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# SYMPOSIUM ON BORDERLESS E-COMMERCE

## E-Products and the WTO

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### I. Introduction

Since the establishment of the World Trade Organization (WTO) in 1995, the single most important economic development has been the growth of the Internet and e-commerce. The WTO has begun to address the international trade issues presented by e-commerce, particularly through its Work Programme on Electronic Commerce (Work Programme), which was initiated at the WTO Second Ministerial Conference in 1998.<sup>1</sup> However, the WTO has so far taken little concrete action in this area, in part because a potential consensus on a variety of e-commerce issues was one of the casualties of the general failure of the 1999 WTO Third Ministerial Conference in Seattle (Seattle Ministerial).

The WTO is quite well equipped to handle many e-commerce issues. Existing WTO commitments cover certain aspects of e-commerce. For example, there is broad consensus that tangible goods that are ordered online should be subject to the same customs duties

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1. See *Ministerial Declaration on Global Electronic Commerce*, WTO Doc. WT/MIN(98)/DEC/2 (May 25, 1998) [hereinafter *Second Ministerial Declaration*]; *Work Programme on Electronic Commerce*, WTO Doc. WT/L/274 (Sept. 30, 1998).

and other rules of the General Agreement on Tariffs and Trade (GATT)<sup>2</sup> that apply to goods ordered by more traditional means. Other e-commerce issues fit comfortably within the existing WTO framework, but will require negotiation of new WTO commitments. For example, it is clear that the delivery of services via the Internet (e.g., telecommunications services, medical services, travel services) is within the scope of the General Agreement on Trade in Services (GATS);<sup>3</sup> however, further negotiations under GATS will be needed to clarify the application of existing commitments to e-commerce and to seek expanded commitments where existing ones do not apply.

But the WTO faces a new set of issues relating to what we will call e-products—that is, content-based products that formerly were delivered in tangible form but now can be delivered in electronic form via Internet download. E-products include, among other things, digitized books, music, videos, and software. A fairly recent WTO working paper recognizes that over time, sales of e-products will increasingly substitute for sales of their physical analogues.<sup>4</sup>

This article considers a few of the central legal issues regarding e-products. First, we consider whether e-products should be treated as goods subject to the rules of GATT, services subject to the rules of GATS, or something else. Second, new taxation rules for e-products in the European Union and other countries raise issues under GATT and GATS. Third, protection of the content of e-products involves issues of intellectual property rights, and we consider how the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement)<sup>5</sup> may govern these issues.

## II. Goods or Services?: The Classification Debate

The debate at the WTO whether e-products should be treated as goods, services, or something else has taken place primarily in the context of the Work Programme. There is substantial consensus on a few points in the classification debate. First, the WTO has decided that “[w]ithout prejudice to the outcome of the work programme or the rights and obligations of Members under the WTO Agreements, . . . Members will continue their current practice of not imposing customs duties on electronic transmissions.”<sup>6</sup> Although it is uncertain whether this rule remains legally binding, WTO members continue to observe it.<sup>7</sup> Second, it is generally agreed that in order to avoid the need to develop an entirely new trade regime, e-products should not be classified as something other than goods or services.<sup>8</sup>

2. General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, T.I.A.S. 1700, 55 U.N.T.S. 194 (amended by General Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Annex 1A, 33 I.L.M. 1154 (1994)) [hereinafter GATT].

3. General Agreement on Trade in Services, Apr. 15, 1994, Annex 1B, 33 I.L.M. 1167 (1994) [hereinafter GATS].

4. A QUANTITATIVE ASSESSMENT OF ELECTRONIC COMMERCE 6 (WTO Economic Research and Analysis Division, Working Paper ERAD-99-01, Sept. 1999) [hereinafter QUANTITATIVE ASSESSMENT].

5. Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Annex 1C, 33 I.L.M. 1197 (1994) [hereinafter TRIPS Agreement].

6. *Second Ministerial Declaration*, *supra* note 1.

7. See Daniel Puzzin, *WTO Members Moving Toward Creation of Ad-Hoc Group on Electronic Commerce*, 5 ELECTRONIC COM. & L. REP. 1227 (2000).

8. See, e.g., *Work Programme on Electronic Commerce, Objectives for Treatment of Electronic Commerce, Communication from Australia*, WTO Doc. WT/GC/25, at 2 (July 5, 1999) (“Principle 3: That existing WTO rules, which are consistently technology-neutral, be applied to electronic commerce as far as possible, thereby obviating the need to classify it as a distinct regulatory domain in international trade.”).

But on the basic question of whether e-products are goods or services, the classification debate is not near resolution, as the WTO Council for Trade in Goods and Council for Trade in Services recognized in their reports on the Work Programme in mid-1999.<sup>9</sup> We argue below that the debate would be more easily resolved through a negotiated, practical solution rather than through legal analysis.

#### A. BACKGROUND OF THE CLASSIFICATION DEBATE

The classification debate on e-products results from the difference between the trade protections of the long-established GATT rules for goods and those of the much-newer GATS rules for services. Under GATT, all goods benefit from most-favored nation (MFN) treatment (i.e., benefits offered to imports from one WTO member country must be applied to imports from every member)<sup>10</sup> and national treatment (i.e., products of a WTO member country must receive treatment under national law no less favorable than that accorded to domestic products).<sup>11</sup> Furthermore, GATT provides numerous other protections to traded goods, including a general prohibition on quantitative restrictions, rules on valuation, rules of origin, and dumping and subsidies rules.<sup>12</sup> By contrast, under GATS, exemptions from MFN treatment are permitted,<sup>13</sup> national treatment applies only when a member has made commitments on a particular service in its GATS schedule,<sup>14</sup> and many of the other GATT protections simply do not exist. Thus, the decision whether e-products are goods or services has significant implications for the trade protections that they will enjoy.

The United States has been the primary advocate of the position that e-products should be classified as goods and benefit from GATT protections:

While some have suggested that all commerce based on electronic transmission is a service, this conclusion needs further examination. . . . While the *transmission* of these products can certainly be characterized as a service, the products themselves are not consumed in their transmission, but rather retain a permanence analogous to the goods world. . . . The United States is not arguing that intangibles should be classified as "goods" in the traditional sense. Given the broader reach of WTO disciplines accorded by the GATT (i.e. market access and national treatment are not dependent on specific commitments) 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.<sup>15</sup>

The U.S. position, which is largely motivated by the U.S. interest in maximizing the applicability of GATT protections to its leading e-commerce industry, has gained some support from Japan,<sup>16</sup> but appears to be a minority view at the WTO.

