Richmond Journal of Global Law & Business

Volume 9 | Issue 2 Article 4

2010

World Trade Organization Agreements and Principles as a Vehicle For the Attainment of Energy Security

Dennis J. Hough Jr.
Duquesne University School of Law

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WORLD TRADE ORGANIZATION AGREEMENTS AND PRINCIPLES AS A VEHICLE FOR THE ATTAINMENT OF ENERGY SECURITY

Dennis J. Hough Jr.*

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^{*} J.D. Candidate Spring 2010, Duquesne University School of Law; B.S., Civil Engineering, University of Pittsburgh, 2001.

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I. INTRODUCTION

A. Russia + Ukraine = A Cold Europe . . .

Do you remember how you felt on Wednesday, January 7, 2009? Perhaps you do not. I know how some Europeans felt — cold.¹ That was the day that Russia stopped all natural gas exports to Ukraine.² By itself, this was a serious course of action. However, because Ukraine is the main transmission corridor for natural gas pipelines shipping gas to Europe,³ the situation commanded worldwide attention.⁴

B. History Tends to Repeat Itself . . .

The United States experienced two major oil shortages in the 1970s.⁵ First, the Yom Kippur war of 1973⁶ gave Arab oil-exporting countries a pretext for implementing an embargo on the shipment of oil⁷ to the United States. Secondly, in 1979, President Jimmy Carter

⁵ Donald W. Jones & Paul N. Leiby, The Macroeconomic Impacts of Oil Price Shocks: A Review of Literature and Issues 2 (Oak Ridge National Laboratory Energy Division Jan. 5, 1995) (draft report, on file with author).

¹ Over 100,000 households and hundreds of factories were without natural-gas heat, Andrew E. Kramer, *Russia Restores Gas to Ukraine*, N.Y. Times, Jan. 21, 2009. A disagreement between Russia and Ukraine over the price paid by Ukraine for natural gas and the terms of transit was the cause of the shutoff, *id*.

² Stephen Castle & Andrew E. Kramer, European Union Steps Into Gas Dispute and Will Monitor Flows in Ukraine, N.Y. Times, Jan. 8, 2009, at A6.

³ Turning the Gas Tap Back On, Economist, Jan. 12, 2009, available at http://www.economist.com/agenda/displaystory.cfm?story_id=E1_TNJNTVRJ&source=login_payBarrier. Eighty percent of all gas shipments from Russia to Europe go through Ukraine. *Id.*

⁴ Castle & Kramer, *supra* note 2, at A6.

⁶ See generally U.S. DEP'T OF STATE, BACKGROUND NOTE: ISRAEL, http://www.state.gov/r/pa/ei/bgn/3581.htm#history (last visited Oct. 30, 2009).

⁷ U.S. Dep't of Energy - Fossil Energy: Our History, http://fossil.energy.gov/aboutus/history (last visited Oct. 30, 2009).

halted the importation of oil from Iran⁸ after Iran seized the United States Embassy in Tehran on November 4, 1979, taking fifty-two people hostage.⁹

II. NATIONAL SECURITY ASSETS

A. Energy as a National Security Asset

Energy, no matter whether it takes the form of petroleum, natural gas, nuclear, coal, or renewable sources, is an economic and strategic asset. ¹⁰ Military power is derived from it. ¹¹ Naturally it follows that energy is a major national security concern. ¹² Energy exporting states (see Russia above) are increasingly able to execute their political and strategic objectives. ¹³ At the opposite end of the spectrum, energy importing states—the most dependent being the United States ¹⁴—are finding it more difficult to achieve their foreign policy and national security goals. ¹⁵

Competition for energy sources among energy importing states creates a tension in international relations and frustrates foreign pol-

⁸ Proclamation No. 4702, 44 Fed. Reg. 65, 581 (Nov. 14, 1979).

⁹ American Experience: Jimmy Carter, PBS.org, http://www.pbs.org/wgbh/amex/carter/peopleevents/e_hostage.html (last visited Jan. 21, 2010).

¹⁰ U.N. Conf. on Trade and Dev. [UNCTAD], *Trade Agreements, Petroleum and Energy Policies*, 14, UNCTAD/ITCD/TSB/9 (2000), http://www.unctad.org/en/docs/itcdtsb9_en.pdf (last visited Oct. 30, 2009) [hereinafter UNCTAD Report].

¹¹ See id.

¹² See Council on Foreign Relations, National Security Consequences of U.S. Oil Dependency, Independent Task Force Report No. 58, at 3 (2006), http://www.cfr.org/publication/11683/national_security_consequences_of_us_oil_dependency.html?breadcrumb=%2Fpublication%2Fby_type%2Ftask_force_report (last visited Oct. 30, 2009) [hereinafter CFR Report].

¹³ Id.

¹⁴ U.S. Energy Information Administration, Country Energy Profiles, http://tonto.eia.doe.gov/country/index.cfm (last visited Oct. 30, 2009). The top five oil net importing countries in 2008 were (in thousand barrels per day): (1) United States - 10,984; (2) Japan - 4,652; (3) China - 3,858; (4) Germany - 2,418; (5) South Korea - 2,144, *id.* The top five oil consuming countries in 2008 were (in thousand barrels per day): (1) United States - 19,498; (2) China - 7,831; (3) Japan - 4,785; (4) India - 2,962; (5) Russia- 2,916, *id.* The top five total primary energy consuming countries in 2007 were (in quadrillion Btu (British thermal unit)): (1) United States - 101.6; (2) China - 77.8; (3) Russia - 30.4; (4) Japan - 22.5; (5) India - 19.1, U.S. Energy Information Administration, International Energy Statistics, Total Primary Energy Consumption, http://tonto.eia.doe.gov/cfapps/ipdbproject/iedindex3.cfm?tid=44&pid=44&aid=2&cid=&syid=2005&eyid=2007&unit=QBTU (last visited Oct. 30, 2009).

¹⁵ CFR Report, supra note 12, at 3.

icy execution. 16 An example is the recent investment made by China in the African state of Sudan. China is Sudan's most important trading partner, and the China National Petroleum Corporation operates oilfields in Sudan. 17

Sudan, however, is a model of instability and corruption. Since its independence in 1956, it has experienced two civil wars and is currently engaged in a conflict in its Darfur region that has claimed the lives of 200,000. Transparency International's Corruption Perceptions Index 2008 assigns Sudan a score of 1.6 out of 10, designating it as a state with widespread corruption. In response to the violence in Darfur, the United States imposed economic sanctions in May 2007. The United States also classifies Sudan as a state sponsor of terrorism. It is most likely that both China and the United States want peace in Sudan; however, their respective foreign policy approaches could not be farther apart. Whereas China opts to invest in Sudan, the United States imposes sanctions.

B. Energy Security

To reduce the risks that energy dependency imposes on national security objectives, a country must make energy security an essential element of its national security policy.²² Energy security is defined as having an energy supply that meets or exceeds demand, is reliable, and is provided at a reasonable cost.²³ Disruptions and shortages in energy production, transmission, and distribution can arise unexpectedly, making absolute energy security unattainable.²⁴ Therefore, energy security is a form of risk management.²⁵

¹⁶ *Id*.

¹⁷ There be Dragons, Economist, Nov. 6, 2008, available at http://www.economist.com/world/asia/displaystory.cfm?story_id=E1_TNVSDVRS.

¹⁸ Central Intelligence Agency, The World Factbook - Sudan, https://www.cia.gov/library/publications/the-world-factbook/geos/su.html (last visited Oct. 30, 2009).

 $^{^{19}}$ Transparency International, 2008 Corruption Perceptions Index, http://www.transparency.org/policy_research/surveys_indices/cpi/2008 (last visited Oct. 30, 2009). The scores range from the "highly corrupt" at zero to the "highly clean" at ten, id.

²⁰ U.S. Dep't of State, Background Note: Sudan, http://www.state.gov/r/pa/ei/bgn/5424.htm#relations (last visited Oct. 30, 2009).

²¹ *Id*.

²² See CFR Report, supra note 12, at 3; International Energy Agency, World Energy Outlook 2007, 161 (2007), http://www.iea.org/textbase/nppdf/free/2007/weo_2007.pdf [hereinafter IEA Outlook 2007].

²³ See CFR Report, supra note 12, at 3; IEA Outlook 2007, supra note 22, at 161.

²⁴ IEA OUTLOOK 2007, *supra* note 22, at 161.

