2007, monopoly to be reviewed in 2003
South Africa	Monopoly until December 2003, thereafter duopoly and consideration of more licenses
Tunisia	No restrictions on supply of local calls after 2003
Korea	As of 2001, maximum foreign equity share in facilities-based suppliers to rise from 33% to 49% (in the national supplier — Korea Telecom — from 20% to 33%); foreign ownership of domestic voice resale entities to be allowed in 1999, with maximum equity participation of 49%, to rise to 100% after 2001
Pakistan	Exclusivity on cross border supply of voice telephony to be eliminated by 2004, divestiture of 26% of national monopoly to a strategic investor, to be granted exclusive license for basic telephony for seven years.
Singapore	Competition of facilities-based telecom services to start in April 2000 with up to two additional licenses and periodic subsequent licenses thereafter
Thailand	Additional commitments for voice telephone and other services to be made in 2006, conditional upon the passage and coming into force of new legislation

Source: Adapted from A Mattoo, 'Developing Countries in the New Round of GATS Negotiations: Towards a Proactive Role,' *The World Economy* 23 (2000), 471-90.

2. Regulation

A key feature of the agreement that emerged was a "Reference Paper" setting out regulatory principles to which signatories may subscribe (by making so-called additional commitments in their schedules, as allowed by GATS Article XVIII). Over fifty members did so. The need for these principles — which draw on elements of the 1996 US Telecommunications Act — arose from a concern that dominant telecom operators might otherwise abuse their market position and restrict competition from new entrants.

The Reference Paper covers principles in the following six areas: competitive safeguards, interconnection, universal service, public availability of licensing criteria,

independent regulators, and the allocation and use of scarce resources. The provisions on competitive safeguards require members to prevent major suppliers from engaging in anti-competitive cross-subsidization and from abusing control over information. Arguably, some of the most significant obligations concern network interconnection, which must take place on non-discriminatory, transparent, and reasonable terms and at cost-oriented rates (among other obligations). The provisions regarding independent regulators require the regulatory body to be impartial, separate from, and not accountable to any service supplier.

To what degree do the Reference Paper's obligations bite? Can the Paper live up to its expectation of ensuring effective market access? On the one hand, the regulatory principles lack in many respects precision and appear to leave enough room for discretionary decision-making by national regulators. It seems difficult, for example, to derive far-reaching obligations from vague language such as "reasonable" terms of interconnection or "appropriate measures" to prevent abusive business practices. Similarly, the obligation to provide interconnection at cost-oriented rates can only be limited in scope, as no reference is made to a specific methodology or definition of network cost. Thus, taken at its face value, it would seem that the Reference Paper prevents only the most egregious departures from pro-competitive regulation.

On the other hand, two factors suggest that the Reference Paper's obligations have teeth. First, several signatories of the Agreement did not adopt the Reference Paper in full, but excluded certain provisions. Arguably, these countries were concerned that their existing regime would be inconsistent with the obligations set out in the Paper. Second, the principles have played a role in disputes between WTO members. Two disputes since the Agreement came into force (pertaining to interconnection prices charged by the dominant incumbents in Mexico and Japan) suggest that the prospect of WTO arbitration can contribute to the implementation of pro-competitive regulation.

It can be argued that the Reference Paper made a positive contribution to enhancing the credibility of commitments made. For example, it has frequently been suggested that, in fact, the major trading nations would not have been willing to conclude the Basic Telecoms Agreement without the regulatory principles. Although it is premature to reach a firm conclusion, the threat of WTO arbitration based on the violation of regulatory obligations may contribute to ensuring effective market access.

Has the Reference Paper also been helpful in supporting the implementation of pro-competitive regulatory regimes? As already pointed out, the lack of preciseness in the principles limits the extent of discipline that can be imposed on a signatory, and in part for good reasons. National regulations typically differ in important details across

nations. Moreover, regulatory harmonization is unlikely to be a desirable end in itself; flexibility in regulatory instruments is needed to satisfy preferences that differ across countries and may change over time. Thus, a careful compromise had to be struck between creating a secure trading regime and not encroaching on national sovereignty. It is unlikely that there are countries that implemented pro-competitive regulations because of perceptions that existing regimes were not compliant with the Reference Paper. Instead, the primary role of the paper is more likely to be one of supporting reformers in governments that seek to implement the principles in any event. Nonetheless, it can be argued that the Reference Paper sets a benchmark or yardstick against which regulatory regimes can be assessed. In some ways, the adoption of the Paper has changed the terms of the debate and may contribute to the implementation of national reform initiatives.