9. *Work Programme on Electronic Commerce, Information Provided to the General Council*, WTO Doc. G/C/W/158, ¶ 2.11 (July 26, 1999) ("wide range of opinions and questions regarding the characterization of the content of electronically transmitted digitalized data"); *Work Programme on Electronic Commerce, Progress Report to the General Council*, WTO Doc. S/L/74, ¶ 6 (July 27, 1999).

10. GATT, *supra* note 2, art. II.

11. *Id.* art. III.

12. *See, e.g., id.* arts. IV, VII, IX, XI.

13. GATS, *supra* note 3, art. II.

14. *Id.* art. XVII. The GATS schedule lists in tabular form, by service, the national treatment and market access commitments that a WTO member country has made under GATS.

15. *Work Programme on Electronic Commerce, Submission by the United States*, WTO Doc. WT/GC/16, at 5 (Feb. 12, 1999) [hereinafter *U.S. Submission*].

16. *See Preparations for the 1999 Ministerial Conference, Electronic Commerce, Communication from Japan*, WTO Doc. WT/GC/W/253, at 1 (July 14, 1999) ("With respect to the treatment of digital contents transmitted

At the other end of the spectrum, the EU contends categorically that e-products should be treated as services.

Electronic commerce involves two types of deliveries:

- goods delivered physically, while ordered electronically, which fall within the scope of the GATT;
- electronic deliveries, which consist of services and therefore fall within the scope of the GATS.<sup>17</sup>

The EU position commands fairly substantial support among WTO members, apparently for several reasons. First, a services classification for e-products allows countries to apply content restrictions on e-products based on national origin. Existing restrictions of this type include the EU Television without Frontiers Directive, which requires EU broadcasters to reserve a majority of their transmission time for "European works,"<sup>18</sup> and the Canadian requirement that 60 percent of television programming and 35 percent of daytime radio musical programming be reserved for Canadian content.<sup>19</sup> No WTO member has made commitments under GATS that would bar such content-based restrictions on e-products. Second, a services classification for e-products would provide precedent on other issues, such as the value-added tax (VAT) issues discussed in section III below. Third, the ability to restrict trade in e-products under GATS rules offers governments more scope for imposing restraints on the current global strength of U.S. e-commerce companies.

Other WTO member countries have taken a more moderate approach focusing on the principle that WTO rules should not discriminate between e-products and their physical analogues. For example, Indonesia and Singapore have stated that "[t]he advent of digitized products however has blurred the boundary between goods and services. . . . Whatever the classification, the basic principles of MFN and national treatment have to apply in order to ensure fair, open and transparent market access for e-commerce."<sup>20</sup>

## B. LEGAL BASES FOR A GOODS OR SERVICES CLASSIFICATION

The legal question of whether e-products are goods or services can be analyzed under at least three general frameworks: (1) theoretical principles regarding the essential nature of goods and services; (2) the basic WTO trade principles of trade and technology neutrality and progressive trade liberalization; and (3) practical considerations of whether trade in e-products is best administered under existing trade rules for goods or those for services.

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electronically, it is appropriate to examine the issue further so that the principles stipulated under GATT, namely the most-favoured-nation treatment, national treatment and the general elimination of quantitative restrictions, can be applied to such contents.").

17. *Preparations for the 1999 Ministerial Conference, Work Programme on Electronic Commerce, Communication from the European Communities and their Member States*, WTO Doc. WT/GC/W/306, ¶ 1 (Aug. 9, 1999).

18. Council Directive 89/552/EEC, art. 4, 1989 O.J. (L 298) 23, *amended by Parliament and Council Directive 97/36/EC*, 1997 O.J. (L 202) 60.

19. See Canadian Radio-television and Telecommunications Commission, *Fact Sheet: Canadian Content on Radio and on TV* (Aug. 11, 1999), available at [http://www.crtc.gc.ca/ENG/INFO\\_SHT/G11e.htm](http://www.crtc.gc.ca/ENG/INFO_SHT/G11e.htm).

20. *Preparations for the 1999 Ministerial Conference, Work Programme on Electronic Commerce, Communication from Indonesia and Singapore*, WTO Doc. WT/GC/W/247, at 2-3 (July 9, 1999).

### 1. *Essential Nature of Goods and Services*

Peter Hill has argued that essential characteristics of goods are that they possess value that can be owned, exist independently of their owners, and can be traded.<sup>21</sup> Services, by contrast, involve some desired change caused by the service provider to something owned by the consumer or to the physical or mental state of the consumer himself. The delivery of a service requires a relationship between the service provider and consumer.<sup>22</sup> Under this analysis, e-products that can be owned, including books, music, and video, constitute goods. Increasingly however, suppliers are offering e-products—such as the ability to watch video on demand—that look more like Hill's services.

Hill rejects the alternative framework that a good is tangible while a service is an intangible.<sup>23</sup> However, tangibility played a role in the WTO Appellate Body decision in *Canada—Certain Measures Concerning Periodicals*.<sup>24</sup> In that case, Canada argued that a tax on periodicals applied to advertisements and was thus subject to GATS rules. The Appellate Body found that while advertising and editorial content had “service attributes,” they formed a “physical product” in the periodical itself.<sup>25</sup> This is not inconsistent with Hill's approach, because a magazine, ads and all, belongs to the purchaser and can be passed along to others. In fact, it is difficult to imagine any tangible product that would not also meet Hill's test. Thus, Hill's distinction only becomes significant when an intangible product can be traded in the same fashion as a tangible product—a situation not yet faced by WTO jurisprudence. In short, there is no clear legal principle that establishes whether the essential nature of e-products is that of goods or of services.

### 2. *Basic WTO Trade Principles*

A second legal approach to the classification debate seeks to apply the trade principles that form the basis of the WTO framework. Under the principle of trade neutrality, like products are generally subject to like trade rules.<sup>26</sup> Like product analysis considers whether products are “similar” or are “directly competitive or substitutable,”<sup>27</sup> focusing on the following factors: (1) the product's end-uses in a given market; (2) consumers' tastes and habits; and (3) the product's properties, nature, and quality.<sup>28</sup> Because e-products demonstrably are substitutable with their physical analogues,<sup>29</sup> the principle of trade neutrality indicates that products should be treated no less favorably than the equivalent physical products, as discussed in section III below. Therefore, GATT disciplines (or their equivalent) should apply in order to avoid unequal treatment.