²⁵ *Id*.

Energy security is a public good which means that as one party benefits from it no other party suffers a corresponding detriment.²⁶ All entities involved in the energy supply chain benefit from energy security, regardless of whether they supported it.²⁷ No individual entity in the energy supply chain, however, has the ability to ensure absolute security.²⁸ Consequently, it is up to governments to ensure that all entities in the energy supply chain are contributing in accordance with its energy security policy.²⁹

Many governments incorporate four core elements into their energy security policy.³⁰ First, the policy must provide for investment in energy infrastructure, to include production, processing, transportation, and storage.³¹ Second, energy efficiency should be encouraged to mitigate demand growth.³² Third, the policy should provide for multiple energy sources and increase the number of market participants to boost the reliability of supply.³³ Fourth, the laws, regulations, and policies that govern and affect the energy market—including the conduct of the energy market itself—must be open to study and inspection by current and potential market participants.³⁴

C. Roadmap for U.S. Energy Security Policy

In 2006, the Council on Foreign Relations issued a report entitled *National Security Consequences of U.S. Oil Dependency.*³⁵ The goal of the report was to analyze how U.S. dependence on imported energy affected its foreign policy.³⁶ The report focused its analysis on petroleum imports,³⁷ but its recommendations apply to energy in general.³⁸

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<sup>26</sup> Id.
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 $^{^{27}}$ *Id*.

²⁸ *Id*.

²⁹ *Id*.

³⁰ *Id.* at 162.

 $^{^{31}}$ Id.

³² *Id*.

³³ *Id*.

³⁴ *Id*.

 $^{^{35}}$ CFR Report, supra note 12, at xii.

³⁶ *Id.* at xi.

³⁷ *Id.* at 3.

³⁸ Peter Mandelson, Former European Union Trade Commissioner, Trade Policy and Stable, Secure and Sustainable Energy, Address at a Conference on Strategic Energy Policy 3 (Nov. 21, 2006), http://ec.europa.eu/commission_barroso/ashton/speeches_articles/sppm133_en.htm (last visited Nov. 21, 2006) ("I know that the energy issue looks different depending on from where you are looking at it. But regardless of whether you are an importer or exporter, whether you work in oil and gas, or in renewables or nuclear energy, the features of energy markets are

The report advocated for a stronger U.S. energy security policy.³⁹ Five recommendations were provided in hopes of strengthening U.S. policy.⁴⁰ First, the report recommended that the United States adjust its domestic energy policy to include efforts to reduce consumption of "petroleum products."⁴¹ Two ways to reduce consumption are to foster new technologies and to improve existing technologies.⁴² The report also recognized that technology alone is insufficient to adequately reduce consumption.⁴³ Therefore the report suggested the use of a tax-based measure to shift consumer behavior toward the use of public transportation.⁴⁴

Second, the report encouraged the United States to work toward a more fair, efficient, and transparent world energy market. ⁴⁵ Regulations, tariffs, and subsidies must be used in a responsible manner so that market operations are uninhibited. ⁴⁶ The basic economic laws of supply and demand must be allowed to govern the market. ⁴⁷

Third, the report advocated for a reliable and secure energy infrastructure.⁴⁸ Transmission infrastructure is critical in all facets of the energy cycle because energy is useless if one cannot move it from the generator to the consumer.

Fourth, the report called on the United States to insist that energy exporting countries manage revenue derived from energy in a wise and prudent fashion.⁴⁹ Good governance of income will foster political stability and enhance living standards.⁵⁰ The report states that political stability is a prerequisite to attracting investment in the country.⁵¹ Investments benefit the country and its citizens by increas-

essentially the same. Decisions are for the very long term. Consumer demand is price inelastic. And governments are tempted to intervene to protect their national security interests.").

³⁹ CFR Report, *supra* note 12, at 6.

⁴⁰ *Id*.

⁴¹ *Id*.

 $^{^{42}}$ Id. at 7

⁴³ *Id.* at 6–7. The report finds that "no strategy [to reduce petroleum consumption] will be effective without higher prices for transportation fuels or regulatory incentives to use more efficient vehicles," *id.*

⁴⁴ *Id.* at 6–7.

⁴⁵ *Id.* at 8.

⁴⁶ *Id*.

⁴⁷ *Id.* (stating that "[t]he United States should continue to urge governments in all countries to reduce subsidies and deregulate the prices of oil and gas where they have been held below world market levels.").

⁴⁸ *Id.* at 9.

⁴⁹ *Id*.

⁵⁰ *Id.* at 10.

⁵¹ *Id*.

ing their social and economic standing. 52 At the same time, as social and economic reforms plant the seeds of democracy, the United States realizes its foreign policy goal of encouraging democratic governments. 53

Finally, the report challenged the United States to revamp its national security staff to include a new energy security directorate that will handle energy specific issues.⁵⁴ The report provided that energy issues are technical and complex; therefore, having qualified personnel to handle such issues, and including these issues in the already broad scope of national security, is a necessity to the policy making process.⁵⁵

D. The Impossibility of U.S. Energy Independence

One misconception that plagues the discussion of energy security and trade is the belief that the United States can avoid this topic simply by becoming energy independent. Energy independence for the United States is unachievable in the foreseeable future. The United States produced 10% of the world's oil while consuming more than double (23%) of that amount in 2008. The reason for this is that transportation needs accounted for over a quarter of the total United States energy consumption in 2008. Ninety-five percent of the total energy consumed by the transportation sector comes from petroleum. Seventy-one percent of the total of import and domestic supplies of petroleum go to the transportation sector. The United States

⁵² *Id*.

⁵³ *Id*.

⁵⁴ *Id*.

⁵⁵ *Id.* at 10–11.

⁵⁶ *Id.* at 4.

⁵⁷ *Id.*; see also Tom Kenworthy, *Energy Independence May be a Pipe Dream*, USA Today, Oct. 24, 2004, *available at* http://www.usatoday.com/news/politicselections/nation/issues/2004-10-24-energy-independence_x.htm.

⁵⁸ Energy Information Administration, Energy in Brief: How Dependent are we on Foreign Oil?, http://tonto.eia.doe.gov/energy_in_brief/foreign_oil_depen dence.cfm (last visited Oct. 31, 2009).

⁵⁹ ENERGY INFORMATION ADMINISTRATION, FIGURE 2.1A ENERGY CONSUMPTION BY SECTOR OVERVIEW, http://www.eia.doe.gov/emeu/aer/pdf/pages/sec2_4.pdf (last visited Oct. 31. 2009). End-Use Sector Shares of Total Consumption, 2008 graph shows the following: industrial - 31%; transportation - 28%; residential - 22%; commercial - 19%. *Id.*

⁶⁰ Energy Information Administration, U.S. Primary Energy Consumption by Source and Sector, 2008, http://www.eia.doe.gov/emeu/aer/pecss_diagram.html (last visited Oct. 31, 2009).

⁶¹ *Id*.

imports approximately 58% of its petroleum needs. ⁶² It is simply not feasible to use a domestic energy alternative as a substitute for imported petroleum absent a significant reduction in the transportation sector requirement. ⁶³

III. PROBLEM STATEMENT

Countries throughout the world have the goal of achieving energy security. The challenge they face is creating the proper legal regime to manage energy—a national security asset—to achieve this goal. This article discusses how the implementation of World Trade Organization ("WTO") principles and agreements can be a means to promote energy security.

IV. WOLRD TRADE ORGANIZATION

A. Background and Politics

The WTO officially became a legally recognized organization on January 1, 1995.⁶⁴ Its roots, however, extend to the period immediately following the Second World War.⁶⁵ In 1947, the United States led a group of countries with the common goal of establishing an institution that would promote free trade.⁶⁶ Although they did not realize their goal of the creation of an international institution, they did draft and implement a new treaty entitled the General Agreement on Tariffs and Trade ("GATT").⁶⁷ The GATT sought to eliminate protectionist economic practices and set forth a collection of rules to govern international trade in goods.⁶⁸ Forty-eight years after the implementation of the GATT, the Member countries of the GATT, during the Uruguay Round of trade negotiations, transformed their de facto regime under the GATT into the de jure WTO.⁶⁹

⁶² Energy Information Administration, Energy in Brief, supra note 58.

⁶³ CFR Report, *supra* note 12, at 14 (stating that "[l]iquid fuels are essential to the nation's transportation system. Barring draconian measures, the United States will depend on imported oil for a significant fraction of its transportation fuel needs for at least several decades.").

