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# The World Trade Organization in times of digital trade

Addressing digital protectionism?

Master thesis

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## List of abbreviations and acronyms

B2B	Business to business
B2C	Business to consumer
B2G	Business to government
C2B	Consumer to business
C2C	Consumer to consumer
CAD	Computer-aided design
CPC	Central Product Classification (product and services classification system used by the United Nations Statistical Commission)
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
DSB	Dispute Settlement Body
ECIPE	European Centre for International Political Economy
EU	European Union
FTA	Free trade area
G2B	Government to business
G2C	Government to consumer
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	Gross domestic product
GDPR	General Data Protection Regulation (EU regulation)
ICT	Information and computer technology
IMF	International Monetary Fund
IPRs	Intellectual Property rights
IT	Information Technology
ITA	Information Technology Agreement
ITC	International Trade Centre
ISP	Internet services provider
LDC	Least developed country
LTE	Long-Term Evolution (high-speed wireless data communications technology)
M2M	Machine to machine
MC	Ministerial Conference
MC9 [e.g.]	9 <sup>th</sup> Ministerial Conference of the Doha Round [number exemplary]
MFN	Most-favoured nation
OECD	Organisation for Economic Co-operation and Development
PPB	Processo Produtivo Basico (Brazilian regulation)
SDGs	Sustainable Development Goals
SMEs	Small and medium enterprises
TiSA	Trade in Services Agreement
TPP	Trans-Pacific Partnership
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
US	United States
USITC	United States International Trade Commission
USTR	United States Trade Representative
VAT	Value-added tax
VPN	Virtual Private Network
WTO	World Trade Organization

## 1. Introduction

Digital transformation is affecting more and more industries, changing existing trade in goods and services, and creating a new, digital trade. Baldwin (2016a) calls it the 4<sup>th</sup> phase of globalization, the second unbundling, driven by the information and computer technology (ICT) revolution.<sup>1</sup> The speed of this transformation is faster than other disruptive changes in the past<sup>2</sup> and digital trade is becoming an important part of international trade.

At the same time, the international trade sphere is experiencing a severe crisis, with barriers to classical trade in goods rising and a trade war between China, the United States (US) and the European Union (EU) imminent. The World Trade Organization (WTO) is the multilateral organization that has dealt with rules for international trade for decades, ensuring trade flows to be as free and predictable as possible. Now, the organization seems to be paralyzed, not knowing how to respond to the new, protectionist, realities in international trade.

In March 2018, German Chancellor Angela Merkel highlighted in her government declaration that “digitalization and protectionism are two opponent poles that in our understanding do not go well with each other. This is actually why the 21<sup>st</sup> century is the century of multilateral solutions and multilateral institutions. This is especially the case with regard to trade.”<sup>3</sup>

For a long time, the Internet has been the sphere where trade flows have been mostly free and unregulated. In 2000, Bill Clinton claimed, “trying to crack down on the Internet (...) is sort of like trying to nail Jell-O to the wall.”<sup>4</sup>

Today, protectionism is rising in the digital sphere as countries are starting to implement an increasing number of barriers to digital trade – the well-known Chinese *Great Firewall* is just the tip of the iceberg. Recent data scandals, such as *Facebook – Cambridge Analytica*,<sup>5</sup> or discussions about fake news have changed the public opinion towards the Internet, free flows of data, and digital products and services. Calls for more regulation, including for digital trade, have become louder.

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<sup>1</sup> See: Baldwin, Richard E. (2016a): *The great convergence: information technology and the new globalization*. Cambridge, MA: The Belknap Press of Harvard University Press., 79-110.

<sup>2</sup> Baldwin 2016a, 17-110.

<sup>3</sup> Translated from German: Merkel, Angela (2018): *Regierungserklärung vom 21. März 2018*. Online: <https://www.bundesregierung.de/Content/DE/Regierungserklaerung/2018/2018-03-22-regierungserklaerung-merkel.html>.

<sup>4</sup> Bill Clinton, 8 March 2000, speech recorded by the Federal News Service and excerpts published in the New York Times (*“Clinton’s Words on China: Trade is The Smart Thing.”* New York Times, 9 March 2000. Online: <https://www.nytimes.com/2000/03/09/world/clinton-s-words-on-china-trade-is-the-smart-thing.html>).

<sup>5</sup> See Schulz, Thomas (2018): *Außer Kontrolle*. Der Spiegel, 18, 24.03.2018, 12-24.

The WTO, on the other hand, has been much criticized for not taking action in regard to the rise of digital trade and respective barriers.<sup>6</sup> Therefore, this paper aims to investigate the role of the WTO and its agreements for trade liberalization in this area. It will be analysed if existing WTO rules address barriers to digital trade already or if modifications, or enhancements, need to be undertaken.

In order to do so, key barriers to trade in the digital sphere will be identified first. Then, the applicability of the existing WTO framework in regard to this new kind of trade will be examined. Lastly, the response of the WTO as an organization regarding digital trade will be analysed and possible future solutions will be pointed out.

## 2. The rise of digital trade

### 2.1 Definition and dimensions of digital trade

As of today, many terms are in use to describe the digitally enabled form of trade such as electronic trade, electronic commerce or digital trade, and there is no generally agreed upon definition of what is understood by those terms.<sup>7</sup> Often, they are used interchangeably, without defining the scope of each concept.<sup>8</sup> At the same time, the WTO has not been able to reach consensus on a final definition despite ongoing discussion for the past 20 years.

For the purpose of its Work Programme on Electronic Commerce, the WTO uses a broad working definition of electronic commerce. It understands the term *electronic commerce* to mean “the production, distribution, marketing, sale or delivery of goods and services by electronic means.”<sup>9</sup> The scope of this definition reaches from selling tangible products over the Internet, to offering an online marketing activity with no sale of any kind of product or service. This very broad approach of defining electronic commerce is consistent with the logic of the explorative nature of the WTO Work Programme on Electronic Commerce, aiming to examine all possible related aspects of digital trade relevant for the WTO. It is interesting to

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<sup>6</sup> See, inter alia, Fleuter, Sam (2016): *The Role of Digital Products Under the WTO: A New Framework for GATT and GATS Classification*. Chicago Journal of International Law, 17(1); Greenberg Center for Geoeconomic Studies (2017): *The Rise of Digital Protectionism*. Council on Foreign Relations. <https://www.cfr.org/report/rise-digital-protectionism>; Primo Braga, Carlos A. (2005): *E-commerce: New game, new rules?* The Quarterly Review of Economics and Finance, 45; Weber, Rolf H. (2010): *Digital Trade in WTO-Law: Taking Stock and Looking Ahead*. Asian Journal of WTO & International Health Law and Policy, 5(1).

<sup>7</sup> World Trade Organization (hereinafter: WTO) (2017b): *World Trade Statistical Review 2017*, 45; WTO: *Communication from Canada, Chile, Colombia, Côte d'Ivoire, the European Union, the Republic of Korea, Mexico, Montenegro, Paraguay, Singapore and Turkey of 13 January 2017*. WTO Doc. JOB/GC/116, JOB/CTG/4 JOB/SERV/248, JOB/IP/21 JOB/DEV/42, 2.

<sup>8</sup> WTO 2017b, 45.

<sup>9</sup> WTO (1998): *Work Programme on Electronic Commerce of 30 September 1998*. WTO Doc. WT/L/274, 1.

point out that no monetary component would need to be involved for an activity to be classified as e-commerce according to the WTO's definition as only the electronic delivery of goods and services (e.g. free of charge or paid for with personal data) is enough to be encompassed by this definition.

In comparison to the WTO, other organizations use a narrower approach when defining digital trade. According to the most current official definition by the Organisation for Economic Co-operation and Development (OECD)

*"[a]n e-commerce transaction is the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online. An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organisations."*<sup>10</sup>

The OECD definition narrows the scope of e-commerce to the *sale or purchase* of goods or services. Activities that do not include a monetary transaction would, therefore, for now, not fall under the scope of the OECD's definition of e-commerce. However, discussions are ongoing, and the OECD calls for including data flows in the concepts of trade in general as, in many cases, those support monetary transactions, even though they might not directly result in one.<sup>11</sup> An example of this can be seen in the business model of Facebook.

Another interesting perspective is the definition of digital trade by the European Union, since it is probably more advanced in making rules for the digital economy through its Digital Single Market than other international organizations. EU law does not define the term *e-commerce*,<sup>12</sup> but an existing EU directive on e-commerce makes reference to the EU directive on *information society services* defining an "Information Society service (...) [as] any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services."<sup>13</sup> A glossary of the European Commission on the EU Digital Single Market lays out that the term *e-commerce* was "used to describe trade over the

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<sup>10</sup> Organisation for Economic Co-operation and Development (hereinafter OECD) (2011): *OECD Guide to Measuring the Information Society 2011*, 72.

<sup>11</sup> OECD (2017b): *Working Party on International Trade in Goods and Trade in Services Statistics: Measuring Digital Trade: Towards a Conceptual Framework*. STD/CSSP/WPTGS(2017)3, 7, 8.

<sup>12</sup> European Commission (2017c): *Digital Single Market: Glossary*. Online: <https://ec.europa.eu/digital-single-market/en/glossary>.

<sup>13</sup> Directive 98/34/EC of the European Parliament and of the Council on laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services [1998], OJ L 204, art. 1.

internet (...) [including] selling goods online, offering online information or commercial communications, providing tools allowing for search of products and services, access and retrieval of data.”<sup>14</sup>

There are two interesting observations to make: first, EU law does only know digital services, not goods. Second, these services do not necessarily have to be remunerated in order to fall under the scope of this definition. The EU Glossary on the Single Digital Market additionally includes activities, such as search tools or offering online information, without mentioning that a direct economic monetary activity needs to be involved. The European Union, like the WTO, therefore, seems to be relatively flexible with the use of the term *e-commerce* and its term *information society service*, leaving the definitions sufficiently open to include new and non-traditionally-remunerated activities.

Many different concepts of e-commerce or digital trade exist, with a growing consensus to include all “digitally enabled transactions” in trade in goods and services.<sup>15</sup> However, inclusion of new developments in the concept of digital trade will need to be discussed, such as transactions paid for with data, transactions made within the so-called “sharing economy”, or machine to machine (M2M) communications. While some transactions generated within those new concepts might already be included in trade statistics, it would be useful to disaggregate them within statistics to highlight their impact within the economy.<sup>16</sup>

This is also reflected by the G20, calling for a “common understanding of Digital Trade that is broad enough to cover existing approaches, and flexible enough to take into account on-going technological evolution.”<sup>17</sup> One possible solution could be to see digital trade as a concept with different dimensions, or categories, rather than trying to find one single definition. New categories could then be added to this concept as new technology evolves, or old dimensions could be removed as they become obsolete.

Fleuter (2016) disaggregates digital products into four categories: tangible goods ordered through the Internet, electronically delivered services, e-products – meaning electronically delivered goods – and remote additive manufacturing.<sup>18</sup> Another approach could be to differentiate between tangible goods ordered via the internet, traditionally delivered services

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<sup>14</sup> European Commission 2017c.

<sup>15</sup> López González, Javier & Jouanjean, Marie-Agnes (2017): *Digital Trade: Developing a Framework for Analysis*. OECD Trade Policy Papers, No. 205. Paris: OECD Publishing, 12.

<sup>16</sup> United Nations Conference on Trade and Development (hereinafter: UNCTAD) (2017): *Information Economy Report: Digitalization, Trade and Development*, 35.

<sup>17</sup> Bundesministerium für Wirtschaft und Energie (2017): *G20 Digital Economy Ministerial Declaration*, 18.

<sup>18</sup> Fleuter 2016, 157.



(e.g. in-person, via telephone) ordered via the internet, and electronically delivered services and goods. The OECD names three different categories of products: goods, services, and information (in the sense of data) and points out that it is not a simple question of yes or no if a cross-border transaction should be considered digital or not.<sup>19</sup> According to the OECD, all digitally delivered products should be within the scope of the concept of digital trade, as well as all goods and services supplied in a traditional way, but digitally ordered via a platform. However, digitally ordered products via traditional means, like an email or an (Internet based) phone call, which are delivered in a physical or traditional way should not be considered digital trade according to the OECD.

This is interesting as, with fast technological progress, it can be difficult to draw a line of what is to be considered electronic commerce or not. If “platform” is the criteria used by the OECD to determine if trade is digital or not, what would apply if incoming order-emails were assessed and processed by an artificial intelligence, instead of a human? Would that be considered digital trade? Making categories based on different uses of the Internet should therefore be seen with caution. On the other hand, the OECD also highlights the need to include information, or data, as new a dimension of international trade, since data is an essential part of the Internet economy and for supporting monetary transactions.

Establishing different categories of digital trade products and services is important to clearly define the subject of this paper, and to also differentiate relatively new trade concepts (electronically transmitted products and services) from traditional, now digitally enabled, trade concepts.

This paper will mainly focus on cross-border transactions in which products and services, including data, are transmitted electronically, to evaluate the response of the WTO with regard to the rise of this new kind of trade. Reference to other digitally enabled, “classical”, cross-border trade in goods and services will only be made briefly where deemed necessary. The terms digital trade, e-commerce and electronic commerce will be used interchangeably.

