A revised version of this paper was published as

Drake, William J., and Kalypso Nicolaïdis. 2000. "Global Electronic Commerce and GATS: The 'Millennium Round' and Beyond." In *GATS 2000: New Directions in Services Trade Liberalization,* edited by Pierre Sauve and Robert M. Stern, 399-437. Washington DC: The Brookings Institution Press.

Global Electronic Commerce and GATS: The Millennium Round and Beyond

William J. Drake and Kalypso Nicolaidis

We would like to thank Virginia Haufler, Michiko Hayashi, Pierre Sauve, Rachel Thompson, Lee Tuthill, and Dimitri Ypsilanti for their helpful comments on an earlier version of this essay.

Of all the trends sweeping the international trade environment, none has engendered more discussion (and hype) than the rapid expansion of global electronic commerce (GEC). The Secretariat of the World Trade Organization (WTO) and the U.S. Department of Commerce predict that GEC---the production, advertising, sale and distribution of products via electronic networks---will soon will reach $300 billion.[1] Some analysts would argue that this is a conservative estimate, but either way a significant amount of money is involved, and the effects of GEC activity on companies, markets, and economies around the world is substantial.

GEC is not a new phenomenon. Businesses have long employed telecommunications networks to produce and market goods and services and have traded them internationally by telephone, fax, and so on. Moreover, the explosion since the 1970s of business data communications via leased circuits and later, private networks, significantly increased the commercial activity conducted over networks in a wide variety of sectors. What is new, though, and is driving the explosion of GEC is the Internet. The rapid globalization, commercialization, and mass popularization of the Internet since 1991 has transformed completely the information and communications technology (ICT) environment, which in turn is having a profound effect on all realms of global economic activity that rely on ICT goods and services. Indeed, the Internet is so central to GEC that is has become common---albeit misleadingly---to use the term "global electronic commerce" as a synonym for Internet commerce (pity the forgotten telephone).

The purpose of this chapter is to examine some of the issues that GEC, and especially Internet commerce, raise for the General Agreement on Trade in Services (GATS) in the so-called Millennium Round and beyond. To be sure, GEC is not a sector and it is not confined to services; agricultural, manufactured, and intangible goods are

also traded electronically, so there are implications for GATT as well. Further, the growth of GEC raises interesting questions with respect to the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) as well as for other WTO instruments and issues. But the focus of this book is on GATS, so an assessment of these other aspects will have to wait for another occasion.

We argue that GATS may need to be reformed in important respects to more clearly apply to trade in GEC services. This trade includes electronic transmission services (telecommunications and Internet access), content services (banking, entertainment, and so on, where the substantive service is directly delivered over a network), and distribution services (in which goods and services are ordered electronically but delivered in nonelectric form).

In arguing for GATS reform, we are mindful of two constraints. First, from a technical standpoint, it may be that not all gaps or ambiguities in GATS coverage need to or can be resolved in the next trade round. Its explosive growth notwithstanding, Internet-based GEC is still a new phenomenon. The technology is changing rapidly, and transactional dynamics, business models, and national policies are still in flux. Under these circumstances it may be difficult for WTO negotiators to devise rules that promote trade and remain appropriate in the years ahead. Moreover, WTO members will confront many other difficult issues during the next round, including moving beyond the standstill commitments of the Uruguay Round to roll back trade restrictions in line with the existing GATS framework.

Second, from a political standpoint, some of the ideas we offer run counter to the prevailing political winds. Indeed, while members' negotiating strategies are still taking shape, both the United States and the European Union (EU) could find points to disagree with in our assessment. This is inevitable because we have attempted to evaluate the issues in terms of strengthening the multilateral system, not in terms of promoting players' interests or identifying opportunities to cut a deal. In consequence, some of our suggestions will probably be ignored, at least in the coming round. We nevertheless hope that by outlining various challenges we can contribute to the debate, which is only in its early stages, about how the trade system will have to adapt to GEC in the years ahead. Thus the "beyond" in this chapter's title is a recognition that some problems we identify may have to wait until the round after next, if then.

The chapter is organized as follows. The first section briefly discusses the WTO's Global Electronic Commerce Work Program and then outlines four non-mutually exclusive options for dealing with the various services issues associated with GEC. The sections that follow take up the items explored in the work program with respect to GATS. The second section addresses the definitional and classification problems raised by the electronic network environment. The third examines the applicability to GEC of the core GATS disciplines concerning market access, regulation, and the like. Finally, the fourth section assesses two additional questions of particular interest to developing countries: whether to apply customs duties to electronic transmissions and how to increase their participation in GEC.

The Institutionalization of Global Electronic Commerce in the WTO

This section briefly discusses the WTO's Global Electronic Commerce work program and then outlines four options (not mutually exclusive) for dealing with the various services issues associated with GEC.

The Global Electronic Commerce Work Program

In May 1998 the WTO's second ministerial conference at Geneva adopted a declaration on GEC. The declaration had two major components. The first pertained to the application of customs duties to electronic transmissions across borders. To date, governments have not attempted to treat such transmissions---via telephone, fax, or data communications services---as imports subject to border duties. With the rapid growth of the Internet the United States has argued that breaking with that tradition would send the wrong signal and risk stifling GEC early in its development. As such, it proposed a standstill on the application of new duties until the next ministerial meeting, an initiative that other industrialized countries supported. Many developing countries were unsure as to whether this was in their interests, but because GEC over the Internet is for them a nascent and still negligible phenomenon, they were willing to go along with a temporary ban.

The 1998 ministerial meeting approved a Declaration on Global Electronic Commerce stating that "we also declare that Members will continue their current practice of not imposing customs duties on electronic transmissions."[2] Governments remained free to levy duties on goods ordered over the Internet and shipped through conventional means, but they were to defer doing this with products shipped electronically over networks. The moratorium is to be reviewed at the Seattle ministerial meeting, where a decision will be made on its extension or codification as a permanent ban.

Second, the declaration called on the WTO's General Council to adopt at its September 1998 session "a comprehensive work programme to examine all trade-related issues relating to global electronic commerce." The council was to produce a report on the progress of work done under this program, including any recommendations for action, for consideration at the Seattle meeting.

Adopted on September 25, the work program laid out items to be examined by WTO organs. The agenda was not designed to be a far-reaching exploration of every trade-related issue associated with GEC, but instead gave priority to assessing the adequacy of WTO instruments. The Council for Trade in Goods was to consider seven issues with respect to GATT's coverage of GEC: market access, valuation issues, import licensing procedures, customs duties, standards, rules of origin, and classification issues. The Council for TRIPs was to address the protection and enforcement of copyright and related rights, trademarks, and new technologies and access to technologies. The Committee on Trade and Development was to examine the effects of GEC on the trade

and economic prospects of developing countries, especially their small and medium-sized enterprises; the challenge of increasing the participation of developing countries as exporters in GEC; the use of information technology in the integration of developing countries in the multilateral trading system; the development implications of GEC's potential impact on traditional means of distributing physical goods; and the financial implications for developing countries.

The Council for Trade in Services was given twelve items to consider with respect to GATS's current and future application to GEC services: scope, including mode of supply (Article I); most favored nation, or MFN (Article II); transparency (Article III); increasing the participation of developing countries (Article IV); domestic regulation, standards, and recognition (Articles VI and VII); competition (Articles VIII and IX); the protection of privacy and public morals and the prevention of fraud (Article XIV); market access commitments on the electronic supply of services, including commitments on basic and value-added telecommunications services and distribution services (Article XVI); national treatment (Article XVII); access to and use of public telecommunications transport networks and services (the Annex on Telecommunications); customs duties; and classification issues.[3] The sections following address each of these subjects.

Dealing with Global Electronic Commerce in GATS

The various bodies' interim reports to the General Council in the spring of 1999 suggest that there has been considerable progress in thinking through the often complex issues raised by GEC. Governments are collectively learning about conceptual issues and their own interests, a process that has similarities to the debates about trade in services that occurred before and during the Uruguay Round.[4] Some of the questions that have been explored clearly do not require any particular sort of action in the coming round. But what about those matters on which the merits of action are at least debatable? How should WTO negotiators proceed?

We outline four institutional approaches to dealing with GATS's application to GEC services. To reiterate, these are not mutually exclusive options: no one approach would provide a satisfactory response to all the outstanding issues. Rather it is a matter of mix and match, with some options being well suited to some issues and others to others. In our view the optimal outcome in this round would comprise a blending of all four.

Rely on the Existing GATS Framework. A first option is simply to rely on the disciplines set out in the current GATS. Any clarification of their application to GEC's trade in services aspects would be pursued in two contexts. First, the issues might be sorted out in the scheduling exercise, with solutions being built into the national commitments. Second, the dispute settlement mechanism would be important. Decisions interpreting how the principles apply to GEC would be made case by case, and their accumulation would help to provide order and stability in the near term and to clarify any gaps in the

disciplines that could be filled in, with the benefit of experience, in an ensuing round of negotiations.