The experience in telecommunications to date suggests that the main emphasis of deeper integration through regulatory convergence has been on securing effective market access. Using the WTO mechanism to harmonize regulatory regimes and advance domestic reform in regulation may not necessarily be welfare-enhancing. However, such convergence is occurring among subsets of countries and has implications for developing countries and the WTO.

3. Enforcement and dispute settlements

As mentioned, there have been two disputes since the Agreement on Basic Telecoms came into force. These pertained to the interconnection prices charged by dominant incumbents in Mexico and Japan. In the case of Mexico, the US initiated WTO dispute settlement proceedings and reserved its right to press on with its case even after the dominant Mexican carrier agreed to a reduction in interconnection fees. In the case of Japan, the US threatened the initiation of a WTO complaint and, subsequently, Japan agreed to substantially lower interconnection charges. Although these two examples undoubtedly point to the relevance of the principles set out in the Reference Paper, one has to keep in mind that in both cases the lowering of interconnection rates was the immediate result of bilateral pressure applied by the United States. Moreover, the regulatory principles have not been critically tested in the sense that, so far, no WTO panel has arbitrated on the basis of the Reference Paper.

C. Moving forward in the GATS context

There is broad consensus that what is needed is the creation of incentives for developing countries to expand their commitments under the GATS. Given ongoing efforts in many countries to adopt a more market and pro-competitive policy stance, this should not be too difficult, although negotiating dynamics — the need for quid pro quos — will inevitably complicate progress. The incentive for developing countries to schedule both status quo and future reforms depends importantly on the value that is placed on such scheduling by reforming economies themselves and the "demandeur" countries who seek market-access guarantees. Many governments continue to maintain restrictive policies in the telecom area, and there is still huge scope for progress. Matters are less straightforward in the regulatory area, where there are a number of deeper integration challenges that confront negotiators. These can be very important from a market-access perspective, as domestic regulations can impede foreign entry altogether or raise the costs of entry significantly.

III. Deeper Integration: The Example of E-Commerce

Calls for deeper integration at the multilateral level have mounted in recent years. Such integration is sometimes held to be necessary to ensure "fair trade" or an equality of competitive opportunities for foreign and domestic firms. A key question is to identify the rationale for — and objectives behind — proposals for deeper integration on a specific issue in the WTO and determine what the payoff is relative to shallow integration, as in many areas — both old and new — there is still great scope for shallow integration (the elimination of discrimination). A corollary question is to determine whether the WTO is the appropriate forum to pursue deeper integration in those instances where a case for this exists. In the telecom/e-commerce context, these questions are highly relevant, in particular concerning the relative importance/weight that should be put on shallow as opposed to deeper integration.

Deeper integration is inherently more difficult to achieve than shallow integration. The economics of the issues are often ambiguous. In contrast to trade policy — where there are clear-cut policy recommendations that unambiguously increase global welfare — when it comes to regulation and market structure, there are few hard and fast rules of thumb that governments can rely on to ensure that trade agreements will enhance welfare. Preferences across societies will differ depending on local circumstances,

tastes, and conditions, resulting in differing demands for regulation. The type of intervention may also differ across jurisdictions depending on economic systems, the strength of administrative capacity and required institutions, and the level of development (income). It is also important to recognize that there are many different ways to pursue "deep integration" via multilateral cooperation. They can range from the pursuit of minimum standards of regulation within a specific agreement (such as the Reference Paper on Telecommunications under the GATS) to more ambitious efforts to harmonize regulatory regimes, as in the case of the EU. In many cases, specialized international bodies have been created to foster the required cooperation; in principle there may be no need to embed resulting cooperative arrangements into formal trade agreements. As is well known, one motivation for doing this is that trade sanctions are often regarded as an effective enforcement device. However, unless there is a clear link between the particular regulatory issue at hand and the contestability of (access to) markets, embedding regulatory disciplines into trade agreements (the WTO) is inappropriate. The debate around e-commerce illustrates the difficulties that arise in this area.