## 2.2 Development of digital trade

Unquestionably, digitalization of the economy, and thus digital trade, has seen a rise on the global scale, impacting both industries and nations in a short amount of time. However, measuring the exact development of digital trade is not as easy as measuring trade in goods,

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<sup>19</sup> Here and following: OECD 2017b, 5-8.

where tangible goods are shipped and can be counted. As of today, little empirical information exists on digital trade.<sup>20</sup>

Two main challenges can be identified when trying to quantify the impact of electronic commerce. Given the absence of a globally accepted definition of what is understood by the terms *e-commerce* or *digital trade*, it is hardly possible to collect data and choose which products and services to include when elaborating statistics on digital trade. This is the first challenge arising when trying to measure digital trade.

In addition to the difficulty of defining e-commerce, separating digitally transmitted products and services via the Internet as part of an economic transaction from data transmitted for other reasons, like personal exchanges between individuals, can be identified as the second main challenge. As all data is transmitted via 0s and 1s, it is still technically difficult, or almost impossible, for governments or statisticians to count and analyse what kind of data is transmitted across borders and which part should be considered to be trade. On the other hand, there is the need for expanding the scope of traditional goods and services trade statistics as benefits from data flows are not fully covered.<sup>21</sup>

Statistical data presented on digital trade therefore ranges from electronically transmitted products and services, to products and services ordered via the internet, cross-border data flows, or indirect indicators such as classical trade with ICT products. Often, statistical data is simply not available (e.g. for electronically delivered products and services), or presented data are only estimates which can vary substantially.<sup>22</sup>

In addition, in difference to classical trade, e-commerce transactions can go in all directions: there can be classical business-to-consumer (B2C), business-to-business (B2B) and business-to-government (B2G) transactions, as well as consumer-to-consumer (C2C) (e.g. eBay), consumer-to-business (C2B) (e.g. in the sharing economy like Airbnb, where people provide their home to Airbnb for the platform to rent it), government-to-consumer (G2C) (e.g. government e-services for citizens abroad), or government-to-business (G2B) (e.g. government e-services for businesses abroad). Statistics will often only cover one or some of the above-mentioned directions.

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<sup>20</sup> OECD 2017b, 2; WTO 2017b, 45.

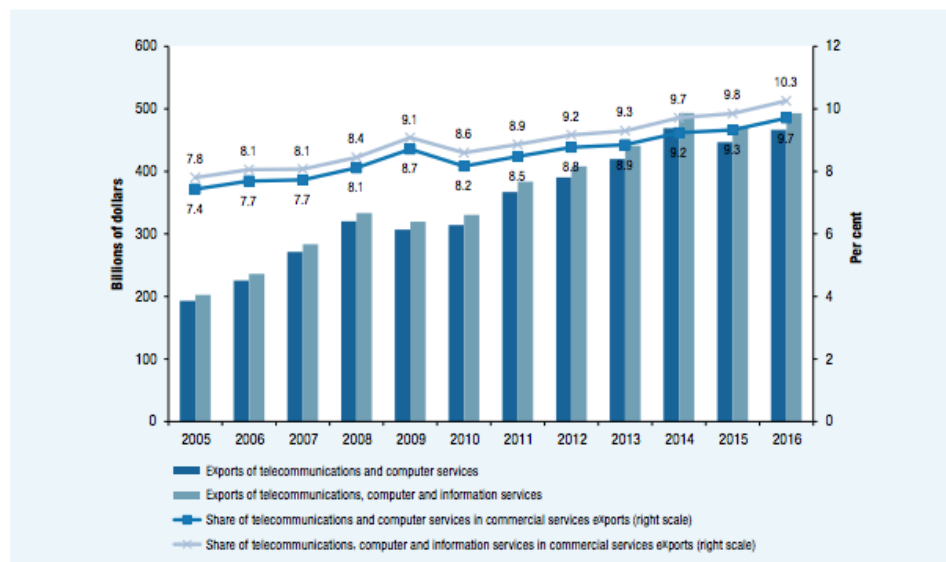
<sup>21</sup> OECD 2017b, 3, 4.

<sup>22</sup> See UNCTAD 2017, 32.

It is therefore necessary to analyse different dimensions of digital trade when trying to compile statistics about its growth or impact.<sup>23</sup> To be aware of what kind of data is included, and what information can be derived from that, caution is needed when analysing and interpreting statistics concerning digital trade.

In its most recent report on the digital economy, the United Nations Conference on Trade and Development (UNCTAD) points out three relevant indicators for measuring digital trade: trade in “classical” ICT-services, trade in electronically delivered services (ICT-enabled services) and cross border B2C e-commerce in goods and services.<sup>24</sup> It is important to note that those groups are not disjoint, but have substantial overlaps, or are subsets of each other. Based on data jointly compiled by the UNCTAD, the WTO, and the International Trade Centre (ITC), the report states that growth of the digital economy is reflected by the expansion of ICT services exports in world trade over the past decade, with computer and telecommunication services reaching \$467 billion in 2016, and information services reaching \$26 billion in 2016, almost three times more than in 2005.<sup>25</sup>

**Figure 1: Global exports of telecommunications, computer and information services, 2005-2016**



Source: UNCTAD 2017, 29, based on data by UNCTAD, WTO and ITC.

Figure 1 shows the rise in global exports of telecommunications, computer, and information services during the last decade, growing much faster than commercial services exports, increasing its share in global services exports constantly.

<sup>23</sup> WTO 2017b, 45.

<sup>24</sup> UNCTAD 2017, 28-34.

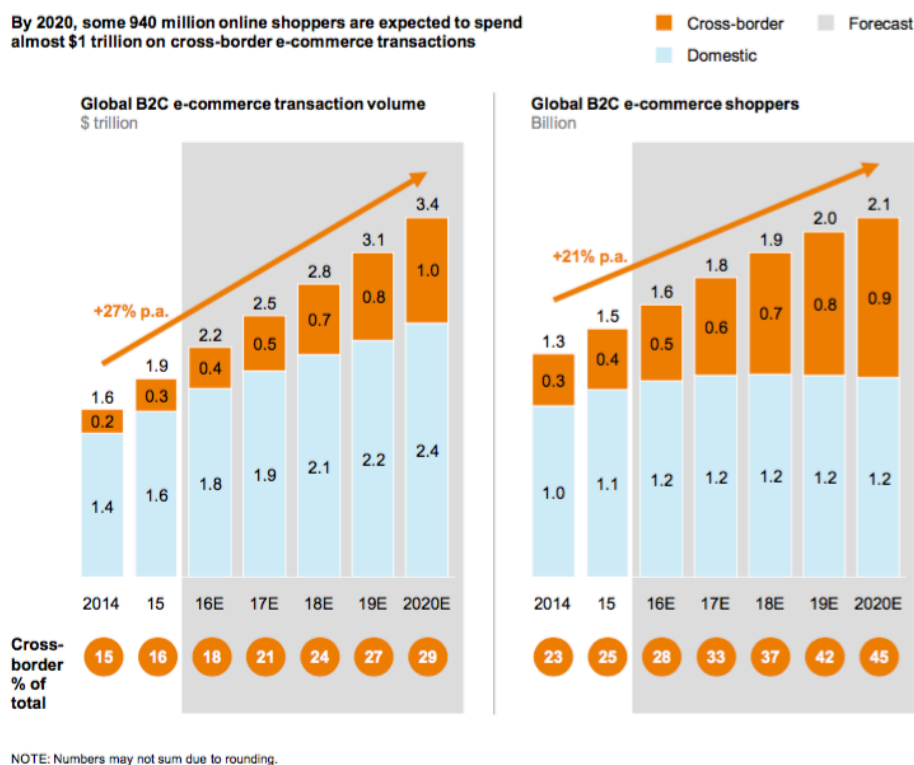
<sup>25</sup> UNCTAD 2017, 28, 29.

However, these numbers are not divided equally over the globe: the EU and the US jointly account for more than half of the world’s telecoms services exports, and the EU, India, and the US account for 80 percent of the world’s exports in computer services.<sup>26</sup>

Trade in electronically transmitted services, including formerly non-tradeable and non-classical ICT-services, is believed to have grown much over the last decade according to the UNCTAD.<sup>27</sup> However, due to a lack of official data on the amount of trade in services delivered electronically, no statistics can be presented – a strong disadvantage for policy makers in this area.<sup>28</sup>

While B2B transactions account for the biggest part of cross-border e-commerce, statistics also point to an increase in B2C and C2C cross-border trade, given that customers are more and more enabled to buy and sell abroad.<sup>29</sup> Even though a lack of official statistics, and even a lack of estimates by countries, makes it difficult for policy makers to evaluate the real impact of digital B2C and even less C2C trade, UNCTAD estimates cross-border B2C e-commerce in 2015 to be around \$189 billion, with 380 million consumers involved.<sup>30</sup>

**Figure 2: Global B2C e-commerce transaction value and global B2C e-commerce shoppers**



Source: Manyika et al. 2016, 35, based on data by AllResearch.

<sup>26</sup> UNCTAD 2017, 28-30.

<sup>27</sup> UNCTAD 2017, 30.

<sup>28</sup> id.

<sup>29</sup> OECD 2017b, 7, 12

<sup>30</sup> UNCTAD 2017, 32.

For the same year, Manyika et al. (2016), in a report published by McKinsey, estimate the volume of cross border B2C e-commerce (in this case meaning all products and services ordered via the Internet) to be around \$300 billion with around 400 million consumers involved as shown in figure 2. McKinsey also estimates that in 2015 approximately 12 percent of the global trade in goods was conducted via e-commerce (including B2B).<sup>31</sup>

Despite the fact that all data presented primarily represents estimates, all reports point to rapid growth of cross-border e-commerce in goods and services: McKinsey estimates the volume of global cross-border e-commerce to be five times higher in 2020 than in 2014, reaching \$1 trillion in 2020. In the same way, cross-border B2C e-commerce will become more important in relation to all B2C e-commerce transactions, making up for roughly a third of all e-commerce transactions worldwide in 2020.<sup>32</sup>

Some regions and countries collect data on specific aspects of cross-border B2C e-commerce. However, data is not sufficient to gain a complete picture of those regions in relation to B2C e-commerce, and even less so to have data on all e-commerce transactions.<sup>33</sup> As an example, the EU collects data on the proportion of EU businesses buying and selling online and the proportion of online shoppers among Internet users. In 2017, for instance, 68 percent of all EU Internet users purchased goods or services online, 40 percent more than in 2007.<sup>34</sup> 33 percent of purchasers conducted cross-border e-commerce transactions with sellers from other EU countries, while 23 percent of e-shoppers bought products and services from sellers outside the EU.<sup>35</sup>

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<sup>31</sup> Manyika et al. (2016): *Digital Globalization: The new era of Global Flows*. McKinsey Global Institute, 23.

<sup>32</sup> Manyika et al. 2016, 35.

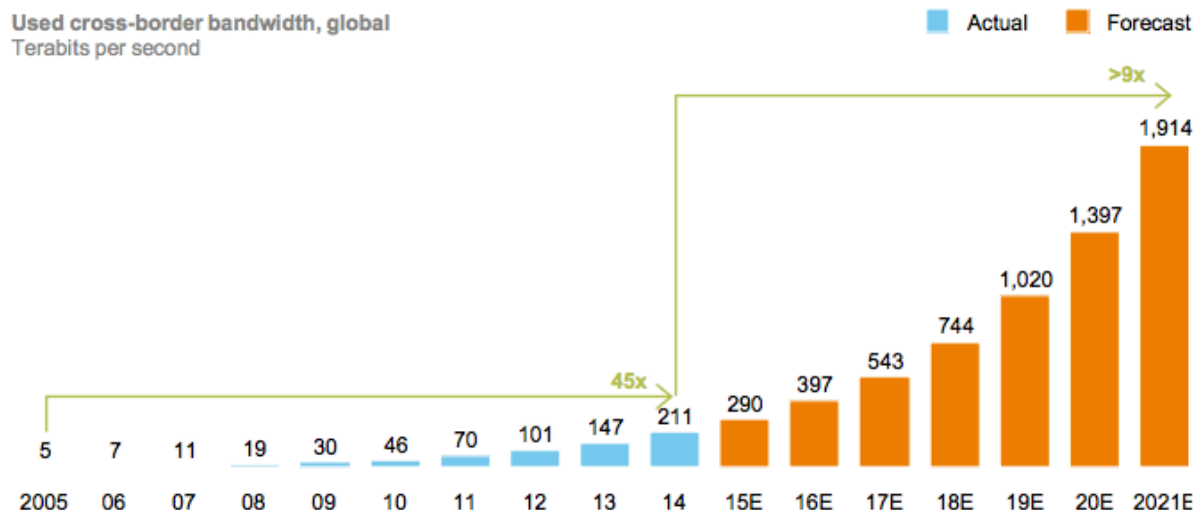
<sup>33</sup> UNCTAD 2017, 32.