For Millennium Round negotiators this is the easiest solution. Sticking with the status quo would allow governments to focus their energies on broadening, deepening, and implementing existing national commitments under GATS. This approach is also appealing for governments and other stakeholders who worry that the pace of technological development will render obsolete or counterproductive any new trade rules negotiators devise, especially if they are unduly restrictive. In this view it would be better to let the Internet mature, business practices stabilize, and any trade problems become manifest before attempting to establish tailored disciplines in GATS or other WTO instruments.

Others, however, might argue that the easiest solution is not necessarily the best and that the current GATS framework does not provide enough clarity and precision to deal with the unique properties of Internet-based commerce between now and the trade round after next. If this is true, when conflicts arise the dispute settlements mechanism might be placed in the position of having to legislate, potentially on very sensitive issues, rather than interpret existing agreements. Of course, the panels could always exercise restraint and return a "can't rule" verdict when GATS does not provide adequate guidance, but that would hardly be an optimal solution in cases where WTO rules really are needed to promote trade or legitimate regulatory objectives. In this view it would be better for WTO members to express their collective intent through a negotiated agreement on how GEC should be governed, ideally one that is flexible enough to accommodate a rapidly changing environment.

Revise the GATS Principles. A second option is to revise the GATS principles to address the most pressing unanswered questions raised by GEC. If there are situations where the general obligations and disciplines (GODs) and other provisions are too broadly stated to be clear about Internet-based transactions or are manifestly out of synchronization with them, negotiators could do some tinkering with the wording or even add to the Articles of Agreement.

If done correctly, selective revisions of GATS might solve any problems created by a mismatch between the rules and the game being played. These revisions might help mitigate any concerns about dispute settlement panels not having enough guidance to render well-grounded decisions. After all, the realignment of multilateral frameworks and changing operational environments is not uncommon in other domains of international cooperation, and in principle it could also be pursued in the WTO.

However, this road could also lead to problems. Technically, it could be difficult to balance the needs to address ambiguities regarding GEC and to avoid overly detailed language that is ill suited to other contexts. The GODs are broadly framed to apply across sectors and modes of delivery. Loading them up with provisions geared toward particular kinds of transactions might be a mistake. And politically, launching a new debate about the fundamentals of the agreement could open a Pandora's box of

competing objectives and demands. Thus given that GATS is only five years old, is replete with shallow stand-still commitments, and remains largely untested, one could argue that it would be better to leave the principles be for the time being.

Add a New GEC Instrument to GATS. A third option is to add a new instrument to GATS that would deal with the unique properties of the network environment. It could take one of two forms. First, negotiators could establish an annex on GEC alongside the other GATS annexes. A minimalist version might entail broad principles that are specific to Internet-based and other forms of GEC, such as a permanent ban on the applications of customs duties to electronic transmissions, strengthened transparency requirements, guidelines for determining applicable national jurisdiction in the event of regulatory disputes, and so on. A more ambitious version might involve detailed rules on how GATS principles apply in potentially ambiguous circumstances.

An annex could provide a more targeted, coherent, and readily understood set of rights and obligations than would be achieved by selectively revising current GATS principles. However, some might argue that attempting to develop an annex would invite governments to add unnecessary provisions or that the result would be to ghettoize GEC issues as being somehow apart from the rest of the framework.

Alternatively, negotiators could create a GEC reference paper akin to the one agreed upon in 1997 for basic telecommunications. Such a paper could contain the same substantive principles and rules that an annex would have; the difference would simply be that governments would choose whether to be bound by the new disciplines in the additional commitments sections of their national schedules.

Clearly, an annex is the stronger and more demanding of these two forms. All WTO members could be required to apply its provisions to all their scheduled commitments. A reference paper would allow governments at different stages of development or with varying degrees of interest in openness to choose their level of commitment at the outset in the hope that they would choose full participation later on. Such differences in obligations might be a blessing in terms of facilitating negotiations and bringing governments on board at a comfortable pace, but they might also be a curse in the near term because they would not promote an open and global system subject to consistent norms.

Pursue Horizontal Reforms of WTO Instruments. A fourth option would be to look beyond GATS and focus on horizontal reforms that cut across the major WTO instruments. There is growing concern that GATS, GATT, and TRIPS are unduly fragmented because they involve varying levels of liberalization, sometimes inconsistent commitments on related transactions, conceptual gaps, and other disparities.[5] Such problems may take on particular urgency with respect to certain aspects of GEC, especially the issues of classifying digital products and promoting technological neutrality (ensuring that products are treated the same regardless of the technological means used to deliver them). Thus negotiators could attempt to devise harmonized

solutions across instruments in certain cases or, much more ambitiously, address any relevant GEC issues in the context of a horizontal revamping of WTO instruments.

From a technical standpoint, a horizontal approach to selected GEC problems, or even to the WTO architecture, may well make sense. Developing coherent disciplines that cut across goods, services, investment, and intellectual property issues has a particular appeal in the ICT environment where technological change has frequently rendered obsolete artificial delineations between systems and services that were devised by governments for regulatory purposes. In the future, one can expect instances in which the lack of technological neutrality and the presence of differing obligations across goods and services generate conflict---the Canada-U.S. magazines case may be a harbinger in this regard.[6]

But politically it could prove difficult to develop horizontal disciplines in the next round. Making the existing GATS work is challenging enough, and filling in its potential gaps with respect to issues such as GEC would be even more demanding. To pursue cross-instrument reforms would be harder still in some respects, and it is unclear whether negotiators would be able to invest the energy needed to pursue a macroeconomic restructuring of WTO instruments this time around. Nevertheless, even if broad revamping is impossible, it may turn out that in a few instances a horizontal approach is the only logical solution to GEC issues.

Definitions and Classifications

We now turn to those aspects of the WTO's GEC work program relevant to GATS. We start with two questions related to definition and classification. How should we distinguish between goods and services and thus GATT and GATS jurisdiction in an era where both goods and services increasingly cross borders in digital form? How should GEC be classified within GATS itself?

Classifying between GATS and GATT

As was recognized during the Uruguay Round, it is sometimes difficult to distinguish clearly between goods and services.[7] The boundary gets especially fuzzy when the products take the form of digital information. The rapid growth of GEC raises this problem anew and with increased urgency. International trade in such products could expand significantly in the years ahead, especially as the next generation of Internet infrastructure is created, but market access commitments will be needed to establish a facilitating environment. Under what instrument should commitments be made? Are digital information products services subject to GATS or goods subject to GATT?

Certainly, a great deal of global economic commerce unambiguously consists of services. But how do we classify products normally recognized as goods---books, magazines, and software---when they are delivered or downloaded in digital form and

then embodied in a tangible medium or are simply stored on a computer? What about television programs, movies, and music? Should they all be treated as services? Alternatively, should they be considered as goods if they are embodied in a physical medium such as videotapes or compact discs but as services when they are supplied and consumed simultaneously rather than being stored?

This problem has become a political issue on which governments and international businesses are at times divided. The European Commission argues that all transmissions of digital products constitute services and fall under the scope of GATS. In addition to presumably being convinced of this on the technical merits, the commission has some other factors to consider. For example, the "all services" approach is embodied in the EU's single market agenda, and the EU is, of course, keen to ensure consistency between its internal reforms and its WTO commitments.

Moreover, the European Union excluded audio-visual services from its liberalization commitments in the Uruguay Round at the urging of various national ministries of culture. A classification that could result in television programs, movies, and music being treated as goods would allow foreign suppliers to operate under GATT rules and bypass this carve-out under GATS. Particularly with future services negotiations falling under mixed rather than exclusive EU competence, France's dogged insistence on the point is certainly a constraint. Further, a services classification would ensure that EU policies on privacy protection and so on apply to the supply of digital products. And given that GATT is stricter on quantitative limitations and that its market access and national treatment principles are GODs rather than negotiated specific commitments as in GATS, acknowledging that digital products can be goods may be perceived as a recipe for a flood of imports from the dominant supplier of such items---the United States.

Predictably, the U.S. government has raised an eyebrow about the European position and has suggested that "given the broader reach of WTO disciplines accorded by the GATT . . . there may be an advantage to a GATT versus GATS approach to such products which could provide for a more trade-liberalizing outcome for electronic commerce."[8] The business community appears divided: for example, while some in the U.S. software industry argue that their offerings must be treated as goods, others in the private sector maintain that all electronically transmitted products should be classified as services. The Alliance for Global Business and the International Chamber of Commerce have remained neutral thus far and have called for further study of the matter.

The WTO Secretariat is of course neutral but has prepared a background note that leans toward an all-services classification. One may speculate as to whether there are organizational reasons for this interpretation, but what really matters is the reasoning. The secretariat argues that the only issue is the character and treatment of electronic transmission itself. "What is done with the information after downloading is another matter. If hard copies are produced, whether legally or not, this is a manufacturing process resulting in the production of goods, into which the electronic transmission could be seen as a services input."[9] Presumably, when a program is downloaded, what is sold is

(at least in part) the electronic transmission itself. But what consumers are buying from Disney is Mickey Mouse, not an electronic transmission, which is incidental to the transaction.

