Trade in Electronic Commerce Services under the WTO: the Need to Clearly Classify Electronic Transmissions as Services and Not Tariff-liable

Ernesto A. Hernandez-Lopez

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The Need to Clearly Classify Electronic Transmissions as Services and Not Tariff-Liable

Ernesto HERNÁNDEZ-LÓPEZ*

Should the World Trade Organization classify electronic transmissions as a service, and thus tariff-free under the General Agreement on Trade in Services (GATS), or should the WTO classify electronic transmissions as a good, and thus subject to tariffs under the General Agreement on Tariffs and Trade (GATT)?

This article discusses two important issues: first, whether, for the sake of legal certainty, the WTO should take the appropriate steps to definitively classify electronic transmissions as a service and as not tariff-liable. Not tariff-liable means that a good is not subject to customs duties. Electronic transmission refers to “digitalized information transmitted by electronic means.” Because they imply an exchange of digital information, electronic transmissions are a dynamic, highly technical, and evolving form of cross-border transactions. Second, it explores how, if electronic transmissions are defined as a service, WTO Members will be able to benefit from eventual liberalization in the service sector.

* J.D. (The George Washington University Law School); M.A. (Georgetown University). Served as an International Relations Professor at the Universidad del Rosario and as a Political Science Professor of the Universidad Javeriana, both in Santa Fe de Bogotá, Colombia.

Thanks are due to Professor John Spanogle for his comments, patience, and suggestions regarding this article, and “Skip” Jones and the staff of the Office of Multilateral Affairs of the U.S. Department of Commerce, as well as Professors Raj Bhala and Stanimar Alexandrov for their guidance in teaching him about the WTO. Any perspectives presented in this article solely reflect the opinions of the author. Any comments may be sent to ernestoh@gwu.edu.

“Tariff-liable” means that a good is subject to tariff duties. Accordingly, a government may charge a tariff on a good, if it is tariff-liable. Tariffs are: “A schedule or system of duties imposed by a government on imported or exported goods. In the United States, tariffs are imposed on imported goods only.”; see Black’s Law Dictionary, West Publishing Co., St. Paul, Minnesota, 1999, at 1468. A certain kind of tariff is a customs duty. A customs duty is “a duty levied on an imported or exported commodity, especially the federal tax levied on goods shipped into the United States.”; see Black’s Law Dictionary, ibid., 523. For the sake of brevity this study uses tariffs and customs duties synonymously, although there are other types of tariff duties, such as antidumping tariff duties, discriminatory tariff duties, retaliatory tariff duties, etc.

See WTO Council for Trade in Goods, Work Programme on Electronic Commerce (hereinafter Work Programme I), 26 July 1999, G/C/W/158, at para. 2.2(iv). This article treats “electronic transmission” as a transaction between a customer and a supplier, and applies trade law to this transaction to see how the transaction is classified as a “trade in goods” or “trade in services”. It asks how the WTO will treat cross-border trade in electronic transmission, the electronic transmission a customer receives and the digitalized information by electronic means. This could be via the Internet, wire, or intranet. It is not necessary for the offer and assent of this transaction to be done via electronic means, although typically it is; it is only necessary for the transmission of the information (service of good) to be done electronically. Examples include downloading documents on the World Wide Web in pdf, html, or word processor format, music in MP3 format, or images in quicktime format.
Section I of the article reports on the current state of confusion and indecision in the WTO surrounding the issue of whether all electronic transmissions are services and whether electronic transmissions are customs-duty-free. Section II presents the various perspectives in the electronic transmissions debate. This debate refers to whether electronic transmissions are a good or a service. There is a discussion of the arguments for classification as a good and for classification as a service, justifications for applying customs duties and reasons to not apply customs duties, and contemporary examples of U.S. law which define “goods” and determine the tax liability of e-commerce. Section III examines how electronic transmissions fall within the GATS legal framework. Initially, hypothetical examples are given to present what potential scenarios may develop from the legal issues raised in this article. Next, there is an analysis of the GATS four-mode legal framework, requirements for specific Member commitments, and the on-going services-trade negotiations. Section IV presents the conclusions.

Electronic transmission can be seen as a good or as a service. From one perspective, a number of electronic transmissions have qualities similar, if not identical, to goods. Electronic transmissions such as downloadable music, books, movies, newspapers, documents and computer programs share many qualities with physical goods. The consumer does not receive a different product. Alternatively, electronic transmissions can be seen as a service. The customer purchases or uses the service of attaining electronic information. Considering these varying positions, this article refers to this issue as the “electronic transmission debate”.

Because electronic transmissions are a dynamic and evolving type of transaction, the WTO should classify them as a service. With this classification, the WTO's complex legal framework for services can adapt to the evolving technological nature of electronic transmissions. If electronic transmissions are not defined as a service, Members will remain debating the characterization of cross-border electronic transmissions. This debate will delay and stall any substantive liberalization for trade in electronic transmissions services.

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3 The WTO does not define goods; instead it relies on Members to apply tariffs to goods in their Tariff Schedule. The GATS Agreement does not define "services"; instead it defines "trade in services"; see Section III.A, below.

4 The typical transaction could be either: (1) a licence which permits the customer to make and use a copy of the computer program; or (2) purchasing the service of using the computer program which is online. For either one of these contracts, the issue of whether there is a service or good applies. The reasoning is that the lack of a customs duty being applied would motivate a government to make the determination of whether it is a good or a service. A more sophisticated analysis would stress the issue of the intellectual property aspect of the transaction. Computer programs, literature, images and music benefit from such intellectual property protection as copyrights, trademarks and patents. It could be argued that the transaction is not a transfer of goods because the customer only attains a right to use the intellectual property. Without any tangible exchange, the transfer of these rights is a service. Nonetheless, the end result of the transaction—a book, music, or text—motivates governments to make the central enquiry of this article.
I. THE CURRENT STATE OF ELECTRONIC TRANSMISSIONS IN THE WTO: A LACK OF CLARITY

Currently, the WTO has failed to extend a moratorium on applying customs duties to electronic transmissions. The WTO agreed to a temporary moratorium on applying customs duties to electronic transmissions in 1998. This issue was to be decided at the WTO's Third Ministerial Meeting in Seattle in the fall of 1999. With the failure to launch a new negotiating round, the Ministerial was unable to discuss the issue. Since then, WTO Members have been unable to extend or to make permanent the moratorium on applying customs duties to electronic transmissions. At present, WTO Members have no legal obligation to apply or to not apply customs duties to electronic transmissions. However, with the current business enthusiasm for e-commerce, the increasing importance of electronic transmissions and the complex nature of the GATS Agreement, the WTO should eliminate any uncertainties and declare electronic transmissions a service, and therefore customs-duty-free.