A. E-commerce

There are many working definitions of e-commerce. For the purposes of this study, e-commerce is considered to take place whenever a transaction completed over a computer-mediated network involves the transfer of ownership or rights to use goods or services.[5] Electronic marketplaces offer great potential to make trading easier and more efficient than ever. By 1991, the internet had around three million users worldwide. By the first half of 2000, there were more than 300 million users. E-commerce has also expanded dramatically. From almost zero in 1995, e-commerce transactions passed the $100 billion mark by 1999 and most analysts predict that they will amount to more than $1 trillion by 2003.[6]

Electronic commerce has the potential of changing the face of international trade, reducing the tyranny of distance, eliminating the need for middlemen and affecting the ability of firms to charge significant mark-ups over costs. Estimates of the cost savings

5 *T Mesenbourg, Measuring Electronic Business: Definitions, Underlying Concepts, and Measurement Plans* (US Bureau of Census, 1999), available at: http://www.census.gov/epcd/www/ebusines.htm.

6 *J Coppel*, 'E-Commerce: Impacts and Policy Challenges,' Economics Department Working Paper 252 (Paris: OECD, 2000).

that can be realized through business-to-business (B2B) e-commerce procurement are in the 15 to 25 percent range for many industries.[7] The importance of electronic commerce rests not in its current size but in the likely speed of its establishment as a significant vehicle for commerce and the potential for future growth.

From a WTO point of view, e-commerce is a vehicle for international trade in both goods and services. It involves a mix of telecommunications, information, financial, and transportation (e.g., express delivery) services. However, the products that are bought and sold may be digitized or tangible goods, or they may be services (access to databases, consulting, advice, and so forth). These products will often be protected through intellectual property rights. Thus, international e-commerce is affected by rules under the GATT, GATS, and TRIPS.

Starting in 1997, WTO members began to wrestle with the questions of if and how e-commerce should be dealt with in the WTO. What areas of the existing agreements needed clarifications and/or could benefit e-commerce expansion via additional commitments? How should we deal with deep integration issues (e.g., taxation, privacy, consumer protection) to ensure that they do not become a barrier to trade? Last but not least, should e-commerce-specific disciplines be negotiated?

B. Clarifications, new commitments and "deep integration" concerns

An important area for clarification of WTO rules with respect to e-commerce refers to the classification of products bought and sold. Should e-commerce be treated as a service and be subjected to the GATS rules, as favored by the EU? If so, should e-commerce be regarded as a mode 1 (cross-border trade) or mode 2 (movement of consumer) type of transaction? The US has argued that treating all e-commerce transactions as services creates the danger that policy regimes may become more restrictive than the status quo, because many WTO members have not made specific commitments on products that are traded electronically (such as software or database access). Conceptually, however, it is extremely difficult, if not impossible, to define what distinguishes goods from services — the valiant efforts of statisticians to make an unambiguous distinction have never borne fruit. From a practical point of view, the EU position may therefore prevail.

7 *C Mann* et al., *Global Electronic Commerce: A Policy Primer* (Washington DC: Institute for International Economics, 2000).

In the GATS schedule of commitments, many WTO members made more liberal commitments under mode 2 for service sectors than under mode 1, in large part because many did not perceive any interest in being restrictive on mode 2 (movement of the consumer) and did not associate this mode with e-commerce. However, it has been argued that if a person buys a product from a firm located in a foreign country through e-commerce, this is akin to the consumer physically moving to the location of the provider. The only difference is that the "movement" takes place by interacting with the server of the enterprise. The distinction between modes also has potential implications for enforcement of contracts. Under mode 2, presumably the legal regime of the provider applies in case of a dispute, whereas under mode 1 it may by the buyer's legal system that applies. Determining which jurisdiction applies is something that has not been addressed under the GATS and illustrates the inevitable "deep integration" nuances that e-commerce negotiations will bring to bear.

The most visible outcome of the debate on e-commerce in the WTO so far, however, was the decision at the 1998 WTO Ministerial that electronic delivery of digitized goods and services would be free from customs duties. This commitment was temporary, and one of the questions confronting members is whether to make this exemption permanent. No agreement on this could be reached at the 1999 Seattle Ministerial. Members could only come up with a draft agreement that the 1998 moratorium would be extended by another two years, but the legal status of this decision became unclear given the failure of the ministerial meeting.