⁶⁴ World Trade Organization, Understanding the WTO 10 (4th ed. 2008), http://www.wto.int/english/res_e/publications_e/understanding_wto_e.htm (last visited Nov. 6, 2009) [hereinafter Understanding].

⁶⁵ Daniel C.K. Chow & Thomas J. Schoenbaum, International Trade Law: problems, cases, and materials 20 (2008).

⁶⁶ *Id*.

⁶⁷ *Id*.

 $^{^{68}}$ Id

⁶⁹ Understanding, *supra* note 64, at 10.

Although petroleum products are a "good" for the purposes of the GATT, ⁷⁰ Member countries have treated petroleum goods as being outside of the GATT scope. ⁷¹ At the time the GATT was negotiated, most of the world's petroleum fields were under the control of corporations owned by the citizens of the United States, the United Kingdom, the Netherlands, and France. ⁷² Because these countries had just emerged from the Second World War, they were reluctant to include strategic assets, namely petroleum products, within the scope of the GATT. ⁷³ This special treatment, that is, non-treatment under the GATT, was because the contracting parties did not want to politicize such a strategic asset. ⁷⁴

B. Doha Development Agenda

For approximately fifty years, the issue of trade in energy goods and services was avoided based on its strategic-asset classification. In 2001, however, the WTO took a major step toward the inclusion of energy as an officially recognized sector of trade. The Doha Development Agenda (DDA), a structured negotiations program in which WTO Member governments discussed trade issues, expressly included the topic of trade in energy services. These negotiations began in 2001 and were originally set to close on January 1, 2005. Disagreements over agricultural issues prevented the WTO from

So the rules of the WTO do not deal with energy as a distinct sector. Yet since our basic rules are applicable to all forms of trade, they also apply to trade in energy goods and services. And these rules can be enforced through the WTO dispute settlement mechanism even if they were not negotiated with energy in mind.

Id.

⁷¹ UNCTAD Report, supra note 10, at 14–15.

⁷⁰ See Pascal Lamy, Dir.-Gen., World Trade Org., Address at the 20th World Energy Congress in Rome: Doha Round Will Benefit Energy Trade (Nov. 16, 2007), available at http://www.wto.int/english/news_e/sppl_e/sppl80_e.htm (last visited Nov. 6, 2009).

⁷² *Id.* at 14.

⁷³ See id.

⁷⁴ *Id.* at 14–15.

⁷⁵ Lamy, *supra* note 70 (stating "[t]he first area where energy stands explicitly on the Doha [Development] agenda is the services negotiations. For the first time Members are discussing energy as a specific services sector.").

⁷⁶ For background information on the DDA, see generally Understanding, *supra* note 64, at 77.

⁷⁷ See Special Session of the Council for Trade in Services, Report by the Chairman to the Trade Negotiations Committee, TN/S/23, at annex B, § 11 (Nov. 28, 2005).

 $^{^{78}}$ See Understanding, supra note 64, at 77.

meeting this deadline. 79 In September 2009, trade ministers from Member governments stated that it was their goal to finalize the DDA in 2010. 80

The DDA is particularly important because it represents an opportunity to adopt specific energy services activities under the General Agreement on Trade in Services (GATS). For the purposes of GATS, the WTO Services Sectoral Classification List⁸¹ (W/120) contains all the services activities eligible for market access and national treatment protections. While this list includes sectors such as business and transportation, it does not include a sector for energy services.⁸² A separate energy services sector may be added through the DDA.⁸³

The United States,⁸⁴ Canada,⁸⁵ the European Communities,⁸⁶ Venezuela,⁸⁷ Japan,⁸⁸ and Cuba⁸⁹ have each submitted a communication containing their proposed energy services additions to the W/120. The United States' proposal is the most detailed and comprehensive out of the group.⁹⁰ It proposes to add an energy sector to the W/120. The energy sector is divided into five broad categories; each category will contain subcategories with corresponding energy services.⁹¹ It is important to note that the energy services listed in the proposal apply to all energy sources (unless otherwise noted) to include oil, natural gas, coal, renewables, nuclear, and electricity.⁹²

⁷⁹ See id.

⁸⁰ Vikas Bajaj, *Trade Talks to Resume, But Divides Remain*, N.Y. Times, Sept. 5, 2009, *available at* http://www.nytimes.com/2009/09/05/business/global/05trade. html.

 $^{^{81}}$ See generally GATT Secretariat, Services Sectoral Classification List, MTN.GNS/W/120 (July 10, 1991).

⁸² See id.

 $^{^{83}}$ See generally Special Session of the Council for Trade in Services, supra note 77.

 $^{^{84}}$ See Communication from the United States, Classification of Energy Services, S/CSC/W/27 (May 18, 2000).

 $^{^{85}}$ See Communication from Canada, Initial Negotiating Proposal on Oil and Gas Services, S/CSS/W/58 (Mar. 14, 2001).

⁸⁶ See Communication from the European Communities and their Member States, GATS 2000: Energy Services, S/CSS/W/60 (Mar. 23, 2001).

 $^{^{87}}$ See Communication from Venezuela, Negotiating Proposal on Energy Services, S/CSS/W/69 (Mar. 29, 2001).

⁸⁸ See Communication from Japan, Negotiation Proposal on Energy Services Supplement, S/CSS/W/42/Suppl.3 (Oct. 4, 2001).

⁸⁹ See Communication from Cuba, Negotiating Proposal on Energy Services, S/CSS/W/144 (Mar. 22, 2002).

⁹⁰ See Communication from the United States, supra note 84.

⁹¹ See id. ¶ 3.

⁹² Id. at Attachment A, n.1.

There are three main reasons for the initiation of WTO negotiations on energy. First, governments realized that the lack of trade agreements on energy restrict their foreign policy options. Without uniform trade rules, petroleum exporting states can impose their foreign policy goals with greater success—especially where their goals are counter to those of the United States. Secondly, it is well accepted that market economies are very good at the efficient allocation of resources. WTO rules contribute to market effectiveness by governing these markets in a transparent and predictable manner. Third, before the 1990s, most energy utilities were state-owned and vertically integrated. The state owned the complete energy system from generation to transmission to distribution. Liberalization of these state-owned utilities has opened up numerous opportunities for private companies to compete for projects in generation, transmission, and distribution. Secondary of the state of the projects in generation, transmission, and distribution.

C. WTO Trade Agreements

Three WTO trade agreements govern the main areas of trade regulated by the WTO. 99

1. General Agreement on Tariffs and Trade

The first agreement is the GATT.¹⁰⁰ The GATT is the oldest of all the WTO agreements. It was signed in October 1947 as a result of an effort to promote economic cooperation among its Member states.¹⁰¹

⁹³ See CFR Report, supra note 12, at 3 (stating that "[m]ajor energy consumers—notably the United States, but other countries as well—are finding that their growing dependence on imported energy increases their strategic vulnerability and constrains their ability to pursue a broad range of foreign policy and national security objectives.").

⁹⁴ Understanding, *supra* note 64, at 14.

⁹⁵ At the 20th World Congress on Energy in 2007, WTO Director General Lamy stated that "[a]s noted by your in-coming Council Chairman, markets remain the most efficient way to allocate resources. But markets must be governed by transparent and predictable rules. And this may be where the WTO, as a forum for the negotiation and enforcement of multilateral trade rules has a role to play," Lamy, supra note 70.

⁹⁶ GATS Secretariat, Energy Services: Background Note by the Secretariat, ¶¶ 3, 20, S/C/W/52 (Sept. 9, 1998).

⁹⁷ *Id*. ¶ 3.

⁹⁸ *Id.* ¶¶ 3–4.

⁹⁹ Understanding, supra note 64, at 10.

¹⁰⁰ See generally General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 187, available at http://www.jurisint.org/pub/06/en/doc/05.htm [hereinafter GATT].

¹⁰¹ Understanding, *supra* note 64, at 15.