Certainly, it is not obvious that there is an intrinsic difference between downloaded music or movies and CDs or videotapes bought at a store. Moreover, newspapers, CDs, and so on have long been manufactured through a process involving the international transmission of data over private networks to production facilities. If transmission to a printing company is part of a trade in goods transaction, why would transmission to an individual consumer be trade in services? It would seem that a good has been sold irrespective of whether it was intangible on delivery or of who made it tangible afterwards.

There are some ways to proceed. First, negotiators could leave it to dispute settlement panels to decide which products are goods and which are services. In our view it would be better for the panels to be used to interpret WTO members' collective intent as expressed in WTO instruments than to force governments to legislate on such fundamental issues because governments cannot reach agreement, especially insofar as goods and services are not defined in the instruments. Second, negotiators could establish a new category of "hybrids" for products that have the properties of both goods and services. This might seem to be the most sound approach conceptually, and it could contribute to promoting the horizontal consistency of WTO instruments. But it might also add unneeded complexity, risk undermining the individual coherence of both GATS and GATT, and make bargaining more difficult. Third, one could argue, as Indonesia and Singapore have suggested, that such products "be simply considered as trade in intellectual property rights and not be classified as a good or a service."[10] But this may be fudging the issue, and given the nature of the TRIPs agreement, it would not seem to contribute heavily to the cause of trade liberalization.

By default, then, the fourth and most difficult option seems unavoidable: negotiators should define and agree on clear criteria differentiating goods from services. They may need to tackle issues of consistency between GATS and GATT in the next round anyway, so sorting out this issue seems an obvious starting point. In effect, this is a question of technological neutrality between goods and services and not only within services.

In our view an operational definition must include both physical and contractual considerations. Two criteria that may be relevant are that digital products can be categorized as goods if they become locally stored and transferable between buyers. "Locally stored" means that the product is downloaded onto a physical medium. It need not take on a tangible form: a magazine, CD, or movie can be downloaded onto a computer and controlled by the consumer without any involvement by the producer and without making a separately packaged hard copy. But even this simple distinction raises problems. For example, companies are developing the means to transmit on-line movies that can remain on a consumer's hard drive either for a few days as a rental or permanently as a purchase.

"Transferable" means that the value of the product can be preserved independently of the initial consumer and transferred to another consumer without the intervention of the producer. An airline ticket is a part of a service that is bound to a specific person unless and until the seller transfers it to another. An architect's drawing or a teacher's comments on a paper in a long distance course are services that are intrinsically bound to the input of the buyer. But downloaded instructions for do-it-yourself learning or textbooks would not be services under the definition. This criterion does not reserve the feature of customization for services: a CD can be downloaded in a customized form and still be of value to another customer. It is still off the shelf in that the initial customization is not absolutely specific to a given customer and that the producer need not intervene again in the customization process.

In short, the definition that we suggest is that a product delivered electronically must be considered as a good if it is locally stored and transferable between buyers, that is if its function and contractual value become independent from the intervention of the supplier at the time of transaction.

The political problem is that classifying such arrays of digital bits as goods would fail to address European concerns that audiovisual products are part of national culture and ought not to be treated in the same way as classic goods. Other governments would agree to a solution involving a cultural exception for both goods and services, but this seems unlikely. The EU may, however, be less concerned about music, games, software, news, and the like, so there could be room for at least some progress. In any event, clarification of the boundary could be effected through several of the institutional options we have listed.

Classifying within GATS

Related issues concern the classification of GEC services and their supply within GATS. Article I (Scope and Definition) specifies that GATS covers any service in any sector except those supplied in the exercise of government authority, and that its disciplines apply to measures affecting trade in services that are taken by central, regional, or local governments and authorities as well as by nongovernmental bodies exercising authority delegated by such governments. Moreover, trade in services is defined as the supply of services (a) from the territory of one member into the territory of another member (cross-border); (b) in the territory of one member to the service consumer of any other member (consumption abroad); (c) by a service supplier of one member through commercial presence in the territory of another member; and (d) by a service supplier or one member through the presence of a natural person in the territory of another member. This formulation can cover all services relevant to GEC. And indeed, as the WTO's GEC report points out, a wide range of e-commerce services are already covered by existing commitments.[11]

At least three interesting categories of questions arise. First, there are a number of services associated with GEC that have been developed since the Uruguay Round. It is

not entirely clear whether existing commitments in more generically defined sectors automatically extend to them. For example, as the United States has asked, "do Web-hosting services, electronic authentication services, or data 'push' services fall under any traditional categories such as value-added services or data processing, or would more explicit commitments provide valuable certainty for the provision of these services?"[12] Some WTO members also wonder whether the activities of firms that administer and assign Internet domain names and IP addresses are covered as "measures" subject to such GATS disciplines as MFN and transparency, or whether they should be explicitly covered to the extent that they can be said to occur under authority delegated by governments.

Moreover, the Internet allows for a great deal of bundling between sectors. In these circumstances it is not entirely clear what services ought to be bound: only the "primary" services or any associated content services as well? In the same vein, should back-office services such as payment and encryption services be classified separately or as an integral part of each sector?[13] When services are intrinsically bundled, should concessions and access rights also be bundled? WTO negotiators may need to sort these and related issues out while scheduling commitments.

Second, discussions in the course of the work program have emphasized that GEC can be involved in all four modes of delivery. Some observers are wondering whether this raises any questions about existing commitments on mode 3 and mode 4. If a member has agreed to allow market entry via commercial presence or the movement of natural persons, do the suppliers automatically have a right to provide electronic services within the member's territory? Some clarification during the scheduling process may be required here as well.

Third, as experience in the financial sector has already demonstrated, GEC raises a dilemma about the boundary between modes 1 and 2. With the mass popularization of the Internet, millions of customers can now "virtually visit" a foreign country and import services, so the question of whether the service is being delivered within or outside the territory of the consumer gets blurry. Although the question is interesting, the practical consequences are more pressing. As the WTO Secretariat notes,

> There is no operational need, in the administration of GATS, to classify transactions according to the modes of supply, though it may be interesting to do so for statistical purposes. The real function of the modes is to categorize commitments in national schedules. The question of the mode under which a transaction takes place only becomes important if there is disagreement about the legitimacy of a measure taken by a Member affecting the transaction, in which case the measure would be judged against the Member's commitments.[14]

Not surprisingly, there is a political dimension to this issue. In the Uruguay Round the commitments undertaken under mode 1 were often limited, in part because many governments preferred that suppliers enter their markets through commercial presence. Mode 2 commitments tended to be stronger, although most governments were

probably not assuming they applied to electronic transactions when they were made. The United States, which is the leading exporter of GEC services, has expressed interest in the idea that mode 2 commitments are applicable, but some governments appear reluctant to embrace this interpretation.

Aside from its implications for the scheduling of commitments, the boundary problem also raises the problem of determining which nation's legal and regulatory jurisdiction applies to a given transaction. In general, and pending exceptions, if a transaction is classified under mode 1, the jurisdiction of the buyer applies; if a transaction is classified under mode 2, the jurisdiction of the seller applies. In the latter case, by "moving" to the seller's territory the buyer has willingly put himself under the seller's home jurisdiction. Determining the applicable jurisdiction for remote transactions is a key problem to sort out, especially because the solution chosen will bear on consumer protection and other important matters.

There are at least three choices. First, some observers have suggested the negotiators might be able to sidestep the problem by simply listing identical commitments on both modes 1 and 2. But this would be an ugly solution and would not resolve the jurisdictional dimension with any clarity. Second, in one of his chapters in this book, Geza Feketekuty has suggested that consideration be given to adding a new, fifth mode of supply for the Internet. The reasoning is clear, but this approach arguably risks ghettoizing GEC somewhat, and there might be problems in defining the boundaries between mode 1 and the new mode.

The third option is for negotiators to define an unambiguous criteria for distinguishing between modes 1 and 2. A simple solution would be to amend Article I by specifying that mode 2 involves the physical presence of the person being serviced in another member's territory. Some may argue that this is actually too simple; for example, what if a person's blood or tissue is sent abroad for testing? Is this not the movement of a person? It seems to us that what is moving here is simply data, and that if the person remains at home for diagnosis and treatment, it is a definite mode 1 scenario. A more practical problem with this option might be what to do if a WTO member argues that its original commitments were based on a different understanding of the mode 1--mode 2 boundary, but this may not be too controversial because the effect is to narrow down the more liberal mode 2 commitments.

To ensure that this solution does not reduce the overall openness in the trading system, it would be imperative to make a major push to enrich the commitments on mode 1. Whether the risk of such an effort's failing would make our solution unacceptable to parties arguing for a mode 2 approach to on-line transactions is another question.