21. Peter Hill, *Tangibles, Intangibles and Services: A New Taxonomy for the Classification of Output*, 32 CANADIAN J. ECON. 426, 437–41 (1999).

22. *Id.* at 441–43.

23. *Id.* at 443. Although the tangible/intangible approach is arguably inconsistent with the fact that intellectual property is an intangible that is not a service, intellectual property is already treated as a special case, governed by the TRIPS Agreement (rather than GATT or GATS).

24. *Canada—Certain Measures Concerning Periodicals*, WTO Doc. WT/DS31/AB/R (June 30, 1997).

25. *Id.* at 17.

26. See GATT, *supra* note 2, art. III.

27. *Japan—Taxes on Alcoholic Beverages (Japan—Alcohol AB Decision)*, WTO Doc. WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R, Oct. 4, 1996, at 23, 24; see also *Canada—Certain Measures Concerning Periodicals*, *supra* note 24, at 24–25.

28. See *Japan—Alcohol AB Decision*, *supra* note 27, at 19; *Canada—Certain Measures Concerning Periodicals*, *supra* note 24, at 20.

29. QUANTITATIVE ASSESSMENT, *supra* note 4, at 5–6.

A closely related (and newer) principle is that of technology neutrality. In particular, GATS commitments apply to services "provided through any means of technology (e.g., cable, wireless, satellites)."<sup>30</sup> Under this principle, a change in delivery technology should not change applicable trade protections. A book or record that is delivered digitally should not benefit less from liberalized trade than if it were delivered on paper or vinyl.

Another bedrock WTO principle is that of progressive trade liberalization. Under GATT, commitments of tariff reductions may not be withdrawn,<sup>31</sup> and withdrawal of GATS commitments requires payment of compensation to affected countries.<sup>32</sup> This principle of "no steps backward" has been extraordinarily successful in achieving tariff reductions under GATT, and it is already beginning to pay dividends under the GATS. In view of the substitutability of e-products and their physical analogues, a decision that e-products enjoy only the lesser trade protections of GATS (rather than the GATT protections applicable to physical goods) would contravene this principle.

In sum, traditional principles of trade analysis indicate that e-products should receive the full protections available under GATT to their physical analogues.

### 3. *Practical Considerations*

Classification of e-products as goods presents two significant practical problems. First, a line-drawing problem arises because, as even the United States recognizes, "[m]ost market access commitments for electronic commerce activities fall under Members' service commitments."<sup>33</sup> Further, as discussed above, some e-products are more like goods and others are more like services. If both goods and services can be delivered online, there will be persistent and difficult questions regarding which electronic commerce activities (and which e-products) are subject to GATT and which are subject to GATS.

Second, there is an enforcement problem because customs duties are the primary national measures affecting trade in goods, and the global customs system is designed to deal with physical goods. Given the nature of the Internet, it may be nearly impossible to reliably enforce customs duties on e-products. Indeed, the current customs duty moratorium on electronic transmissions is probably in large part motivated by this reality.

## C. PRACTICAL RESOLUTION TO THE CLASSIFICATION DEBATE

There is no easy legal resolution to the classification debate, because the legal arguments on both sides have force. It is possible that the WTO Dispute Settlement Body will ultimately settle the debate. But a better outcome would be for WTO Members to reach a negotiated solution that balances their interests. A reasonable solution would be to negotiate a solution that allows nations to treat e-products as services in exchange for GATS commitments to give e-products trade benefits equivalent to comparable physical goods. This approach would be consistent with the moderate approach to the classification debate advocated by countries like Indonesia and Singapore.<sup>34</sup> The clear benefits of the approach are

30. *Group on Basic Telecommunications, Notes for Scheduling Basic Telecom Services Commitment*, WTO Doc. 5/GBT/W/2/Rev.1, ¶ 1(c) (Jan. 16, 1997).

31. GATT, *supra* note 2, art. II:1(b); Understanding on the Interpretation of Article II:1(b) of the GATT 1994, Apr. 15, 1994, Annex 1A, 33 I.L.M. 1156 (1994).

32. GATS, *supra* note 3, art. XX.

33. *U.S. Submission*, *supra* note 15, at 3.

34. For a more detailed discussion, see section II. of this article.

that it would avoid both the practical difficulties discussed in section II.A.3 above and the costs that would be associated with prolonged debate and dispute resolution regarding the classification of e-products.

There would also be at least two interrelated problems with our proposed approach. First, the approach is premised on substantial elimination of the disparity between GATT and GATS protections for e-products—that is, exactly the disparity that has engendered the classification debate. Second, the United States and other countries that advocate a goods classification for e-products are properly reluctant to enter negotiations that begin by conceding that e-products will be classified as services. However, these problems could be surmounted by an approach that is quite familiar in WTO negotiations by treating the classification question as part of a package of negotiated commitments that will be part of a multilateral agreement only if the leading proponents of trade liberalization (including the United States, EU, Japan, and Canada) conclude that the WTO members as a whole have made adequate commitments on the services front.

A package approach to e-products under the GATS would be particularly appropriate because the negotiations now ongoing at the WTO are limited to the WTO's built-in agenda of services and agriculture. Thus, the proposed approach would both deal with the fact that there is no current procedural vehicle at the WTO for GATT negotiations and would avoid the more complex set of trade-offs that are inherent in a broader round of trade negotiations.

### III. Taxation of E-Products

In this section, we discuss the potential application of existing WTO rules to a recent EU initiative, under which EU Member States would apply their VAT to e-products supplied by non-EU suppliers.<sup>35</sup> Other countries are considering similar initiatives,<sup>36</sup> which would likely present similar WTO issues.

#### A. THE EU VAT PROPOSAL

The EU has proposed to issue a Directive that would commit Member States to apply their VATs to the importation of services, by amending the EU's existing Sixth VAT Directive.<sup>37</sup> The proposal expressly applies to electronic transmissions.<sup>38</sup> Under normal EU law, services are subject to VAT at the location of the service supplier. The proposal alters

35. A VAT is a tax levied on the value of the product or service that is added to in the process of its manufacturing and distribution. See ALAN A. TAIT, *VALUE ADDED TAX: INTERNATIONAL PRACTICE AND PROBLEMS* 4 (1988).