The venerable GATT focuses on trade in goods, where trade in goods is the most prevalent channel of trade. 102 Prior to the establishment of the WTO in 1995, the GATT was the only multilateral agreement governing international trade. 103

2. General Agreement on Trade in Services

The second agreement is the General Agreement on Trade in Services (GATS).¹⁰⁴ The GATS came into effect in 1995.¹⁰⁵ The GATS is the only international trade agreement covering trade in services.¹⁰⁶ The significance of the GATS cannot be understated because it covers all types of services.¹⁰⁷ The services trade sector is the fastest growing sector of the world economy.¹⁰⁸

3. Trade-Related Aspects of Intellectual Property Rights

The third agreement of the WTO framework is the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), ¹⁰⁹ which was also adopted in 1995. ¹¹⁰ As knowledge and advanced technology products constitute a greater share of international trade, the need for adequate protection of the ideas and expertise embodied in these products increases. ¹¹¹

V. WTO FUNDAMENTAL PRINCIPLES

WTO agreements rest on a foundation of fundamental principles including: (1) trade without discrimination; (2) free trade; (3) predictability in trade; (4) fair competition; and (5) economic development. Non-discriminatory trade is pursued through the use of two core obligations: (1) the most-favored-nation (MFN) principle; and (2) the national treatment principle. The MFN principle stands for the requirement that a WTO Member state must afford to all of its WTO Member state trading partners the same, or equal, treatment

¹⁰² See Chow & Schoenbaum, supra note 65, at 354.

¹⁰³ *Id.* at 11.

¹⁰⁴ The General Agreement on Trade in Services, Apr. 15, 1994, Annex 1B, 33 I.L.M. 1167 (1994) [hereinafter GATS].

 $^{^{105}}$ Understanding, supra note 64, at 37.

¹⁰⁶ Id. at 33.

¹⁰⁷ *Id*.

¹⁰⁸ *Id*.

 $^{^{109}}$ Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Annex 1C, 33 I.L.M. 1197 (1994).

¹¹⁰ Understanding, supra note 64, at 39.

¹¹¹ See id.

¹¹² *Id.* at 10–12.

¹¹³ Chow & Schoenbaum, supra note 65, at 143.

regarding trade advantages.¹¹⁴ MFN produces a result where all WTO Members receive the same treatment; therefore, no Member state has an advantage over the other.¹¹⁵ Article I of the GATT enumerates the MFN principle.¹¹⁶ The national treatment principle stands for the requirement that a WTO Member state cannot afford more favorable trade treatment to its domestic products and producers as compared to other WTO Member states.¹¹⁷ Both the MFN principle and the national treatment principle were first included in the GATT but continue to play a major role in the GATS and TRIPS.¹¹⁸

A. Most-Favored-Nation Principle

1. Origins

From its origin in the twelfth century through the nineteenth century, the MFN principle had an opposite effect than its current effect under the WTO. During its history, certain trading partners received favorable treatment due to the friendly relations between two states. As a result, a limited number of trading partners enjoyed such trade advantages.

2. Current Operation and Elements

Today, as used in the WTO framework, the MFN principle gives all WTO trading partners the same treatment; equal treatment is the norm and any treatment varying from the norm is the exception. The MFN principle, as embodied in Article I of the GATT, contains two distinct elements. The first element is that the MFN principle applies to any trade advantage that a Member country may afford to any *other* country, where the other country need not be a WTO Member. 123

The second element is that the Member country affording such an advantage must immediately and unconditionally grant the same advantage to WTO Member countries that produce like products.¹²⁴ Some of the advantages of the MFN principle include the protection of

 $^{^{114}}$ Id.; GATT, supra note 100, pt. I, art. I, \P 1; see also GATT, supra note 100, pt. II, art. III, $\P\P$ 1–2.

¹¹⁵ Chow & Schoenbaum, supra note 65, at 143.

 $^{^{116}}$ See GATT, supra note 100, pt. I, art. I, \P 1, pt. II, art. III, $\P\P$ 1–2.

¹¹⁷ Chow & Schoenbaum, supra note 65, at 143.

¹¹⁸ *Id*.

¹¹⁹ *Id.* at 144.

¹²⁰ *Id*.

¹²¹ *Id*.

¹²² *Id.* at 145.

 $^{^{123}}$ Id.

¹²⁴ *Id*.

trade concessions against a reduction in value, promotion of free and fair trade, and protection against corruption within a multilateral trading system. ¹²⁵ Along with these advantages come some disadvantages, which include the opportunity for other states to act as free riders on the concessions of other countries, that is, the absence of a guarantee of reciprocity of concessions where one country may be affording a greater advantage than it receives in return. ¹²⁶

One may distinguish the MFN principle from the national treatment principle by the end result of their application. The MFN principle affects external trade practices (e.g., tariffs, customs duties) while national treatment affects internal trade practices (e.g., internal taxes). Although the language of the MFN principle and the national treatment principle varies in the GATT, GATS, and TRIPS, the effect is the same. 129

3. Scope

a. Border and Internal Charges

It is important for any party to a trade transaction to understand the scope of the MFN principle. The GATT Panel Report, Belgian Family Allowances, is illustrative of the reach of the MFN principle. In Belgian Family Allowances, trade delegations from Norway and Denmark filed a complaint with the GATT Panel alleging a violation of the MFN principle by Belgium. Certain goods that had been imported into Belgium and cleared customs were subsequently charged a levy at the time of purchase of the goods by certain Belgian public bodies. This charge was disguised as an internal charge rather than an import charge. Belgium, however, did not apply this levy in a uniform manner, but rather provided an exception to the levy for a limited number of states. The panel considered whether this internal charge placed upon certain products violated the GATT. The Panel held that the levy violated the GATT's MFN prin-

¹²⁵ *Id*.

¹²⁶ *Id*.

¹²⁷ *Id.* at 143.

¹²⁸ *Id*.

 $^{^{129}}$ Id. at 144.

¹³⁰ Id. at 147.

¹³¹ Report of the Panel, *Belgian Family Allowances (Allocations Familiales)* (Nov. 7, 1952), GATT B.I.S.D. (1st Supp.) at 59 (1953); see also Chow & Schoenbaum, supra note 65, at 147–49.

Report of the Panel, supra note 131, \P 1.

¹³³ *Id*. ¶¶ 1–2.

¹³⁴ *Id.* ¶ 2.

¹³⁵ *Id.* ¶ 3.

¹³⁶ See id. ¶¶ 3–7.

ciple.¹³⁷ The Panel ruled that the levy must be either completely removed or applied in a non-discriminatory manner to comply with the MFN principle.¹³⁸ The Panel decision stands for the rule that the MFN principle applies to both charges upon imported goods at the time of importation and to any subsequently applied internal charges.¹³⁹

b. Like Products

Another important element of the MFN principle is the "like product" designation. The MFN principle applies only where the products are considered to be like products and, accordingly, products that do not qualify as like products do not enjoy MFN treatment. The GATT Panel explored the issue of like product designation in the Report of *Treatment by Germany of Imports of Sardines*. The issue before the Panel was whether Germany violated the MFN principle with its application of non-uniform duties on certain types of fish. 143

In order to address this issue, the Panel had to decide whether the three types of fish involved were like products and, if so, only then would MFN treatment be required. The Panel held that the three types of fish in question were not like products for purposes of determining MFN treatment. In making its determination, the Panel recognized Germany's consistent treatment of the three types of fish as separate and distinct. A determination of like product status must be performed on a case-by-case basis where, as the Panel illustrated in this instance, both the treatment of the products by the states in the dispute, along with the products themselves, must be taken into consideration. It

¹³⁷ *Id*. ¶ 8.

¹³⁸ *Id*. ¶ 3

¹³⁹ See Chow & Schoenbaum, supra note 65, at 147–49.

¹⁴⁰ *Id.* at 150.

Id

 $^{^{142}}$ Report of the Panel, Treatment by Germany of Imports of Sardines (Oct. 31, 1952), GATT B.I.S.D. (1st Supp.) at 53 (1953); see also Chow & Schoenbaum, supra note 65, at 150.

¹⁴³ Report of the Panel, *Treatment by Germany of Imports of Sardines*, supra note 142, \P 10.

¹⁴⁴ *Id.* ¶ 11.

¹⁴⁵ *Id*. ¶ 13.

¹⁴⁶ *Id*.

¹⁴⁷ See id. ¶ 12.

c. De Facto Discrimination

The MFN principle also operates to prevent de facto discrimination. The MFN principle also operates to prevent de facto discrimination. The MTO Appellate Body Report of Canada–Certain Measures Affecting the Automotive Industry. De facto discrimination occurs where a Member country imposes certain criteria that allow for exceptions to duties or import charges where such exceptions are not expressly based on a country of origin, but rather some economic criteria. Canada instituted an import duty exception, the Motor Vehicle Tariff Order, which applied to the importation of automobiles.