The WTO is currently analysing how e-commerce fits within the various legal benefits and obligations presented by a variety of WTO Agreements. A part of this e-commerce enquiry is the electronic transmission debate. At present, Members are not obligated to apply or to not apply customs duties to electronic transmission transactions. Following the 1999 Seattle Ministerial, there has not been any extension or confirmation of the moratorium on applying customs duties to electronic transmissions. Many Members have different perspectives regarding the moratorium. Some Members contend that the moratorium is still in effect, while others contend that it lapsed with the failure of extension at Seattle. Nonetheless, no Member has declared its intention to impose customs on e-commerce transactions. Regardless of there being no clear determination by the WTO, there is still the possibility for a Member to apply customs duties to electronic transmissions.

7 See Information Technology, BNA Int'l Trade Reptr, 6 October 1999.
9 Id.
10 This argument stems from the fact that: (1) there have not been specific e-commerce sector negotiations in the GATS; and (2) the moratorium on customs duties application has not been renewed. Alternatively, it may be argued that the GATS imposed a prohibition on tariffs for all services. Thus, because electronic transmission is a service, Members enjoy the benefit of having trade in this service free from tariffs. With this, Members have the de facto obligation to not impose a customs duty.
11 See Electronic Commerce, BNA Int'l Trade Daily, 14 December 2000: explaining that the United States insists that the moratorium is in effect, while developing countries contend that it has lapsed. Information Technology, BNA Int'l Trade Daily, 6 October 1999: explaining that despite much support amongst Members, the moratorium will most likely not be permanent, and India, Malaysia and Mexico were non-committal, "arguing that further clarification was needed on what transactions will be covered by the moratorium."
The most recent development has been the establishment of a formal “Work Programme on Electronic Commerce” by the WTO General Council on 17 July 2000.\(^1\) This was an important step, as e-commerce issues had been stalled for nearly two years following the Third Ministerial.\(^2\) Previous WTO work on e-commerce was done informally, and not necessarily under the supervision of the General Council.\(^3\) The current programme invites the four WTO subsidiary bodies—the Council for Trade in Goods, Council for Trade in Services, Council for Trade-Related Aspects of Intellectual Property Rights (TRIPS), and the Committee on Trade and Development—to independently examine how e-commerce fits within their focus sectors. The four bodies are to report at the General Council’s regular meetings.\(^4\) This Work Programme builds on previous work done within the Council for Trade in Goods.\(^5\) Established in July 1999, this latter view includes:

- market access for and access to products related to electronic commerce;
- valuation issues arising from the application of the Agreement on Implementation of Article VII of the GATT 1994;
- issues arising from the application of the Agreement on Import Licensing Procedures;
- customs duties and other duties and charges as defined under Article II of GATT 1994;
- standards in relation to electronic commerce;
- rules of origin issues; and
- classification issues.”\(^6\)

Classification issues represents the most important concern for this article, as they relate to the decision as to whether an electronic transmission is a good or a service, i.e. the electronic transmission debate.

II. THE ELECTRONIC TRANSMISSION DEBATE

Currently, the WTO has decided to classify cross-border transactions via the Internet as “trade in services”, and they thus fall under the GATS.\(^7\) The GATS is technology-neutral, i.e. it does not “distinguish between technological means of delivery.”\(^8\) Personal delivery, delivery by boat, delivery by airplane, or electronic delivery of services all fall under the GATS. Accordingly, most WTO Members propose that “all the provisions of the GATS apply to trade in services through electronic means.”\(^9\) Regarding most e-commerce services, there is little disagreement about their legal status as a service.


\(^{13}\) See Electronic Commerce, supra, footnote 5.

\(^{14}\) See Chairman’s factual progress report, supra, footnote 12.

\(^{15}\) Id.

\(^{16}\) Id.

\(^{17}\) Ibid., at 3.


\(^{19}\) Id.

\(^{20}\) Id.
There is, however, disagreement about the "classification" of the specific form of e-commerce called electronic transmission.\textsuperscript{21} Electronic transmission refers to "digitized information transmitted by electronic means".\textsuperscript{22} These transmissions can be viewed as a good or as a service. In order to make sense of this issue, this study presents below the arguments made by Members stressing:

- classification as a service (II.A);
- classification as a good (II.B);
- applying customs duties (II.C); and
- not applying customs duties (II.D).

The first two sub-sections address the substantive legal issue of classification, while the latter two analyse the logistical problems of customs-duty application. As part of an effort to draw external legal influence, this section concludes with an examination of how U.S. contract law and U.S. e-commerce regulations define goods and services and how they apply tax liability to e-commerce transactions (II.E).

Electronic transmissions refer to the possibility of a consumer obtaining a book, text, software, or music via electronic means. Examples include downloading a book from the Internet, a computer program from a host server, or an MP3 file from an electronic bulletin board.

From the service perspective, Members argue that the consumer is only using a service which, for instance, permits the consumer to make a copy of the book.\textsuperscript{23} From this perspective, there is no actual physical product exchange, there is only an exchange of digital information. That is, there is only the use of service/information to make a product.

From the goods perspective, Members contend that the consumer electronically attains a product identical to an actual physical good.\textsuperscript{24} This position emphasizes that the electronic transmission facilitates the delivery of a physical good, such as a book.\textsuperscript{25}

It is contended here that this debate is fuelled by economic and sovereignty interests. Governments have the authority to apply customs duties. A multilateral


\textsuperscript{22} See Work Programme I, supra, footnote 2, at para. 2.2(iv).

\textsuperscript{23} Ibid., at para. 2.4.

\textsuperscript{24} Ibid., at para. 2.6.

\textsuperscript{25} Id.
decision to not apply customs duties translates into a sovereign ceding some of its authority. The GATS prohibits applying tariffs to services, while under the GATT, Members may subject goods to customs duties. Accordingly, some Members feel that electronic transmissions offer consumers a means of avoiding paying customs duties on articles such as music recordings on CDs, or books. With this, governments lose much-needed funds. Despite participation in global free trade, many countries receive a major part of their government funds from tariffs. Alternatively, other Members regard electronic transmissions as an example of free trade. Here, there is commercial activity which is not subject to government intervention. Similarly, many nations are hesitant to cede their authority to apply customs duties. Nations often regard this authority as their sovereign right.