<sup>34</sup> Eurostat (2017): *E-commerce statistics for individuals*. Online: [http://ec.europa.eu/eurostat/statistics-explained/index.php/E-commerce\\_statistics\\_for\\_individuals#68.C2.A0.25\\_of\\_internet\\_users\\_in\\_the\\_EU\\_shopped\\_online\\_in\\_2017](http://ec.europa.eu/eurostat/statistics-explained/index.php/E-commerce_statistics_for_individuals#68.C2.A0.25_of_internet_users_in_the_EU_shopped_online_in_2017).

<sup>35</sup> Id.

**Figure 3: Cross-border bandwidth growth**

**Cross-border bandwidth has grown 45 times larger over the past decade—and may grow another nine times larger by 2021**



Source: Manyika et al. 2016, 31, based on data by TeleGeography & Global Bandwidth Forecast Service.

Another interesting dimension to quantify the development of digital trade is to look at the increase of flows in data as shown in figure 3, represented by cross-border bandwidths. In 2014, cross-border bandwidth was 45 times higher than in 2005, while the growth in flows of goods (10.5 times), services (3.1 times), foreign direct investment (2.3 times), and people (1.6 times) was significantly lower.<sup>36</sup> It is important to note that not all of this data can be considered relevant for digital trade. A great amount of this data supports, or is part of, transactions of trade in goods and services, including intra-company trade, is part of a M2M-transaction, or constitutes non-commercial data, such as personal data sent by individuals or data transmitted by governments. However, cross-border data flows are a good indicator to quantify the growing importance of data in all parts of globalization, including digital trade. Data and the use of data analytics are becoming an essential part of basically any business, leading to an increase in cross-border data transfers.

Most of this data moves between advanced economies: 93 percent of cross-border data flows happen between the top 35 economies (with the top 15 accounting for 77 percent), while the rest of the world only accounts for 7 percent of global data flows.<sup>37</sup>

This points to a deep digital divide between the top digital economies and the rest of the world as large parts of the globe are apparently not participating in the growth of the digital economy and digital trade. This divide could not only lead to strong disadvantages when not

<sup>36</sup> Manyika et al. 2016, 4, 20, 21.

<sup>37</sup> Manyika et al. 2016, 60, 61.

participating in a large part of the economy, but also to disagreements between Members of the WTO as their interests will be based on the role they take within digital global trade (e.g. participating strongly or not participating at all).

This section has shown that, while some data on dimensions of digital trade exist, there is still a need for improved statistics to better understand the impact of digital trade in the economy.<sup>38</sup> As the WTO states in its most recent statistical review: “The challenge for the international statistical community is to find a way of capturing these [digital trade] transactions in international trade statistics and subsequently in macroeconomic aggregates.”<sup>39</sup> While there are already a number of initiatives working on this issue, such as by the OECD, UNCTAD, or the International Monetary Fund (IMF), these are still mostly focused on conceptualizing the different aspects of digital trade.<sup>40</sup>

The direction, however, is clear, cross-border digital trade is becoming an important part of international trade and the global economy. Nevertheless, this section has also shown that transactions of digital trade are unequally distributed over the globe, leading to gaps between the new digital players and those, for now, left behind, an issue of potential relevance for the WTO.

### 3. A new digital protectionism

#### 3.1 Existing pre-barriers to digital trade

Before analysing measures implemented by governments that directly address digitally transmitted products and services, some factors are noteworthy to mention that have a direct or indirect impact on the development on digital trade. However, these will not be further analysed in this paper as they do not constitute measures implemented by governments restricting digital trade directly.

These include barriers to classical trade in information technology (IT) equipment such as tariffs, quotas, or technical barriers, low participation in the Information Technology Agreement (ITA) and ongoing discussions about its scope, as well as restrictions to the supply

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<sup>38</sup> See OECD 2017b.

<sup>39</sup> WTO 2017b, 45.

<sup>40</sup> Id.

of telecommunications-services.<sup>41</sup> All of these issues are related to, or potentially hindering the development of digital trade.

Apart from these more general factors, research has shown that especially developing economies face substantial pre-existing barriers to digital trade, preventing them to fully take advantage of the gains of electronic commerce, thus leading to the above-mentioned digital divide in relation to e-commerce. It is important to note that those pre-existing barriers do not fall under the scope of WTO-law addressing trade barriers.

Kshetri (2007) identifies three kinds of trade barriers to e-commerce prevailing in developing economies, of which some are also valid for advanced economies.<sup>42</sup> The first category he identifies is “economic barriers”, including slow or no access to the Internet, bad telecommunications infrastructure, lack of electric supply, unavailability of credit cards, economies largely based on agriculture, and logistics challenges (e.g. for the delivery of online-ordered packages). The second kind are socio-political barriers, such as a preference for face-to-face communications, validity of electronic signatures, import duties on ICT-products, weak formal institutions, as well as legal burdens. The last category Kshetri identifies is “cognitive barriers”, such as lack of awareness of potential opportunities, lack of trust, computer illiteracy, or lack of language skills.

Of all these factors, the lack of widespread availability of fast broadband Internet is one of the most restricting factors for the development of e-commerce and cross-border digital trade in developing economies.<sup>43</sup>

This non-exhaustive list illustrates the numerous challenges countries are facing when participating in global digital trade. While some barriers might be overcome within the next years, such as lack of electric supply or access to the Internet, others, such as weakness of formal institutions, might need longer, possibly leading to disadvantages for developing economies.

While many scholars point to significant potential advantages for developing economies through digitalization of international trade,<sup>44</sup> others note that structural disadvantages at the

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<sup>41</sup> See Ahmed, Usman & Aldonas, Grant (2015): *Addressing Barriers to Digital Trade*. E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) & World Economic Forum, 3-6.

<sup>42</sup> Here and following: Kshetri, Nir (2007): *Barriers to e-commerce and competitive business models in developing countries: A case study*. *Electronic Commerce Research and Applications*, 6, 443-452.

<sup>43</sup> Ahmed & Aldonas 2015, 6.

<sup>44</sup> See, inter alia, Ahmed & Aldonas 2015, Kshetri 2007, Manyika et al. 2016; Suominen, Kati (2017): *Fuelling Trade in the Digital Era: Policy Roadmap for Developing Countries*. International Centre for Trade and Sustainable Development (hereinafter ICTSD). Online: [https://www.ictsd.org/sites/default/files/research/suominen\\_fuelling\\_trade\\_in\\_the\\_digital\\_era\\_0.pdf](https://www.ictsd.org/sites/default/files/research/suominen_fuelling_trade_in_the_digital_era_0.pdf).



start could be exacerbated through digital trade and possible international regulation in that field.<sup>45</sup> Many developing countries themselves are of the opinion that digital trade, based on rules mainly elaborated by advanced economies, will impede their further development.<sup>46</sup> Even though this issue will not be the focus of this paper, the importance of overcoming those pre-existing barriers for discussions on multilateral rules for digital trade between all WTO Members as equals can be highlighted at this point.

## 3.2 Key barriers to digital trade implemented by governments

### 3.2.1 Introduction

Along with the rise of digital trade, a rise in restrictive measures in the digital space can be identified, posing potential barriers to digital trade.<sup>47</sup> Even though the Internet still seems to be a relatively free space regarding trade, compared to the “real world”, with physical frontiers between countries, governments are progressively understanding the functioning of the Internet economy and starting to regulate it. Through implementing restrictive measures, some countries are introducing a kind of “digital protectionism”<sup>48</sup>, with some measures having a negative impact on digital trade. Some of these trade-restrictive barriers are similar to measures that can be identified in classical trade in goods and services, while others are unique to electronic commerce. The motives for implementing such measures are various and reach from protecting public moral, security, or data privacy of citizens to economic protectionism. The line between these motives is often blurred as, like in classical trade, the evoking of public moral, or security reasons, in some cases leads to competitive advantages for domestic companies. This section aims to identify and categorize key barriers to trade in digitally transmitted products and services, as well as motives of governments for their implementation, without prejudice if those barriers are subject to any of the agreements of the WTO or in violation of them.

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<sup>45</sup> James, Deborah (2017): *Twelve Reasons to Oppose Rules on Digital Commerce in the WTO*. Huffington Post. Online: [https://www.huffingtonpost.com/entry/twelve-reasons-to-oppose-rules-on-digital-commerce\\_us\\_5915db61e4b0bd90f8e6a48a](https://www.huffingtonpost.com/entry/twelve-reasons-to-oppose-rules-on-digital-commerce_us_5915db61e4b0bd90f8e6a48a).

<sup>46</sup> WTO: *Statement by the African Group of 20 October 2017*, WTO Doc. JOB/GC/144.

<sup>47</sup> WTO, JOB/GC/116, JOB/CTG/4 JOB/SERV/248, JOB/IP/21 JOB/DEV/42.

<sup>48</sup> The term “digital protectionism” includes all measures taken by governments to put restrictions in the digital sphere (Greenberg Center for Geoeconomic Studies 2017).

### 3.2.2 Tariffs

Classical market access limitations such as tariffs are not a major issue in the field of digital trade, and there are no noted cases of countries imposing custom duties on digital products and services.<sup>49</sup> This is mostly due to three reasons: first, digital trade<sup>50</sup> includes mostly services, where tariffs in a classical sense have never been a big issue. Second, it is still technically difficult, if not impossible, to control all cross-border flows of data and therefore impose tariffs on electronically transmitted products and services. And third, the WTO currently holds a moratorium on custom duties on digitally transmitted products and services which – even though it is legally not binding – could additionally prevent Members from implementing tariff barriers.

### 3.2.3 Data localization measures

Data localization measures are among the most cited barriers to international digital trade. They are measures taken by governments which prohibit or restrict the cross-border flow of data or require companies to store and process data locally. They therefore limit access to digital markets in affected economies as they require development and use of local infrastructure (e.g. computing centres) as a condition for market access.<sup>51</sup> Data localization measures are not only relevant for digital trade, but for classical trade in all sectors as data is becoming a resource relevant for every industry. Thus, barriers to free flows of data constitute an important barrier not only to trade, but to growth in general, hindering digital trade directly, hindering the enabling of classical trade (e.g. e-payments, e-reporting) and hindering the value creation of traded products (e.g. by hindering cross-border M2M-communications in the manufacturing, automotive, or agriculture industries).<sup>52</sup>

For companies, complying with local data storage requirements can come at significant costs. According to a survey by the United States International Trade Commission (USITC) among US-companies, 82 percent of large companies and 52 percent of small and medium

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<sup>49</sup> See United States Trade Representative (hereinafter: USTR) (2017a): *2017 National Trade Estimate Report on Foreign Trade Barriers*. Online: <https://ustr.gov/sites/default/files/files/reports/2017/NTE/2017%20NTE.pdf>; USTR (2017b): *Key Barriers to Digital Trade*. USTR Fact Sheets. Online: <https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2017/march/key-barriers-digital-trade>.

<sup>50</sup> As outlined in chapter 2.1: only digitally delivered products and services.

<sup>51</sup> See Crosby, David (2016): *Analysis of Data Localization Measures Under WTO Services Trade Rules and Commitments*. E15Initiative. Geneva: ICTSD and World Economic Forum, 1.

<sup>52</sup> See International Chamber of Commerce (hereinafter: ICC) (2016): *WTO Business Focus Group 1: MSMEs and E-Commerce*. Online: <https://cdn.iccwbo.org/content/uploads/sites/3/2016/10/WTO-Business-focus-Group-1-MSMEs-and-e-commerce.pdf>, 6; OECD 2017b, 4.

enterprises (SMEs) in the digital communications sectors found data localization requirements to be a barrier to their business.<sup>53</sup>

Several economies are considering implementing or have already implemented data localization requirements, including the EU, Korea, Russia, and Turkey. Cory identifies data localization measures in a total of 31 countries and the EU<sup>54</sup>. This number illustrates that many countries are considering some kind of “data protectionism”<sup>55</sup>, even though the extent of existing data localization measures and their impact on digital trade is not yet fully clear.<sup>56</sup>

The main reasons evoked for implementation are the protection of privacy of citizens (such as the General Data Protection Regulation (GDPR) in the EU)<sup>57</sup>, as well as national security interests (such as in South Korea, prohibiting the cross-border flow of data related to maps)<sup>58</sup>. However, there are few examples of economic protectionism:<sup>59</sup>

South Korea has established data localization requirements to protect local e-commerce and online payment operators: foreign e-commerce companies are only allowed to store Korean customer credit card data abroad when operating in five or more countries.<sup>60</sup>

Another example of economic protectionism could be Kazakhstan, requiring all websites registered with a .kz-domain to operate on servers located within the country.<sup>61</sup>

In Turkey, Internet-based payment providers, like PayPal, must store all data within the country for ten years, which, inter alia, made PayPal exit the country.<sup>62</sup>

The impact of data localization requirements on the economy is not marginal: the USITC estimates that removing data localization measures posed by foreign governments would increase the real GDP of the US by 0.1 to 0.3 percent.<sup>63</sup> This number will grow as an increasing number of barriers to the free flow of data are implemented and more and more classical sectors or trade disciplines will depend on data flows, such as manufacturing, automotive or

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<sup>53</sup> United States International Trade Commission (hereinafter: USITC) (2014): *Digital Trade in the U.S. and Global Economies, Part 2*. Online: <https://www.usitc.gov/publications/332/pub4485.pdf>, 81.