36. Japan is one country that has considered such a measure. See *Japan Tax Commission Weighing New Levies for Electronic Sales of Goods and Services*, 5 ELEC. COM. & LAW REP. (BNA) 17, at 435 (Apr. 26, 2000); *Japanese Government Exploring Viability of Taxing Internet-Delivered Music, Software*, 5 ELEC. COM. & LAW REP. (BNA) 9, at 211 (Mar. 1, 2000). Canada also apparently treats downloaded music and books as intangible personal property that is subject to its general sales tax (GST). See Jim Vincze & Randy Schwartz, *E-Commerce Taxation: A Canadian Update*, Tax Analysts Doc. 2000-20834 (June 7, 2000), at 5.

37. Proposal for a Council Directive amending Directive 77/388/EEC as Regards the Value Added Tax Arrangements Applicable to Certain Services Supplied by Electronic Means, 2000/148 (CNS), June 7, 2000, amending the EU's 6th VAT Directive, 77/388/EEC (May 17, 1977).

38. *Id.* art. 1(1). Article 1(1) refers to "supply by electronic means of . . . software, of data processing, of computer services including web-hosting, web-design or similar services and of information. . . ."



this normal rule in the case of imported services, providing that VAT is applied at the location of the consumer if the buyer is a non-business customer. The proposal would require that non-EU suppliers obtain an EU taxable identity by registering in any one of the EU Member States, and charge VAT to individual consumers based on the VAT policies of that Member State. This is referred to as a single registration approach, as it ensures that non-EU suppliers do not have to register in each EU Member State.<sup>39</sup>

Two aspects of the EU's proposal are of particular importance as they raise potential WTO issues. First, the EU Directive would subject e-products to VAT, but would not allow e-products to benefit from the traditional exemptions or reductions of VAT for cultural goods, particularly newspapers and books.<sup>40</sup> Therefore, newspapers and books in electronic form would be subject to a much higher VAT than the equivalent physical products that are arguably equivalent. For example, in France, a book sold in physical form is subject to a VAT of 5.5 percent, but a book sold electronically would be subject to a VAT of 20.6 percent. Similarly, in Germany, a newspaper is subject to a 7 percent VAT when sold in physical form but would be subject to a 16 percent VAT when sold electronically.

Second, the EU Sixth VAT Directive permits Member States to exempt low-value imports of goods from the VAT. Under this authority, Member States have created exemptions from the VAT if the imported goods are valued under an amount of ten to twenty-two euros, depending on the country involved.<sup>41</sup> However, the EU proposal to apply VAT to imported services makes no exception for e-products that have a similarly low value (although it should be noted that the VAT would not apply to free e-products). Thus, if one assumes that a CD has a value of fifteen dollars, the e-product would be subject to a VAT of about three dollars while the physical product would not.

## B. DISCRIMINATION BETWEEN PHYSICAL GOODS AND E-PRODUCTS

The current EU proposal distinguishes in two significant ways between physical goods and e-products: (1) with respect to the application of the special VAT rules for cultural goods; and (2) with respect to the VAT exemption for low-value imports. The WTO issues raised by each of these distinctions are discussed below.

### 1. Cultural Goods

Does the disparity in VAT rates for arguably similar products, described above, raise any problems under WTO rules? The EU proposal on its face does not violate the core WTO principle of national treatment: that is, the proposal does not expressly treat imports any worse than domestically-produced goods. Rather, the proposal discriminates against e-products (whether produced by EU or non-EU suppliers) in favor of physical goods.

However, national treatment violations may arise even where a law or regulation is neutral on its face, if it is discriminatory in its effect. Otherwise, governments would find ways to discriminate against foreign products by passing seemingly neutral laws that in practice have a much greater impact on foreign products. Because of this possibility, it is necessary

39. *Id.*

40. See TAIT, *supra* note 35, at 75 (listing examples of countries that have exemptions or reductions of VAT for cultural activities, including newspapers and books).

41. Michel Aujean, *Supplementary Material on the E.U. VAT System*, (testimony submitted to the Advisory Commission on Electronic Commerce) (Dec. 14, 1999), available at <http://www.ecommercecommission.org/>.

to consider whether the EU proposal may be discriminatory in practice, even though not facially.

The relevant legal provisions are as follows. Article III:2 of GATT states that:

The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products. Moreover, no contracting party shall otherwise apply internal taxes or other internal charges to imported or domestic products in a manner contrary to the principles set forth in paragraph 1.<sup>42</sup>

Article III:1, referenced in the second sentence of article III:2, states that:

The contracting parties recognize that internal taxes and other internal charges should not be applied to imported or domestic products so as to afford protection to domestic production.<sup>43</sup>

Further, an Interpretative Note to article III:2 states that:

A tax conforming to the requirements of the first sentence of paragraph 2 would be considered to be inconsistent with the provisions of the second sentence only in cases where competition was involved between, on the one hand, the taxed product and, on the other hand, a directly competitive or substitutable product which was not similarly taxed.<sup>44</sup>

Several legal issues arise in assessing whether the EU Directive may run afoul of these provisions. An initial question is whether these provisions are applicable. These GATT provisions would not apply to the supply of e-products if e-products are services rather than products. If so, the supply of digital content must be analyzed under GATS. This raises the issues discussed earlier regarding the good/service distinction. Article III does not refer to goods, but to products. While commentators have described GATT as applying to goods,<sup>45</sup> this reflected a traditional distinction between goods and services. Such references do not address whether a product may exist in digital form. Rather, under WTO dispute settlement practice, one must look to the ordinary meaning of the text. The term product could encompass not only physical goods but also electronic products,<sup>46</sup> such that e-products are within the scope of article III specifically and GATT generally.<sup>47</sup>

42. GATT, *supra* note 2, art. III:2.

43. *Id.* art. III:1.

44. *Id.* art. III:2, interpretive note.

45. See, e.g., JOHN H. JACKSON, *THE WORLD TRADING SYSTEM: LAW AND POLICY OF INTERNATIONAL ECONOMIC RELATIONS* 307 (2d ed., 1997).