It is further contended here that the debate is exacerbated by dueling multilateral negotiation positions intrinsic to the WTO. The electronic transmission debate fits in as a part of a variety of trade negotiations which each Member conducts. The WTO represents a series of multilateral negotiations in many economic sectors, such as agriculture and services, where consensus has not been reached. Some Members, such as the United States and the European Union, seek the initiation of a new round of trade negotiations. Other Members prefer to not proceed with further such negotiations. Both camps, though, need other Members to build alliances and consensus in the WTO Ministerials and in the actual trade negotiations. With so many negotiation positions, the electronic transmission debate becomes a bargaining chip within larger issues, such as the start of a new round, negotiating the Agreement on Agriculture and revising the Anti-Dumping Agreement. Accordingly, this multilateral bargaining exacerbates the indecision and ambiguity surrounding electronic transmissions.

A. WITH NO TANGIBLE GOODS TRANSFERRED, ELECTRONIC TRANSMISSIONS ARE A SERVICE

Some WTO Members present four main arguments for classifying electronic transmissions as services. These arguments stress that the GATS:

- is technology-neutral;
- information is exchanged not products;
- electronic transmissions are customizable; and
- digitalized information does not require a physical or tangible form.

26 Examples of these WTO Treaties include areas such as: textiles, agriculture, sanitary and phytosanitary measures, technical barriers to trade, subsidies and countervailing measures, antidumping, safeguards, rules of origin, customs valuation, import licensing, State trading enterprises, information technology products (ITPs), trade facilitation services, intellectual property, TRIPS, trade policy reviews, government procurement, transparency working, investment and trade, balance of payments, competition policy, electronic commerce, environment, development, regionalism, and dispute settlement. See WTO, WTO Trade Topics, available at: <http://www.wto.org/english/tratop_e/tratop_e.htm>, viewed on 21 April 2001.
First, the strongest argument for classification of electronic transmissions as a service is that the GATS is technology-neutral; it does not distinguish between what form of technology is used to deliver a service. Electronic transmissions involve a digital or non-physical manifestation of exchange. The similarity of digital information with actual goods is irrelevant, because information does not have actual physical attributes like a good; information only permits the customer to make something, such as a good. The GATS encompasses all trade in services; the WTO Secretariat notes that “the reach of the GATS rules extends to all forms of international trade in services.” With this mind-set, electronic transmissions are no different from other services, and thus the GATS applies.

Second, electronic transmissions transmit digital information, as opposed to any physical product. Here, there is a distinction between the data (digitalized information) and the product (music CD, book, or magazine). Often Members refer to the product as the carrier of the data. The carrier is tariff-liable, while the data is not. With an electronic transmission, there is an exchange of data or information. This data is digitalized. Nothing physical or tangible is exchanged. Because information is not a physical product, electronic transmission cannot be classified as a good.

Indonesia and Singapore explain this point:

“Books, music, and software are not themselves new commercial products. It is just that prior to the advent of e-commerce, they were treated as goods because they had to be delivered in the form of a carrier media, be it paper, cassettes, etc., and those carrier media were classified as goods. Now that those forms of tangible carrier mediums are no longer necessary maybe what we need to consider is whether the software and music would continue to classify as goods, or it might be more appropriate for them to be classified as services.”

Third, the ability to adapt or customize electronic transmissions precludes their classification as a good. With electronic transmissions, there is not a single good exchanged. Instead, a service is provided to create a customized set of data. Digitalized information permits a recipient to alter the form, structure, size and applicability of the final product. For instance, a recipient may download only one section of a text, may decide to not download all files included in an application, or may retrieve only sections of a CD or sections of a song. This changeable nature of the transmission supports the

27 See Work Programme II, supra, footnote 21, at para. 6; Work Programme III, supra, footnote 21, at para. 4. The GATT is not technology-neutral, but all goods to which the GATT applies must be classified in the Harmonised System (HS). Accordingly, only technologies in a Member’s Tariff Schedule are subject to tariffs.

28 Specifically, the GATS provides some general obligations which Members must afford to “trade in services” from other Members. For further liberalization, Members must reach specific commitments on specific sectors. Accordingly, one sector of “trade in services” may benefit from more liberalized treatment than another sector because the specific commitments vary. In this respect, all service sectors do not benefit from the same liberalization. For instance, there may be more liberalized treatment given to trade in financial services as compared to trade in legal services, because the specific commitments relating to financial services are more liberal.

29 See WTO Secretariat, An Introduction to the GATS, Trade in Services Division, October 1999, at para. 1.1.

30 See Work Programme I, supra, footnote 2, at para. 2.6.

31 See Preparations, supra, footnote 21, at para. 11.

32 Id.

33 Id.

34 See Work Programme I, supra, footnote 2, at para. 2.8.
service argument, because the transmission's end result can be changed. With this customized nature, the transaction never results in one single type of product. The Council for Trade in Goods elaborates:

"The inherently 'customizable' nature of many digital products would argue against classifying them as traditional goods. The number of new categories of products made possible by digitalization was limitless."\(^{35}\)

Fourth, the intangible or non-permanent nature of digitalized information suggests that it is not a good.\(^{36}\) With this changing nature, it becomes difficult to classify an electronic transmission as one kind of good. Digitalized information, such as software, text or digital music, is not fixed or tangible. Digital information exists as ideas, yet it is not necessary for them to be tangible for them to have any value. This non-fixed or non-permanent nature suggests that they resemble a service. This is because it is in the information that the value lies. Digitalized information may only resemble a good if it is stored in a physical form, such as a diskette or paper copy. The Council for Trade in Goods explains:

"All digitalized products could be traded over the Internet, and while some products, e.g. software or music, could be stored on a carrier media after being received electronically (thus approximating a good), a carrier media was, in many cases, unnecessary."\(^{37}\)

B. WITH A RESULT THAT IS IDENTICAL TO A GOOD, AN ELECTRONIC TRANSMISSION IS A GOOD

Some Members argue that electronic transmissions should be classified as goods.\(^{38}\) The central argument for such classification is that the end result of a transmission is identical to a physical good.\(^{39}\) Here, observers note in some instances that transmission of digitalized information provides recipients with something which is not different from a tangible version of the information.\(^{40}\) This similarity suggests that goods are exchanged via electronic transmissions. The Council for Trade in Goods reports:

"Examples given in this context related to music downloaded from the Internet in the form of digitalized data versus a physical CD purchased in a shop. In the circumstances where software downloaded from the Internet was a perfect substitute for the software on a disk or CD ..."\(^{41}\)

\(^{35}\) See ibid., at para. 2.8. This argument rests on the reasoning that the mutable nature of electronic data permits an endless variety of end-products. This makes it impossible to classify an electronic transmission as one product. This argument is weakened however, by current goods which are "customizable". Products such as jewellery, cars, clothes, shoes, and many others come in many shapes and sizes. Yet they are able to be classified as a good.