<sup>54</sup> Cory, Nigel (2017): *Cross-Border Data Flows: Where Are the Barriers, and What Do They Cost?* Information Technology & Innovation Foundation. Online: [http://www2.itif.org/2017-cross-border-data-flows.pdf?\\_ga=2.13714868.2007752918.1518863940-1236132695.1518863940](http://www2.itif.org/2017-cross-border-data-flows.pdf?_ga=2.13714868.2007752918.1518863940-1236132695.1518863940), 20-31.

<sup>55</sup> Cory 2017, 2.

<sup>56</sup> See USTR 2017a, USTR 2017b.

<sup>57</sup> USITC 2014, 90.

<sup>58</sup> Cory 2017, 28.

<sup>59</sup> Crosby 2016, 2.

<sup>60</sup> Cory 2017, 28.

<sup>61</sup> Deibert, Ronald; Palfrey, John; Rohozinski & Zittrain, Jonathan (eds.) (2008): *Access Denied: The Practice and Policy of Global Internet Filtering*. Cambridge, MA; London: The MIT Press, 315.

<sup>62</sup> Cory 2017, 29.

<sup>63</sup> USITC 2014, 78.

agriculture. A study published by the European Centre for International Political Economy (ECIPE) comes to the result that in a scenario with economy-wide data localization measures applying to all sectors, GDP-losses would be substantial in countries analysed, with -1.1 percent in the EU and South Korea, -0.8 percent in Brazil and India, and -0.7 percent in Indonesia.<sup>64</sup>

### 3.2.4 Quotas

There are no cited cases quotas in the classical sense regarding the supply of digitally transmitted products and services.<sup>65</sup> There are however some cases in which countries implement a total prohibition of the supply of a digital product or service within their territory which can be interpreted as a zero quota as the case *US – Gambling* has shown.<sup>66</sup> Given that a zero quota is a special case in WTO-law, this should be seen more generally in relation to blocking and filtering websites and applications (apps). A quota can be interpreted as the prohibition of websites and apps offering a certain kind of service (web blocking and filtering), and vice-versa.

### 3.2.5 Web blocking and filtering

Blocking and filtering of websites and apps is one of the most common barriers to digital trade, of which two dimensions can be identified: websites or apps can either be blocked as a whole, or some of their content can be filtered. Filtered content and services may include certain news, information, movies, e-books, music, or payment services. Web blocking and filtering could be interpreted as some kind of a quota, but given its importance, its own category seems to be more useful.

Numerous examples can be named: China is one of the most cited and well-known examples for web blocking and filtering: currently there are more than 3,000 websites blocked, including 11 of the top 25 global websites and services like Facebook, Instagram, and Twitter. These measures – known as the *Great Firewall*<sup>67</sup> – constitute one of the biggest, if not the biggest, trade barriers for digital trade globally.<sup>68</sup> Besides blocked websites and apps, lots of content

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<sup>64</sup> Bauer, Matthias; Lee-Makiyama, Hosuk; Marel, Erik van der & Verschelde, Bert (2014): *The costs of data localisation: friendly fire on economic recovery*. European Centre for International Political Economy (ECIPE). Online: [http://www.ecipe.org/app/uploads/2014/12/OCC32014\\_\\_1.pdf](http://www.ecipe.org/app/uploads/2014/12/OCC32014__1.pdf), 6.

<sup>65</sup> USTR 2017a; USTR 2017b.

<sup>66</sup> WTO Appellate Body Report adopted 7 April 2005: *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services* (US – Gambling), WT/DS285/AB/R, hereinafter: AB report *US – Gambling*.

<sup>67</sup> USTR 2017a, 90.

<sup>68</sup> “China’s protectionism comes home to roost”. Financial Times, 03 January 2018. Online: <https://www.ft.com/content/14196546-f098-11e7-ac08-07c3086a2625>.

is filtered by companies themselves in order to comply with Chinese law to be able to enter the Chinese market.

Not always are websites and apps blocked entirely: sometimes only parts are blocked, making the website or app less useful. This was, for example, the case with WhatsApp in China: the government, prior to blocking the app completely, interrupted the possibility of sending photos, videos, and voice messages, as well as filtered some text messages so that users could not be sure if their message had been received, hence making the app basically useless.<sup>69</sup> Even though national security might be one of the motives for blocking many websites, it cannot be denied that this has led to an increase in national, very similar, services, such as WeChat (similar to Facebook and WhatsApp) or Baidu (similar to Google), giving China and its companies an advantage in the global economy.<sup>70</sup> With its successful implementation of web filtering and blocking, Chinese blocking behaviour also serves as an example for other countries which are implementing similar measures.<sup>71</sup>

Other examples include Pakistan, regularly blocking websites that its government considers to be blasphemous or immoral.<sup>72</sup> In Turkey, over 111,000 websites were banned as of May 2016, based on complaints regarding Turkey's civil code and violations of Intellectual Property rights (IPRs), according to the Office of the United States Trade Representative (USTR).<sup>73</sup>

Motives for blocking websites and filtering content include cultural, moral, political, or safety reasons. Economic protectionism, the reason for classically imposing quotas, cannot be considered an evident motive for website and app blocking,<sup>74</sup> even though support for local similar services might be a result.

It is important to note that not all web blocking and filtering can be considered a barrier to lawful international trade as some websites might be non-commercial, such as personal websites or blogs, while others might include clear violations of IPRs (like illegal music downloads) or basic human rights (e.g. child pornography).

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<sup>69</sup> Bradsher, Keith (2017): *China Blocks WhatsApp, Broadening Online Censorship*. The New York Times. Online: <https://www.nytimes.com/2017/09/25/business/china-whatsapp-blocked.html>.

<sup>70</sup> Greenberg Center for Geoeconomic Studies 2017.

<sup>71</sup> Coca, Nithin (2017): The missing trade war against China's digital protectionism. Engadget. Online: <https://www.engadget.com/2017/09/15/china-digital-protectionism-firewall-trade/>.

<sup>72</sup> USTR 2017a, 340.

<sup>73</sup> Haas, Benjamin (2017): *China moves to block internet VPNs from 2018*. The Guardian. Online: <https://www.theguardian.com/world/2017/jul/11/china-moves-to-block-internet-vpns-from-2018>; USTR 2017a, 441.

<sup>74</sup> See USTR 2017a.

Questions arise around the evaluation of blocking and filtering websites and apps that do not have a direct commercial activity involved with the final consumer, such as Facebook, or WhatsApp, but where consumers “pay” with their data (in the case of Facebook, monetary transactions are, however, involved between the platform and companies advertising on the platform). Given that data is often cited to be an essential resource in the 21<sup>st</sup> century, blocking and filtering of websites and apps which generate “data revenue” (rather than “monetary revenue”) monetized at a later stage in the value chain should also be considered to be a barrier to digital trade.

The numbers presented show that web blocking and filtering constitutes a major barrier international digital trade.

### 3.2.6 Access to network infrastructure and the Internet

The transport of data to its destination is essential for digital trade to be possible which is why it should be analysed with further detail. Countries are starting to put barriers to access to network infrastructure, the Internet, or other networks. Access to telecommunications- and Internet-services has to be seen as a medium for facilitating digital trade, comparable to roads or harbours in classical trade. Without liberalized access, digital trade can face restrictions.

A famous example for restricting access to infrastructure is the WTO dispute settlement case *Mexico – Telecoms* in which the Panel found that Mexico had failed to offer reasonable and non-discriminatory access to basic telecommunications-services for US companies at cost-orientated prices.<sup>75</sup> Even though the dispute was on prices for international phone calls and not on data, it illustrates how easily access to telecommunications-infrastructure and -services can be restricted.

A very recent case of restricting access to the Internet is China which in 2017 announced the total prohibition of Virtual Private Networks (VPNs), except for VPN-software licensed by the Chinese government, taking affect 31 March 2018.<sup>76</sup> In China, VPNs are largely used by individuals, researches, and businesses to circumvent *the Great Firewall*. VPNs are also used by businesses to communicate and exchange data within their intra-company networks. As

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<sup>75</sup> See WTO Panel Report adopted 2 April 2004: *Mexico – Measures Affecting Telecommunications Services* (Mexico – Telecoms), WTO Doc. WT/DS204/R, hereinafter Panel report *Mexico – Telecoms*.

<sup>76</sup> “China Tells Carriers to Block Access to Personal VPNs by February”. Bloomberg News, 10 July 2017. Online: <https://www.bloomberg.com/news/articles/2017-07-10/china-is-said-to-order-carriers-to-bar-personal-vpns-by-february>; “China schränkt Zugang zu freiem Internet weiter ein”. Spiegel Online, 31 March 2018. Online: <http://www.spiegel.de/netzwelt/web/china-regierung-erlaubt-nur-noch-staatlich-lizenzierte-vpn-software-a-1200731.html>; “US flags fears over China’s new VPN rules with the World Trade Organisation”. South China Morning Post, 23 February 2018. Online: <http://www.scmp.com/news/china/diplomacy-defence/article/2134550/us-flags-fears-over-chinas-new-vpn-rules-world-trade>.

the measure is only in effect since very recently, it is yet unclear how it will affect foreign businesses using VPNs.<sup>77</sup> However, concerns of the US show that restrictions to network access via VPNs might pose a significant barrier to trade for foreign companies.<sup>78</sup> Restrictions to VPN-use will also have an effect on Chinese customers, using VPNs to purchase goods and services abroad via VPNs, hence, posing a barrier to e-commerce.

Another example for implementing arbitrary access restrictions to the Internet is Vietnam, not allowing access to the Internet through foreign Internet Services Providers (ISPs), again posing a barrier to digital trade.<sup>79</sup>

Web filtering and blocking also poses restrictions to the access to the Internet. Due to its importance, different nature, and frequent use by countries, it was treated above in a separate section.

### 3.2.7 Net neutrality

Net neutrality ensures that all data on the Internet is treated equally, no matter the origin or destination. The concept is, thus, similar to the principle of non-discrimination in WTO-law.<sup>80</sup> When eliminating net neutrality, ISPs are able to charge companies for transporting data with higher priority. This can lead to de facto discrimination of companies based on their country of origin, for example, if a monopolist ISP transports data from local companies faster than data from foreign companies. Even in liberalized markets, ISPs could charge foreign businesses more to transport their data than domestic companies. Net neutrality is still an important principle in all major digital economy markets, except for the US. There, it has been recently eliminated,<sup>81</sup> hence, enabling ISPs to discriminate data of companies based on fees paid or potentially the country of origin. As the supply of Internet is a monopoly market in large parts of the US,<sup>82</sup> this will lead to substantial barriers to digital trade: companies will have no choice

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<sup>77</sup> "MIIT: China only prohibits VPNs of unauthorised companies or individuals". GB Times, 25 July 2017. Online: <https://gbtimes.com/miit-china-only-prohibits-vpns-unauthorised-companies-or-individuals>; Spiegel Online, 31 March 2018; South China Morning Post, 23 February 2018.

<sup>78</sup> GB Times, 25 July 2017; South China Morning Post, 23 February 2018.

<sup>79</sup> United States Department of State (2016): *Vietnam 2015 Human Rights Report*. Online: <https://www.state.gov/documents/organization/253025.pdf>, 28.

<sup>80</sup> See Shroff, Tvisha & Kuhlmann (2016): *A Legal Perspective on Digital Trade: Keeping the Internet Neutral*. Trade, Law and Development, 8(2), 13.

<sup>81</sup> Rushe, Dominic & Gambino, Lauren (2017): *US regulator scraps net neutrality rules that protect open internet*. The Guardian. Online: <https://www.theguardian.com/technology/2017/dec/14/net-neutrality-fcc-rules-open-internet>.

<sup>82</sup> 31 percent of ZIP code areas have no choice regarding their Internet provider as only one ISP offers services in their area. 70 percent of US ZIP code areas have none or only one provider offering high speed broadband Internet >25Mbps in their area. 99 percent of US ZIP code areas have none or only one provider offering high speed broadband Internet >100Mbps in their area (Segan, Sascha (2017): *Check Out the Terrible State of US ISP*

but to pay an additional fee or accept that their data is delivered with less priority within the respective areas.<sup>83</sup>

Given that elimination of net neutrality in the US has been very recent and developing economies, where net neutrality is sometimes de facto non-existent, are often no important digital markets, effects of non-existing net neutrality as a potential barrier to digital trade cannot be fully evaluated yet.

### 3.2.8 Taxation

Differences in taxation can prevent liberalization of digital trade when governments give less favourable tax regimes to foreign digital service providers than domestic ones. Low taxes for domestic digital companies can constitute a subsidy for competing in the domestic market as well as for exporting.

Brazil, for example, provides significant tax reductions on many domestically-produced ICT-products, and digital products and services, like software or technical services under the *Processo Produtivo Basico* (PPB) regulation,<sup>84</sup> putting foreign suppliers at a significant disadvantage.<sup>85</sup> Given that the related *Brazilian Support Program for the Development of the Information Technology Sector* has the objective to strengthen research and development in the Brazilian information technology sector, to foster national development, and support and projects of national interest,<sup>86</sup> it can be argued that the motive for differentiation in tax is pure economic protectionism.