The issue before the Panel was whether Canada's automobile tariff exception, which was expressly origin-neutral in application, may have operated inconsistent with MFN principles. The Panel found, and the Appellate Body agreed, that the actual use of the import duty exemption produced a discriminatory effect where only a very small number of automobile manufacturers were afforded the exemption and because of this, enjoyed an advantage over the vast majority of other automobile manufacturers. Therefore, MFN treatment also applies to origin-neutral import charges that, once implemented, have a defacto discriminatory effect by affording certain products an advantage over other like products.

B. National Treatment Principle

1. Operation

The second core WTO principle is the national treatment principle ¹⁵⁴ which is found in GATT Article III. ¹⁵⁵ The national treatment principle means that no less favorable treatment can be afforded to imported goods as compared to domestic goods by the importing state. ¹⁵⁶ This principle prevents an importing state from implement-

¹⁴⁸ Chow & Schoenbaum, supra note 65, at 156.

¹⁴⁹ Appellate Body Report, Canada—Certain Measures Affecting the Automotive Industry, WT/DS139/AB/R, 142/AB/R (June 19, 2000); see also id. at 153.

¹⁵⁰ Appellate Body Report, *Canada—Certain Measures Affecting the Automotive Industry, supra* note 149, ¶ 78 (stating that the words of Article I:1 do not restrict its scope only to cases in which the failure to accord an 'advantage' to like products of all other Members appears on the face of the measure. . . . [W]e cannot accept Canada's argument that Article I:1 does not apply to measures which, on their face, are 'origin-neutral.'").

¹⁵¹ *Id.* at ¶¶ 7, 9.

 $^{^{152}}$ *Id.* at ¶ 77.

¹⁵³ *Id*. ¶ 81.

 $^{^{154}}$ See GATT, supra note 100, pt. I, art. I.

¹⁵⁵ See GATT, supra note 100, pt. II., art. III.

¹⁵⁶ See GATT, supra note 100, pt. I, art. I.

ing discriminatory measures upon imported goods after the goods have passed customs and been subject to the applicable tariffs. ¹⁵⁷ Without the national treatment principle, a state could impose few or no tariffs on imports, and then could assess large fees against the imported goods at a later time. ¹⁵⁸ Every state has an inherent and reasonable interest in promoting domestic goods and products because their success is a key component in the prosperity of the state itself. ¹⁵⁹

2. Elements of Paragraph Two

The WTO Appellate Body Report for *Japan – Taxes on Alcoholic Beverages* interprets the national treatment principle as it applies to domestic taxes and charges. The Panel had to determine whether a Japanese Liquor Tax Law violated the national treatment principle. In making this determination, the first issue confronted by the Panel was whether shochu, a Japanese alcoholic beverage, and vodka are like products, and therefore whether the higher domestic taxes on imported vodka as compared to shochu constituted a violation of GATT Article III:2, first sentence. The second issue was whether the non-uniform taxes placed on shochu, as compared to other imported alcoholic beverages, violated GATT Article III:2, second sentence. Second Sentence.

The Panel reasoned that if the domestic and imported goods are like products and the domestic goods are taxed at a rate lower than the imported products, then the tax violated GATT Article III:2, first sentence. The Panel also determined that the criteria required to violate GATT Article III:2, first sentence, is different from that of the second sentence. The first sentence is to be construed to encompass a more narrow range of products where the products in question must be like products. The second sentence is to be construed to encompass a broader range of products because the like product requirement is not present. The second sentence is to be construed to encompass a broader range of products because the like product requirement is not present.

¹⁵⁷ Chow & Schoenbaum, supra note 65, at 159.

¹⁵⁸ *Id*.

¹⁵⁹ Id. at 159-60.

¹⁶⁰ Appellate Body Report, *Japan—Taxes on Alcoholic Beverages*, WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R (Oct. 4, 1996); *see also* Chow & Schoenbaum, *supra* note 65, at 161.

¹⁶¹ Appellate Body Report, *Japan—Taxes on Alcoholic Beverages*, *supra* note 160, at 3–4.

 $^{^{162}}$ Id.

¹⁶³ *Id*.

¹⁶⁴ *Id.* at 17.

¹⁶⁵ *Id.* at 24.

¹⁶⁶ *Id.* at 19.

¹⁶⁷ *Id.* at 24.

The Appellate Body held that the Panel correctly determined that imported vodka and domestically produced shochu are like products and that the taxes on the vodka exceeded those of the shochu, thereby constituting a violation of GATT Article III:2, first sentence. The excess amount need not be large and may be of the slightest amount to constitute a violation. 169

In taking up the second issue, the Panel listed three elements that are required to make up a violation of GATT Article III:2, second sentence.¹⁷⁰ The first element is that the imported goods and the domestic goods must be either "directly competitive or substitutable products" that are in competition with each other.¹⁷¹ The second element is that such products are "not similarly taxed."¹⁷² The third element is that the non-uniform taxation must be applied in a manner which results in the protection of the domestic product.¹⁷³ Although the Appellate Body disagreed with the Panel's method of a combined analysis of the second and third elements, the Appellate Body nevertheless agreed with the Panel's final decision that the Japanese Liquor Tax Law was inconsistent with GATT Article III:2, second sentence.¹⁷⁴

3. Internal Regulations

A sovereign state has an inherent right to regulate its internal affairs including the regulation of domestic and imported goods. ¹⁷⁵ Energy products and services are, in general, subject to extensive governmental regulation. ¹⁷⁶ The regulations are in place to ensure that the government's national security and public policy objectives, such as consumer health and safety, reliable service, and environmental

¹⁶⁸ *Id.* at 23–24.

¹⁶⁹ *Id.* at 24.

¹⁷⁰ *Id.* at 25.

¹⁷¹ *Id.* at 25. The evaluation of whether two products are directly competitive or substitutable products must be evaluated on a case-by-case basis where the characteristics to be evaluated include the physicality, uses, tariff classifications, and the market of the product. *Id.* at 25–26.

¹⁷² *Id.* at 25. The second element of dissimilar taxation requires that the imported product be taxed at a higher rate than the domestic product where the difference must be greater than a de minimis amount. *Id.* at 28.

 $^{^{173}}$ Id at 25. The third element does not require intent to confer an advantage upon the domestic product; it is a question of whether some advantage did result from the application of the tax. Id. at 28–29.

¹⁷⁴ *Id.* at 32–33.

¹⁷⁵ Chow & Schoenbaum, supra note 65, at 177.

¹⁷⁶ GATS Secretariat, supra note 96, ¶ 62.

protection, are met.¹⁷⁷ In certain circumstances, however, where regulations affect domestic and imported products differently, internal regulation may be inconsistent with the national treatment principle under GATT, Article III:4.¹⁷⁸

In *Italian Discrimination Against Imported Agricultural Machinery*, the GATT Panel took up the issue of whether loans that provided more favorable terms for purchases of domestic (Italian) farm machinery as opposed to imported machinery were a violation of the national treatment principle.¹⁷⁹ The Panel recognized that the intention of Article III was to ensure that imported products, once they passed customs and were placed on the importing state's market, were to remain free from discrimination.¹⁸⁰ The text of Article III indicates that its application is not limited to laws that directly regulate the sale of goods but it is also applicable to laws that may have a negative impact on the internal market conditions, such as loan interest rates that are related to the goods in question.¹⁸¹ The Panel found that the favorable interest rate was a form of protection for domestically manufactured agricultural machinery by the Italian government, and therefore it was inconsistent with the national treatment principle.¹⁸²

Another example of the how government regulation may conflict with the national treatment principle is contained in the Appellate Body Report of *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef.*¹⁸³ The issue before the Panel was whether Korea's regulation of beef, which required domestic and imported beef to each have its own retail facility, was a violation of the national treatment principle.¹⁸⁴ The Panel held that the Korean system was a violation of Article III:4.¹⁸⁵

 $^{^{177}}$ "The energy sector is generally highly regulated in order to protect important policy objectives such as health and safety, environmental protection, universal service and consumer protection." Id.

¹⁷⁸ Chow & Schoenbaum, supra note 65, at 177; GATT, supra note 100, pt. II, art. III, \P 4.

Report of the Panel, Italian Discrimination Against Imported Agricultural Machinery, $\P\P$ 1–2, L/833 (Oct. 23, 1958), GATT B.I.S.D. (7th supp.) at 60 (1959); see also Chow & Schoenbaum, supra note 65, at 178.