46. The term product is defined as "a thing produced or brought forth" and of particular relevance here, as "that which is produced by any action, operation or work; a production; the result. Now freq. that which is produced commercially for sale." See *OXFORD ENGLISH DICTIONARY* 565 (1991). The term produce in turn is defined as: "To bring forth, bring into being or existence. To bring (a thing) into existence from its raw materials or elements, or as the result of a process; to give rise to, bring about, effect, cause, make (an action, condition, etc.)." *Id.* at 564. These definitions do not require that a product have tangible form. Therefore, consistent with these definitions, an e-product might be considered as a product within the meaning of Article III of GATT.

47. If e-products are considered instead as a service subject to GATS, the EU's proposed VAT approach is more likely permissible. GATS national treatment commitments apply only to sectors where the WTO member has specifically accepted commitments. See GATS, *supra* note 3, art. XVII(1). In particular, the transmission of books and newspapers may be characterized as an audio-visual service, a sector where the EU did not make

Assuming that GATT applies to e-products, does the EU approach treat like products differently, in violation of the first sentence of article III:2? In light of the disparity in internal tax rates, a violation of the first sentence of article III:2 would exist if digital products are found to be like the equivalent physical product. The WTO Appellate Body's decision in *Japan—Taxes on Alcoholic Beverages* interpreted GATT article III. The Appellate Body held that the term "like product" as used in article III:2 should be construed narrowly on a case-by-case basis. The Appellate Body suggested that tariff classification could be a helpful sign of product similarity. However, the Appellate Body also endorsed the relevance of common end uses and the same physical characteristics.<sup>48</sup>

Under *Japan—Alcohol, AB Decision* it is unclear whether digital products would be considered as like the equivalent physical product. These products are not classified under the same tariff heading. Digital products on physical media fall under HTS heading 8524, which covers the media themselves. However, there is no applicable tariff heading for digital products (as noted earlier, e-products are currently exempt from customs duties). Moreover, while digital products should be considered to have the same end use as the equivalent physical product, they do not have the same physical characteristics.<sup>49</sup> Therefore, it is unclear whether the EU's proposed VAT approach would violate the first sentence of article III:2.

A final question is whether the EU's proposed VAT approach would operate so as to afford protection to products that are "directly competitive or substitutable"<sup>50</sup> with imported e-goods, and therefore violate the second sentence of article III:2. As interpreted in *Japan—Alcohol AB Decision*, a violation of this provision has three elements. First, the products involved must be "directly competitive or substitutable products"<sup>51</sup> that are in com-

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commitments. The transmission of books and newspapers might also be viewed as a distribution service, a sector where the EU did commit to provide national treatment, to an extent. However, the EU has not made a national treatment commitment for retail distribution services provided cross-border (mode 1 of the GATS). See EU Schedule of Commitments under the GATS. Therefore, if the electronic transmission of books and newspapers is considered as a retail distribution service, and the e-product service would be provided cross-border, no national treatment commitment would apply.

If GATS national treatment commitments apply, the EU would be precluded from "modifying] the conditions of competition in favour of service or service suppliers of the [EU] compared to like services or services suppliers of any other Member." GATS, art. XVII(3). A significant question is whether imports of e-products would be considered as like to EU companies' distribution of physical goods. The distribution of software in physical form may not be like electronic distribution.

If e-products distribution is like physical distribution, then arguably the EU approach could violate article XVII(3) by imposing a higher VAT rate on e-products than on physical products. The EU's VAT approach would apply equally to the domestic and international supply of digital content, that is, there would be no discrimination between domestic and international services of supplying digital content. However, there could be an argument, as in the GATT context that the EU's approach is discriminatory in practice although not on its face. Of course, the same evidentiary issue would arise as discussed in the GATT context, above: namely, whether the EU approach de facto discriminates against foreign suppliers even though it is neutral on its face.

48. See *Japan—Alcohol AB Decision*, *supra* note 27, at 24.

49. The WTO panel in *Japan—Alcohol AB Decision*, affirmed by the Appellate Body, stated that like products "must share . . . essentially the same physical characteristics." *Id.* ¶ 6.22. However, the WTO panel in *Indonesia—Autos* took a broader approach, finding that different cars were like under article III:2 where they had the same end uses, the same basic properties, nature, and quality, and were in the same market segments. *Id.* ¶ 14.110.

50. GATT, *supra* note 2, art. III:2.

51. *Japan—Alcohol AB Decision*, *supra* note 27, ¶ 5.5.

petition with each other. Even if the products are not “like products” under the first sentence of article III:2, they may be “directly competitive or substitutable products.” This assessment is made on a case-by-case basis, looking at physical characteristics, common end uses, tariff classifications, and the marketplace. The Appellate Body specifically endorsed looking at “competition in the relevant markets,”<sup>52</sup> including by assessing the elasticity of substitution between the two products.<sup>53</sup>

There appears to be a good argument that e-products are “directly competitive or substitutable” with the equivalent physical product. There are, of course, significant physical differences between these products. Moreover, tariff classifications are likely to be different, as discussed above. However, the end uses may be similar, and the products may compete in the relevant markets (i.e., consumers choose whether to purchase a physical newspaper or book versus an electronic version). The extent of this competition may be demonstrated if it is shown that there is significant elasticity of substitution between these products, based on price. Therefore, while hardly conclusive, there appears to be a good argument that this legal standard is met.

Second, the products involved must be “not similarly taxed.” The Appellate Body interpreted this language to mean that there must be more than a *de minimis* level of difference in the tax. Whether a given tax difference is more than *de minimis* is determined on a case-by-case basis.<sup>54</sup> Given the significant disparities described above between the VAT rates on physical products and the VAT rates proposed for digital products, it appears likely that the products involved are “not similarly taxed.”

Third, the difference in the tax must be “so as to afford protection.” The Appellate Body emphasized that this does not require a showing of discriminatory intent. Rather, the focus is whether the measure in fact affords protection to domestic products. This analysis requires “a comprehensive and objective analysis of the structure and application of the measure in question on domestic as compared to imported products.” A more than *de minimis* difference in tax does not, standing alone, warrant a conclusion that the difference is “so as to afford protection.”<sup>55</sup>

In the current situation, the significant difference in VAT rates would be an important factor. An equally important factor—though not legally mandated—may be a demonstration that the burden of the higher VAT rates falls disproportionately on foreign products. The EU could argue that the proposed VAT does not afford protection because it applies equally to European-origin digital content. In an earlier GATT case involving Japan’s liquor taxation, the panel examined, as one factor, “the fact that *shochu* [the protected product] was almost exclusively produced in Japan.”<sup>56</sup> The Appellate Body cited this language with approval.<sup>57</sup> Thus, an important question would be whether the large majority of e-products supplied for consumption by consumers in the EU Member States are of foreign origin.<sup>58</sup>

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52. *Id.*

53. *See id.* at 24.