Competition and Regulation in Networked Markets

A second set of issues addressed by the GEC work program deals with the applicability of core GATS principles to electronic commerce. These include market and

network access, competition, likeness, the necessity test with regards to regulation, recognition and harmonization, and legitimate domestic regulation.

Access to and Use of Telecommunications Transport Networks and Services

Conditions in the electronic network environment obviously have a major impact on the ability of individuals and organizations to engage in GEC. The dominant incumbent public telecommunications operators (PTOs) in particular have the ability to employ restrictions that effectively limit the value of market access commitments across the board, that is in network access and transport services, electronic content services, and distribution services. As such, assessing the adequacy of GATS in relation to telecommunications services has been a critical part of the GEC work program. In addition to the application of the general obligations and disciplines, two targeted instruments are crucial: the Telecommunications Annex, and the Reference Paper that was adopted by fifty-seven countries (as additional commitments) during the Group on Basic Telecommunications negotiations that concluded in February 1997.

Arguably, the Telecommunication Annex is the most user-oriented component of GATS. It deals with access to and use of public telecommunications transport networks and services as a mode of supply for services on which countries have made commitments. The annex requires that access to and use of public networks and services be provided on a reasonable and nondiscriminatory basis. Thus governments are required to grant foreign suppliers access to and use of privately leased circuits. Moreover, governments must ensure that foreign service providers purchase or lease and attach terminal or other equipment interfacing with public networks; interconnect privately leased or owned circuits with public networks or with circuits leased or owned by another service supplier; and use operating protocols of the service supplier's choice, provided that they do not disrupt telecommunications transport networks and services to the public generally. Governments must also make sure that foreign service suppliers can use these networks and circuits to transfer information without undue impediments within and across national borders and that they can access information contained in databases held in any member country.

In addition, governments must not establish conditions on access and use other than those necessary to safeguard an incumbent carrier’s public service responsibilities, protect the technical integrity of public networks, or ensure that foreign service suppliers provide only services that have been designated open to competition in market access commitments. If the measures are necessary to meet these criteria, however, governments may adopt policies that restrict resale and shared use of public services; require the use of specific technical interfaces and protocols for interconnection; require the interoperability of services; require type approval of terminal or other equipment interfacing with public networks; restrict the interconnection of privately leased or owned circuits with either public networks or the circuits of other service suppliers; and require the registration or licensing of foreign suppliers.[15]

Although it is not a part of the GATS framework agreement, the fact that the Reference Paper on basic telecommunications has been incorporated into the schedules of countries representing perhaps 90 percent of the global telecommunications market makes it an important tool for promoting GEC as well. The Reference Paper comprises six principles for the redesign of national regulatory rules and institutions to ensure compatibility with trade disciplines.

---*Competitive safeguards.* Governments are required to ensure that major suppliers, especially the national public telecommunications operators, do not engage in anticompetitive cross-subsidization, use information gathered from competitors with trade-restricting results, or fail to make available on a timely basis the technical information about their facilities and operations needed by competitors to enter the market.

---*Interconnection.* PTOs are to provide market entrants with interconnection at any technically feasible point in the network. Interconnection is to be provided at nondiscriminatory terms, conditions, and rates, and should be of a quality no less favorable than the provider gives its own services. Moreover, interconnection rates are to be cost-oriented, transparent, and where economically feasible, unbundled. A dispute mechanism administered by an independent body is called for to handle disputes over interconnection terms and other issues.

---*Universal service*. Such obligations are to be administered in a transparent, nondiscriminatory, and competitively neutral manner that is not more burdensome than required to meet the policy objectives.

---*Public availability of licensing criteria.* Where licenses are needed, information and decisionmaking procedures are to be transparent.

---*Independent regulators.* Regulatory bodies are to be separated from service providers and not accountable to them.

---*Allocation and use of scarce resources.* Procedures for allocating and using frequencies, numbers, and rights-of-way are to be carried out in an objective, timely, transparent, and nondiscriminatory manner.[16]

At least three issues arise regarding these disciplines. First, the Telecommunications Annex applies only to sectors where specific commitments have been made, and in sectors crucial to GEC many governments have not made significant commitments. We discuss later the question of commitments, but in this context the point is that the benefits of the annex's application are thus somewhat limited.

Second, the language of both instruments is broadly framed. For example, the annex does not contain strong disciplines on points of interconnection, pricing, numbering, unbundling, and promptness of access, all of which are crucial for GEC. The Reference Paper is more explicit on some of the relevant issues but even so is broadly

cast. In consequence, governments might argue that a variety of PTO practices are legal under GATS although to others they appear to restrict market access. For example, there have already been battles on interconnection, with incumbent PTOs and their governments defending prices and operating requirements that potential entrants have argued prohibit market entry.

One could argue that GATS is perfectly capable of tackling such matters through the dispute settlements mechanism, and that it would be difficult to negotiate more precise language, especially when governments' domestic regimes vary and are in flux. Government regimes do vary, but the annex may not provide sufficient guidance for optimal panel rulings, and anyway it would be better to provide all stakeholders with a clearer set of rights and obligations in one place. Similarly, while more explicit national commitments elaborating on the Reference Paper principles would help, relying on this alone still might leave too much regulatory variability across markets. Unlike some of the other GEC issues, the problems in telecommunications are well understood; as such, strengthening these disciplines should be a priority in the coming round.

Third, there is a looming problem concerning the networks and services to which these instruments apply. Governments designed the annex and the Reference Paper to deal with basic telecommunications and public switched telephone networks (PSTN), especially (and explicitly, in the latter case) where these are supplied by the incumbent PTOs. Now with the emergence of major Internet access providers that are not providers of basic telecommunications and PSTNs, some WTO members are asking whether the obligations contained in the two instruments should not be extended to these firms as well. In effect, Internet access providers would be deemed basic telecommunications providers and subject to the full range of WTO obligations pertaining to such providers. Of course, the decision on this issue also would bear on whether Internet access is deemed to be covered by existing commitments.

At present, the European Commission appears to be leaning in this direction. But such a change would pose difficulties for the United States, where the Federal Communications Commission has repeatedly refused to designate Internet access a basic telecommunications service subject to common carrier legislative and regulatory obligations. Moreover, U.S.-based Internet access providers would be vehemently opposed to such a classification, which they would undoubtedly decry as an effort by foreign governments to impede entry into the foreign markets and to boost their own firms' prospects via administrative power rather than consumer choice.

There is no question that a major reason for the Internet's extraordinary growth, especially in the United States, is that it has been treated as an unregulated enhanced (or value added) service. Except where the incumbent PTOs have prevented this, the global Internet access market generally is competitive. In that context, imposing extensive new regulations on independent Internet access providers---even if only on the larger ones---would be a premature solution in search of a problem, and one that carries a substantial risk of limiting competition and slowing the deployment of new infrastructure and services. It would be better for the WTO to focus on clearing the way for competition

with the PTOs and perhaps to take up other issues raised by media convergence, including competition in cable television infrastructure.

Competition

GATS Article VIII (Monopolies and Exclusive Service Providers) requires members to ensure that monopoly suppliers do not act in a manner inconsistent with their obligations in a relevant market. In particular, the members must take care that such providers not abuse their positions when competing in markets outside the scope of their monopoly rights. Similarly, Article IX (Business Practices) notes that certain suppliers' actions may restrict trade in services and requires members to enter into consultations at the request of any other member to eliminate such practices.

These articles clearly have direct bearing on telecommunications services, and intentionally so. What requires further consideration is how they may apply to other GEC services. It may well be that global electronic commerce reduces the scope for trade-restrictive business practices by improving access to and the transparency of markets, which are especially important for small suppliers. But a problem could arise involving monopolies and restrictive practices in certain software services as well as certification and authentication or Internet address assignment services. In these and other cases it would seem important to reach a clear understanding of whether the rules apply only to monopolies that are formally established or authorized by governments or also to suppliers who have attained such positions without government intervention. The latter may also have the effect of limiting market access and the expansion of the GEC generally.

Because the dispute settlement mechanism has not been brought to bear on such problems yet, it is difficult to make a strong judgment about whether the existing GATS disciplines are sufficient. But the kinds of services we have mentioned are fundamental to the operation of the Internet and GEC, and governments were not thinking of them when they devised GATS and their national commitments. It may be unwise to leave such matters to dispute settlement panels, which would essentially have to legislate on new and critically important terrain. Whether the specificities of GEC competition issues would best be addressed in an annex or in another manner merits further consideration.

Market Access Commitments on the Electronic Supply of Services

Maybe the most distinctive feature of GATS is that the withdrawal of actually restrictive domestic measures is governed only through negotiated commitments included in national schedules. Under Article XVI (Market Access) members that want to retain such measures may either exclude sectors in their schedule or include them with reservations for the measures in question. Thus the procedure for registering commitments in national schedules combines positive and negative undertakings: there are no liberalization obligations unless a sector or subsector is positively included in the schedule, but once it is, a member cannot maintain measures in that sector that are inconsistent with Article XVI. The article specifies that members are to accord services

and service suppliers of any other member treatment no less favorable than that provided for in their schedule. Where commitments are made, members are to avoid numerical restrictions unless otherwise specified in their schedules. These restrictions are listed as follows: limitations on the number of service suppliers, on the total value of service transactions and the number of people that may be employed in a sector, and limitation on the participation of foreign capital, either in terms of a percentage limit on foreign shareholding or on the total value of foreign investment, either in the aggregate or by a single entity.