The net effect of the ban on duties is to act as a subsidy to products that can be digitized, and therefore as a tax on transport services and producers who do not (cannot) use the internet as a mode of supply. At the margin, both customs and sales tax revenues will also fall (as sales taxes, even if formally applicable, are difficult to collect). There has been a vigorous debate on the merits of extending the ban on imposing duties on e-commerce (note that the ban does not extend to goods ordered over the net; these remain subject to tariffs). *Mattoo* argues that much of this debate is confused.[8] If a WTO member has made a commitment in a particular sector to provide national treatment, then all discriminatory taxes (including customs duties by definition) are already prohibited and so the ban adds nothing. Conversely, if a member has not made a national treatment commitment, it remains free to impose discriminatory internal taxes other than customs duties, so again the ban has little value. Based on such arguments, it

8 *A Mattoo,* 'Developing Countries in the New Round of GATS Negotiations: Towards a Proactive Role,' *The World Economy* 23 (2000).

seems reasonable to argue that the most effective route to ensure the liberalization of electronic commerce is to expand the GATS specific commitments.

Such a minimalist "shallow integration" approach does not address the many "deep integration" issues that are associated with e-commerce debates.[9] Accordingly, there are those who argue that unless specific disciplines for e-commerce are negotiated under the WTO, the potential for inadequate national regulations to constrain the global e-commerce expansion is quite significant. The difficulties in pursuing such a broad agenda, however, are well known. Some governments favor strong control and regulation; others opt for a more liberal, hands-off approach. Those in favor of government intervention argue that the internet can bring their citizens face to face with pornography, gambling, or fraud and note there is no reason why e-commerce should be exempt from taxation or the type of trade controls that apply to mail-order within and across national borders. Liberals argue that the internet has the potential of transforming the functioning of economies and that government intervention could have potentially serious detrimental consequences by slowing down the growth of networks and the pace of innovation. They also argue that new technologies increasingly offer solutions for internet users to protect themselves against undesired messages or fraud and that market forces will be more effective than government intervention in ensuring contract enforcement.

Table 2 presents an overview of the most prominent "deeper integration" issues and indicates the scope for international conflicts and the international agreements that have emerged on these issues over the past years. Most recent agreements have taken the form of non-binding guidelines. A notable exception is the creation of the WIPO domain name dispute resolution body, which provides holders of trademark rights with an administrative mechanism to challenge the bad-faith registration of internet domain names that correspond to those trademarks. So far, this dispute resolution mechanism has worked well, with over 3200 cases received by the body in 2000. The successful pursuit of "deeper integration" in this instance was facilitated by the fact that internet domain names were a radically new issue and involved a community where national borders have relatively little meaning. Forming consensus on issues where national systems are more entrenched (e.g., taxation, tort law, privacy legislation) is far more complicated. The WTO is unlikely to be a helpful forum in this context, as trade negotiations are politically more charged compared to the technical or procedural discussions that take place at specialized bodies, such as the ITU or WIPO. In addition,

9 For a review of these broader issues, see *Mann* et al..

as trade negotiations are driven primarily by market-access oriented motives, they may not lead to welfare-maximizing outcomes.

Table 2: Deeper Integration Issues Related to E-Commerce and Existing Agreements

Issue	Scope for international conflicts	Existing international agreements
Taxation	Jurisdictional arbitrage, enforcement problems	OECD Tax Framework Conditions
Protection of privacy, consumer protection, content rules (pornography, gambling, hate propaganda)	Different national approaches. Some countries prefer strict rules, others self-regulation.	OECD Guidelines for Consumer Protection and the Protection of Privacy.
Protection of intellectual property	Foreign infringement of national copyright laws, trademark-infringing domain name disputes	WIPO Copyright Treaty, WIPO Performance and Phonograms Treaty, WIPO domain name dispute resolution body
Legal liability, cybercrime (hacking, internet fraud)	Extra-territorial application of national laws	Council of Europe Cybercrime Treaty, Hague Convention (to be adopted)