54. *See id.* at 25–26.

55. *See id.* at 26–29.

56. *Id.*

57. *See id.* at 27.

58. More broadly, it could be argued that the overall EU proposal operates “so as to afford protection” to EU suppliers of e-products, due to the risk of double taxation of non-EU suppliers. EU suppliers must charge VAT to individual EU consumers. Yet if a non-EU supplier is located in a country that itself imposes a VAT,

## 2. Low-Value Goods

As discussed above, the EU Directive would not allow e-products to benefit from the same VAT exemption for low-value goods (below approximately ten to twenty-two euros) that currently is applied by many Member States for physical imports. Does this disparity in treatment of arguably similar products raise any problems under WTO rules?

Here, the question is whether the EU VAT approach may violate the WTO MFN principle described above. Again, while the proposal does not on its face discriminate in favor of one country versus another, it is possible that the proposal discriminates in practice because imports of e-products are disproportionately from a limited number of WTO member countries (particularly the United States).

The MFN principle should apply whether e-products are considered as a good under GATT or as a service under GATS. While GATS does permit members to take an exemption from their general MFN commitment, we are unaware of any exemption taken by the EU that would apply to imports of e-products. Therefore, the EU appears to have committed to apply the MFN principle to imports of e-products, whether under GATT as a good or under the GATS as a service.

However, the good versus service issue remains important. This is because under GATS, a WTO member must apply to services and service suppliers of other members "treatment no less favourable than that it accords to like services and service suppliers of any other country."<sup>59</sup> If e-products are considered as a service under GATS, then there may not be any like service and service supplier that is receiving more favorable treatment. Recall that the comparison is between the imported low-value e-product and the imported low-value physical good. In the latter case, there does not appear to be any supply of a service, but merely the supply of a good.

If e-products are considered as goods, the existence of a WTO violation is uncertain. Under article I of GATT, MFN treatment must be accorded "to the like product originating in . . . the territories of all other contracting parties."<sup>60</sup> However, under the WTO practice described above, it is unclear whether e-products would be considered "like" to the equivalent physical product. And in contrast to article III, there is no provision for making an MFN comparison between products that are competitive or substitutable. Therefore, while it may be inequitable to treat these products differently, it is unclear whether a WTO violation could be established.

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the supplier may be required to charge VAT twice on a sale to individual EU consumers: once by the EU Member State where the supplier has registered, and once by the country where the supplier is based. This double taxation can occur because the traditional international practice is that VAT is charged at the location of the service supplier. Since certain major jurisdictions continue to follow this approach (e.g., Japan), double taxation could result from the EU's approach. The effect of the EU's proposal, therefore, when considered against the international tax policy background, is arguably to protect EU suppliers by imposing double taxation on many of their foreign competitors. On the other hand, the EU could seek to rebut this argument by citing the October 1998 decision of the OECD that indirect taxes such as the VAT should be applied at the place of consumption. See OECD, *Electronic Commerce: Taxation Framework Conditions* (Oct. 8, 1998), at [http://www.oecd.org/daf/fa/E\\_COM/framewke.pdf](http://www.oecd.org/daf/fa/E_COM/framewke.pdf). The EU could contend that its proposal conforms to this international standard and therefore should not be considered as operating "so as to afford protection."

59. GATS, *supra* note 3, art. II:1.

60. GATT, *supra* note 2, art. I.

### C. THE FRENCH PROPOSAL: LESS FAVORABLE TREATMENT FOR NON-EU SUPPLIERS OF E-PRODUCTS

The French government has proposed a change to the EU VAT approach, which, if accepted, would raise an additional issue of WTO compliance. As discussed earlier, the EU approach would allow non-EU suppliers to register in a single EU Member State. However, France and other EU members with relatively high VAT rates have been concerned that this approach would create an incentive for most non-EU suppliers to register in the jurisdiction with the lowest VAT rate, Luxembourg. Moreover, many EU members fear that this approach would create pressure for the harmonization of VAT rates within the EU, which is quite controversial. Therefore, France has proposed that non-EU suppliers should have to register for VAT purposes in every EU Member State in which they supply e-products to consumers. While no written description of the French proposal has been released, the proposal reportedly would require VAT to be charged at the rate of the Member State in which the consumer is located.<sup>61</sup> As a result, non-EU suppliers would have to determine the location of their customers within the EU and develop systems to ensure that VAT charges were accurately paid to the appropriate Member State.

The EU Commissioner for Taxation, Frits Bolkestein, has criticized the French proposal as potentially violating the EU's WTO obligations. Commissioner Bolkestein has stated that: "requiring a non-EU operator to register in all Member States where he makes sales would constitute a considerably heavier burden than that faced today by EU business. It would almost certainly expose us to difficulties in the WTO. We would be accused of discriminating against non-EU business."<sup>62</sup>

The most likely WTO concern raised by the French proposal is, again, a national treatment issue. The French approach arguably treats non-EU suppliers of e-products worse than EU suppliers in two respects. First, the French approach would mean that a U.S. supplier of e-products would need to charge a VAT of 19.6 percent (the French VAT rate) when supplying to a consumer located in France. However, a German supplier to the same French consumer would need to charge a VAT of only 16 percent (the German VAT rate), since this is where the EU supplier is located. On its face, this different tax treatment provides more favorable treatment to EU-supplied e-products than to non-EU-supplied e-products.<sup>63</sup>

If e-products are considered as a product within GATT 1994 rules, the French proposal appears to violate article III. The non-EU and EU e-products are probably "like products,"

61. See Peter Jenkins & Tim Wilkie, White Paper, *The Application of VAT to E-Commerce in the European Union: A Commentary on the EU Draft Directive on Digital Goods and Services*, Nov. 23, 2000, at 6 (stating that under French proposal, "an on-line service provider should register and account for VAT in all the Member States in which he trades") (on file with authors).

