

Digitalization of International Trade

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I. Introduction

Digital trade offers economy-wide benefits.¹ The advancement of technology has aided international business. Millions of people worldwide use the Internet to do everything from research to purchasing products online. One of the many uses derived from the Internet is the development of digital trade. Digital trade lends itself to distinctive issues. World Trade Organization (WTO) members recognized the benefits digital trade offers and have developed a work program to facilitate the development of digital trade. However, WTO efforts to facilitate digital trade have stalled, leading to a slower than anticipated progress.

The question this article addresses is how the WTO supports and deals with digital trade. This article briefly discusses the historical advancement of the Internet, defines the concept of digital trade and its development in the international market. The article then analyzes how existing WTO agreements have dealt with digital trade. The article also addresses recent trade agreements particularly the USMCA. It was chosen because it involves the largest economy in the world and the U.S. could use USMCA provisions as template for future trade agreements.²

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¹ Digital trade and e-commerce can be used interchangeably. Both terms refer to the trade of goods and services using the Internet including the transmission of information and data across borders. However, digital trade has wider connotation such as big data, Internet of things, and clouding. Thus, "digital trade" will be utilized throughout the article.

² Earlier free trade agreements have included e-commerce chapters since the 2001 US-Jordan FTA. However, the e-commerce provisions can be limited to goods sold online. See Brian Bieron and Usman

I. WTO and Digital Trade

Digital trade has developed after the creation of the WTO in 1994. Consequently, the WTO does not contain specific articles for digital trade. Nevertheless, there are several WTO agreements related to digital trade. These WTO agreements include the General Agreement on Trade in Services (GATS) and the Information Technology Agreement (ITA).

The GATS is of particular significance to digital trade for several reasons. First, the communication services which provide access to digital trade fall under the GATS.³ Second, GATS covers many sectors and modes of delivery whether the mode is traditional or electronic. Indeed, it was determined that GATS was technologically neutral.⁴ Third, the execution of an electronic transaction necessitates infrastructure services (distribution, payment, etc.) whose liberalization equally falls under the GATS. In view of the acknowledged importance of telecommunication services, the access to public telecommunication networks was incorporated in a separate telecommunication annex.⁵

Each WTO member agreed to liberalize specific service sectors. These commitments are included in schedules or lists of service commitments. These commitments range from liberalizing education, tourism, insurance, media, auditing, legal services, and other

Ahmed, Regulating E-commerce through International Policy: Understanding the International Trade Law Issues of E-commerce, 46.3 *Journal of World Trade* 545, 551 (2012). See also Maria Ptashkina, Facilitation 2.0: E-Commerce and Trade in the Digital Age 7-8 (2018), available at <https://www.ictsd.org/sites/default/files/research/rta_exchange_-_ptashkina_-_facilitation_2.0_-_e-commerce_-_ptashkina_0.pdf>.

³ See Taunya L. McLarty 'Liberalized Telecommunications Trade in the WTO: Implications for Universal Service Policy' (1998) *Federal Communications Law Journal* Vol 51, pp 1-7.

⁴ See WTO Panel Report, US – Gambling, WT/DS285/R, para. 6.285.

⁵ The Telecommunication Annex states that any service supplier of any other WTO member must be accorded access to and use of public telecommunication networks and services on reasonable and non-discriminatory terms and according to conditions for the supply of a service included in the country schedule (Annex 5 a).

areas. In other words, what is covered and not covered a WTO member schedule of service depends on the particulars of that country.⁶ Many service sectors can be delivered physically and more importantly electronically. Whenever unlimited market access commitments are undertaken, every means of delivery including remote supply should be allowed.⁷

Article VI GATS authorizes the Council for Trade in Services to develop the necessary disciplines to ensure that measures relating to qualification requirements and procedures, technical standards and licensing requirements do not constitute unnecessary barriers to trade in services. This language applies to digital trade. WTO members should not adopt policies or measures that are more burdensome than necessary to ensure quality of the service.