Article XVI provides adequate guidance for global electronic commerce, but relevant national commitments need to broadened and deepened. This is especially obvious in telecommunications, where---despite progress in the Group on Basic Telecommunications---many members have only partial and phased-in commitments on basic telecommunications, while many others still have none at all. As we have mentioned, the coverage of Internet access services under existing commitments may need to be clarified where some members have included specific entries while other have not. In general, commitments on electronic transport should cover telecommunications and Internet access, commitments on distribution services should cover the on-line ordering and delivery of products, and the relevant sectoral commitments should apply to "content" services like financial and professional services.

Nondiscrimination and the Problem of "Likeness"

In GATS, Article II (Most Favored Nation) requires members to extend to the services and service suppliers of members treatment no less favorable than they accord to like services and service suppliers of other countries---unless, of course, they have listed exemptions in their schedules of commitments. Similarly, Article XVII (National Treatment) requires members to accord foreign service suppliers treatment within their territories that is no less favorable than that which they apply to their own suppliers of like services. National treatment is meant to affect qualitative, discriminatory measures, implying that the treatment of foreign and national suppliers must be equivalent in substance, not just in form. Measures that may have restrictive effects on trade but are not deemed discriminatory need not be scheduled, although they could be questioned under Article VI (Domestic Regulation) or other obligations. There is nothing about electronic commerce that requires a fundamental rethinking of these cardinal principles; rather the challenge is to clarify their application, especially since discriminatory measures may be magnified in a network world where a national point of entry can give access to a global service market.

Article II is mandatory whereas Article XVII is optional. But in both the same question arises: does the criterion of "likeness" raise new issues in the GEC environment? One problem is that the ability to customize digital products may make it difficult to judge their likeness when adjudicating disputes. For example, an on-line supplier may offer a customized service that is nominally classified like a standardized service. How are the two services to be compared? They appear to be different to the customer, but should they be treated differently under trade disciplines?

Another problem concerns the ability to supply services remotely. Clearly, a given electronic service should be treated the same whether it is delivered from home or abroad. But should a service that is delivered electronically from abroad be treated in the same manner as one that is delivered domestically through nonelectric means? The technological neutrality requirement would dictate that there is no reason for differential treatment. But since GATS allows the regulation of foreign service providers by importing states, there may be no violation of national treatment if like services are treated differently in order to apply such regulation. That the supplier is not located, even partially, in the host country might be deemed to change the very nature of the service. The traditional criteria for assessing likeness (for example, product characteristics and consumer attitudes) may not be sufficient here. A consumer may not realize that the provider is less accessible for the purpose of ex post liability claims and would thus consider the two services to be alike even if they are different from a regulator's viewpoint.

In general the issue of likeness has become one of the most contentious in the WTO for both goods and services.[17] In the long-term a horizontal solution may be needed, and not only for GEC. In the short run, however, electronic commerce is likely to be where disputes arise, so it may be important to clarify how MFN and national treatment are to be applied in the coming round. For example, one approach to the first problem noted earlier might be to specify that the service being assessed for likeness is actually the service input to a transaction rather than the subsequently customized end product.

From an institutional standpoint the most straightforward approach here could be to improve scheduling methods and practices by specifying in members' commitments the regulatory reasons for any restrictions. Dispute settlement panels then would have a clearer benchmark to assess the legality of domestic measures, and those that do not significantly contribute to accepted regulatory objectives would be struck down.

Domestic Regulation and Standards

Article VI (Domestic Regulation) applies to national measures for which contracting parties have not scheduled exceptions in their national schedules, whether or not their delivery is electronic. It indicates that members should ensure that measures of general application affecting trade in services are administered in a reasonable, objective, and impartial manner. It also calls for domestic measures relating to qualification requirements and procedures, technical standards, and licensing requirements not to constitute unnecessary barriers to trade in services. Recognizing that this injunction is very broad, Article VI(4) calls on the Council for Trade in Services to develop further disciplines. In the meanwhile, Article VI(5) applies, prohibiting the application of licensing and qualification requirements that would nullify commitments under articles XVI (Market Access) and XVII (National Treatment).

These provisions apply equally to electronic transport services, distribution services, and content services. Content services are of particular interest here. The electronic supply of these services generally has not been targeted by extensive domestic regulation. However, there is a significant risk that this will change as the volume, value, and variety of transactions expand. Thus there may be a need to begin clarifying some of the issues. For example, how are the necessity or proportionality tests to be applied in as complex and fluid a realm as GEC? What do terms like "reasonable" and "not more burdensome than necessary" mean in this context (or any other, for that matter)? What should be done about the problem of applicable national jurisdiction?

It may be difficult to handle these and related regulatory problems in the upcoming round. Crucial parties are divided: some in the international business community worry that Article VI might give regulatory authorities too much license to "regulate the net" and argue that GEC issues should be left to them to sort out through self-regulatory initiatives whenever possible. In contrast, many WTO members worry about their capacity to enforce their sovereign regulatory rights under the article, and the European Union has been particularly vocal in maintaining that self-regulation cannot be the only basis for GEC regulation. For example, distant sourcing of input services makes it especially difficult for regulatory authorities to make recognition of qualifications a condition of market entry. This is a concern expressed especially by the Europeans.

Given the negotiating difficulties that would be encountered, one might argue that Article VI should be left as it is until all the gaps in schedules have been filled, and that WTO members could then see whether disputes abound before seeking clarification. Further, one can always hope that industry self-regulatory initiatives undertaken in the meantime would provide workable enough solutions to facilitate the growth of electronic commerce, at least in the near term.

But as unpalatable as it may seem to some parties, there probably is a need to establish at least some intergovernmental guidelines on what is permissible regulation of GEC content services. After all, government regulations protecting basic public interests such as public health and safety, consumer rights, and the security of transactions ought to apply equally in both the virtual and physical worlds. There is nothing sacred about the Internet that should or will preclude governments from, for example, attempting to regulate the on-line supply of medical or educational services to their citizens. And if they are going to establish such regulations, there should be some level of multilateral agreement about what kinds of regulations are legal under GATS. Moreover, shared principles could help mitigate the growing threats to the Internet of governments unilaterally regulating cyberspace or subjecting service providers and transactions to multiple and totally incompatible national regulations.[18]

Of course, in addition to industry self-regulatory initiatives on these issues, there are intergovernmental efforts under way in bodies like the Organization for Economic Cooperation and Development. To the extent that these are successful, WTO negotiators might be able to avoid at least some of these murky waters or even make reference to other agreements within GATS. But in the end at least some guidelines will become

necessary in the near term if trade in content services is to flourish. Whether developing these can be left entirely to whatever trade round will follow the one beginning in 2000 is a real question.

The European Commission has suggested that "it would be worth discussing whether a list of regulatory objectives---for example, consumers' protection, universal service, and security of the transactions, as well as those covered by Article XIV [General Exceptions] of the GATS, among others---could be established."[19] One can quibble about which objectives should be so listed, and governments undoubtedly would, which is a problem. Nevertheless, a list may be a reasonable first step, regardless of whether it is done generically for all services transactions in a reworked Article VI or in a more network-specific instrument like a GEC annex.

If they go this route, WTO negotiators may also find it useful to begin considering what kinds of regulations on electronic content services could pass the GATS necessity test. One option to consider might be a registration requirement, under which content suppliers must register in every country in which they wish to do business. This would provide a basis for consumer protection and liability redress and would be all the more justified if there was a quid pro quo relaxation of commercial presence restrictions. Another possibility might be a labeling requirement under which content services provided over the Web must include all relevant information regarding the regulations to which they are subject. Countries could design formats for mandatory services labeling. The impact would range from simple informed access for certain types of consumers to conditional access. A third possibility might be an identification requirement under which suppliers require consumers to use identification devices to provide them with information on their jurisdiction of origin. In any event, harnessing technologies that help create "virtual borders" may be legitimate to the extent that regulatory authorities have exploited the specific opportunities for least restrictive regulations offered by the Internet.

With any such requirements there would clearly be problems of enforcement and the mutual recognition of enforcement. Most governments may not have the necessary domestic institutions, laws, and regulations to handle these matters yet. This is just one of the many challenges that will have to be confronted if networked trade in educational, health, and other consumer-related services in particular is to flourish.