\(^{36}\) The key element here is that data is intangible. It cannot be touched or carried away. It does not have a physical composition. Some goods may not be permanent, but they are tangible. For instance, agricultural products, if left alone, will decay and cease to exist eventually. They are non-permanent. Initially, and even in decomposition, these goods are tangible. They have a physical element.

\(^{37}\) See Work Programme I, supra, footnote 2, at para. 2.8.

\(^{38}\) Ibid., at para. 2.6.

\(^{39}\) Id.

\(^{40}\) Id.

\(^{41}\) Id.
Another argument stresses that mass electronic distribution of data should be classified as a good. This is because mass distribution lessens the individual or specialized nature of services. With mass distribution, a host is consistently supplying data as if it were a good. The consistent and dedicated nature of the distribution suggests there is an economic value to the data, which is transacted as if it were commerce in goods.

Furthermore, some Members note that there should be classification as a good when there is a physical counterpart to the result of electronic transmission. This perspective attempts to distinguish digital transmissions of data and digital transmissions of products which exist in tangible form. When there is a tangible counterpart, the transmission should be classified as a good and thus tariff-liable.

There are WTO benefits to characterizing electronic transmissions as goods and thus subject to the GATT. At an initial glance, the GATT appears less favourable because it permits a Member to impose tariff-liability on most goods. Interestingly, the GATT places the general obligations of national treatment and most-favoured-nation (MFN) treatment, does not require specific commitments, and does not contain any progressive liberalization. It thus provides a clearer sets of benefits and obligations for Members. Goods traded between Member countries benefit from national and MFN treatment.

On the other hand, electronic transmissions, like most forms of e-commerce, represent a rapidly evolving technology. With fibre optics, satellite-based transmissions, mobile communications technology, Internet networks and the constant fusion between these technologies, electronic transmission will evolve at an amazingly rapid pace. A classification of electronic transmissions as a good would be short-sighted as it may become quickly outdated in a world of evolving technologies. With this constant evolution, the GATS presents a better system of liberalization as its definition of services is less static than a product/goods determination and thus more accommodating to technological innovations.

C. LIKE ANY OTHER GOOD, ELECTRONIC TRANSMISSIONS SHOULD BE SUBJECT TO CUSTOMS DUTIES

For proponents of applying customs duties to electronic transmissions, the argument rests on a classification of electronic transmissions as goods. Should this be the case, customs duties could be applied. Goods are subject to Tariff Schedules, as submitted to the WTO by its Members. Goods obtained electronically, such as downloaded music or books, should be subject to customs duties just as tangible goods.

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42 Ibid., at para. 2.7.
43 Ibid., at para. 10.
44 Ibid., at para. 2.3.
45 While the WTO and the GATT have the objective of reducing trade barriers, tariffs remain a fixture in the trade regime of many nations. Many States are hesitant to completely liberalize their goods markets and eliminate all tariffs for many goods. With this in mind, the GATT trade negotiation rounds aimed to reduce tariff rates for many goods.
are. The GATT negotiations represent extensive multilateral obligations on tariff rates for various goods. Permitting a class of goods, such as electronically transmitted goods, to escape customs duties disrupts free trade. The WTO represents an organized and planned effort to liberalize trade between nations. With a class of goods escaping negotiated tariff levels, Members are having their benefits violated. Tariff levels were negotiated; each tariff level in the GATT represents a multilateral benefit. Members benefit from a certain rate negotiated for goods such as TVs, books or video cassette movies. These tariff levels represent a multilateral effort to achieve free trade. For instance, Members negotiated a certain tariff level for books and CDs but these tariffs are not collected when there is an electronic transmission of these products because the transmission permits a customer to avoid customs declaration at a port.

D. BECAUSE THEY ARE A SERVICE, AND DETERMINATION OF WHEN THERE IS ACTUAL "IMPORTATION" REMAINS UNCLEAR, ELECTRONIC TRANSMISSIONS SHOULD NOT BE SUBJECT TO CUSTOMS DUTIES

It is contended by some Members that electronic transmissions should not be subject to customs duties. Arguments against applying customs duties rest on two ideas: electronic transmissions are a service, which is not subject to customs duties; and it is difficult to logistically apply customs duties to an electronically delivered product. The GATS does not include any mention or possibility of applying customs duties, and to apply tariffs to a service would go against the benefits secured by the negotiated Agreement. Accordingly, to apply tariffs to trade in services is a violation of a Member's GATS benefits.

Electronic transmissions present many problems for applying customs duties. First, it is difficult to actually determine if an importation takes place. With an electronic transmission, there is no tangible object which crosses a physical border; with this lack, the question arises of when and if an importation can be determined. Without determination of when an importation occurs, it is difficult to establish when customs duties should be applied. The Council for Trade in Goods reports:

"... where customs duties were applied to goods in the delegation's country, a cross-border
trade transaction was always involved. With electronic commerce, especially in the Internet realm, it was unclear whether there was a 'thing' that actually moved across a border, which would lead to the conclusion that 'importation' in the sense of Article II of the GATT had not taken place. GATT Article II referred to customs duties applied in connection with an importation. If no importation was involved, electronic transmission would be taken out of the realm of applying customs duties.52

Second, the electronic nature of these transfers escapes classification under the Harmonized System (HS) which WTO Members use to classify products and determine tariff levels. The HS does not currently include any electronic transmissions.53 Classification of a product in the HS relies on the “distinguishing physical characteristics of the product.”54 For instance, a CD or a book is classified by the HS according to its physical shape, size and dimensions. Electronic transmissions represent the transfer of digital information, lacking a tangible quality. Electronic transmissions, however, do not have any physical characteristics.55 Digitalized information is only distinguishable by its content; it is not recognizable, until a recipient receives it. During transmission, this information remains as a series of computer-generated “0s” and “1s”. Having no physical characteristics, digital information and electronic transmissions escape the HS classification scheme. The Council for Trade in Goods expands:

“While the HS distinguishes between empty carrier media and carrier media with content, it does not have a classification for the content itself. This can be illustrated by the case of computer software traded over the Internet. The HS does not have a classification for software because software is not a physical entity. Rather, software is classified under the type of carrier media is contained on.”56

Lacking a way to properly place electronic transmissions in the HS, Members suggest that customs duties should not be applied to electronic transmissions.