WTO members agreed to so-called Reference Paper. The Reference paper provides for rules that shall prevent anti-competitive behavior in the telecommunications sector.⁸ The Reference Paper includes competition policy principles to ensure access to public telecommunication networks. WTO members considered that the Reference Paper might be applicable to digital services where Internet access providers qualify as major

⁶ See Ruosi Zhang, Covered or Not Covered: That Is the Question - Services Classification and Its Implications for Specific Commitments under the GATS, (World Trade Organization 2015).

⁷ See Appellate Body Report, *US – Gambling*, WT/DS285/AB/R, para. 239.

⁸ The non-discriminatory, transparent access and interconnection with the public network or dominant supplier is obligatory. Even though each country has the right to maintain domestic regulations concerning universal service obligations, this right shall be used in a fair and non-discriminatory manner. The allocation of licenses but also the award of other scarce resources (numbers, frequencies, etc.) shall also be fair and non-discriminatory. The Reference Paper demands the establishment of an independent regulatory agency which must supervise the observance of the above principles and the telecom markets in general.

suppliers of basic telecommunications.⁹ The EU was of the opinion that the principles of the Reference Paper are applicable to internet access and internet network services.¹⁰

The Information Technology Agreement (ITA) is of a particular significance to digital trade. WTO members agreed to a common position with regard to trade in information technology (IT) goods. WTO members committed themselves to reduce their tariffs on IT-goods in four steps of twenty-five percent to reach a tariff-free policy by the year 2000.¹¹ This obligation pertains to a common list of IT-products covering wide range of some 180 information technology products in five major categories: computers and peripheral devices, semiconductors, printed circuit boards, telecommunications equipment (except satellites), and software. By the year 2015, the ITA covers ninety-five percent of the existing world trade in IT-goods.¹² Thus, the ITA brings advantages to a wide range of production activities.

Largely at the insistence of the U.S. at the WTO Ministerial Conference in 1998, WTO members decided to develop a work program covering digital trade.¹³ According to the WTO Work Program on Electronic Commerce, digital trade is understood to mean the production, distribution, marketing, sale or delivery of goods and services by electronic means. The WTO divides digital trade transactions into three distinctive stages:

⁹ See WTO Council for Trade in Services, Work Programme on Electronic Commerce – Progress report to the General Council, Adopted by the Council for Trade in Services on 19 July 1999, S/L/74, 27 July 1999, para. 13.

¹⁰ See WTO Work Programme on Electronic Commerce, Communication from the European Communities and their Member States, S/C/W/183, 30 November 2000, para. 6.

¹¹ See Charles Owen Verrill, Jr., Peter S. Jordan, Timothy C. Brightbill 'International Trade' (1998) *International Lawyer* Vol 32, pp 319-324, 1998.

¹² See WTO, 20 Years of the Information Technology Agreement, available at <https://www.wto.org/english/res_e/booksp_e/ita20years_2017_chap2_e.pdf>.

¹³ Four WTO subsidiary bodies had been charged with examining e-commerce issues: the Goods Council, the Services Council, the TRIPS Council and the committee on Trade and Development. See WTO Secretariat, Development Implications of Electronic Commerce, WT/COMTD/w/51 (November 23, 1998).

the advertising and searching stage, the ordering and payment stage, and the delivery stage. Any or all of these stages may be carried out electronically and may therefore be covered by the concept of digital trade. In other words, a buyer may purchase a book via the Internet and to be delivered physically later on or he can purchase and download the book via the Internet. In either case, the purchase of the book could be said that it is conducted through digital trade means.