A related matter explored in the GEC work program is technical standardization, which presents a special problem in the electronic environment. Clearly there is a need to ensure that governments and private firms do not establish standards that are unduly trade restrictive. But judging whether standards have that effect using the language in GATS could be difficult. The issues of domestic regulation and nondiscrimination are intrinsically linked in this regard. Under the status quo even admittedly like products might be denied entry by technical choices that are not clearly driven by discriminatory intent. As the Alliance for Global Business suggests, this could arise with "regulations that are neutral on their face but nonetheless affect some countries more than others. So, for example, a WTO member nation might decide to favor a certain digital signature or

encryption technology and not others, thereby favoring contracts for services provided from countries that also recognize that technology."[20]

Standards issues can be extremely complicated, and assessing them often requires a high level of technological expertise. Moreover, the GATS language on standards is very broad. It therefore is not obvious that dispute settlement panels would have an easy time rendering well-grounded judgments if, as it seems reasonable to expect, conflicts arise with the expansion of GEC. As it would not make sense to burden the general obligations and disciplines with rules specific to the networked environment, this seems like another area in which additional clarification might best be pursued in a new instrument like an annex.

Transparency

Under Article III (Transparency) members must publish all relevant measures of general application that pertain to or affect the operation of GATS, promptly or at least annually inform the WTO of the introduction of new regulations or guidelines or changes to existing ones, and promptly respond to requests from other governments for specific information on any of its measures. To facilitate prompt response, WTO members are also to establish inquiry points. The Internet and GEC do not pose any particular problems for this loose provision, and in fact should help governments carry out their obligations under its terms, including channeling information to the relevant parties.

In fact, one could argue that WTO members should be required to publish on the Internet---in an accessible, one-stop shopping manner---all regulations or guidelines affecting GEC services exports into their markets. This would be especially helpful to individual entrepreneurs and small and medium-sized businesses. After all, one of the widely celebrated virtues of the Internet is that it can lower some barriers to entry for such businesses. But that promise may be negated if they cannot readily determine what rules apply to providing services to foreign customers who visit their Web pages and so on (assuming a mode 1 solution to the classification issue). As governments begin to adopt domestic regulations on the supply of electronic content services, small businesses should be able to find out what the rules are without having to hire a fleet of consultants. Governments probably would not be willing to even consider taking on this obligation for administrative and other reasons, so perhaps it is just wishful thinking. Nevertheless, GEC-specific transparency requirements in either an annex or a revised Article III would be a good thing, especially in light of the WTO debates over transparency, relations with civil society and nongovernmental organizations, and so forth.

Mutual Recognition and Regulatory Cooperation

Under GATS, domestic measures that are trade restrictive but nondiscriminatory and are likely to escape the reach of Article VI (Domestic Regulation) provisions at times may need to be dealt with through more far-reaching and restricted agreements.[21] Thus

Article VII (Recognition) encourages signatories to enter mutual recognition agreements bilaterally or plurilaterally, or even to engage in unilateral recognition of "the education or experience obtained, requirements met, or licenses or certification obtained" under each other's jurisdiction.

The Internet could make implementing mutual recognition agreements (MRAs) easier, so governments may want to explore how to use this potential to its fullest. In addition to helping enforce procedural MFN status, the Internet could help create the basis for MRAs by fostering cooperation between regulators and collaboration between private bodies with delegated authority (such as university accreditation bodies or professional boards). Recognition may eventually be extended to electronic accreditation bodies whose stamp of approval would constitute a right of entry for Web delivery to specified jurisdictions. The existing GATS may provide an adequate basis for the WTO to assess any charges of discrimination and such involving these operations.

An example relevant to GATS of how the Web can change things involves professional services. The proportionality principle requires that the professional associations or public authorities granting rights to activity in the importing country "take account" of the qualifications obtained in the professional's home country. This idea of taking into account can be greatly fine-tuned and operationalized through bilateral or plurilateral MRAs. The widespread "managed" character of recognition simply means that there is always a residual degree of control by the host country. The questions are over what, how much, and on what grounds. Whether regulators seek to implement the necessity test embodied in Article VI (Domestic Regulation) or whether they seek to implement MRA obligations, regulating access by professionals on the basis of proportionality could be facilitated by cyberspace. Taking into account foreign qualification requirements to determine what residual requirements may be warranted is a customized process that is very information intensive. Regulators need to evaluate the foreign system and the path followed in it by the candidate for access. The availability of Web-based information on curriculum content, training requirements, and foreign accreditation conditions and grades can serve as the basis for more routine assessment. Common comparative databases of certifying institutions could be developed to facilitate this process and build the foundation for a global decentralized accreditation regime.

Societal Protections

Article XIV (General Exceptions) states that members may adopt and enforce measures necessary to protect the privacy of individuals in relation to processing and disseminating personal data and protecting confidentiality of individual records and accounts; protect public morals or maintain public order; and prevent deceptive and fraudulent practices. However, any such measures must not constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, and they must not serve as disguised restrictions on trade in services. Article XIV kicks in when measures have been ruled illegitimate under Article VI (Domestic Regulation).

As with GATS generally, the article has not been tested. But the mass popularization of the Internet and the direct and unmediated involvement of potentially millions of consumers in global electronic commerce will mean that there will be an infinitely larger number of transactions in which the issues Article XIV covers could come into play, so the question of whether it should be clarified (and used) may become unavoidable. The clause on public morals is unlikely to raise problems: it is unlikely that any government will go to bat for a firm that is being prevented from selling pornography in another country or that the democracies would challenge authoritarian governments' restrictions on political speech in the WTO. But on the other matters there are challenges to be faced.

With regard to privacy protection, the primary problem is the transatlantic division. The United States remains strongly committed to a "self-regulatory" approach to Internet privacy that is favored by its well-organized business community but regarded as completely ineffective and unenforceable by almost all independent privacy advocates and consumer groups. In contrast, the EU's Data Directive provides stronger requirements for business compliance and legal remedies for violations, but it was designed before the Internet boom and may now be overly rigid. Neither approach is satisfactory in its current form, but we are left with a heated debate about their relative merits nonetheless.

Bilateral negotiations to square the circle are still under way, with the United States insisting against all evidence that self-regulation provides the same or better protection than laws and that the two approaches are simply different means to the same ends. The OECD's 1981 Guidelines and 1998 Declaration on data protection---which was issued at its ministerial meeting on GEC in Ottawa---are sometimes held up as evidence that there is at least transatlantic agreement on governing principles, but there are healthy grounds for skepticism because these instruments are vague and toothless by design.[22] Thus although one can hope that the United States would have the good sense not to challenge the EU's obligation to protect its citizens' privacy as a trade barrier, it might be useful to clarify what means to that end are acceptable under GATS.

Similarly, there is a need to go beyond the single focus on fraud by adding to GATS a broader exception for consumer protection. Consumer protection is absolutely essential if people are to have confidence that transactions on-line are as safe as those in the physical world. The biggest division here is between international business and consumer groups. The consumer groups are demanding strong protections and a recognition that the consumer's country is the applicable national jurisdiction in any disputes (a mode 1 approach). International differences on the point were in evidence at the OECD's GEC ministerial meeting, which was able to adopt only a vague declaration calling for continued dialogue. Consumer groups also are becoming increasingly critical of the WTO, and many are planning to band together with environmental and other nongovernmental organizations to protest outside the WTO's Seattle ministerial meeting. Given the importance of the issue for the expansion of electronic commerce and in light of the larger WTO debate on transparency and relations with civil society, it would make sense to address the issue in GATS, as the European Union seems inclined to do.

The problem for negotiators is that as with the calls for the WTO to address environmental, labor, and human rights questions, the issues above involve the proper balance between trade and wider social objectives. Given the sharp differences on such matters, addressing them in any detail in the WTO would be opening the proverbial can of worms. But not addressing them could entail risks as well. The result is a "damned if you do, damned if you don't" scenario for the WTO.

In this heated environment, it would be inappropriate to leave to dispute settlement panels to decide what national policies are (un)justifiable. To have panels making judgments on sensitive social issues in closed deliberation could present a threat to the legitimacy of and public support for the WTO. In the context of the Internet, where individuals and organizations can easily make a lot of noise and mobilize networks of like-minded correspondents around the world---as was demonstrated by the OECD's failed effort to establish the Multilateral Agreement on Investment---it is not difficult to imagine campaigns being launched in response to panel determinations deemed adverse by some stakeholders or observers somewhere. This could raise domestic political problems for a member government faced with an adverse ruling on privacy or consumer protection.

Of course, WTO negotiators need not attempt to devise detailed instruments on these issues and indeed are probably not well placed to do so. Ideally, governments and other parties would reach a workable level of consensus in other international forums, although the efforts thus far have yet to yield meaningful results. Absent that, the negotiators could evade a given issue with a "gentlemen's agreement" to avoid resorting to dispute settlements until there is greater consensus, as the Group on Basic Telecommunications did with regard to international telephone accounting and settlements rates. However, it is not clear that this would be a trade-expanding or institution-strengthening outcome.