E. CLASSIFICATION AND TAX-LIABILITY EXAMPLES IN U.S. LAW

U.S. law has begun to examine many of the issues that the WTO faces in determining whether electronic transmissions are goods or services and whether e-commerce should be taxed. Should the WTO apply the U.S. legal perspective, electronic transmissions will not be classified as a good. They lack the “tangible” quality necessary to qualify as a “good”. Similarly, they exchange “computer information”, which is excluded from the definition of “goods”. Regarding the taxing of

52 Ibid., at para. 2.9.
53 Ibid., at para. 4.4. Alternatively, these classifications could be added. However, this goes contrary to the tendency of classifying electronic transmissions as a service.
54 Ibid., at paras. 5.4 and 5.5.
55 Alternatively, electronic transmissions could be classified according to whichever physical characteristics or carrier the content typically has. With this, electronic transmissions would fit into the HS and the GATT. This classification would go against the trend to keep e-commerce duty free. Also, classification of an electronic transmission into the HS would not reflect technological advances. For instance, with the music available online example, HS classification would place this transmission in the CD or magnetic recording section of the HS. However, this does not reflect the actual transaction, because the physical elements of a magnetic recording or a CD are not evident when music is downloaded.
56 See Work Programme IV, supra, footnote 21, para. 2.2.
e-commerce, the United States has been hesitant to tax any transaction done by this means. The U.S. government takes this position because taxation would hinder the medium's development, and tax liability would raise the complex issue of which tax regime should apply.

1. **The U.S. Definition of “Goods”: Stressing the Tangible and Movable Qualities**

   Specifically, the most prevalent U.S. definition of goods is that used in the Uniform Commercial Code (UCC). This definition stresses the “tangible” and “movable” qualities of goods. As did the draft for the model law for computer information, the Uniform Computer Information Transactions Act (1999) (UCITA) incorporates the UCC's definition of “goods”. Most States have not adopted or implemented UCITA. It does, though, provide an example of how U.S. policy-makers may define goods and services in the e-commerce sector.

   To qualify as a “good” under the UCC there must be a tangible or physical quality present at the time of the transaction. According to these criteria, electronic transmissions escape the definition of being goods. There is no tangible or movable object evident when digital information is transmitted. Consequently, the U.S. contract-law perspective would fail to qualify electronic transmissions as a good.

   The UCC definition stresses the tangible and movable qualities of goods:

   "‘Goods’ means all things (including specially manufactured goods) which are movable at the time of identification to a contract for sale other than money in which the price is to be paid, investment securities (Article 8) and things in action. ‘Goods’ also includes the unborn young of animals, growing crops, and other identified things attached to realty as described in the section on goods to be severed from realty.” (emphasis added).

   The Official Comment adds:

   "The definition of goods is based on the concept of movability.”

   Black’s Law Dictionary makes reference to this definition of goods, and it adds:

   "The term does not include … general intangibles.”

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58 See UCC, id.
60 UCC Article 2-105(1).
61 Id.
62 See West Group, supra, footnote 57, at 49.
63 Supra, footnote 1, at 701, referring to UCC § 2-101-(a)(24).
When interpreting Article 2-105(1), U.S. courts stress the tangible element of the transaction in question to determine if the software transaction implies a good or a lease. In *Communications Groups Inc. v. Warner Communications Inc.*, a New York County Court held that a software transaction was a good because the transfer from seller to buyer involved tangibles. Here, the contract stipulated "equipment" in the work schedule. This inclusion of tangibles—equipment—made the transaction a sale of goods. If the transaction was limited to information only, without tangibles such as equipment, the contract would have been a service.

In *Architectronics Inc. v. Control Systems Inc.*, the Southern District Court of New York held that a software transaction was not a good. Here, the Court noted that software is considered a good, but that copyrights, patents and trademarks are considered "intangibles" and thus not goods. In this case, the Court reasoned that the transaction concerned the right to use software and the right to market the product. The Court held that because this contract implied a transfer of intellectual property rights, the transaction was a lease and thus not a sale of goods.

Accordingly, following U.S. legal analysis, the key distinction is whether the transmission involves the movement of tangibles or intangibles. The transfer of tangibles indicates that the transmission involves goods. The transfer of intangibles makes the transmission a service. Specifically, if the electronic transmission is limited to transfer of digital information, U.S. law would find it a service. Examples of such transfer would be an MP3 music file, a text or a magazine article downloaded from the Internet. However, if the electronic transmission includes the transfer of anything physical or tangible, then the transmission will imply a good. Examples of this would include downloading a program or text electronically which includes paper literature, an article of clothing, or a plastic identification card. In these cases, the key element of the transmission was digital information, but the inclusion of paper literature, an article of clothing or a plastic identification card reify that tangibles are included. These last examples are extreme, but they do illustrate that to securely avoid a transmission being identified as a goods transfer nothing tangible should be transferred.

The UCITA bases its definition of goods on the UCC criteria of tangibility and movability, and tailors the UCC definition by adding:

"'Goods' means all things that are movable at the time relevant to the computer information transaction ... The term does not include computer information, money, the subject of foreign exchange transactions, documents, letters of credit, letter-of-credit rights, instruments,

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64 See *Communications Groups Inc. v. Warner Communications Inc.*, 527 N.Y.S. 2d, 341, 343.
65 Ibid., at 344.
66 Id.
68 Id.
69 Id.
70 Id.
investment property, accounts, chattel paper, deposit accounts, or general intangibles." (emphasis added).\(^71\)

It goes on to provide the following definition for computer information:

"… information in electronic form which is obtained from or through the use of a computer or which is in a form capable of being processed by a computer …"\(^72\)

The UCITA provides a series of exclusions which are important to electronic transmissions. First, they stress that the UCITA applies to computer information and not to goods. It states:

"This Act applies to computer information transactions … if a transaction includes computer information and goods, this Act applies to the transactions involving computer information, informational rights in it, and creation or modification of it."\(^73\)

By stressing computer information, the UCITA highlights the intangible (information) versus tangible distinction evident in U.S. contract law. Accordingly, electronic transmissions under this definition are a service and not a good.

Second, the exclusions identify many transactions which include information or intangibles and which are not within the UCITA's scope. There is a fear that industries which use computer information may fall under new obligations and duties that are set in the UCITA. In particular, a business may use computer services to facilitate its industry, although it is not involved in computer information creation, such as software production. From this viewpoint, computers are used to create financial services, music recordings and motion pictures. These industries fear that the UCITA will place contractual obligations on them. Accordingly, the UCITA includes specific exclusions which nullify its application to these industries.\(^74\) Using this example, international legal obligations evident in the WTO, EU, or other treaties could proceed to specifically exclude computer-facilitated transactions from e-commerce.

Electronic transmissions fail to meet the tangibility criterion as defined in the UCC and the UCITA. First, there is no tangible or physical product evident when an electronic transmission takes place; the recipient uses a computer program presented by the host only to attain additional digital information. This digital information can be used to reproduce music as on a CD, text as in a book or computer functions as in a computer program. Nonetheless, there is never any movable or physical object present at the time of the transaction, only a transfer of digital information. The UCITA also sets out the standard, "all things that are movable at the time relevant to the computer information transaction."\(^75\) With no physical product existent at the time of transmission, electronic transmissions thus fail to meet the "goods" definition.