Despite the fact that the WTO Work Program on Electronic Commerce has been set up in 1998, very little progress has been achieved. The most important issue blocking progress on digital trade in the WTO agenda is the question of categorization. WTO members differ whether products which were usually sold as goods due to their link to a physical carrier and which can now be delivered online over the net (e.g. music or movies) shall be treated as goods under the General Agreement on Tariffs and Trade (GATT) or as services under the GATS.¹⁴ For example, if a book is ordered online, but is delivered physically, for the purposes of WTO trade rules, it is a good. That makes it subject to the GATT. However, if the book is delivered electronically - downloaded onto the computer – it is unclear whether this digital product should be treated as a good or a service. If goods delivered online were considered goods, they would be subject to few trade restrictions under the GATT such as tariffs.¹⁵ On the other hand, if goods delivered online were considered services, they would be subject to more trade restrictions under

¹⁴ See Kristi L. Bergemann 'A Digital Free Trade Zone and Necessarily-Regulated Self-Governance for Electronic Commerce: The World Trade Organization, International Law, and Classical Liberalism in Cyberspace' (2002) *Marshall Journal of Computer and Information Law* Vol 20, pp 595-601.

¹⁵ The U.S. has been the primary advocate of the position that products delivered online should be classified as goods. The European Union counters that all products delivered electronically should be considered services. See Stewart A. Baker et al. 'E-Products and the WTO' (2001) 35 *International Lawyer* Vol 35, pp 5-7.

the GATS such as market access barriers and discriminatory domestic regulations.¹⁶ For example, if the delivery of films and broadcasts on the Internet is considered services, countries apply their restrictive rules on the distribution and broadcast of audiovisual works to films and television programs transmitted over the Internet. Until the classification debate is resolved, WTO members decided not to impose tariffs on imported electronic transmissions.

There were numerous WTO meetings and seminars producing views and proposals which are reflected in the country statements or the final reports.¹⁷ These meetings would include informal exchange of view-points than the achievement of agreements. Therefore, the classification debate issue continues to be unresolved.¹⁸ There have been no new digital trade relevant actions at the WTO until now.

A. WTO Case Law and Digital Trade

The first time the WTO addressed digital trade was its ruling on U.S. restrictions on cross-border Internet gambling services. Antigua and Barbuda initiated a dispute case against the U.S. claiming that U.S. Internet gambling restrictions, restrictions by U.S. credit card companies on payments to offshore gambling outlets, at both the federal and state levels violated the U.S. commitments under the GATS. Antigua claimed to have lost some \$90 million over the period 2000-2004 as a result of the restrictions in the U.S., its

¹⁶ When an electronic transaction falls under the GATS one must also decide under what GATS mode the service is to be registered. The GATS describes several modes for service delivery. In the case of electronic transaction, it is a point at issue if it shall be under mode 1 (cross-border trade) where a service is exported from one member of the WTO to another member or mode 2 (consumption abroad) where the service is consumed in the country of origin of the service supplier but is consumed by a customer of a different nationality.

¹⁷ See Committee on Trade and Development, Seminar on Electronic Commerce and Development, WT/COMTD/18 (March 23, 1999).

¹⁸ See Daniel Pruzin, U.S. Holds E-commerce Talks with WTO Partners, Covering Nature of Digital Products, International Trade Daily (Bureau of National Affairs) (June 13, 2001).

principal market, and reducing the number of Internet gambling enterprises in Antigua from 119 to 30 in the same period.

A WTO panel ruled that online gambling restrictions imposed by the U.S. at the federal and state levels violated its market access commitments under sub-sector 10.D (other recreational services) of its GATS schedule.¹⁹ In specific, the WTO panel agreed with Antigua that U.S. market access commitments under Section 10.D of its GATS schedule covering “other recreational services” do include gambling services. The panel rejected the U.S. claim that it never intended to allow the cross-border supply of such services. The panel also maintained that the U.S. commitment to allow unrestricted market access on recreational services applies to all means of delivery, including the Internet. While the WTO panel agreed with the U.S. that the U.S. ban on cross-border gambling services may be justified under WTO rules to protect "public morals," it found that the ban was applied in a discriminatory manner since the U.S. permits remote gambling wagers through off-track betting under the 1978 Interstate Horseracing Act.