Thus it would be useful to add an explicit exception for consumer protection to Article XIV and to consider whether it is possible to provide at least some clarification as to what kinds of policies are or are not arbitrary, unjustifiable, or disguised restrictions on trade in services. This would give any dispute settlements panels greater guidance and political cover in interpreting the principles. Whether it would be better to provide that guidance in a revised Article XIV or in a new instrument like an annex would depend on the level of context-specific detail deemed necessary.

Additional Issues of Particular Interest to Developing Countries

Finally, we turn to GEC matters of particular interest to developing countries. We start with the current controversy about customs duties, perhaps the hottest issue on the GATS agenda. We then turn to recommendations on how to ensure increasing participation in the world trading system by these countries in the age of electronic commerce.

Customs Duties

In principle, whether to extend or make permanent the standstill on applying customs duties to electronic transmissions may not seem to be solely an issue in developing countries. After all, customs duties are routinely applied around the world on other kinds of transactions, and ministries of finance everywhere are typically loath to forgo sources of revenue. Moreover, the European Commission has announced that it will not support the U.S. proposal for a permanent moratorium until work on other aspects of the GEC work program is completed to its satisfaction. But insofar as EU governments have previously supported a permanent ban, this is probably just a bargaining tactic being used to advance the commission's agenda regarding other items on which it is at odds with the United States.

In practice then, this issue is primarily relevant to developing countries. One problem is that many developing countries believe they will be net importers of GEC in the years ahead, so forswearing customs collection at the virtual border would be depriving themselves of a new source of foreign revenue. In the same way, when the Internet is used as an alternative to the conventional delivery of products that are subject to customs, this substitution effect is seen as eroding an existing source of revenue. Complicating things further, even though border duties and the internal taxation of transactions are separate issues, many governments seem to think of them as being closely linked. In light of these concerns, some developing countries have expressed interest in keeping open the possibility of applying customs duties in the future.

Nevertheless, the assumptions on which this position rests are problematic. For one thing, opponents of a ban seem to have a rather static analysis of their own prospects. Some developing countries may well develop vital GEC export markets. Furthermore, if appropriate national policies are in place, GEC should contribute enough to overall economic activity to offset the absence of customs revenues on transmissions.

It is also important to emphasize that taxes and customs duties are indeed separate issues. Internet commerce certainly does raise a number of thorny taxation issues for national governments, but many of these go beyond the border measures and nondiscrimination issues dealt with by the WTO. And while some countries such as the United States may choose to limit taxes in order to stimulate the growth of GEC in their territories, it is entirely legitimate for other countries to pursue a different strategy. This is consistent with WTO instruments; for services, GATS Article XIV (General Exceptions) allows domestic measures aimed at ensuring "the equitable or effective imposition or collection of direct taxes." But any such taxes should be imposed internally on the value of the transactions' content and must not be applied only to foreign-originated services if national treatment commitments apply.

There also is a noteworthy practical problem. Technologically, it would be difficult to distinguish from other traffic, measure, and ascribe values to commercial electronic transmissions, and this may be especially true for developing countries.

Insisting on the right to do something they probably do not have the means to do anyway arguably results in the worst of both worlds if revenues are not collected and the market is given a signal that GEC is unwelcome. Certainly, attempting to simply apply customs duties to all Internet traffic, rather than just to commercial transactions, would be profoundly self-destructive.

Such considerations aside, the question remains as to whether customs duties on transmissions would be consistent with developing countries' WTO obligations. Customs duties are of course routine for trade in goods and compatible with GATT, including duties for goods ordered over the Internet and delivered in physical form. In contrast, customs duties on trade in services are almost nonexistent. However, as the WTO Secretariat notes, "there is no reason in principle why customs duties should not be applied to services, whether supplied electronically or in any other way." But any such measure "which would increase the bound level of protection of a committed service would be inconsistent with a Member's commitments."[23]

There is nevertheless an ambiguity when one focuses on the transmission per se in the GATS context. None of the countries that have scheduled commitments in the telecommunications sector have thought to schedule duties on transmissions. If the technological neutrality principle is taken seriously, the question arises as to whether they can therefore claim the option for Internet transmissions. Contracting parties need to decide if doing so would be a breach of bindings in such cases.

There is growing opposition to the U.S. proposal for the Seattle Round among Latin American and Asian governments. It is unclear how deep the divide is or whether opposition is just a bargaining tactic. But in the end, if the application of customs duties on transmissions is determined to be consistent with their commitments, developing countries have every right to give it a try. It unclear that the effort would promote any national objectives; more likely it would stifle their participation in GEC. Several years of being left out of the expansion of GEC might bring these countries around to reducing or eliminating the duties.

If developing countries do dig their heels in on electronic customs duties, it would be a mistake for the industrialized countries to insist on banning the duties and risk lending credence to the wrongheaded view that an open GEC environment is yet another example of rich countries imposing their will on poor countries. Persuasion is far preferable to pressure here, especially insofar as a ban may be of greater symbolic than practical value. If an agreement cannot be reached, the industrialized countries could always develop a plurilateral agreement that would cover much of the GEC in the near term. But if an agreement can be reached, codifying a ban in a new instrument like a GEC Annex would be a nice touch.

Increasing Developing Countries' Participation in GEC

Article IV (Increasing Participation of Developing Countries) calls on WTO members to undertake specific commitments helping developing countries by, among other things, strengthening their domestic services capacity through access to technology, improving their access to distribution channels and information networks, and liberalizing market access in sectors of interest to them. Members are also to establish contact points to facilitate access to trade-related information regarding qualifications and other aspects of doing business in members' markets.

The Internet is perfectly compatible with these minimalist provisions and can readily be used to promote the objectives they present. For developing countries the Internet should be a godsend relative to the days when data networking was largely about proprietary networks operated by transnational firms. Its open architecture and related attributes can facilitate easy access to a wealth of trade-related information from government, nongovernment, and business sources, as well as to a seamless distribution channel; the Trade Point program of the UN Conference on Trade and Development (UNCTAD) is a model that could be built on in this respect. Indeed, the Internet may well be the biggest transfer of technology and information the world has ever seen.

Although Article IV does not require any clarification, WTO members could undertake some useful steps to implement it more fully in the context of GEC. For example, the developed countries should strengthen their commitments in GEC-related sectors where developing countries might have a comparative advantage. Identifying those sectors, and any barriers that may obtain in them, should be a priority in both the WTO technical cooperation efforts and in UNCTAD.

One area that deserves particular attention involves labor-intensive exports from developing countries. Part of the political bargain of the Uruguay Round was supposed to be that the developed countries would make commitments with respect to mode 4 exports in exchange for developing countries making commitments on commercial establishment under mode 3. But in the end the industrialized countries' mode 4 commitments generally had to do with the movement of corporate executives and the like; both low-skill and high-skill workers or professionals from developing countries were treated more under the category of "movement of labor"---subject to immigration laws---than under the GATS category of movement of a natural person service supplier.

In this round the industrialized countries could take a more liberal approach to the movement of professionals from developing countries who deliver services such as software or architectural design, including where the periodic movement of such persons is ancillary to Internet-based services supply. They might also enter into mutual recognition agreements that acknowledge the credentials and ease the temporary entry of professionals and technicians from developing countries. Given the industrialized countries' shortage of skilled personnel in some high-technology industries, which in the United States has led Silicon Valley to advocate immigration reform, there should be a way to make this politically palatable.

For their part the developing countries urgently need to undertake domestic reforms. For example, many of these countries maintain market-restricting practices in the telecommunications sector---prohibiting infrastructure competition, curtailing the entry of independent Internet access providers, imposing high prices on the leased circuits needed by these providers, requiring end users to pay per-minute dial-up fees, and so on---that constrain the expansion of Internet usage and GEC.[24] Often the incumbent national telecommunications operators still dominate policymaking and insist that they must limit competition to recover past investments and build out the bandwidth necessary for Internet and other service offerings. It is not impossible that some governments may even believe that an underdeveloped information infrastructure is beneficial insofar as it limits foreign entry in network-dependent markets and thus provides time for local infant industries to develop. Reforming self-defeating national policies would go a long way toward helping the developing countries benefit more fully from the international trading system.

Finally, there is an urgent need to expand technical cooperation programs with regard to the Internet and GEC. Although some still insist on seeing the Internet as a tool of cultural imperialism and economic domination, many developing country governments have come a long way in the past few years in their thinking about it. Even so, making commitments to an open GEC environment will be a difficult pill for some to swallow. Much more technical support will be needed if developing countries are going to establish appropriate national policies on a range of GEC issues so that they can participate effectively in both the world market and in WTO negotiations. Governments, the international business community, the WTO, and other international organizations like the World Bank, UNCTAD, and the International Telecommunication Union all have roles to fill here.[25]

Conclusion

Although this chapter has covered a good deal of ground, in a real sense it has only begun to scratch the surface. The trade issues associated with GEC services are complex and wide ranging, and they will undoubtedly become more so as the technologies, business practices, and national policies continue to develop in the years ahead. Nevertheless, as a snapshot of the current terrain, we hope our discussion provides useful contribution to the evolving policy debate.