\(^71\) Supra, footnote 59, at § 102(33).
\(^72\) Ibid., at § 102(10).
\(^73\) Ibid., at § 103(b)(1).
\(^74\) Ibid., at § 103(b)(2).
\(^75\) Ibid., at § 102(33).
Second, electronic transmissions also fail to meet other "goods" criteria, defined in the UCC and UCITA; they fall within the "general intangibles" exclusion of the UCC and the "computer information" exclusion in the UCITA. These two Sections specifically exclude "general intangibles" and "computer information" from the "goods" definition. Electronic transmissions are the exchange of computer information. This information may produce music texts, or a computer program, but it is not a good.

The significance of the information exchanged in an electronic transmission is that a computer uses it. The information is of no value without using a computer to read it. A CD or MP3 player reads the information transmitted with a computer to produce music. A computer's central processing unit (CPU) reads digital information and displays it on a computer monitor as text. A computer's attached printer reads the digital information and produces a paper copy of the text, while a CPU reads digital information to run a computer program. In all three examples, a computer is necessary to read the digital information. This data is computer information. Accordingly, it is excluded from the UCC and UCITA definitions of "goods".

2. U.S. Preservation of Tax and Customs-Duty Neutrality for E-Commerce

The U.S. domestic treatment of e-commerce provides for non-taxation and no tariff liability for international electronic transmissions. There is a temporary moratorium on taxing e-commerce transactions, and there is a clear legal precedent that electronic transmissions are not subject to customs duties. Indeed, the United States has decided to not impose any customs duties or taxes on e-commerce transactions. In 1997, the Clinton Administration presented A Framework for Global Electronic Commerce, which stressed the importance of tax neutrality for e-commerce. The Report explained that subjecting e-commerce to tax liability would impede the growth of the medium. "Inconsistent tax regimes" would create confusion for both consumers and businesses. This rationale led to the Internet Tax Freedom Act (ITFA) which placed a three-year moratorium on imposing any new taxes on "Internet access and multiple or discriminatory taxes on electronic commerce".

"... based on a simple principle: Information should not be taxed. As we enter the digital age,
the age of information, establishing this principle in law will have profound and long-lasting consequences.”

Similarly, the U.S. Customs Service does not subject electronic transmissions to customs duties. In presenting its “Importation Requirements”, the Customs Service states:

“Information and materials downloaded from the Internet are not subject to duty. This applies to any goods or merchandise that are electronically transmitted to the purchaser, such as CDs, books or posters.”

When asked about what customs duties are applicable to software transmitted by electronic means, the Customs Service explains that “software entered via electronic transmissions” is exempted from the “general rule that all goods provided for in the HTSUS [Harmonized Tariff Schedule of the United States] are subject to duty. Therefore, no duty is owed if software is entered via electronic transmissions.”

III. TO SECURE TRADE LIBERALIZATION, INHERENT COMPLEXITIES AND AMBIGUITIES IN THE GATS URGE A CLEAR DETERMINATION OF THE ELECTRONIC TRANSMISSION DEBATE

In order to understand how WTO obligations affect electronic transmissions, this
article provides two hypothetical examples. One is in a country with free trade and national treatment in the electronic transmission services sector, while the other is in a country without free trade in the electronic transmissions services sector.

Example 1:

Ernesto, residing in country Free Trade Land (FTL), downloads an MP3 file from Internet Music Service Page Inc. (IMS) which is based in Foreign Country (FC). Ernesto pays for the service and receives the MP3 file. FC and FTL are both Members of the WTO. With bilateral negotiations and determination in their commitment Schedules, FC and FTL have agreed to extend national treatment to trade in electronic transmission services.

There are no customs duties included in Ernesto's price because the IMS is classified as "trade in electronic transmission service". As a service, this transaction falls under GATS, which prohibits tariffs for service transactions. Purchasing the same music in CD form or as an over-the-counter MP3 file would include customs duties if the CD or MP3 file was imported. Accordingly, classification as a service permits this download to benefit from customs-duty-free treatment. Also, IMS benefits from national treatment in FTL. Although it is a foreign company, IMS enjoys all rights that a service provider from FTL would, because of the specific service sector commitments between FTL and FC. Therefore, specific service sector commitments provide electronic transmission service providers easier access to conduct business in WTO countries.

Example 2:

John, a resident of country Secure Our Borders (SOB), downloads an MP3 file from Internet Music Service Page Inc. (IMS) which is based in Foreign Country (FC). John pays for and receives the MP3 file. John pays customs duties on the download to avoid a penalty from SOB's Internet Download Monitor Board (IDMB). FC and SOB have no trade agreement on electronic transmissions; SOB is not a Member of the WTO. SOB classifies electronic transmissions as goods when there is a transfer of something similar to a physical product.

John pays a higher price than Ernesto because the MP3 file download in SOB is classified as a good. The MP3 has a physical counterpart, i.e. a CD. As a good, CDs are tariff-liable. With customs duties added to the MP3's price, this increases John's and IMS' costs. Because SOB must determine when there is an actual importation, SOB sets up the IDMB. SOB has to pay to create and maintain this new administrative agency. SOB charges a value-added tax to John to pay for the creation and maintenance of the IDMB. Also, IMS is subject to foreigner-specific regulations
concerning setting up a foreign office, electricity, importing hardware, and Internet-provider licences. Accordingly, without tariff-free treatment and liberalization in the trade in electronic transmission services, John's transaction is more expensive than Ernesto's. Yet both received the same result—a music file.

With four modes of supply of services, required Member-specific commitments and continuing trade negotiations on market access to services, the GATS presents a complex and unclear set of WTO obligations for trade in services. Any obligations which result from a resolution of the electronic transmission debate will be a part of this complex network of GATS commitments. Accordingly, this article contends that the WTO should begin to resolve the electronic transmission debate in order to then decide appropriately how liberalization commitments for trade in electronic transmission services fall within the GATS framework. Without these definitions and determinations, the WTO will continue in a state of uncertainty and inability to secure e-commerce GATS benefits for its Members. By clearly defining whether electronic transmissions are a service or a good, customs-duty free or tariff-liable, the WTO may proceed to define what trade liberalization obligations exist. With this objective, this section describes the GATS' unique legal commitment framework.