Another example to be named with regard to economic protectionism is India, where the government introduced an “equalization levy”, posing an additional 6 percent withholding tax on foreign online advertising platforms, aiming to “equaliz[e] the playing field”<sup>87</sup> between Indian and foreign service providers.<sup>88</sup>

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*Competition*. PC Mag. Online: <https://www.pcmag.com/news/357972/exclusive-data-shows-the-terrible-state-of-us-isp-competitio>).

<sup>83</sup> Data delivery with a lower priority can have serious implications for digital businesses. If for example data of a video portal is delivered too slowly, consumers might not be able to watch videos on a certain website without having to wait for the video to load, while videos on competitor’s websites having paid extra fees for quicker data delivery will load without any problems.

<sup>84</sup> WTO Panel Report adopted 30 August 2017: *Brazil – Certain Measures Concerning Taxation and Charges* (Brazil – Taxation), WTO Doc. WT/DS472/R, WT/DS497/R, para. 2.46, hereinafter: Panel Report *Brazil – Taxation*.

<sup>85</sup> “*Brazil - Information Technology - Computer Software and Hardware*”. Export.gov, 2017. Online: <https://www.export.gov/article?id=Brazil-Information-Technology-Computer-Software-and-Hardware>; USTR 2017a, 51.

<sup>86</sup> Decreto Nº 5.906 de 26 Setembro de 2006, Diário Oficial da União - Seção 1 - 27/9/2006 [Brazil], art. 10 §1.

<sup>87</sup> USTR 2017a, 217.

<sup>88</sup> Id.



### 3.2.9 Intellectual property rights

Too weak, as well as too strict, IPRs can also constitute barriers to digital trade. It is agreed that strong IPRs are critical for innovation, while weak IPRs can hinder innovation as well as digital trade, for example, due to illegal downloads.<sup>89</sup> On the other hand, innovation in the Internet economy, and therefore also digital trade, depends, to a certain degree, on open innovation and open source codes. IPRs that are too strict can, therefore, equally pose a barrier to the development of the digital economy and, thus, digital trade, for instance, in regard to developing and trading new software, or the distribution of movies or music (see geoblocking below).

### 3.2.10 Geoblocking

Many companies use geoblocking to restrict access to content in a certain territory. Geoblocking can also be induced by governments, such as when countries do not allow websites, like YouTube or Netflix, to show certain content in their country. These measures should then be categorized as web blocking or filtering, as described above. Companies usually use geoblocking to increase revenues via IPRs, or to tailor content to a specific market. They can, thus, reduce costs for IPRs or are able to use different pricing in different markets. Even though from a consumer perspective this can be seen as a barrier to trade, these company-induced measures should rather be considered a regular business measure than a barrier to digital trade as it is comparable with companies tailoring their offer to a specific market in the traditional industry.

While eliminating company-induced geoblocking barriers can be seen as positive from a consumer perspective, companies can see this as an additional barrier to trade: to strengthen the Single Digital Market, the EU recently eliminated what it calls “unjustified geoblocking”<sup>90</sup>, hence, forcing companies to provide equal access to content for all consumers within the European Union, strengthening the rights of consumers. US companies, on the other hand, have expressed concerns that this would affect their ability to market offerings tailored to different markets or engage in licensing of audio-visual work based on territorial limitations, increasing costs related to IPRs.<sup>91</sup> This illustrates the complex nature of barriers to digital trade

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<sup>89</sup> Primo Braga, Carlos A. 2005, 546.

<sup>90</sup> European Council & Council of the European Union (2018): *Geo-blocking: Unlocking e-commerce in the EU*. Online: <http://www.consilium.europa.eu/en/policies/geo-blocking/>.

<sup>91</sup> USTR 2017a, 183

and respective regulation: while it might reduce barriers on one side, regulation can pose new barriers on the other side of the equation.

#### 3.2.11 Technical standards and forced technology transfer

The forced use of different or unusual technical standards, the need for certain certifications, or the requirement to use local technology pose additional barriers to digital trade. China, for example, requires the use of Chinese encryption algorithms (e.g. for WiFi or LTE-products).<sup>92</sup> In the case of China, this is probably related to government induced web blocking and filtering as the use of Chinese technology makes censorship technically easier.

Forced technology transfer is, as in traditional trade, also an issue in digital trade, especially in countries where establishing a subsidy is only possible in the form of a joint venture, such as in China.

#### 3.2.12 Other barriers

There is a number of other internal regulations affecting e-commerce less relevant for this paper, including regulation of the telecommunications market, competition policy, or further internet governance issues, such as allocation of IP addresses.<sup>93</sup> Even though these issues can also pose barriers in digital trade, due to limitations in space, they will not be further analysed in this paper.

### 3.3 Summary

This section has shown that governments are implementing a wide range of barriers to digital trade, thus, leading to a new, digital, protectionism. The line between the different trade barriers is sometimes blurred, such as between web blocking and quotas, or data localization measures and access to network infrastructure as well as net neutrality. Aggregating those barriers further on the other hand would come at the disadvantage of clear, existing barriers not being named as such. This is why in this paper the most important barriers have been included in own categories, respectively.

Naturally, not all countries are implementing barriers to trade with the same intensity. The USITC has identified countries posing most barriers for US companies, led by Nigeria, Algeria, China, Bangladesh, Russia, and Pakistan.<sup>94</sup> Also, barriers might vary substantially depending on the type of company or industry. While social networking companies, such as Facebook,

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<sup>92</sup> USTR 2017a, 91.

<sup>93</sup> Primo Braga 2005, 545.

<sup>94</sup> USITC 2014, 79.

might face substantial barriers to offer their products in some markets, this might not be the case for companies offering business software as a service, such as Adobe.

Interestingly, Baldwin (2016a), while acknowledging the fact that government policies could counteract falls in communication costs, points out in relation to free flows of data and communication that at least in the G7 countries, “the instinct for an open society is stronger than any protectionist instinct that is likely to arise.”<sup>95</sup> This statement, however, seems questionable when having in mind the broad spectrum of barriers to digital trade governments are starting to implement, including the G7, as well as the recently changed international trade environment, with rising protectionism not only in digital, but also in classical trade as noted in this paper’s introduction.

## 4. WTO framework regarding digital trade

### 4.1 The Work Programme on Electronic Commerce

In May 1998, ministers of Member States at the Second Ministerial Conference of the Doha Round called for the adoption of a comprehensive work programme on electronic commerce, recognizing the growing importance of digital trade creating new opportunities. The WTO Work Programme on Electronic Commerce was subsequently established by the General Council in September that year.

It should be “a comprehensive work programme to examine all trade-related issues relating to global electronic commerce, taking into account the economic, financial, and development needs of developing countries.”<sup>96</sup> The Work Programme should be as broad as possible and of exploratory nature. In addition to providing a working definition of what is understood to be electronic commerce for the means of the Work Programme (as described in chapter 2.1), the document also provides a list of tasks for the Council for Trade in Services, the Council for Trade in Goods, the Council for TRIPS, and the Committee for Trade and Development. The General Council, on the other hand, should play a central role in the process and review the Work Programme on a continuous basis. Since May 2001, the General Council has held

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<sup>95</sup> Baldwin 2016a, 287.

<sup>96</sup> WTO: *Ministerial Declaration of 25 May 1998*. WTO Doc. WT/MIN(98)/DEC/2.

dedicated biannual discussions on cross-cutting issues. However, deliverables of those debates have been limited as differences between Member States are substantial.<sup>97</sup>

Work carried out in the different bodies has been of varying intensity. Progress reports submitted to the General Council show that while there have been 17 reports submitted by the Council for Trade in Services, only four have been submitted by the Council for TRIPs.<sup>98</sup> Work in the respective bodies has been very active in the years after launching of the Work Programme. However, almost no reports have been issued in the 2000s and early 2010s as interest of Members in the topic had waned.<sup>99</sup> More recently, the bodies have become more active again thanks to renewed interest of Member States to engage in this issue.<sup>100</sup> Rising barriers to digital trade as outlined in chapter 3 can certainly be seen as one trigger for this development.

To date, the Work Programme has not been able to present substantial results: this is partially due to Member States having diverging opinions on key issues of electronic commerce including on how discussions should take place.<sup>101</sup> Some have stated needing more time to internally evaluate the impact of digital trade, while others have not taken interest in the matter, and thus have not participated in the discussions at the relevant meetings of the different Councils.<sup>102</sup> While most Members point out the need to further investigate the issue of electronic commerce and to continue examining and exploring its trade related aspects, others view that e-commerce was being given a higher priority compared to the Doha issues of interest to them.<sup>103</sup> Some Member States believe that some of the submissions made other Members went beyond the exploratory nature of the Work Programme and were looking towards rule-making, something that was not part of the 1998 mandate.<sup>104</sup> One Member refused to engage within the Dedicated Discussion convened by the General Council, since from its viewpoint the General Council had no mandate to convene such a discussion. Still

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<sup>97</sup> See WTO: *Documents Online: General Council: Dedicated Discussions on Electronic Commerce*; Farrokhnia, Farrokh & Richards, Cameron (2016): *E-Commerce Products Under the World Trade Organization Agreements: Goods, Services, Both or Neither?* *Journal of World Trade*, 50(5).

<sup>98</sup> WTO: *Documents Online: General Council*.

<sup>99</sup> See number of published documents in WTO Documents Online; Foster, Christopher & Azmeh, Shamel (2018): *The Digital Trade Agenda and Africa. International Centre for Trade and Sustainable Development*. Online: <https://www.ictsd.org/bridges-news/bridges-africa/news/the-digital-trade-agenda-and-africa>.

<sup>100</sup> *Id.*

<sup>101</sup> See WTO: *Report to the General Council of 8 December 2016*, WTO Doc. WT/GC/W/728, para. 1.6.

<sup>102</sup> See WTO: *Report to the General Council of 8 December 2014*, WTO Doc. WT/GC/W/692, para. 1.5.

<sup>103</sup> WTO, WT/GC/W/728, para. 1.8.

<sup>104</sup> *Id.*

others would accuse some delegations of using procedural issues to block discussions entirely.<sup>105</sup>

As a consequence, consensus on substantial issues can hardly be expected without at least agreeing on how discussions on electronic commerce should be carried out. The issues laid out above highlight the need for a more practice-orientated, hands-on, approach in order to deliver results within a reasonable amount of time.

## 4.2 Applicability of WTO provisions to electronic commerce

### 4.2.1 Difficulties of classification

Classification of digital products and services within the framework of the WTO is one of the main controversies between Member States as well as among scholars. With regard to classification of cross border digital trade, two of the main WTO agreements are potentially of relevance: the General Agreement on Tariffs and Trade (GATT) and the General Agreement on Trade in Services (GATS). While trade related IPRs are also an important issue when analysing digital trade within the WTO framework, this paper will not focus on these aspects due to the different nature of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). This provides minimum standards regarding IPRs, thereby supporting trade liberalization in affected goods and services rather than providing rules for liberalization of trade per se.<sup>106</sup>

Discussions have been ongoing for more than twenty years now without any final decision made. This is not only a technical question<sup>107</sup> in terms of statistical classification<sup>107</sup> but a highly political one:<sup>108</sup> classification of e-commerce products and services under the GATT or the GATS can have serious implications for digital trade, given that the regime provided by the GATT is more liberalised than the GATS.<sup>109</sup>

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<sup>105</sup> WTO, WT/GC/W/728, para. 1.9., 1.10.

<sup>106</sup> For further research trade related IPRs in relation to digital trade see, inter alia, Taubmann, Antony (2012): *TRIPS encounters the Internet: An analogue treaty in a digital age, or the first trade 2.0 agreement?* Burri, Mira & Cottier, Thomas (Eds.): Trade Governance in the Digital Age. Cambridge: Cambridge University Press; Wunsch-Vincent, Sascha & Hold, Arnold (2012): *Towards coherent rules for digital trade: Building on efforts in multilateral versus preferential trade agreements.* Burri, Mira & Cottier, Thomas (Eds.): Trade Governance in the Digital Age. Cambridge: Cambridge University Press.

<sup>107</sup> WTO 2017b, 45.

<sup>108</sup> See Burri, Mira (2013): *Should There Be New Multilateral Rules for Digital Trade?* E15Initiative. Geneva: International Centre for Trade and Sustainable Development & World Economic Forum, 3.

<sup>109</sup> GATS: General Agreement on Trade in Services, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, 1869 U.N.T.S. 183, 33 I.L.M. 1167 (1994), hereinafter GATS; GATT 1994: General Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187, 33 I.L.M. 1153 (1994), hereinafter GATT.