¹⁸⁰ Report of the Panel, *Italian Discrimination Against Imported Agricultural Machinery, supra* note 179, \P 11.

¹⁸¹ *Id.* ¶ 12.

¹⁸² *Id*. ¶ 16.

¹⁸³ Appellate Body Report, *Korea—Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, WT/DS161/AB/R, WT/DS169/AB/R (Dec. 11, 2000); see also Chow & Schoenbaum, supra note 65, at 182.

 $^{^{184}}$ Appellate Body Report, Korea—Measures Affecting Imports of Fresh, Chilled and Frozen Beef, supra note 183, \P 3.

¹⁸⁵ *Id*. ¶ 148.

There are three elements that make up a violation of Article III:4 of the national treatment principle. The first element is that both the domestic and imported goods must satisfy the classification of "like products." The second element is that the law or regulation in question, as applicable to the imported or domestic goods, must affect the sale, purchase, or other related market activity concerning such goods as conducted within the importing state. The third element is that the law or regulation must impose less favorable treatment on the imported good. 189

The Appellate Body first highlights the fact that a mere difference in treatment between the imported good and domestic good does not, by itself, constitute less favorable treatment. The separate retail systems, as imposed by law, do not alone constitute a violation of Article III:4. To determine whether the conduct of the importing state is inconsistent with the national treatment principle, the focus must be on the "conditions of competition" in which the goods are sold. If the state's law or regulation imposes unequal conditions of competition, then the law or regulation is inconsistent with Article III:4. The Korean law here results in a less favorable condition of competition for imported beef, and therefore violated Article III:4. III.

C. Transparency

The MFN and national treatment principles constitute the two main columns supporting the GATT and the GATS. ¹⁹⁵ Another attribute worth noting here is that a trade system should be predictable. ¹⁹⁶ A predictable market allows market participants to trade confidently and plan out their investments and business activities. ¹⁹⁷

Two essential elements required for a stable and predictable trade system are that its Member states must be bound by it and it must be transparent.¹⁹⁸ The first element requires that a Member state honor or be bound by its tariff rate limitations.¹⁹⁹ Such limita-

¹⁸⁶ *Id.* ¶ 133.

¹⁸⁷ *Id*.

¹⁸⁸ *Id*.

¹⁸⁹ Id. Korea appeals only the third element. Id.

¹⁹⁰ *Id*. ¶ 135.

¹⁹¹ *Id*.

 $^{^{192}}$ Id. ¶ 137.

¹⁹³ *Id*.

¹⁹⁴ *Id.* ¶¶ 146, 148.

¹⁹⁵ Chow & Schoenbaum, supra note 65, at 143.

¹⁹⁶ Understanding, supra note 64, at 10.

¹⁹⁷ *Id.* at 11.

 $^{^{198}}$ *Id.* at 12.

¹⁹⁹ *Id*.

tions may be changed only through negotiations with its trading partners and not unilaterally.²⁰⁰ The second element is transparency, which includes a Member state's disclosure of its laws, regulations, and practices affecting trade.²⁰¹

GATT Article X, titled "Publication and Administration of Trade Regulations," plays a leading role in ensuring transparency. 202 While the publishing requirement of Article X:1 is self-explanatory, paragraph 3(a) requires some explanation. The Panel Report of United States—Anti-Dumping Measures on Certain Hot-Rolled Steel Products from Japan, provides a description of the operation and scope of Article X. 203 The dispute centered on anti-dumping measures implemented by the United States against Japan concerning Japanese hot-rolled steel. 204 The issue was whether the United States violated Article X:3(a) by implementing its anti-dumping measures. 205 The Panel found that the United States did not violate Article X:3(a). 206

This Report included a good description of the operation of Article X. The scope of Article X is limited to those laws or regulations that are "of general application." For example, an import license concerning a specific company or specific shipment is not of general application. Additionally, in following previous Appellate Body decisions, the Panel explained that Article X:3(a) does not apply to a Member country's laws, regulations, and decisions in themselves, instead it applies to the administration of such laws. 209

VI. GENERAL AGREEMENT ON TRADE IN SERVICES

A. Overview

The GATS will play a leading role in national security challenges. Indeed, GATS' role may be larger than that of GATT because

²⁰⁰ Id.

²⁰¹ *Id.* at 12.

 $^{^{202}}$ GATT, supra note 100, pt. II, art X $\P\P$ 1, 3(a).

²⁰³ Panel Report, United States—Anti-Dumping Measures on Certain Hot-Rolled Steel Products from Japan, WT/DS184/R (Feb. 28, 2001).

 $^{^{204}}$ Id. ¶ 2.1.

 $^{^{205}}$ Id. ¶ 7.262.

 $^{^{206}}$ Id. ¶ 7.277.

 $^{^{207}}$ Id. ¶ 7.266 (citing Panel Report, European Communities—Measures Affecting the Importation of Certain Poultry Products, ¶¶ 269–70, WT/DS69/R (July 13, 1998)).

²⁰⁸ Id. (citing Panel Report, European Communities—Measures Affecting the Importation of Certain Poultry Products, ¶ 114, WT/DS69/R (July 13, 1998)).

 $^{^{209}}$ Id. ¶ 7.266 (citing Appellate Body Report, European Communities—Regime for the Importation, Sale and Distribution of Bananas, ¶ 200, WT/DS27/AB/R (Sept. 25, 1997)).

of the inclusion of energy services in the DDA.²¹⁰ It is well-known that United States is dependent on imported energy goods.²¹¹ Many are not aware, however, that the United States maintains a trade surplus; it is a net exporter, of services.²¹² The GATS, like the GATT, imposes obligations on Member states to include the MFN, national treatment, and transparency principles.²¹³

Differences arise in the manner in which these two trade agreements apply such principles.²¹⁴ The GATT applies all three obligations against any discriminatory trade measure.²¹⁵ In contrast to the GATT, the GATS contains two categories of obligations: (1) general obligations in Part II; and (2) specific commitments in Part III.²¹⁶

B. Part II General Obligations

The MFN and transparency principles lie within the general obligations.²¹⁷ These obligations are unconditionally and automatically afforded to other Member countries.²¹⁸ The MFN principle as contained in GATS Article II:1 contains a like services requirement.²¹⁹ The Panel Report for *Canada—Certain Measures Affecting the Automotive Industry*, provides guidance as to this like services requirement.²²⁰ The Panel stated that the like services requirement is satisfied with respect to the actual services provided.²²¹ The characteristics of the entity actually providing the services are not to be considered.²²²

[T]he nature and the characteristics of wholesale transactions as such, as well as of each of the different subordinated services mentioned in the headnote to section 6 of the [UN Central Prod-

 $^{^{210}}$ See Special Session of the Council for Trade in Services, Report by the Chairman to the Trade Negotiations Committee, TN/S/23, at annex B, \S 11 (Nov. 28, 2005).

²¹¹ See text accompanying supra note 14.

The United States had exports of services totaling \$479,150,000,000 and imports of services of \$372,296,000,000 for a surplus of 106,854,000,000,U.N. Conf. on Trade and Dev. [UNCTAD], Handbook of Statistics Online, http://stats.unctad.org/Handbook/ReportFolders/ReportFolders.aspx (last visited Nov. 12, 2009).

Understanding, supra note 64, at 10–11.

 $^{^{214}}$ Chow & Schoenbaum, supra note 65, at 282, 284.

 $^{^{215}}$ See id. at 282.

²¹⁶ *Id.* at 281–82.

 $^{^{217}}$ GATS, supra note 104, pt. II, art. II:1–3; GATS, supra note 104, pt. II, art. III:1.

²¹⁸ Chow & Schoenbaum, supra note 65, at 282.

²¹⁹ See GATS, supra note 104, pt. II, art. II:1-3, pt, art. III: 1.

²²⁰ Panel Report, Canada—Certain Measures Affecting the Automotive Industry, WT/DS139/R, WT/DS142/R (Feb. 11, 2000).

²²¹ *Id.* at ¶ 6.843.

 $^{^{222}}$ Id. at ¶ 6.842.