Specialized bodies are generally a more appropriate forum for forging consensus on deeper integration. In practice of course this is what occurs. Governments and industries have pursued deeper integration in trade-related areas for centuries. Often this integration was independent of formal trade treaties or preferences. In early modern Europe, it was driven by the private sector:

> Merchants carried with them in long-distance trade codes of conduct, so that Pisan laws passed into the sea codes of Marseilles. Oleron and Lubeck gave laws to the North of Europe, Barcelona to the south of Europe, and from Italy came the legal principle of insurance and bills of exchange.[10]

International interconnection norms agreed under auspices of the ITU eliminated the need for telegrams to be printed at each border post, walked across, and retyped.[11] The Radiotelegraph Union aimed to prevent a global radio monopoly by requiring interconnection across different technologies.

10 *D North, Institutions, Institutional Change and Economic Performance* (Cambridge: Cambridge University Press, 1990), p. 127.

11 *C Murphy, International Organization and Industrial Change: Global Governance Since 1850* (New York: Oxford University Press, 1994).

The need for deeper integration arises especially if there are network externalities or economies of scale. However, where possible, competition between regulatory regimes is to be preferred over harmonization, as this allows for differences in preferences and economic conditions. If necessary, harmonization should be limited to the adoption of minimum standards that comply with international norms if these exist. If they do not, specialized bodies with the required competence should be used to develop common norms.

C. Minimizing discrimination to maximize the benefits for deeper integration

Mutual recognition or harmonization-based policy integration can result in effective discrimination against outsiders. What matters, then, is whether they can be "recognized" in turn or have the ability to attain the standards that are imposed. The principles of open access and conditional MFN can be applied to third parties seeking to join the "club." If a country meets the "minimum conditions" for membership, it should be able to participate in a policy integration initiative. Introducing such a transitivity rule in the WTO could help prevent the creep of discrimination: if A and B (and B and C) accept each other's regulatory regimes, it should be automatic for A and C to apply this to each other's norms as well. The more open "insiders" are to efforts by nonmembers to participate in policy integration, and the more they rely on international standards that have been set through mechanisms in which all stakeholders have a voice, the less worrisome deeper integration will be.

This raises a number of issues. Is harmonization required? If so, how is the common standard determined? Finally, are all countries able to adopt the common standard — in particular, are the costs of adoption distributed equitable? In many cases, harmonization is not required in order to ensure access to markets; all that is necessary is to accept regulatory competition. For example, jurisdictions may have very differing approaches to taxation and privacy regulations. One country may restrict the exchange of personal data and seek to tax internet transactions while another may have a more lax approach to privacy — leaving it to consumers to decide whether to allow their data to be used by third parties, and only requiring that consumers be told that data may be sold — and rely on other tax bases for revenue. Such differences will have implications for the incentives of firms to locate in jurisdictions and to provide services, but do not provide a strong case for harmonization. Instead, they will give rise to regulatory competition,

with the strength of regulation differing across countries and consumers accepting the resulting implications as far as the supply of services is concerned.

The problem of course is that many governments are unwilling to accept such competition and seek to defend their norms. One way to do this is through harmonization — seeking to impose national (or regional) standards. One observes such attempts in the areas of both taxation and privacy rules. Thus, the EU has been very resistant to any relaxation of European privacy regulation, forcing the US to negotiate a special arrangement under which US-based firms guarantee not to violate such norms when engaging in transactions with EU consumers. The problem with such outcomes is that such deals are unlikely to be available to developing countries, creating potential for de facto discrimination. It is noteworthy in this regard that neither the US nor the EU has concluded MRAs with developing countries in the area of product standards and conformity assessment.[12] Developing countries may be forced to harmonize to allow trade to occur. However, attaining stringent standards may be very costly for developing countries, requiring major investments in infrastructure, software, and training. Special efforts will be required to ensure that policy integration does not perpetuate or increase discrimination.