A. "MODES OF SUPPLY" AND A LACK OF DEFINITIONS

Article I defines the scope and coverage of the GATS. The Article states that GATS applies to "measures by [WTO] Members affecting trade in services."86 This includes all services, except those "supplied in the exercise of governmental authority".87 The GATS does not, however, provide a clear and precise definition of "what is a service [or] what is not a service."88 Observers have explained that Members were hesitant to define "services" because "they concluded no practical purpose can be served by an attempt to define 'services'."89 Aly K. Abu-Akeel provides this explanation:

"Given the enormity of tradable services and the continuous change in the description, content, and characteristics of any given service due to constant technological advances, it is sufficient for purposes of the GATS to define only what is meant by 'trade in services'."90

The dynamic and changing nature of electronic transmissions illustrate why negotiators were so hesitant to agree to a definition of services.

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87 Ibid., Article I(3)(b).
88 Id.; see also Aly K. Abu-Akeel, Definition of Trade in Services under the GATS: Legal Implications, 32 Geo. Wash. J. Int'l L. & Econ., at 189.
89 Ibid., at 190.
90 Ibid., at 190–191.
In setting out four modes of supply, Article 11 defines "trade in services". Specifically, Article 11(2) states:

"For the purposes of this Agreement, trade in services is defined as the supply of a service:
(a) from the territory of one Member into the territory of any other Member;
(b) in the territory of one Member to the service consumer of any other Member;
(c) by a service supplier of one Member, through commercial presence in the territory of any other Member;
(d) by a service supplier of one Member, through presence of natural persons of a Member in the territory of any other Member."

Put generally, these modes of supply refer to "cross-border supply", "consumption abroad", "commercial presence", and "presence of natural persons". Article 11(2) describes where the "trade" occurs and assumes "services" will be understood by observers and Members. With this definitional framework, the GATS identifies what trade in services accomplishes: it supplies across borders, provides a commercial presence abroad, and establishes a physical presence abroad. The GATS does not define what a service is. It does point to four areas where trade in services occurs.

This lack of definition fuels the current electronic transmission debate. Electronic transmissions represent a "cross-border supply" and "consumption abroad". With this in mind, they can be classified as "trade in services". Similarly, some electronic transmissions result in a product which is no different to a good. Music downloaded from the Internet is not different to a physically transported CD. A manuscript attached to an e-mail and sent across borders is no different to a book which faces customs inspection and tariff charges. With a more precise definition of "services", Members could decipher whether electronic transmissions are a good or a service. Currently, a lack of a clear definition fuels the debate and permits Members to avoid any commitments and to delay liberalization negotiations.

Despite this definitional dilemma, the GATS sets a series of obligations which Members must provide to "trade in services" from other Members. Article II's MFN treatment obligation is the most important. Also it is important to note that the GATS does not include a national treatment obligation. National treatment is a general obligation evident in the GATT and many other WTO Agreements and is used in international treaties to provide foreigners the same benefits afforded to nationals of a State. It is of extreme importance because it provides foreigners the certainty that they will not be discriminated against. It is a principal benefit of the WTO and GATT legal framework, as is MFN treatment.

MFN is usually sought by States in order to ensure that any benefits received from a treaty are not overshadowed or made insignificant by future agreements with other

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91 See GATS, supra, footnote 86, at Part II: General Obligations and Discipline.
States. For example, State A and State B may agree to certain benefits in Treaty X with an MFN clause. If State A comes to another agreement with State C in Treaty Z, by virtue of the first Treaty's MFN clause State B will receive the benefits of Treaty Z. Without the MFN clause, State B would not receive the new benefit. Consequently, the benefits agreed to in first agreement would be less favourable when compared to the second agreement.

B. THE COMPLEXITY OF SPECIFIC COMMITMENTS

By setting the obligation of national treatment in Part III (Specific Commitments), the GATS makes one of the WTO general obligations into an obligation required only by specific commitment. Essentially, Members only have to provide "national treatment" in trade in those service sectors where they make a specific commitment and place this commitment in their Schedule. If they do not make a specific commitment or if they fail to include it in their Schedule, Members can provide discriminatory treatment to foreign service providers. With the GATS scheme, a Member may provide discriminatory treatment to an electronic transmission provider from another Member country.

Specifically, Article XVI (Market Access) states that for a service supplier from a Member country to another Member's market:

"... each Member shall accord services and service suppliers of any other Member treatment no less favourable than that provided for under the terms, limitations and conditions agreed and specified in its Schedule." (footnote omitted).44

And for national treatment, Article XVII (National Treatment) states that Members shall provide "treatment no less favourable than that it accords to its own like services and service suppliers." The Article, though, permits Members to provide "different treatment" for foreign service suppliers. Article XVII(2) adds:

"A Member may meet the requirement of paragraph 1 by according to services and service suppliers of any other Member, either formally identical treatment or formally different treatment to that it accords to its own like services and service suppliers." (emphasis added).

By eliminating any distinction between "formally identical treatment or formally different treatment", Article XVII(2) provides Members with a legal avenue for discriminating against foreigners.

For goods, the GATT provides national treatment as a general obligation. It sets this standard:

"The products of the territory of any contracting party imported into the territory of any

93 Article XVI.
94 Article XVII(1).
other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use …”96

Without any limitations set by specific commitments or by the “formally identical treatment or formally different treatment”, the GATT provides treatment which may be more favourable to goods. For trade in services, legal counsel must analyse if the treatment is provided in a Member’s specific Schedule, while for goods, legal counsel rests more secure that Article III of the GATT sets national treatments as a general obligation and is not subject to any specific commitments.

WTO Members have the choice to decide whether electronic transmissions will be subject to the GATS or the GATT. At first glance, the GATS appears more favourable, because it provides for no tariff liability for trade in services. The GATT appears less favourable, because it subjects goods to customs duties. The GATS, however, does limit the application of fundamental WTO rights such as MFN and national treatment. In deciding whether electronic transmissions should be classified as a good or a service, Members must weigh tariff-free treatment with limited MFN and national treatment. Put bluntly: what is preferable, clearly set tariffs or the possibility of discriminatory treatment?

This limited version of national treatment, as opposed to the general obligation for goods, is a result of services being tariff-free while goods are tariff-liable. Generally speaking, international trade in goods is restricted by customs duties, while services are not subject to customs duties. Without customs duties, the movement of services would be too free and many Members hesitant to open their markets as much. Accordingly, Members have to place a service on its Schedule in order to be obligated to provide non-discriminatory treatment.