In China — Publications and Audiovisual Products, the WTO panel found that the scope of China’s commitment in its GATS Schedule on "Sound recording distribution services" extends to sound recordings distributed in non-physical form through technologies such as the Internet.²⁰ In achieving this outcome, WTO panel relied on the principle of progressive liberalization which contemplates that WTO Members undertake

¹⁹ See Appellate Body Report, United States - Measures Affecting the Cross-Border Supply of Gambling and Betting Services, WT/DS285/AB/R (April 7, 2005).

²⁰ See China - Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products - Report of the Panel, para. 7.1209 (Aug. 12, 2009) (In examining the definitions in Article XXVIII(b) of the GATS, we note that 'the supply of a service' is defined as including the 'production, *distribution*, marketing, sale and delivery of a service' (emphasis added). This definition makes clear that the activity of 'distribution' is included within the notion of the supply of a service. Since a 'service' is intangible and not itself a good, this definition suggests that the supply of a service listed in a Member's Schedule, unless otherwise specified, can cover the distribution of non-physical products, such as sound recordings delivered over the Internet).

specific commitments through successive rounds of multilateral negotiations with a view to liberalizing their services markets incrementally.²¹ Thus, distribution covers both tangible and intangible products.

Prior to the WTO panel's findings in those disputes, neither WTO panel nor the Appellate Body has ever decided a digital trade case. The WTO's ruling would have important implications, notably in the relationship between the WTO and digital trade. Now, under the WTO jurisprudence digital trade is covered under the GATS.

III. The Digital Trade Provisions in the USMCA

The US-Mexico-Canada trade agreement (USMCA) FTA includes explicitly provisions concerning digital trade.²² The digital trade provisions of the USMCA - which resemble the language in the Trans-Pacific Partnership (TPP) - apply to goods and services traded over the medium of the Internet.²³ The USMCA ensures that physical software and downloaded software are both treated the same.

The USMCA provides a definition for digital products. A digital product means a computer program, text, video, image, sound recording, or other product that is digitally encoded, produced for commercial sale or distribution, and that can be transmitted electronically. The USMCA provides illustrative examples of digitized products such as electronically traded software, books, and music.

The entire purpose of the FTA is to lower barriers to trade in all sectors, including digital trade; therefore, the U.S., Mexico, and Canada were in the position with digital

²¹ See China - Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products - AB-2009-3 - Report of the Appellate Body, paras. 392-394 (Dec. 21, 2009).

²² See Chapter 19 Digital Trade, The U.S.-Mexico-Canada Trade Agreement, available at <https://ustr.gov/sites/default/files/files/agreements/FTA/USMCA/Text/19_Digital_Trade.pdf>.

²³ *Id.* art. 19.4.2.

trade to never even establish a tariff that would later need to be lowered and eliminated.²⁴ The FTA creates duty-free cyberspace. The USMCA requires parties not to impose customs duties on electronic transmissions. This language is based on the U.S. Internet Tax Freedom Act of 1998.²⁵ The customs duties standstill in the USMCA is not indefinite or permanent. The parties to the agreement are merely obliged to continue the customs duties standstill until further notice.

The continuing of the no-duty policy under the USMCA may result in negative economic impact because Mexico for example would not collect from digital transactions as it does from other transactions that actually result in the payment of tariffs. The other economic implication for no-duty policy under the trade agreement is that it could lead to trade-diversion because of the preferential treatment of a particular mode of delivery over other modes. The USMCA language is limited to tariffs but not domestic taxes whether direct or indirect. Therefore, the U.S. could impose taxes on seller's income based on his economic activity. Mexico or Canada can impose value added taxes on some transactions, especially for tangible goods above a certain value. However, any domestic taxation of digital trade could be limited and done in a way which ensures neutral treatment between supply modes.

The USMCA also requires that the parties do not establish unnecessary barriers on electronic transmissions.²⁶ The term "unnecessary" is not clearly understandable. In addition, the standard "unnecessary barriers" is subjective since each party will determine

²⁴ *Id.* art. 19.3.