There is not only controversy about the classification per se, but also if classification is needed at this point or not.<sup>110</sup> This question is interesting, as neither the GATT nor the GATS clarify what is understood to be a product or a service. However, the different nature of e-commerce products and services, and especially of electronically transmitted products and services, seems to bring the need for definition, as discussed in chapter 2, and clarification in classification. At this point, it is unclear what WTO regime should be applied, especially in regard to digitally delivered products and services.<sup>111</sup>

While the WTO is struggling to clarify the issue of classification, fast technological change has even outdated parts of the discussion. One example of this is if software delivered on an optical disc and software delivered via download should be considered *like-products* as software is mostly not sold on optical discs anymore.<sup>112</sup> This example illustrates the challenges for the WTO that lay ahead. As negotiations within the WTO are very time consuming, it is important to establish a solid and exhaustive system, encompassing arising technologies for coming decades. As of today, many questions still remain unanswered.

The basic question guiding those discussions is whether e-commerce products and services fall under the scope of one of the existing WTO agreements, and if so, which one, or whether modifications, or even an entirely new agreement regarding e-commerce products, is needed. Given that the term e-commerce is not even clearly defined, it will be advantageous to make use of the categories, outlined in chapter 2, to analyse the applicability and classification of e-commerce products and services within the WTO framework: tangible goods ordered via the internet, services delivered in a traditional way, electronically delivered products, as well as the issue of information or data, and remote additive manufacturing.

Scholars widely agree that goods ordered or payed for via the internet but delivered in tangible form still remain goods for the purposes of the GATT when crossing the border, while traditionally delivered services (including remote delivery) ordered via the internet clearly remain subject to the GATS.<sup>113</sup>

As a side note, it is interesting to mention that growth of B2C and C2C cross-border e-commerce, as well as the rise of just-in-time delivery in the B2B segment, are leading to an

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<sup>110</sup> Farrokhnia & Richards 2016, 799, 800.

<sup>111</sup> WTO 2017b, 45.

<sup>112</sup> See López Gonzales & Jouanjean 2017, 21.

<sup>113</sup> Fleuter, Sam (2016): *The Role of Digital Products Under the WTO: A New Framework for GATT and GATS Classification*. Chicago Journal of International Law, 17(1), 158.

increase in small packages and small value products crossing borders.<sup>114</sup> This means it will be important for governments to evaluate and, if necessary, adjust their current *de minimis* to respond to this development.<sup>115</sup> The WTO could assist Members evaluating the optimal *de minimis* in order for regulation not to hamper the development of this kind of trade. At the same time, the WTO could ensure that Members do not lose too much tariff income, which in some developing countries is still an important source of income.

Remotely supplied digital services are encompassed by the GATS, given its technological neutrality within the respective modes,<sup>116</sup> as clarified by the Panel *US – Gambling* and confirmed in *China – Publications and Audiovisual Products*.<sup>117</sup> Questions arise concerning the remaining products, like those which possess a physical equivalent, such as e-books, movies, music, or software.

#### 4.2.2 Classification of digitally transmitted products under the GATT

Some arguments can be made to classify digitally transmitted products under the GATT, such as that content is more important than the need to be a physical good (given that the GATT does not state that it only applies to physical goods). Classification under the GATT would also eliminate the uncertainties around likeness in relation to their physical counterpart.<sup>118</sup> The existing moratorium on applying custom duties on electronic transmission can further be valued in the light of applying GATT rules to digitally transmitted products as custom duties are not an issue within the GATS framework.

Additionally, the WTO Panel might have made a case for classifying digital products that possess a physical counterpart as products under the GATT in a recent ruling: the before cited Brazilian tax measures have been challenged at the WTO under the GATT, as the PPB mostly includes physical ICT-goods, and only some related services and possibly digital products.<sup>119</sup> The Panel found Brazil's measures, inter alia, to be inconsistent with paragraphs 2 and 4 of

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<sup>114</sup> López Gonzales & Jouanjean 2017, 8; OECD 2017b, 11, 12.

<sup>115</sup> See Ahmed & Aldonas 2015, 5; López Gonzales & Jouanjean 2017.

<sup>116</sup> In this regard, it is important to note that Members can discriminate based on the four modes of supply. It is equally important to note that the specific schedules of Members are part of the GATS.

<sup>117</sup> Panel Report *US – Gambling*, inter alia para. 6.285, 6.355, 7.2(b); WTO Appellate Body report adopted 21 December 2009: *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products* (China – Publications and Audiovisual Products), WTO Doc. WT/DS363/AB/R, hereinafter AB report *China – Publications and Audiovisual Products*; WTO Panel report adopted 12 August 2009: *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products* (China – Publications and Audiovisual Products), WTO Doc. WT/DS363/R, hereinafter: Panel report *China – Publications and Audiovisual Products*.

<sup>118</sup> See Farrokhina & Richards 2016, 801, 802.

<sup>119</sup> Panel Report *Brazil – Taxation*, para. 2.2.1.3, 2.2.2.3, 2.2.3.3, 2.2.4.3, 2.2.5.3, 2.2.6.3, 2.2.7.3.

article III (National Treatment on Internal Taxation and Regulation) of the GATT, including for software.<sup>120</sup> This is interesting, as this would include software that is supplied electronically (given that software today is often supplied electronically and no restrictions on how the software has to be supplied (e.g. in physical form) have been made in the Panel report). If this is the case, the Panel would have treated digital products like their physical counterparts by applying GATT rules to them. The still outstanding Appellate Body Report might bring clarification to this issue. If the Appellate Body reaffirms the findings of the Panel, digital products delivered electronically would possibly have to be analysed under the provisions of the GATT – at the first sight a good sign in the light of liberalization. Physical products and their digital counterparts could then be treated as like-products under the GATT. No literature analysing this specific issue of this dispute settlement case can be found at this moment, but further discussions on this issue will be necessary. Questions around custom duties on digitally transmitted products and the line between digital products possessing a physical counterpart, and those that do not, would then have to be evaluated.

#### 4.2.3 Classification of digitally transmitted products and services under the GATS

To date, discussions among scholars point towards classifying digitally transmitted products and services as services under the GATS.<sup>121</sup> Arguments include that a product was rather defined by its content than its form or the importance of domestic regulation for digitally delivered products.<sup>122</sup> Others emphasize that the GATT has been designed only for physical goods, with a number of evidences pointing towards this, such as the listing of physical goods according to their physical appearance.<sup>123</sup> The WTO Secretariat pointed out that any kind of electronic transmission should be seen as a service, as the relevant issue is the act of cross-border transmission, not what can be done with the transmitted data afterwards, such as downloading or printing it out.<sup>124</sup> Furthermore, it was highlighted that “[a]ny suggestion that "electronic transmissions" as such should be regarded as outside the scope of the GATS would

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<sup>120</sup> Panel Report *Brazil – Taxation*, para. 7.1-8.22.

<sup>121</sup> Chen, John-ren & Smekal, Christian (2009): *Should the WTO deal with e-trade taxation issues?* Progress in Development Studies, 9(4); Farrokhina & Richards 2016; Fleuter 2016; Singh, Harsha V., Abdel-Latif, Ahmed & Tuthill, L. Lee (2016): *Governance of International Trade and the Internet: Existing and Evolving Regulatory Systems*. CIGI & Chatham House (Publishers): Mapping the Digital Frontiers of Trade and Intellectual Property. Ontario, London: CIGI, Chatham House, 108.

<sup>122</sup> Farrokhina & Richards 2016, 801, 802.

<sup>123</sup> WTO: *Submission from the European Communities of 09 May 2003*, WTO Doc. WT/GC/W/497.

<sup>124</sup> WTO: *Note by the Secretariat of 16 November 1998*, WTO Doc. S/C/W/68, para. 37, 38.



of course fundamentally damage the entire Agreement and undermine a wide range of existing commitments (...).”<sup>125</sup>

Classifying all digitally delivered products and services under the GATS leads to the question of differences in market access commitments for tangible goods and their digital counterparts as well as discrimination between both, based on national regulation. There has been an ongoing discussion if tangible goods and their physical counterparts should be treated as like-products.<sup>126</sup> In case all digitally delivered products are to be classified as services under the GATS, from a WTO-law standpoint, this is a rather theoretical question. While the GATT only makes references to like-products (ruled by the GATT), the GATS only makes references to like-services (ruled by the GATS). A service therefore can legally not be a like-product in reference to a good or vice versa.

Even though this question could be solved from a legal-perspective if all digitally delivered products were to be services, it still poses challenges in practice as this leads to different treatment, e.g. for music delivered on a CD and music downloaded, in terms of market access and national treatment – a question, the WTO will possibly have to deal with in the near future.

#### 4.2.4 Neither products nor services – a sui generis?

Classifying all digitally delivered products and services as services under the GATS is not unchallenged. Farrokhina & Richards (2016), for example, criticize the discussion focusing only on a choice between GATT and GATS, being a source of inconsistencies.<sup>127</sup> Some scholars as well as WTO Member States point out that e-commerce products and services (sometimes even including tangible goods ordered via the internet) were neither products nor services, but a third category, sometimes leading to the conclusion that a new treaty for them, a sui generis solution, would be necessary.<sup>128</sup> This is an interesting proposal, given that, without a doubt, e-commerce blurs the line between what traditionally was considered to be simply goods and services.

However, when aiming to solve the issue of classification of e-commerce, and especially digitally transmitted, products, those suggestions seem not be useful for delivering quick

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<sup>125</sup> WTO: *Note by the Secretariat of 16 November 1998*, WTO Doc. S/C/W/68, para. 37.

<sup>126</sup> López Gonzales & Jouanjean 2017.

<sup>127</sup> Farrokhina & Richards 2016, 816.

<sup>128</sup> See i.a. Burri 2013; Farrokhina & Richards 2016; Fleuter 2016; Lee-Makiyama (2011): *Future-proofing world trade in technology: Turning the WTO IT Agreement (ITA) into the International Digital Economy Agreement (IDEA)*. European Centre for International Political Economy (ECIPE). Online: <http://ecipe.org/app/uploads/2014/12/WP201104.pdf>.

results and clarity to the issue of classification. This is especially true given the already existing trade agreements within the WTO framework and the time-consuming nature of multilateral negotiations. A new agreement would risk undermining the value of existing agreements.<sup>129</sup> In addition, it would emphasize the need for clarifying the question of what kinds of products should be under its scope beforehand. This, again, leads to the question of classification which that potentially new agreement was originally meant to avoid. Also, negotiating a new agreement solely for digital trade would pose the risk being more restrictive than existing rules as Member States currently seem to be imposing greater rather than fewer barriers, something which could be reflected in a possible new agreement.

#### 4.2.5 New challenges

Even if all electronically delivered products and services were understood to be services, and therefore subject to the GATS, new challenges would arise.

The bundling of products, mixing traditional goods and electronically delivered services (e.g. a farm equipment manufacturer providing data on weather, the soil, health of animals etc.), or the as-a-service-culture would again complicate identifying the applicable WTO regime.<sup>130</sup> Emerging technologies will challenge the existing WTO framework additionally, such as additive manufacturing. In 1998, the WTO Secretariat, in a note to the Council for Trade in Services, stressed that “of course it would be impossible to deliver a tangible product electronically.”<sup>131</sup> This statement is not quite obvious anymore. Baldwin (2016a) notes that when 3D-printing becomes normal, “the transmission of data would substitute for the transportation of goods.”<sup>132</sup> This leads to the question that if a Computer-Aided Design (CAD)-file for 3D-printing is sent from one country to another to be printed at a manufacturing site or at home, is this to be considered a service (providing the file) or a good (as at its point of consumption, it will be a good)? While it could be argued that the cross-border sending of the file is clearly a service,<sup>133</sup> questions arise around the final state of the product: will tariffs apply to printed products or only to its materials, if imported? If the cross-border transaction is solely a service, custom duties on the product are not likely to be applied, challenging the concept of countries protecting certain parts of their economy through high tariffs. This will

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<sup>129</sup> Fleuter 2016, 174.

<sup>130</sup> Gonzales & Jouanjean 2017, 5-9; OECD (2017a): *OECD Digital Economy Outlook 2017*. Paris: OECD Publishing. Online: <http://dx.doi.org/10.1787/9789264276284-en>, 232.

<sup>131</sup> WTO, S/C/W/68, para. 37.

<sup>132</sup> Baldwin 2016a, 291.

<sup>133</sup> See López Gonzales & Jouanjean 2017, 16.

also raise the question if those goods are like-products in relation to products that have been delivered in a traditional way.

At this point, no clear answer can be identified for those questions given the limited scope of this paper. In addition, further development in the additive manufacturing sector will be necessary to determine new kind of questions that will arise in the field of international trade in practice and how the WTO could best address them. It is necessary, however, to have these issues in mind when discussing rules for digital trade, so as to not miss essential points that are already on the rise. Hence, more research on these issues will be necessary to gain a better understanding of the impact of 3D-printing in international trade.

Given the uncertainties highlighted above, it is critical for the WTO to clarify the issue of classification of digital goods and services alongside the described implications, especially in relation to data.

## 5. Analysis of digital trade under the GATS

### 5.1 The logic of the GATS

As the majority of scholars points to trade in digitally transmitted products and services to be ruled by the GATS, as outlined in chapter 4.2.3, this section aims to analyse such digital trade under the provisions of that agreement to evaluate if existing rules already address arising issues. A similar analysis in regard to the GATT is not undertaken at this point, given the limited scope of this paper, without prejudice to the still outstanding Appellate Body ruling in the case *Brazil – Taxation* and its possible subsequent implications. Further research on the applicability of GATT rules to digital trade will be necessary.