62. Frits Bolkestein, *A Changing Approach to Taxation with the Development of Electronic Commerce*, address at Vereniging voor Belastingwetenschap in the Netherlands, The Hague (Sept. 14, 2000), available at [http://europa.eu.int/rapid/cgi/rapcgi.ksh?p\\_action=gettxt=gt&doc=SPEECH/00/303/0/RAPID&lg=EN](http://europa.eu.int/rapid/cgi/rapcgi.ksh?p_action=gettxt=gt&doc=SPEECH/00/303/0/RAPID&lg=EN).

63. Obviously, in other situations the non-EU supplier would charge a lower VAT rate than the EU supplier. An example is where a U.S. supplier is selling e-products to a German consumer, and charging a 16 percent VAT rate, in competition with a French supplier, who must charge a 19.6 percent VAT rate. However, it is unlikely that the EU could defend the French approach on the ground that the proposal does not overall favor EU suppliers, if it is conceded that the proposal would favor EU suppliers in particular situations like the one described in the text above. See EDMOND MCGOVERN, *INTERNATIONAL TRADE REGULATION* (Nov. 2000), at § 8.211.

at least in certain instances (e.g., where EU and non-EU suppliers of online music offer the same CD). If e-products are considered as a service subject only to GATS rules, it would be necessary to determine whether e-products fall within a sector as to which the EU has taken a national treatment commitment that applies to cross-border supplies, as discussed earlier.

Second, the French proposal raises a national treatment concern under the GATS because EU suppliers are not required to register in each Member State. Rather, a French supplier, for example, is registered only in France. In sales involving individual consumers (as opposed to businesses), VAT is charged in the jurisdiction of the service supplier. Therefore, the French supplier does not need to be concerned about VAT charges in the EU countries to which it supplies; the French supplier merely charges all of its EU customers the French VAT and remits those collections to the French government. As a result, the French approach imposes a burden on non-EU suppliers—registration in all EU countries for VAT purposes—which is not imposed on EU suppliers.

Unlike the discriminatory taxation discussed earlier, the French approach appears to burden the supplier, rather than the product being supplied. One may recall the point made by the United States, quoted in section I, that the transmission of an e-product does constitute a service. The French approach appears to burden suppliers' ability to transmit e-products—by imposing burdensome procedures on the transmission. On the other hand, as noted in section III, it is unclear in the GATS context whether e-products would fall into a service sector in which the EU has made a national treatment commitment. If the transmission of an e-product does fall within such a sector, the French approach seems to create a significant risk that the EU would violate this commitment.

#### **IV. E-Products and Intellectual Property**

Most e-products are essentially methods of delivering copyrighted content to consumers via the Internet. Books, music, audiovisual performances, and software may all be subject to copyright protections, and together define most of the currently viable business models for e-products. For this reason, the application of intellectual property rights to e-products has become an important—and controversial—topic of public policy debate, of interest both to copyright holders and those who consume copyrighted content. This debate has reached its most fevered pitch in the recent controversy surrounding file-sharing programs such as Napster and Gnutella, which allow individual users to exchange music files and other forms of copyrighted content on a virtually seamless and anonymous basis.

Striking an appropriate balance between the rights of copyright holders and those who purchase copyrighted content is hardly a new issue, but what makes this undertaking particularly challenging in the context of e-products are three essential characteristics of digital media. First, unlike a copy of an analog product, such as a printed book or a tape-recorded piece of music, a copy of a digital product is, in most cases, a perfect reproduction of the original. There is no theoretical limit on the number of perfect copies that can be made from the same source. Thus, copies of digital products do not have the built-in degradation that is characteristic of analog copies, and that would ordinarily compel most consumers to return to the copyright holder (or its approved distribution channel) to purchase the content in its original form (e.g., as a printed book, or a packaged CD). Second, while traffic in unauthorized copies of copyrighted content is not a new phenomenon, the global interconnectivity of the Internet vastly increases the magnitude and velocity at which such exchanges can occur (as evidenced by programs like Napster and Gnutella). Lastly, from an

enforcement standpoint, it is a significant technological challenge to prevent unauthorized copies of e-products and to be able to identify the sources and recipients of any unauthorized copies.

Taken together, these factors are forcing a fundamental reconsideration of the structure and distribution channels of industries that are dependent upon revenues from copyrighted content. While the recording industry has so far faced the greatest pressure to respond to the challenges presented by the Internet and digital media, other industries—including the publishing and audiovisual industries—are already beginning to feel similar pressures. So far, the dominant response—at least by established members of these industries—has been to seek technological means of preventing unauthorized reproduction and distribution of copyrighted digital content, principally through the application of encryption and rights management technologies.<sup>64</sup>

These efforts have, however, faced serious opposition from consumers and some participants in those industries, who believe that encryption-based systems will interfere with the exercise of traditional fair use defenses to copyright infringement, such as for the purpose of criticism, news reporting, teaching, or research, as well as the right recognized under some statutes for consumers to make a limited number of copies of a previously purchased recording for personal use, such as for listening to music in a car or on a portable device. With respect to software, for example, technological measures may prevent reverse engineering of software code, which is sometimes necessary to gain access to the ideas (rather than the protected expression of those ideas) underlying the program.<sup>65</sup> These types of restrictions, critics argue, may stifle further innovation based upon access to the ideas expressed in copyrighted works.<sup>66</sup>

#### A. APPLICATION OF THE TRIPS AGREEMENT TO E-PRODUCTS

The TRIPS Agreement<sup>67</sup> serves three essential purposes. First, it establishes a minimum set of protections that member countries must afford to the areas of intellectual property covered by the Agreement.<sup>68</sup> The Agreement incorporates, and in certain areas expands upon, the substantive protections established under the principal pre-existing intellectual property conventions (for example, the Berne Convention with respect to copyrights). Second, the Agreement obligates member countries to ensure the existence of certain domestic procedures and remedies for the enforcement of intellectual property rights, including, for example, the right of copyright holders to obtain provisional measures against alleged in-

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64. In general, rights management systems are technological methods used to identify the authority of a particular user or device to access, reproduce, or distribute copyrighted content, and to prevent any such actions that are not authorized. The Secure Digital Music Initiative (SDMI), for example, is an effort by a coalition of recording and consumer electronics companies to establish an open standard for the development of a system that will control access to copyrighted digital music. Information about SDMI is available at <http://www.sdmi.org>.

65. See, e.g., *Sega Enter. v. Accolade, Inc.*, 977 F.2d 1510, 1527–28 (9th Cir. 1992) (infringing copies that result from reverse engineering of software code may be defended under fair use doctrine where necessary to understand the ideas inherent in the work).