²⁵ The act, which has the purpose of promoting universal access and less burdensome Internet tax policy, imposes a moratorium on all taxation of Internet access and on "multiple" or "discriminatory" taxes on e-commerce. The act also includes a declaration that the Internet should be free of tariffs, trade barriers, and other restrictions. Moreover, the act asks the U.S. President to pursue "international agreements" to ban such tariffs and other trade barriers. See Internet Tax Freedom Act of 1998, 47 United States Code §151 (2000). The moratorium begins on Oct. 1, 1998 and ends on Nov. 1, 2003.

²⁶ See The U.S.-Mexico-Canada Trade Agreement, *supra* note 29, art. 19.2 & art. 19.5.

what a necessary or unnecessary barrier is. An example of unnecessary barrier could be applying trade restrictive technology mandates and not using open and market-driven standards. Applying trade restrictive technology mandates could inhibit the growth of digital trade

The USMCA is concerned with the delivery of services electronically. As such, the FTA not only covers trade in goods electronically but also trade in services. For instance, a supplier in the U.S. could deliver financial services, engineering plans, or legal services, to a client in Mexico through the Internet. However, in this instance it is unclear how the mode of the delivery could be classified, whether it is virtual cross-border supply or consumption abroad.

The USMCA does not require harmonization of digital trade laws and regulations of the U.S., Mexico, and Canada. The absence of such harmonization could pose problems for trading in products electronically when countries have different levels of laws and regulations. However, since the nature of the Internet and digital trade is global then an international approach is needed for regulating digital trade.

The USMCA contains several principles that deal with technological neutrality i.e., ensuring that basic trade concepts of non-discrimination, national treatment, and most-favored-nation status apply to digital trade, and regulatory forbearance - i.e., avoiding government action that would restrict trade. The USMCA also covers the validity of electronic signatures.²⁷

The USMCA has yet to determine if digital products should be treated as goods, services, or something new altogether. Determining whether an e-product is a good or service is a crucial assessment. If an e-product is a good, then it will be subject to the

²⁷ *Id.* art. 19.6.

national treatment rules of the trade agreements. In contrast, if an e-product is a service, then each party may impose restrictions on market access and national treatment.

Moreover, the digital trade provisions of the USMCA apply to digitized products traded only between the parties. However, considering the global nature of digital trade, it might be difficult to determine whether the product is of a U.S. or Mexican origin for purposes of the trade agreement.

The USMCA provides that no country is allowed to give less favorable treatment to digital products "created, produced, published, contracted for, commissioned or first made available on commercial terms in the territory of another party, or to digital products of which the author, performer, producer, developer or owner is a person of another party."²⁸ Also, the USMCA allows the parties to provide subsidies or grants to its own residents and businesses, including "government-supported loans, guarantees and insurance."²⁹ These USMCA provisions give the parties some policy space whereby they can favor their domestic cultural industries.

The USMCA has a requirement to maintain anti-spam rules and online consumer protection laws.³⁰ However, these rules do not contain any specificity. The same is true for personal information protection requirements,³¹ which call for a legal framework to protect the personal information of users of digital trade, but buried in a footnote is an acknowledgment that merely enforcing voluntary undertakings of enterprises related to privacy is sufficient to meet the obligation. The USMCA information protection requirements do not establish a mandatory minimum of protection.

²⁸ *Id.* art. 19.4.1.

²⁹ *Id.* art. 19.4.2.

³⁰ *Id.* art. 19.7. The consumer protection provisions apply online and do not help consumers enforce their rights across borders.

³¹ *Id.* art. 19.8.

Paperless trade did not escape the attention of USMCA negotiators as it helps in facilitating trade.³² Each party endeavors to accept a trade administration document submitted electronically as the legal equivalent of the paper version of that document. Although the language used is not strong as it refers to "endeavors", but it is still important to include it to ensure faster movements of goods and services across borders.

The USMCA include targeted sections on computer facilities.³³ The purpose of such a provision is to prevent maintaining control over information processing and storage in a country. Thus, the parties to the USMCA would not make it a condition for conducting business that a company from a trading partner must use or locate a computing facility in their country. The USMCA does not provide for public policy objectives which may lead party to require the physical presence of computing facilities in certain circumstances.