The GATS provides a framework for international trade rules for services in all sectors<sup>134</sup> supplied in one of the four modes outlined in the agreement (mode 1: cross-border trade, mode 2: consumption abroad, mode 3: commercial presence of a foreign company, mode 4: presence of natural foreign persons).

It includes two sets of basic obligations for Members: first, General Obligations, including most-favoured nation (MFN)-treatment (article II), prohibiting to discriminate between Members, as well as transparency (article III), automatically applying to all Members in relation to all services covered by the GATS. And second, Specific Commitments regarding market access (article XVI) and national treatment (article XVII), applying to services

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<sup>134</sup> Except services supplied in the exercise of governmental authority as well as air traffic rights services.

designated by Member States in their individual schedules of commitments. Potentially, provisions on domestic regulation (art. VI) disciplines also apply to all services for which Members have undertaken commitments.<sup>135</sup> However, GATS disciplines on domestic regulation in general, or with regard to e-commerce, have not yet been concluded.<sup>136</sup> Thus, the GATS provides a more flexible, less liberalized, regime than the GATT as Members can decide for which services they want to undertake liberalization commitments under which modes of supply.

## 5.2 Modes of supply

According to the scheduling guidelines of the GATS, modes are essentially defined on the basis of the origin of the service supplier and consumer as well as the degree and type of territorial presence at the moment the service is delivered.<sup>137</sup>

It might be apparent that cross-border trade of digitally transmitted products and services is a kind of remote supply and therefore under mode 1.<sup>138</sup> However, some authors argue that certain parts of this trade could also be seen as consumption abroad (mode 2), always when a consumer “visits” a foreign website which is hosted in the territory of a foreign country.<sup>139</sup> Others argue that the line between mode 1, 2, and 3 is blurred as the intangible nature of products and services delivered via the Internet has created incentives for providers to establish their service where it is best advantageous, for instance, in terms of cost or legislation.<sup>140</sup>

Even though mode 1 seems to be the most obvious way of supply for digitally delivered products and services, an example can illustrate the emerging difficulties: Uber is a company

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<sup>135</sup> In that case, it is important to note that measures covered by article VI cannot be covered by article XVI at the same time, as they are mutually exclusive (Panel Report *US – Gambling*; Wunsch-Vincent, Sascha (2006): *The Internet, cross-border trade in services, and the GATS: lessons from US-Gambling*. World Trade Review, 5(3), 339).

<sup>136</sup> WTO (2018b): *WTO negotiations on domestic regulation disciplines*. Online: [https://www.wto.org/english/tratop\\_e/serv\\_e/dom\\_reg\\_negs\\_e.htm](https://www.wto.org/english/tratop_e/serv_e/dom_reg_negs_e.htm); See also: Wunsch-Vincent, Sascha (2008): *Trade rules for the digital age*. Panizzon, Marion, Pohl, Nicole & Sauvé Pierre (eds.) (2008): *GATS and the Regulation of International Trade in Services*, Cambridge: Cambridge University Press, 7-9.

<sup>137</sup> Crosby 2016, 3.

<sup>138</sup> This was also confirmed by the Panel and the Appellate Body in *US – Gambling*.

<sup>139</sup> See Farrokhnia & Richards 2016, 796; Tinawi, Emad & Berkey, Judson O. (2000): *E-Services and the WTO: The adequacy of the GATS classification framework*. Institute for Agriculture & Trade Policy. Online: [https://www.iatp.org/sites/default/files/E-Services\\_and\\_the\\_WTO\\_The\\_Adequacy\\_of\\_the\\_GAT.pdf](https://www.iatp.org/sites/default/files/E-Services_and_the_WTO_The_Adequacy_of_the_GAT.pdf); Wunsch-Vincent 2006, 325.

<sup>140</sup> OECD 2017b, 4.

that acts as a broker for transportation services.<sup>141</sup> Uber itself does not own any cars, might not even employ the driver, but operates an app where clients can order an “Uber”, a transportation service. If a client orders an Uber via this app, the transportation service will take place in one country. Other services, like the matching service via the app, the payment for the driver by Uber, or the insurance are potentially provided from another country. Depending on the classification of the service Uber provides, it operates under different modes of supply of the GATS. If classified as a transportation service, it is, according the argumentation used by the OECD, operating under GATS mode 3, while when classified as a business service, it is operating remotely (mode1).<sup>142</sup> The 2008 System of National Accounts specifies this service as a transportation service (and therefore according to the OECD operating under mode 3). It could also be argued that Uber, as a company, does only provide business services to the driver (finding clients) and clients (finding a driver, providing insurance for the ride).<sup>143</sup> Another point view would be that Uber provides its transportation services remotely (mode 1), or that each service provided in the bundle would be subject to different rules. Thus, the bundling of services poses additional challenges for answering the question of modes of supply.<sup>144</sup>

Most members have made broad liberalization commitments under mode 2, while they have been more restrictive with commitments under mode 1.<sup>145</sup> Again, this makes the question of classification a political one. Classifying cross-border e-commerce under mode 1 might put significant barriers to further development of e-commerce due to lower market access commitments. On the other hand, classification as mode 2 would put Members in the position to find themselves with services more liberalized than they had intended to.<sup>146</sup>

These arising questions pose challenges for policy makers and highlight the need for further clarification on the issue of modes of supply in digital trade to give Members the possibility to update their schedules if deemed necessary.

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<sup>141</sup> Here and following: OECD 2017b, 6-7.

<sup>142</sup> OECD 2017b, 7.

<sup>143</sup> Id.

<sup>144</sup> See López Gonzales & Jouanjean 2017, 10, 15, 16.

<sup>145</sup> Tinawi & Berkey 2000, 5-7; Wunsch-Vincent 2006, 324.

<sup>146</sup> Id.

### 5.3 Inclusion of digital services and data within GATS schedules

Liberalization commitments in services in relation to market access and national treatment depend on the specific schedules of each member. Through a positive list approach, Members have to undertake liberalization commitments for each specific service (or sector) and mode of supply in regard to market access and national treatment. Doing so, they are free to schedule (or not to schedule) specific commitments for complete sectors or any single service, if desired.<sup>147</sup>

As digitalization progressively affects all industries, more and more services are affected by digital trade, even those that were formerly non-tradeable, or at least non-tradeable remotely. On the other hand, there is a number of new services, such as search engines, mobile applications, or cloud computing, for which clarification is needed where those services fit within the existing UN Central Product Classification (CPC)<sup>148</sup>, on which the WTO Services Sectoral Classification list is based.

However, there has been no significant progress in improving the coverage of GATS commitments at the multilateral level since 1997.<sup>149</sup> Even though the UN has updated its CPC-list, this progress has not yet been incorporated in GATS schedules.<sup>150</sup> Hardly anyone could have imagined the tremendous impact the Internet would have on all areas of life and the implications for international trade in services when GATS commitments were undertaken. This is especially the case for sectors where digitalization has been faster than in others, such as telecommunications, media, financial services, retail, education, healthcare, business services, as well as data services.

This can have serious implications for Members when scheduling was undertaken at a moment when the service scheduled was essentially different from today.

This can be illustrated by the WTO dispute settlement case *China – Publications and Audiovisual Products*:<sup>151</sup> the US accused China of posing limitations to market access as well as national treatment in regard to distribution services for publications and audiovisual products, including sound recordings. China argued that by the time when it had undertaken

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<sup>147</sup> See the ruling of the Panel in: WTO Panel Report adopted 31 August 2012: *China – Certain Measures Affecting Electronic Payment Services* (China – Electronic Payment Services), WTO Doc. WT/DS413/R, hereinafter: Panel report *China – Electronic Payment Services*.

<sup>148</sup> WTO: *Communication by the Russian Federation of 13 July 2017*, WTO Doc. JOB/GC/131, para. 3.2.

<sup>149</sup> Crosby 2016, 1.

<sup>150</sup> Weber 2010, 9.

<sup>151</sup> AB Report *China – Publications and Audiovisual Products*; Panel Report *China – Publications and Audiovisual Products*.

commitments in “sound recording distribution services”, they had been exclusively intended for distribution of sound recordings in their traditional hardcopy format and that those commitments did not include network music services. In 2007, when the case was discussed, the majority of sound distribution was already conducted via the Internet.<sup>152</sup> So, the notion of what was understood by “sound recording distribution services” was different to when China had undertaken commitments for this service.<sup>153</sup>

In that case, the Appellate Body noted that interpretation of commitments scheduled has to be based on the common intentions of all Members and not on the unilateral interpretation of its commitments by a single Member.<sup>154</sup> It did, thus, not follow the argumentation of the Panel which assumed that China was aware of the technologic possibility of network music services by the time it undertook its commitments. However, the Appellate Body assumed that using generic terms in the GATS schedules evidences the convincement of Members for technology to change over time.<sup>155</sup>

In this regard, again, the case *US – Gambling* can be cited in which the intra-modal technological neutrality of the GATS was pointed out<sup>156</sup>, thus, confirming its applicability in regard to new technologies. In the case *China – Publications and Audiovisual Products* applicability in regard to new technologies was confirmed again, even though the Appellate Body used a different argumentation.<sup>157</sup>

With the intra-modal technological neutrality of the GATS and the use of generic terms in Members’ schedules, the GATS seems to be equipped to respond to technological changes. This means, on the other hand, Members would have to re-evaluate and, if needed, modify their specific schedules if due to technological change original market access or national treatment commitments are not reflected anymore, e.g. when wanting to differentiate between different means of supply.

Another issue arises around the question of data: it can be confirmed that GATS schedules also include relevant sectors and subsectors for digitally transmitted services, including “Data and Processing Services” (CPC Section 843) and “Data Base Services” (CPC Section 844),<sup>158</sup>

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<sup>152</sup> Peng, Shin-yi (2012): *Renegotiate the WTO “Schedules of Commitments”?: Technological Development and Treaty Interpretation*. Cornell international law journal, 45(2), 416-418.

<sup>153</sup> Id.

<sup>154</sup> Peng 2012, 419-426; AB report *China – Publications and Audiovisual Products*.

<sup>155</sup> Peng 2012, 427.

<sup>156</sup> Panel Report *US – Gambling*, inter alia para. 6.285, 6.355, 7.2(b).

<sup>157</sup> Peng 2012, 429.

<sup>158</sup> Crosby 2016, 5.

both subsectors within “Computer and Related Services” which falls under “Business Services”. However, not all cross-border data flows can be clearly defined as a service involving a monetary transaction. Many data flows rather support an economic activity, such as personal data collected by companies. Further clarification on how this data is to be classified is needed.

## 5.4. Barriers to digital trade covered by GATS provisions

### 5.4.1 General observations

In the light of scholars emphasizing the need for clear rules for digital trade, or even new rules, it is important to see if existing rules would already provide a comprehensive framework to address arising challenges. Consequently, the question was pointed out, if new rules for digital trade could be redundant as they were potentially already covered by existing disciplines.<sup>159</sup> Against the backdrop of the GATS seeming to be most useful for classifying all trade in digitally delivered products and services as shown above, this section aims to analyse if the GATS already provides a comprehensive framework to address rising barriers to digital trade as described in chapter 3, or if other options or modifications of the agreement would have to be evaluated.

### 5.4.2 Tariffs

Tariffs are traditionally not an issue in the services sector. Apart from the earlier-cited articles II and III, potential tariffs on electronically submitted products and services would especially affect supply in mode 1 and could be challenged against article XVI:1 (market access) of the GATS. While there is currently a customs moratorium on digital transmissions, GATS provisions could become relevant if this was no longer upheld. However, in contrast to the GATT, the GATS does not include any provisions specifically on tariffs.

### 5.4.3 Data localization measures

Data localization measures are a particularly sensitive topic as Members probably did not have in mind the flow of cross-border data at a large scale when making GATS commitments, given that the Internet was essentially less developed at that time.

It can be argued that the cross-border remote supply of a digitally delivered service (mode 1) necessarily requires “data-transfer”. Even though not listed explicitly as a subsector, transfer

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<sup>159</sup> Wunsch-Vincent & Hold 2012, 30.



of data is necessary to supply a service electronically.<sup>160</sup> Additionally, physical presence of a company cannot be required when a member has fully scheduled market access commitments in mode 1, including for digital services.<sup>161</sup>

Data localization measures requiring the establishment of local infrastructure directly or indirectly (prohibition of cross border data flows), and consequently local presence of a company, can, therefore, be seen as a restriction on market access in a sector with no limitations on mode 1, violating article XVI:2(c) of the GATS as it limits the number of service operations de facto to zero.<sup>162</sup> However, for interpretation of those paragraphs it is important to examine the common intention of Members with regard to cross-border data transfer at the time when scheduling commitments were undertaken.<sup>163</sup>

An indication for Members' intention can be found in paragraph 5(c) of the Annex on Telecommunications, stating that "each Member shall ensure (...) movement of information within and across borders, including for intra-corporate communications of such service suppliers, and for access to information contained in data bases [sic!] or otherwise stored in machine-readable form in the territory of any Member."<sup>164</sup> This can be seen as an indicator that Members knew cross-border data transfer would be necessary for the supply of services.<sup>165</sup> Members, therefore, would have to ensure free cross-border data transmissions of suppliers of all scheduled services, including data that is supporting a services transaction. However, this paragraph has not yet been challenged in the light of rising data localization measures and access restrictions to the Internet implemented by governments.