The WTO explains this difference:

“At first sight, it may be difficult to understand why the right to national treatment is restricted under the GATS to services for which commitments have been undertaken, whereas under the GATT it applies to all goods. The reason lies in the nature of trade in services. Universal national treatment for goods is possible, without creating free trade, because the entry of foreign goods into a national market can still be controlled by import duties, quantitative restrictions and other border measures. By contrast, a foreign supplier of most services, particularly if those services are supplied by commercial or personal presence in the importing country’s market, will in practice enjoy virtually free access to that market if given national treatment, since this by definition will remove any regulatory advantage enjoyed by the domestic service supplier.”97

There is a need to control this trade because, without limitations, domestic markets would be disrupted with a flood of imported services.

96 Article III(4).
97 See WTO Secretariat, supra, footnote 29, at para. 8.
With the limits set on national treatment by the GATS, services have a more limited market access than goods. The GATT provides a general obligation for national treatment; the GATS, though, requires a specific commitment from a Member for national treatment to be an obligation. Specific commitments provide individual Members additional discretion to choose whether or not to extend the treatment. Furthermore, the need for specific commitments provides Members with additional leverage and opportunities for delay when negotiating any WTO obligation. Because national treatment is not secured for all services, Members will play upon their individual extension of national treatment to secure a better negotiating position in the WTO. This position will extend to other WTO negotiations in other sectors and, as a result, services such as e-commerce have a more fragile national treatment benefit.

C. PROGRESSIVE LIBERALIZATION AND SPECIFIC COMMITMENTS: AMBIGUOUS BENEFITS

Currently, the GATS does not provide a clearly defined set of benefits to liberalized cross-border trade in services. The trade-in-services sector of electronic transmissions does not benefit from specific commitments. For a Member to benefit from GATS liberalization, there must be a specific commitment made by another Member to open a service sector. Members must take part in continued negotiations—called progressive liberalization—to liberalize specific sectors of the service economy. A Member may only benefit from market access to another Member's service economy when there is a specific commitment made in a particular service sector. Absent this commitment, there is no guaranteed market access or benefit of national treatment. Accordingly, GATS benefits of tariff-free trade in services, MFN treatment and national treatment are conditional on further negotiations and on reaching a specific commitment in particular sectors. Consequently, trade in e-commerce services will only be guaranteed market access when negotiations and additional commitments are reached.

GATS Article XIX(1) sets the progressive liberalization standard as:

"... Members shall enter into successive rounds of negotiations, beginning not later than five years from the date of entry into force of the WTO Agreement and periodically thereafter, with a view to achieving a progressively higher level of liberalization ..."

Members will have to engage in multilateral, bilateral, or plurilateral negotiations to establish which service sectors will be liberalized.98

This liberalization is not guaranteed to be multilateral. Members will benefit from market access to service sectors only as another Member makes a specific commitment to liberalize a service sector. The negotiations explained in Article XIX serve as the

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98 The WTO Secretariat explains the importance of new negotiations: "Article XIX is a guarantee that the present GATS package is only the first fruit of a continuing enterprise, to be undertaken jointly by all WTO Members, to raise the level of services commitments towards one another.": see WTO Secretariat, Guide to the Uruguay Round Agreements, at 173.
forum to reach a consensus about which Member will liberalize which sectors. This contrasts with the GATT's general approach which provides benefits to all Members. The GATS, however, only extends benefits such as MFN or national treatment when an individual Member commits.99 This conditioning of GATS benefits is set in Article XVI(1) (Market Access). It states:

"With respect to market access through the modes of supply identified in Article I, each Member shall accord services and service suppliers of any other Member treatment no less favourable than that provided for under the terms, limitations and conditions agreed and specified in its Schedule." (footnote omitted).

By permitting Members to limit market access on an individual basis, Article XVI shifts the importance from the GATS Agreement to the commitment Schedules of its one hundred and forty-one Members.

IV. CONCLUSION

Currently, the WTO faces a variety of complex issues surrounding electronic transmissions. Specifically, these include:

- classification of electronic transmissions (or the "electronic transmission debate");
- extension of the moratorium on applying customs duties; and
- commencing liberalization negotiations for the e-commerce trade services sector.

Before Members benefit from any liberalization in this sector, these issues must be resolved. The moratorium is a temporary solution to the problem of applying customs duties to electronic transmissions.

Because no Member has demonstrated or expressed an interest in applying customs duties, an agreed-to moratorium does not necessarily translate into a real benefit. The multilateral efforts spent to reach a moratorium may be better spent on proceeding with liberalization in the sector. The GATS provides Members with the power to limit national treatment and MFN treatment to protect their service sector markets. Any liberalization requires an affirmative and specific commitment. Accordingly, a Member may proceed with trade in the e-commerce service sector negotiations without fearing that their markets will be penetrated by foreign providers.

99 This conditioning is further complicated by the schematic structure of a Member's Schedule. Bhala and Kennedy note: "If the framework of agreement is the skeleton of the GATS, then the Schedule of market access commitments is the flesh and bones. The Members' Schedules list the service sectors and modes of supply for which individual Members have agreed to provide full or partial access to the service suppliers of other WTO Members."": see Bhala and Kennedy, supra, footnote 95, at 1256. They add: "Only those industries that are listed in a Member's Schedule of Commitments are open to foreign service suppliers with respect to at least one mode of supply."; ibid., at 1257.
The WTO should define electronic transmission as a service and, as such, free from customs duties. This will provide three important benefits. First, Members will be able to begin thinking about how to liberalize or protect their domestic electronic transmission service market in the future. Members will be able to prepare themselves for the progressive liberalization required under the GATS. In particular, Members will not have to decide if this economic sector requires treatment as a good or as a service.

Second, Members will not have to face the daunting task of classifying electronic transmissions within their Tariff Schedules. As the U.S. Customs Service's position illustrates, it is not easy to place electronic transmissions within such a Schedule. The HS distinguishes products by their physical attributes. Because electronic transmissions only contain digital information, it is difficult to place them in the HS Schedule.

Third, Members will benefit from the GATS' open definition of "services". Electronic transmissions represent a highly technical and constantly changing medium. Economic necessity and technological innovation develop faster than multilateral legal obligations. If the WTO labelled electronic transmissions as a good, then this definition might not accurately represent future technological developments. With this in mind, GATS negotiators were hesitant to draft a "service" definition which might, in the future, have excluded important functions. With the GATS, Members have the benefit of limiting liberalization with specific commitments. This power of specific commitments provides Members with a way to guide or control liberalization of their electronic transmissions market sector.

The benefits of liberalization, however, will only develop when Members proceed to the progressive liberalization step of the GATS framework. This requires the identification of a service area sector which Members intend to liberalize. Accordingly, the WTO should definitively classify electronic transmissions as a service and not subject to customs duties.

With these steps, Members will be able to begin examining how and under what conditions may they liberalize their electronic transmissions market.