The USMCA recognizes that there are different legal approaches to protecting personal information, including comprehensive privacy, personal information, or personal data protection laws; sector-specific laws covering privacy; or laws that provide for the enforcement of voluntary private sector undertakings. The U.S., Canada, and Mexico agreed to promote compatibility and exchange information on their respective mechanisms. The USMCA specifically identifies the APEC Cross-Border Privacy Rules system as a valid mechanism to facilitate cross-border information transfers while protecting personal information.³⁴

The USMCA includes provisions to break down data localization laws, which require that certain kinds of data remain within a country's borders. The USMCA bans

³² *Id.* art. 19.9.

³³ *Id.* art. 19.12.

³⁴ *Id.* art. 19.4.

restrictions on data transfers across borders.³⁵ In contrast, the EU demands limits on data transfers.³⁶ The European model of data protection uses data transfer restrictions as a way to ensure that the information enjoys adequate legal protections.

The USMCA prevents countries from requiring the disclosure of source code.³⁷ In addition, the USMCA goes further to bar governments from requiring the disclosure of "algorithms" expressed in that source code unless that disclosure was required by a regulatory body for a specific investigation, inspection, examination enforcement action or proceeding.

The USMCA provides protection for Internet service providers modeled on the Digital Millennium Copyright Act.³⁸ The USMCA protects Internet service providers for copyright liability for the actions of their users. Internet platforms are not held civilly –but not criminally- liable for the actions of their users. However, there is no language in the USMCA that requiring a balanced approach to copyright which might have further empowered user rights.

The USMCA protects open government data provided in machine readable format.³⁹ The language used regarding open government data is not mandatory but rather best endeavors.

Conclusion

The Internet offers substantial opportunities to companies. The world has witnessed an explosion in digital trade in the past few years, with online shopping now doubling

³⁵ *Id.* art. 19.11.

³⁶ See Shakila Bu-Pasha, Cross-Border Issues under EU Data Protection Law with regards to Personal Data Protection, 26 Information and Communication Technology Law 213, 216 (2017).

³⁷ The U.S.-Mexico-Canada Trade Agreement, *supra* note 29, art. 19.16.

³⁸ *Id.* art. 19.17. See also Emily M. Asp, Section 512 of the Digital Millennium Copyright Act: User Experience and User Frustration, 103 Iowa Law Review 751, 762-765 (2018).

³⁹ *Id.* art. 19.18.

annually. Although the WTO did not contain explicit articles covering digital trade, it was seen that the WTO is well-fitted to advance digital trade because of the WTO principles of non-discrimination, transparency, and market openness. However, the WTO program on digital trade is stalled because WTO members could not agree on the so-called horizontal issues such as whether products delivered in digital form should be classified as goods or services under WTO rules.

The USMCA was thought as a breakthrough to the WTO deadlock in the sense that the FTA included explicit chapter concerning digital trade. A closer examination of the USMCA on digital trade revealed that the parties invent some specific rules needed for digital trade. For most of the digital trade provisions in the USMCA, the approach of the parties was based on the simple premise that digital trade is trade, that it is only the form by which the commercial transaction is performed which may be new, and not its substance; thus the parties relied on existing treaties or domestic laws. Thus, the USMCA does not require many legal changes to domestic laws.

The digital trade provisions in the USMCA showed the need to push the debate over digital trade forward. Future trade agreements should expand existing trade rules or draw up new rules. There is a host of digital trade issues that need to be addressed in future trade agreements. Among them are including new technologies such as block chain, classification of the content of certain electronic transmissions, the issue of "likeness" of e-goods; development-related issues, including access to infrastructure and technology; fiscal and revenue implications of digital trade, the relationship and possible substitution effects between digital trade and traditional forms of commerce., and whether dispute settlement mechanism covers digital trade in a way similar to any other provision in the

free trade agreement. By expanding and developing rules for digital trade, parties to the USMCA can take maximum advantage of the vast opportunities that the technological revolution offers.