Unlike the GATT MFN principle, Article II:2-3 allows Members to limit the reach of this provision. These exemptions prevent free riding by other Member countries. Free riding is a two-step process that begins when country A affords favorable treatment to all other Member countries. The second step occurs when one of the other Member countries receiving the favorable treatment, say country C, may not afford country A equal favorable treatment. Therefore, country C is receiving a benefit while country A is subject to a detriment. Using this example, country A may take advantage of Article II:2-3, to mitigate the detriment it suffers at the hands of country C. Therefore, count

C. Part III Specific Commitments

Obligations within the specific commitments section are afforded to only those services designated as committed on a country's GATS Schedule.²²⁹ Market access and national treatment obligations are classified as specific commitments under GATS.²³⁰

1. National Treatment

National treatment is the most important free trade principle pertaining to services.²³¹ National treatment requirements are substantially the same under both GATT and GATS; however, GATS allows its Members to limit and condition the reach of the obligation.²³² Article XVII provides that the services sectors listed on a Member country's Schedule may be subject to the conditions and qualifications

uct Classification system], are "like" when supplied in connection with wholesale services, *irrespective* of whether these services are supplied with respect to bananas of EC and traditional ACP origin, on the one hand, or with respect to bananas of third-country or non-traditional ACP origin, on the other.

Id. at \P 6.842 (quoting Panel Report, European Communities—Regime for the Importation, Sale and Distribution of Bananas, \P 7.322, WT/DS27/R/USA (May 22, 1997)) (emphasis added).

²²³ Chow & Schoenbaum, supra note 65, at 282.

²²⁴ *Id*.

²²⁵ *Id*.

²²⁶ Id. at 283.

²²⁷ *Id*.

²²⁸ *Id*.

²²⁹ Id. at 284.

 $^{^{230}\,}$ GATS, $supra\,$ note 104, pt. III, arts. XVI & XVII.

²³¹ Chow & Schoenbaum, *supra* note 65, at 285; GATS, *supra* note 104, pt. III, art. XVII:1.

²³² Chow & Schoenbaum, supra note 65, at 285.

also included on its Schedule.²³³ Therefore, for Member country A to enjoy full national treatment in country C, country C must first include the applicable services sector on its Schedule. Second, country C must refrain from exercising its right to subject the sector to conditions and qualifications.

2. Market Access

While trade in goods, (i.e., the importation and exportation of items such as bananas or shoes) is generally straightforward, trade in services is more ambiguous. Article I defines trade in services as the supply of a service in terms of four different scenarios or modes.²³⁴ The first mode, a cross-border transaction, occurs where the service provider, located in country A, provides a service to a consumer in country B, while both provider and consumer remain present in their respective countries. 235 Such services may be provided through electronic communications, postal, or parcel services.²³⁶ The second mode occurs where the service provider, located in country A, provides a service to a service consumer from country B, and the provider and consumer are both located in country A.²³⁷ The third mode applies to the situation where a service provider from country A establishes a commercial presence in the country of the service consumer, country B, and then the commercial entity performs the service.²³⁸ The fourth mode describes the circumstances where a service provider from country A travels to the country of the service consumer, country B, and then performs the service. 239 Because market access is a specific com-

²³³ *Id*.

 $^{^{234}}$ Chow & Schoenbaum, supra note 65, at 279; GATS, supra note 104, pt. I, art. I:1-2.

²³⁵ See GATS, supra note 104, pt. I, art. I:2(a).

²³⁶ Chow & Schoenbaum, *supra* note 65, at 279. Example services include the receipt of "consultancy or market research reports, telemedical advice, distance training, or architectural drawings," *id.* at 280.

²³⁷ See GATS, supra note 104, pt. I, art. I:2(b). This scenario occurs when "[n]ationals of [country B] have moved abroad as tourists, students, or patients to consume the respective services," Chow & Schoenbaum, supra note 65, at 280.

²³⁸ See GATS, supra note 104, pt. I, art. I:2(c). "The service is provided . . . [in country B] by a locally-established affiliate, subsidiary, or representative office of a foreign-owned and –controlled company (bank, hotel group, construction company, etc.)," Chow & Schoenbaum, supra note 65, at 280. This also includes a representative of an energy company.

²³⁹ See GATS, supra note 104, pt. I, art. I:2(d). A foreign national [from country A] provides a service within [country B] as an independent supplier (e.g., consultant, health worker) or employee of a service supplier (e.g., consultancy firm, hospital, construction company), Chow & Schoenbaum, supra note 65, at 280. This also includes an independent supplier or employee of an energy company.

mitment, for Article XVI obligations to apply to their fullest extent, the service (1) must be included on the country's Schedule and (2) the country must not exercise its right to place terms, limitations, and conditions on the modes of supply associated with that service.²⁴⁰

When market access obligations are uninhibited by terms, limitations, or conditions, the obligations prohibit a country from placing limits on: the number of service suppliers; the value of service transactions; the amount of services' output; the number of natural persons employed; the type of legal entity required for operation; and the value of foreign capital.²⁴¹

VII. PROPOSED SOLUTION—THE WAY FORWARD

WTO agreements, if used properly, are the means by which the United States can lead a global trek toward energy security. The WTO provides the foundation and infrastructure for multilateral representation, ²⁴² open communication channels, ²⁴³ and an established dispute resolution forum ²⁴⁴ on which energy security can be built. The GATT and GATS provide the tools and guidelines necessary to shape multilateral agreements to promote energy security.

A new entity dedicated to energy security is not required when we have the necessary vehicle already available. Perhaps we need to ask ourselves: would a carpenter want to invent a new type of hammer when the one he already uses is time-tested and proven through experience? Immediate action using the tools at our disposal is required. Returning to the Council on Foreign Relations Task Force Report (CFR Report) and the International Energy Agency's ("IEA") elements of energy security, the following discussion uses GATT and GATS to support these elements.

 $^{^{240}}$ Chow & Schoenbaum, supra note 65, at 285; GATS, supra note 104, pt. III, art. XVI.

²⁴¹ Chow & Schoenbaum, supra note 65, at 285.

²⁴² Understanding, *supra* note 64, at 10.

²⁴³ See id. at 9.

²⁴⁴ *Id.* at 10.

²⁴⁵ See CFR Report, supra note 12, at 4; see also Mandelson, supra note 38 (advocating for trade policy to take a leading role in energy security); Susan L. Sakmar, Bringing Energy Trade Into the WTO: The Historical Context, Current Status, and Potential Implications for the Middle East Region, 18 Ind. Int'l & Comp. L. Rev. 89, 90 (2008) (stating that "a push for freer trade in those energy services already within the current Doha Development Agenda (Doha Round) has already occurred.").

²⁴⁶ See generally CFR Report, supra note 12.

²⁴⁷ See generally IEA OUTLOOK 2007, supra note 22, at 161–62.

A. Reduce Energy Consumption Through Trade

First, the IEA and the CFR Report recommend that the United States adjust its domestic energy policy to include efforts to mitigate demand growth and reduce energy consumption.²⁴⁸ One way to reduce consumption is to foster new technologies and to improve existing technologies. Through the MFN and national treatment principles, the GATT works to encourage trade in goods. If products that contain new and energy-conserving technologies are subject to GATT, it follows that such products will have the best chance for widespread use by consumers. As more of these products enter the marketplace, competition among products will lead to innovation. New products born out of the competition will subsequently enter international commerce. Member countries have the responsibility to include energy products on their tariff Schedules and to keep tariff rates low to promote fair trade and the free flow of such products.

Working in conjunction with GATT, GATS will ensure the availability of the many diverse services required for this innovation. GATS market access commitments are a key component of the liberalization of trade in services. Education services are required to grow students into the next generation of engineers, researchers, and scientists. Training is required to ensure the proper use of available technologies. Research and development are needed to foster new products and technologies. Manufacturing, construction, and product implementation are necessary to bring the technology and products to the user. These services activities are exactly what the GATS drafters had in mind when composing the four modes of supply.

Two events must happen to allow GATS to be used to its fullest extent. First, the energy services negotiations currently held under the DDA must incorporate a wide range of energy services. The United States proposal of W/120 energy service sector additions should be adopted because it is the most comprehensive proposal available. Such categories and services must be available to Member countries to include on their GATS Schedules. Second, as countries include energy services on their Schedules, they must keep the modes of supply as unencumbered as possible. To be sure, the modes of supply play a crucial role within the trade in services. Exceptions and limitations that may be placed on the modes must be kept to a minimum. The road to energy security is already arduous; each limitation placed on the modes acts to make the road steeper.

 $^{^{248}}$ See CFR Report, supra note 12, at 6; IEA Outlook 2007, supra note 22, at 162.

²⁴⁹ See GATS, supra note 104, pt. II, art. IV.