66. See, e.g., Julie S. Sheinblatt, *The WIPO Copyright Treaty*, 13 *BERKELEY TECH. L.J.* 535, 546–47 (1998).

67. TRIPS Agreement, *supra* note 5.

68. These are: copyright and related rights, trademarks, geographical indications, industrial designs, patents, integrated circuits, and certain types of trade secrets.



fringement. Lastly, and perhaps most importantly, the Agreement brings TRIPS-related disputes into the WTO's dispute settlement procedures and thereby creates a significantly more robust enforcement mechanism for a set of international agreements that were previously considered very difficult to enforce.

By establishing a minimum set of intellectual property protections and enforcement obligations for copyrighted content, the TRIPS Agreement provides a basic international legal framework for the protection of e-products. The TRIPS Agreement is, however, essentially a pre-Internet agreement, and most of the intellectual property issues specifically implicated by e-products currently lie outside its scope. Instead, those issues have begun to be addressed in two treaties concluded under the auspices of the World Intellectual Property Organization (WIPO) in 1996: the WIPO Copyright Treaty (WCT)<sup>69</sup> and the WIPO Performances and Phonograms Treaty (WPPT).<sup>70</sup> While neither agreement is currently covered by the TRIPS Agreement, it is very likely that the issues addressed by these agreements, and most likely the agreements themselves, will be considered in the Work Programme, in the WTO Council for Trade-Related Aspects of Intellectual Property Rights, and as a basis for future amendments to the TRIPS Agreement.<sup>71</sup> Thus, it is worth exploring at least one of the important issues raised by these agreements as it may relate to future work on, and implementation of, the TRIPS Agreement.

### 1. *Anti-Circumvention Issues*

As discussed above, the principal reaction to the copyright challenges posed by digital content has been to seek technological means of preventing unauthorized copying and distribution of such content. Both the WCT and the WPPT specifically contemplate this approach to the problem and, in a significant and controversial innovation in copyright law, obligate the contracting parties to provide adequate legal recourse against the circumvention of any technological measure that is used to control access to copyrighted content.<sup>72</sup> Thus, for the first time in the history of copyright law, the law is meant to sanction not only infringing uses of copyrighted content, but also efforts to bypass measures that control access to that content. As is sometimes said of this concept, it is intended to protect both the book and the lock on the bookstore's door.

The implementation of these treaty obligations into the laws of the United States and the European Union has engendered significant controversy.<sup>73</sup> On one side, the major copyright industries have argued that stringent implementation and enforcement of these treaty provisions is necessary to ensure the commercial viability of Internet-based distribution

69. WIPO Copyright Treaty, Dec. 20, 1996, WIPO Doc. CRNR/DC/94.

70. WIPO Performances and Phonograms Treaty, Dec. 20, 1996, WIPO Doc. CRNR/DC/95.

71. In fact, the Council for TRIPS has already issued a document that explores the issues raised by the WCT and WPPT agreements. See *Work Programme on Electronic Commerce: Background Note by the Secretariat*, WTO Doc. IP/C/W/128 (Feb. 10, 1999) (TRIPS Work Programme) at ¶¶ 80–92.

72. Article 11 of the WCT and article 18 of the WPPT state that contracting parties "shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used . . . in connection with the exercise of" copyright entitlements "and that restrict acts . . . which are not authorized by the" copyright holder.

73. See Digital Millennium Copyright Act, Pub. L. No. 105–304, 112 Stat. 2860 (Oct. 28, 1998) (DMCA) (codified at 17 U.S.C. § 1201 *et seq.*); Amended Proposal for a European Parliament and Council Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, COM(99)250 final [hereinafter EU Copyright Directive]. The EU Copyright Directive is in its final stages of consideration by the EU Parliament.

models for copyrighted content. By and large, these arguments have carried the day—the United States has enacted, and the EU has reached agreement upon, legislation that imposes civil penalties for circumvention of technological measures. These pieces of legislation, in many respects, go beyond the requirements of the treaties in protecting these types of devices.<sup>74</sup> However, a diverse group of arrayed interests on the other side of this issue—including librarians, researchers, music consumers, information security professionals, and commercial purchasers of software products—have had some success in carving out limited exceptions to the anti-circumvention provisions, such as where the act of circumvention is necessary for encryption research and information security testing.

From the standpoint of the TRIPS Agreement, what may eventually prove to be significant is the different approaches that countries take to implementing and enforcing any anti-circumvention obligations that they undertake through the WCT and WPPT agreements. To the extent that a particular member country establishes a less stringent regime for sanctioning the circumvention of technological measures—for example, by enacting numerous fair use defenses and exceptions—any copies of copyrighted content lawfully made in that country could become a source of unprotected digital copies that are available to Internet users in countries in which the same conduct would be illegal. Because it is essentially a matter of indifference whether a particular digital copy is located next door or on the other side of the world, this situation would greatly facilitate the digital equivalent of gray market imports of copyrighted content. It would, moreover, undermine the technological feasibility of many rights management systems that depend upon global application and enforcement of the system.

While it remains to be seen whether this will become a significant issue under the TRIPS Agreement, it seems likely that divergent national approaches to the protection of copyrighted content, including content that is protected by technological measures, will cause an increasing amount of trade friction as more content industries move their principal distribution channels onto the Internet. To take but one example, the U.S. film and recording industries are among the nation's largest exporters, and have also been among the most aggressive proponents of cracking down on pirated copyrighted materials in countries that lack adequate copyright enforcement mechanisms. As those pirated materials become available not only on street corners in the developing world, but also on websites accessible from all over the world, the effort to enforce copyright protections on a global basis will no doubt take on even greater significance for these and other industries.

## V. Conclusion

The issues regarding e-products that we examine above are significant ones that the WTO will face as it deals with this important area of electronic commerce. As shown in the discussion, there is considerable controversy among WTO members as to the appropriate integration of e-products into the WTO system. Some of these issues may be resolved through negotiation, while others may wind up in dispute settlement. Our hope is that WTO members are able to take this opportunity to demonstrate the usefulness and adaptability of the WTO system in a changing world.

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74. For example, both the DMCA and the EU Copyright Directive seek to control the manufacture, sale, and distribution of devices that can be used to circumvent technological measures, which is not strictly required by article 11 of the WCT.