While recognizing the political difficulties entailed in the alternative, we are not convinced that a quick fix consisting of only the most minimal additions to or clarifications of GATS would be the best outcome of the coming round. Even if the round actually concludes in 2003, GEC will by then have already expanded dramatically, which will probably lead governments to adopt a variety of national policies to deal with emerging problems. Who knows what the situation will look like by the time the round after next gets under way, much less concludes? Without a multilateral consensus on at least core principles during the Millennium Round, there may be a risk that such policies

will stifle GEC somewhat or lead to conflicts that the dispute settlement system is not well equipped to handle yet.

Thus while the adoption of detailed rules on certain points may have to wait, it would be advisable to establish flexible guiding principles that take into account the specifics of the GEC environment. Among the most pressing items are the classification problems; strengthening the Telecommunications Annex; establishing at least a list of permissible domestic regulatory objectives, including consumer protection (although specifying some criteria of permissibility would be even better); and banning customs duties on transmissions if the developing countries can be convinced that it is in their interest. As to the other issues we have discussed, it might be worth trying to develop language clarifying the workings of the transparency, national treatment, and competition principles in the GEC environment or at least to reach an informal agreement on their interpretation. In addition, national commitments need to be strengthened across the board, including those on electronic transmission services (telecommunications and Internet access) and on sectors and modes of supply that are of particular interest to the developing countries. Even if formal agreement cannot be reached on all these issues, working through them could yield greater consensus in some respects. And if the alternatives are unilateral rule or no rules at all, the only thing worse than negotiating is not negotiating.

References

Cottier, Thomas, Petros Mavroidis, and Patrick Blatter, eds. 1999. *Regulatory Barriers and the Principle of Non-discrimination in World Trade Law: Past, Present and Future.* University of Michigan Press.

Drake, William J. 1999. Toward Sustainable Competition in Global Telecommunications: From Principle to Practice---Summary Report of the Third Aspen Institute Roundtable on International Telecommunications. Washington: Aspen Institute.

Drake, William J., and Kalypso Nicolaïdis. 1992. "Ideas, Interests and Institutionalization: 'Trade in Services and the Uruguay Round." *International Organization* 45 (Winter): 37--100.

Drake, William J., and Eli M. Noam. 1998. “Assessing the WTO Agreement on Basic Telecommunications.” In Gary Clyde Hufbauer and Erika Wada, eds., *Unfinished Business: Telecommunications After the Uruguay Round*, pp. 27--61. Washington: Institute for International Economics.

Grubel, Herbert G. 1987. "All Traded Services are Embodied in Materials or People." *World Economy* 10 (September): 319--30.

Hill, Peter. 1997. “Tangibles, Intangibles, and Services: A New Taxonomy for the Classification of Output.” Paper prepared for the CSLS Conference on Service Sector Productivity and the Productivity Paradox, Ottawa, April 11--12.

International Chamber of Commerce. 1999. “Draft Alliance for Global Business Discussion Paper on Trade-Related Aspects of Global Electronic Commerce.” March.

International Telecommunication Union. 1999. *Challenges to the Network: Internet for Development.* Geneva.

Nicolaïdis, Kalypso. 1995. “International Trade in Information-Based Services: The Uruguay Round and Beyond.” In William J. Drake, ed., *The New Information Infrastructure: Strategies for U.S. Policy,* pp. 269--302. New York: Twentieth Century Fund.

Nicolaïdis, Kalypso. 1999. “Non-Discriminatory Mutual Recognition: An Oxymoron in the New WTO Lexicon?” In Petros Mavroidis and Patrick Blatter, eds., *Non Discrimination in WTO: Past and Present.* World Trade Forum series. University of Michigan Press.

Organization for Economic Cooperation and Development. 1999. “Electronic Commerce: On-line Supply of Services--Market Access Issues.” Draft Working Paper, Trade Committee, February.

-----. 1998. “Documents of the Ministerial Conference on Global Electronic Commerce, Ottawa; http://www.oecd.fr/dsti/sti/it/ec/news/ottawa.htm.

Tuthill, Lee. 1996. "Users' Rights? The Multilateral Rules on Access to Telecommunications." *Telecommunications Policy* 20 (March): 89--99.

U.S. Department of Commerce. 1998. *The Emerging Digital Economy*. April; http://www.ecommerce.gov/emerging.htm.

World Trade Organization. 1998a. *Global Electronic Commerce and the Role of the WTO—Special Studies 2*. Geneva.

-----. 1998b. “Declaration on Global GEC.” WT/MIN(98)/DEC/2 (May 20); www.wto.org/wto/anniv/ecom.htm.

World Trade Organization, Committee on Trade and Development. 1998. “Global Electronic Commerce in Goods and Services—Communication from the Delegation of Egypt.” WT/COMTD/W/38 (March 3).

World Trade Organization, Council for Trade in Services. 1998. “The Work Programme on Electronic Commerce: Note by the Secretariat.” S/C/W/68 (November 16).

World Trade Organization, Council for Trade in Services. 1999. “Work Programme on Electronic Commerce---Communication from the European Communities and Their Member States.” S/C/W/98 (February 23).

World Trade Organization, General Council. 1998. "Work Programme on Electronic Commerce." WT/L/274 (September 30).

World Trade Organization, General Council. 1999a. "Preparations for the 1999 Ministerial Conference: Work Program on Electronic Commerce--Communication from Indonesia and Singapore." WT/GC/W/247 (July 9).

-----. 1999b. "Work Programme on Electronic Commerce---Communication from the United States." WT/GC/16 (February 12).

Notes

[1] The WTO suggests that the "value of electronic commerce has catapulted from virtually zero to a predicted US$300 billion in the ten years up to the turn of the century." See WTO (1998a, p. 2). It is not entirely clear how the figure for ten years ago could have been zero, unless one is referring solely to commerce over the Internet. For its part, the U.S. Department of Commerce more straightforwardly predicts a value of $300 billion by 2002. See WTO (1998a, p. 7).

[2] World Trade Organization (1998b).

[3] World Trade Organization, General Council (1998).

[4] On the nature of those debates and their significance for the eventual GATS agreement see Drake and Nicolaïdis (1992).

[5] For an argument along these lines, see Pierre Sauvé and Robert Stern's overview to this volume.

[6] The Canadian government's reliance on GATS to curtail imports of so-called split-run was rebuked by the WTO Appelate Body on the basis of GATT. Canadian policy was to prevent Canadian advertisers from buying advertising space at dumped prices in magazines with little Canadian editorial content, thereby confining the advertisers to the Canadian magazine market. Canada maintained that the measure was covered under GATS because it related to advertising and that Canada had not scheduled any liberalization commitments. But the Appelate Body argued that the measure nullified benefits under GATT because the inability to sell magazines, a good, was what was at stake.

[7] This is especially obvious when goods and services are bundled together and jointly marketed or otherwise comingled in a given commercial transaction. For a broad discussion of the problem see Grubel (1987).

[8] World Trade Organization, General Council (1999a, p. 5).

[9] World Trade Organization, Council for Trade in Services (1998, pp. 10--11).

[10] World Trade Organization, General Council (1999b, p. 2).

[11] World Trade Organization (1998, p. 51).

[12] World Trade Organization, General Council (1999b, p. 2).

[13] Rachel Thompson suggests that other examples of bundled services might include Internet access services, the operation of server farms, rich e-mail, electronic data interchange bulletin boards, on-line auctions, community groups on the Web, museum and cultural services, and electronic books. See, Organization for Economic Cooperation and Development (1999).

[14] World Trade Organization, Council for Trade in Services (1998, p. 2).

[15] On the workings of the Telecommunications Annex see Tuthill (1996).

[16] For discussions of the Group on Basic Telecommunications deal and the Reference Paper see Drake and Noam (1998); and Drake (1999).

[17] For a general discussion see Cottier, Mavroidis, and Blatter (1999).

[18] The Bavarian government's December 1995 threat to prosecute CompuServe points to early lessons in this vein. The ISP was attacked for serving as carrier to discussion groups producing material violating German pornography law and, as a result, had to block access to these discussion groups worldwide. The issue was finally resolved through technological devices, but similar conflicts are bound to arise.

[19] World Trade Organization, Council for Trade in Services (1999, p. 2).

[20] International Chamber of Commerce (1999, p. 55).

[21] For a discussion on the boundary between articles VI and VII, see the chapter by Nicolaidis and Trachtman in this volume.

[22] The OECD's work and reports on e-commerce issues are available at http://www.oecd.fr/dsti/sti/it/ec/index.htm. The materials from the Ottawa ministerial conference are available at http://www.oecd.fr/dsti/sti/it/ec/news/ottawa.htm.

---

[23] World Trade Organization, Council for Trade in Services (1998, p. 9).

[24] For a thorough discussion of such issues see International Telecommunication Union (1999).

[25] These concerns were first raised in World Trade Organization, Committee on Trade and Development (1998).