²⁵⁰ See generally Communication from the United States, supra note 84.

In addition to market access, the national treatment principle plays a leading role. The principle must be enforced to prevent internal taxes and internal charges that act as trade barriers to imported goods and services. While the GATT prohibits a Member country from imposing conditions and qualifications on the national treatment principle,²⁵¹ the GATS has no such rule. Therefore, it is up to Member countries to refrain from imposing these conditions and qualifications.

B. Transparent and Predictable Energy Markets

Second, the IEA and the CFR Report encourage the United States to work toward a more efficient, transparent, and fair world energy market. Regulations, tariffs, and subsidies must be used in a responsible manner so that market operations are uninhibited. The WTO does not advocate for the complete elimination of trade barriers (such as tariffs and subsidies) but it does support efforts to reduce trade barriers, ensure non-discrimination, and increase market transparency and predictability. The basic economic laws of supply and demand must be allowed to govern the market.

Transparency of Member countries' laws, regulations, rules, and procedures governing trade will bring fairness to the market. The GATT and GATS already incorporate articles addressing transparency of laws, policies, and regulations. Member countries must support these articles through the openness of their lawmaking, rulemaking, and enforcement mechanisms.

The United States Federal Energy Regulatory Commission (FERC) has set the bar for transparency. FERC is an independent agency within the federal government whose overall mission is to ensure the availability of reliable, efficient, and sustainable energy services to consumers. Its duties include the regulation of the transmission and wholesale sale of electricity, the regulation of natural gas transmission and interstate sales, and the regulation of energy markets. Its guiding principles include due process, transparency, and regulatory certainty. In support of its principles, the FERC

²⁵² United States Federal Energy Regulatory Commission, About FERC, http://www.ferc.gov/about/about.asp (last visited Nov. 16, 2009) [hereinafter FERC].

Due Process and Transparency – Paramount in all of its proceedings is the Commission's determination to be open and fair to all participants.

²⁵¹ See GATT, supra note 100, pt. II, art. III.

²⁵³ FERC, About FERC - What FERC Does, http://www.ferc.gov/about/ferc-does. asp (last visited Nov. 16, 2009).

 $^{^{254}}$ FERC, supra note 252. The agency's Guiding Principles include:

Regulatory Certainty – In each of the thousands of orders, opinions and reports issued by the Commission each year, the Com-

makes its rules, regulations, statutes, court opinions, and orders available through its website "eLibrary" application to anyone, free of charge.²⁵⁵ Member countries may use FERC as a template for their own energy regulatory agencies.

Reliable and Secure Infrastructure Through Trade

Third, the IEA and the report advocate for a reliable and secure energy infrastructure. Infrastructure is critical in all facets of the energy cycle because energy is useless if one cannot move it from the seller to the consumer. The application of GATT and GATS here is similar to the first recommendation. Products and services are required to make infrastructure improvements and therefore the free movement of such products and services is necessary.

The electricity transmission and distribution grid is one example of an infrastructure improvement that requires immediate attention. The goal is to remake the current transmission and distribution grid into a "Smart Grid." In simple terms, the Smart Grid is defined as the incorporation of information technology concepts into the grid. 257 So-called smart meters will be able to collect data regarding electricity usage, down to the individual household appliance, and present this information to both the consumer and utility provider.²⁵⁸ Distribution systems will notify the utility of an outage without the utility relying on customer complaints.²⁵⁹ The grid will be able to reroute electricity around interruptions to minimize outages.²⁶⁰ One other major advantage of the smart grid will be its ability to incorporate and manage electricity generation from highly-variable generation resources such as wind turbines and solar power facilities.²⁶¹ These non-constant sources of electricity are valued for their low environmental impact but can stress the grid in that there may be capacity but no demand and vice versa. When implemented, the

mission strives to provide regulatory certainty through consistent approaches and actions.

FERC, eLibrary, http://www.ferc.gov/docs-filing/elibrary.asp (last visited Nov. 16, 2009). Other statutes and orders are located on the FERC website under the "Legal Resources" webpage, see FERC, Legal Resources webpage, http://www.ferc. gov/legal/legal.asp (last visited Nov. 16, 2009).

²⁵⁶ FERC, Smart Grid, http://www.ferc.gov/industries/electric/indus-act/smartgrid.asp (last visited Nov. 16, 2009).

257 Id.; see also Wiser Wires; Smart Grids, Economist, Oct. 10, 2009, at 71.

²⁵⁸ Wiser Wires; Smart Grids, supra note 257, at 71–72.

²⁵⁹ *Id.* at 71.

²⁶⁰ *Id*.

²⁶¹ *Id.* at 72.

²⁶² *Id*.

smart grid will allow consumers, electric utilities, transmission operators, and generators to combine their efforts to ensure the availability of safe, reliable, reasonably priced, and environmentally friendly electricity. 263

D. Political Stability Through Energy Security and Trade

Next, the CFR Report calls on the United States to insist on energy-exporting countries to manage revenue derived from energy in a wise and prudent fashion. Good governance of income will foster political stability and enhance living standards. One argument made in the report is that increased transparency of government accounting of energy revenues will make corruption easier to recognize. As corruption is recognized and eliminated, a more responsible government will emerge. The contract of the contract

Another comparable argument can be made that trade in energy products and services will foster a less corrupt and more stable government. It is well known that trade promotes economic development. Power, especially electricity, is the lifeblood of economic development because without it most factories cannot operate. By opening up the trade in energy and energy services, adequate and reliable electricity can be made available to those developing countries that need it. A reliable supply of electricity invites investors to invest their capital in developing countries. Investments and energy security are a condition precedent to job growth; job growth leads to a more stable political situation.

²⁶³ Clever, but Unprincipled; Smart Grids, Economist, Oct. 10, 2009, at 15–16.

²⁶⁴ CFR Report, *supra* note 12, at 10.

²⁶⁵ *Id*.

²⁶⁶ *Id*.

²⁶⁷ Id.

²⁶⁸ See Understanding, supra note 64, at 12.

²⁶⁹ Emily Wax, *Developing World's Energy Needs Set Stage for Fight*, Wash. Post, Sept. 9, 2009, at A01 (stating that "[a] factory in Nigeria was forced to relocate because the cost and scarcity of electricity made it impossible to turn a profit."). ²⁷⁰ *Id.* (stating that "[d]eveloping nations' urgent need for more energy has become a central issue this year").

²⁷¹ A lack of reliable electricity causes "[f]oreign investors [to] become wary of parking their money in Africa . . . ," *id*.

²⁷² "The shortage of power stymies industrial growth and the resultant job opportunities, which can destabilize fragile governments in some of the poorest parts of the world," *id.*; see also The Organization for Security and Co-operation in Europe, Energy Security as a Prefequisite for Political Stability 1, July 9, 2005, http://www.osce.org/documents/fry/2005/09/16189_en.pdf (last visited Nov. 16, 2009) (stating that "[t]he political stability of a country is linked with the sustainability of its economic development, which is closely related to the reliability of

E. Personnel Knowledgeable in Trade Policy

Last, the CRR Report challenges the United States to revamp its National Security Staff to include a new energy security directorate that will handle energy specific issues.²⁷³ Energy issues are both technical and complex and having the personnel with the expertise to handle such issues will greatly help the policy making process.²⁷⁴ These same personnel need to have an understanding of the primary role that trade can play in achieving our energy security goals.

Another challenge facing the United States is the domestic implementation of WTO agreements.²⁷⁵ The executive and legislative branches of the federal government must find a way to coordinate their efforts. Trade negotiations, headed by the United States Trade Representative,²⁷⁶ and any energy policy legislation must complement each other to be effective.

VIII. CONCLUSION

Energy security remains an elusive goal for not only the developing countries, but also the developed countries. Energy, while it still claims its national security asset status, is manageable under the correct legal regime. WTO agreements and principles are the tools at our disposal that must be employed to implement a legal regime for energy goods and services. This legal regime gives a country the best chance at achieving energy security. Energy security, economic prosperity, and political stability are within reach.

access to energy resources. This implies that access to stable sources of energy is one prerequisite for state stability.").

²⁷³ CFR Report, supra note 12, at 10.

 $^{^{274}}$ *Id*.

²⁷⁵ Chow & Schoenbaum, supra note 65, at 103.

²⁷⁶ "[The United States Trade Representative] is the chief official of the Executive Branch with respect to international trade," *id*.