What are the implications for the WTO? First, for the WTO to be fully supportive of a rapid expansion in international trade in telecom-intensive services; most important, it is to expand the coverage of specific commitments under the GATS. These entail shallow integration — the elimination of discrimination (committing to the national treatment rule) and allowing foreign providers to enter (market access). Such commitments must pertain to both the internet and telecommunications 'backbone' services as well as the financial services that are critical to allow efficient payment for e-commerce transactions, and the international logistics that are a vital element of delivery of goods that cannot be digitized (distribution services). Second, as far as deeper integration is concerned, much of the action must occur outside the WTO — insofar as there is a good case for regulatory convergence, this is something that should be explored and addressed in specialized forums that have the appropriate expertise. The main role of the WTO should be to encourage such efforts and to maximize the scope for competition between regulatory regimes in instances where multilateral agreement in specialized forums has not yet emerged. One vital task for the WTO is to monitor agreements between members to deal with regulatory conflicts in ways that imply discrimination

12 *B Hoekman* and *M Kostecki*, *The Political Economy of the World Trading System* (Oxford: Oxford University Press, 2001).

against third parties. The agreement between the US and the EU on data privacy is an example.

IV. Concluding Remarks

There is widespread recognition among governments and civil society that the pursuit of regulatory reforms in the telecom area can have large payoffs. In this respect the political context today is quite different from that prevailing in 1986 when the Uruguay Round was launched. Opposition to liberalization certainly exists in many countries, and nations differ on the desirable modalities and speed with which to pursue reforms. There are also valid concerns regarding the need to put in place the appropriate regulatory policies and strengthen regulatory institutions before certain types of liberalization are undertaken. Yet the thrust of policy in the majority of nations is towards a more market-oriented stance, as is reflected in the widespread privatization of telecom operators and licensing of new entrants. The success of the basic telecom sectoral talks was largely due to the fact that most of the governments involved were convinced of the need to pursue regulatory reforms in these sectors, including the liberalization and elimination of entry barriers. This was a precondition for agreement to materialize — it was clear that the associated regulatory reforms did not go much beyond what had already been accomplished or decided in the national context. That said, there is still very significant scope for WTO members to use the traditional mercantilist dynamics of the negotiating process to achieve further liberalization of access to telecom and related markets.

In the area of e-commerce and related telecom-intensive services, consensus with respect to proper regulatory policies and the role of trade agreements in promoting them is still forming. This in part reflects the novelty of the issues addressed, but also is related to the fact that many of the relevant issues can only be properly addressed in the context of a “deep-integration” agenda. For developing countries, participation in these debates is important to ensure that their concerns are properly taken into account. Most of the benefits to be derived from participation in such a process, however, can be pursued in the context of the existing institutional framework of multilateral agreements rather than by developing a “deep integration” framework in the WTO dedicated to e-commerce. The clarification of the use of existing multilateral disciplines to e-commerce and the expansion of the scope of liberalization commitments under the GATS should be the main WTO priorities at this stage. Much of the deep integration

agenda can and should be pursued outside the WTO framework, with specialized bodies taking the lead. Seeking to address the outstanding deeper integration agenda in the WTO setting has the potential to slow down the needed development of global norms and the process of convergence of national regulatory regimes. The primary role of the WTO is to expand the scope for competition, both on product markets and in the "market for regulation." Regulatory competition is the bedrock underlying the national treatment rule. In those instances where consensus can be achieved on international regulatory standards, whether or not this is embedded into the WTO, a major task of the institution should be to defend the MFN principle. This is even more the case in instances where no such consensus can be determined.

References

Hoekman, B. and *M. Kostecki*. 2001. *The Political Economy of the World Trading System* (Oxford: Oxford University Press).

Lawrence, Robert and *Robert Litan*. 1990. "The World Trading System After the Uruguay Round," *Boston University International Law Journal*, 8:247-76.

Mann, C., Eckert, S. and *Knight, S.* 2000. *Global Electronic Commerce: A Policy Primer* (Washington DC: Institute for International Economics).

Mattoo, Aaditya. 2000. "Developing Countries in the New Round of GATS Negotiations: Towards a Proactive Role," *The World Economy*, 23:471-90.

Murphy, Craig. 1994. *International Organization and Industrial Change: Global Governance Since 1850* (New York: Oxford University Press).

North, Douglass. 1990. *Institutions, Institutional Change and Economic Performance.* (Cambridge: Cambridge University Press).

Tinbergen, Jan. 1954. International Economic Integration. Amsterdam: Elseviers.

UNCTAD and World Bank. 1994. *Liberalizing International Transactions in Services: A Handbook* (Geneva: United Nations).