It can also be argued that data localization measures are in violation of article XVII of the GATS in sectors with no limitations on mode 1, as requiring companies from other Member States to establish infrastructure in its own territory will come at additional costs for those companies. This, thus, modifies the conditions of competition through giving them less favourable treatment than national companies, as outlined in paragraph 3 of article XVII.

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<sup>160</sup> Crosby 2016, 6.

<sup>161</sup> See Crosby 2016, 3; López González & Jouanjean 2017, 13.

<sup>162</sup> Following the argumentation provided by the Panel and the Appellate Body in *US – Gambling* in relation to article XVI:2(a) and applying it to 2(c).

<sup>163</sup> See in this regard the findings of the Appellate Body in *US – Gambling* (AB report *US – Gambling*, para. 159) and *China – Publications and Audiovisual Products* (AB report *China – Publications and Audiovisual products* para. 405) reminding of the importance the common intention of parties as outlined in the Vienna Convention.

<sup>164</sup> GATS Annex on Telecommunications, para. 5(c).

<sup>165</sup> Crosby 2016, 8.

Following this argumentation, data localization requirements could only be in compliance with the GATS for “unbound” services, or services where according to GATS schedules physical presence is required for a mode 1 supply.

#### 5.4.4 Quotas

Article XVI:2 of the GATS prohibits limitations on the number of service suppliers (XVI:2(a)), the total value of service transactions or assets (b), the total number of operations (c), the total number of natural persons (d), the type of legal entity (e), and the participation of foreign capital (f), where specific commitments have been undertaken. All of these paragraphs are of relevance for trade in digitally delivered products and services. *US – Gambling* has shown that the total prohibition of a (digital) service is considered a numerical quota and thus in violation of article XVI:2(a). In *China – electronic payments*, the Panel has reaffirmed this argumentation in relation to maintaining a monopoly supplier where market access commitments have been undertaken.<sup>166</sup>

#### 5.4.5 Web blocking and filtering

Blocking and filtering of commercial<sup>167</sup> websites and apps can be interpreted in the light of various provisions of the GATS. In the first place, prohibiting the supply of a service, by blocking or filtering the supplier’s website, could be interpreted in the light of article XVI:2(a) and (b) in sectors where commitments have been undertaken. This would also be the case if a service, such as access to a social network, is supplied on a non-monetary basis to the consumers, but rather on the basis of “paid with data” as GATS does not specify that a monetary transaction needs to be involved. However, as those “free to use” services are usually monetized through advertising, the question arises how a case like blocking of the Facebook website should be analysed: in the light of commitments undertaken in the “Computer and Related Services” section, such as “Data Processing Services” (CPC 843), or the “Communication Services” section (e.g. CPC 7523) as this is how Facebook gets its data? Or, rather as advertising services (CPC 871) in the “Other Business Services” section<sup>168</sup> as this how Facebook realises sales? This is equally the case for all websites and apps with a business model based on connecting user-data and advertising.

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<sup>166</sup> Panel Report *China – Electronic Payments*.

<sup>167</sup> Filtering and blocking of private, non-commercial websites cannot be considered a barrier to trade as stated in chapter 3.

<sup>168</sup> See: WTO: *Services Sectoral Classification List from 10 July 1991*, WTO Doc. MTN.GNS/W/120.

It can also be argued that filtering and blocking foreign websites and apps in scheduled sectors is in violation of article XVII of the GATS when national “like-websites and apps” (as in the concept of like-services and like-services suppliers as outlined in article XVII:1) are allowed to operate. This could be the case for China when blocking Facebook and WhatsApp or undermining its use (by filtering messages sent)<sup>169</sup>, but at the same time allowing WeChat, a Chinese platform which offers very similar services like Facebook and WhatsApp. Especially the case of blocking WhatsApp, but also Facebook Messenger, could be challenged against China’s commitments undertaken in Telecommunications and Value-added Services, including electronic mail, voice mail, and electronic data interchange in regard to national treatment, where no limitations are included in the Chinese schedule.<sup>170</sup>

Web blocking and filtering could also violate MFN-obligations (art. II), if measures applied accord less favourable treatment to services or service suppliers from one Member State in relation to another Member State. This is the case if mainly American news websites are blocked, while e.g. Russian news websites are available.

#### 5.4.6 Access to telecommunications infrastructure and net neutrality

Regarding barriers to access to telecommunications infrastructure and services as well as net neutrality, three additional agreements to the GATS should be mentioned: the Annex on Telecommunications, the 4<sup>th</sup> protocol to the GATS, and the Reference Paper.<sup>171</sup>

The Annex on Telecommunications recognizes the essential nature of telecommunications services for trade in services and ensures access to telecom networks and basic telecom services for the supply of scheduled services, regardless if basic telecommunications services have been scheduled.<sup>172</sup> Hence, the Annex on Telecommunications provides essential protection against restrictions for access to telecommunications-infrastructure and services in the sectors where commitments have been undertaken.

The 4<sup>th</sup> protocol to the GATS includes provisions on commitments by Member States to liberalize a significant number of basic telecommunication services, including data transmission, however, only for scheduled services.<sup>173</sup> The Reference Paper, on the other hand, includes some key principles for net neutrality, including transparency and non-discrimination. It also contains positive language on competition and interconnection

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<sup>169</sup> Bradsher 2017.

<sup>170</sup> GATS, Schedule CLII – The People's Republic of China of 01 October 2001. WT/ACC/CHN/49/Add.2.

<sup>171</sup> See Shroff & Kuhlmann 2016.

<sup>172</sup> GATS Annex on Telecommunications, para. 5(a) - (e); See also: Shroff & Kuhlmann 2016, 21.

<sup>173</sup> Shroff & Kuhlmann 2016, 21

between telecommunications companies. However, this language has never been applied in the Internet context.<sup>174</sup>

Even though the scope of these three agreements is limited by participation of Members and commitments made, they provide a starting point for ensuring liberalized access to the Internet and Internet services, the prohibition of data localization measures, as well as the principle of net neutrality.

#### 5.4.7 Taxation

As in classical trade in services, the GATS provides a framework for addressing discriminatory taxation within the concept of MFN (art. II), national treatment (art. XVII), when scheduled accordingly, and potentially domestic regulation (article VI).

As outlined in chapter 4.2.2, the before-cited case of Brazil has not been challenged at the WTO under GATS, but under the GATT, as the PPB mostly includes physical goods and only some related services and digital products.<sup>175</sup> Nevertheless, taxation measures focusing on services could be challenged at the WTO under the GATS in sectors where Members have undertaken specific commitments in the light of article VI:1 and article XVII:1, as well as article II if tax regimes discriminate between Members.

#### 5.4.8 Technical standards

The forced use of specific technology or technical standards could potentially be seen as in violation of article VI:5(a)i. This is the case if the use of a certain technology or standard is not based on objective and transparent criteria, such as the mere ability to supply certain services, or more burdensome than necessary to ensure the service's quality as outlined in the paragraphs 4(a) and (b) of article VI of the GATS. However, relevant disciplines, as outlined in article VI of the GATS, have not been developed yet, thus, being only a potential coverage.

The need to use specific technology or technical standards could, however, be analysed in the light of national treatment commitments for scheduled services (art. XVII:3): forcing companies to use a different, potentially unusual, standard or technology will come at additional costs for foreign companies compared to national companies that operate from the beginning based on these different standards or technologies. In case of a dispute, it would

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<sup>174</sup> While the case *Mexico – Telecoms* the Panel clarified the applicability of the Reference Paper to cross-border data interconnection, its applicability on the Internet has not been challenged yet and remains therefore unclear. See: Ahmed & Aldonas 2015, 8; Panel Report *Mexico – Telecoms*; Shroff & Kuhlmann 2016, 22.

<sup>175</sup> Panel Report *Brazil – Taxation*.

then be upon the Panel or Appellate Body to determine if a technology or standard would have to be considered unusual, so that it modifies the conditions of competition.

#### 5.4.9 Intellectual property rights, geoblocking, and others

As IPRs are essentially addressed by the TRIPS agreement, geoblocking undertaken by governments can be interpreted in the same regard as web blocking and filtering, and Internet governance related topics do not fall under the main scope of the WTO, those issues will not be further analysed at this point, given the limitations in space. However, clarifying their relation to WTO-law is important and should be addressed by future research.

### 5.5 GATS exceptions

Barriers violating one or several articles of the GATS may be covered by a relevant exception as stated in article XIV “General Exceptions” of the agreement. In order to do so, the measure in question must, first, fall within the scope of one of the exceptions laid out in article XIV and, second, comply with the chapeau of article XIV. Two of the most cited exceptions will be analysed in the following.

The protection of public moral and maintaining the public order (as outlined in art. XIV(a): necessary to protect public morals or to maintain public order) is one of the often-cited arguments for implementing quotas as well as measures for blocking and filtering of websites. Thus, it has been referred to in two WTO dispute settlement cases related to digital trade already. In the WTO dispute settlement cases *US – Gambling* as well as *China – Publications and Audiovisual Products*, the Appellate Body upheld the argumentation of prohibiting certain digital services to protect public morals. However, in the case *China – Publications and Audiovisual Products*, it was made clear that this exception could not be evoked for banning services (in that case, inter alia, digital distribution of books and movies) in a widespread general manner, but had to be applied based on individual circumstances.<sup>176</sup> It can also be noted that compliance with the chapeau of article XIV is questionable, especially in regard to web blocking and filtering in an arbitrary manner, leading to possible de facto discrimination between Members.

In the case of data localization requirements, the data privacy of citizens (art. XIV(c)ii) is one of the most mentioned reasons for implementation of such requirements. However, its applicability has not yet been challenged in the ambit of digital trade. It is questionable,

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<sup>176</sup> AB report *China – Publications and Audiovisual Products*, para. 234-311.

however, if these measures would sustain the necessity test, as it can be argued that security of data does not depend on the territory stored, but rather on security measures taken by companies to protect data.<sup>177</sup> On the other hand, it can be argued that foreign governments could access data or force companies by legislation to share data if data is stored in their territory. But even if data is stored within national territory, foreign governments can force their domestic based companies to give them access to data stored abroad as the case of the US government, forcing Google to share data stored on servers in Ireland, shows.<sup>178</sup> The passing of the necessity test for data localization measures would, again, be in question.

South Korea's Personal Information Protection Act, for example, requires companies to obtain user consent prior to exporting data, including details on who receives the data, the personal information provided, the period the data will be stored, as well as the purpose of exporting.<sup>179</sup> It can be argued that such comprehensive provisions, especially the requirement to provide additional information, do not have any effect on the privacy of data, leading to the conclusion that this measure is not necessary for the protection of data privacy of citizens and, consequently, does not comply with the GATS in sectors in which South Korea has scheduled market access commitments.

Restrictive measures might also be covered by Article XIV bis "Security Exceptions", especially by paragraph 1(b). This paragraph covers all measures that Members "consider necessary" for the protection of essential security interests. These security related exceptions are, therefore, difficult to challenge at the WTO. Hence, a "fair use" of this article by Members is necessary to ensure operability of the GATS, also in the digital sphere.

With increasing regulation limiting cross-border data flows justified with privacy or security questions, it will be important for governments to find the right balance between protection of interests and openness of the internet. While the GATS might grant WTO Members the opportunity to restrict certain activities in their territory, this might also limit the possibilities of their citizens and companies to participate in the international digital economy. On the other hand, as the recent scandal regarding Facebook and Cambridge Analytica has shown, governments will also have the duty to ensure that private companies, including foreign

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<sup>177</sup> See Corry 2017, 3-5.

<sup>178</sup> Kerr, Orin (2017): *Google must turn over foreign-stored emails pursuant to a warrant, court rules*. The Washington Post. Online: [https://www.washingtonpost.com/news/volokh-conspiracy/wp/2017/02/03/google-must-turn-over-foreign-stored-e-mails-pursuant-to-a-warrant-court-rules/?utm\\_term=.f041e246e251](https://www.washingtonpost.com/news/volokh-conspiracy/wp/2017/02/03/google-must-turn-over-foreign-stored-e-mails-pursuant-to-a-warrant-court-rules/?utm_term=.f041e246e251).

<sup>179</sup> Cory 2017, 5.

companies, will not abuse data of their citizens in their interest.<sup>180</sup> However, when implementing restrictions to digital trade to achieve relevant policy goals, Members should always only implement measures that are the least trade-restrictive to attain the respective objective.

## 5.6 Summary

When applied to existing barriers, it was shown that GATS rules already address most identified barriers to international trade in digitally delivered products and services when WTO Members undertake relevant commitments.

However much of its provisions remain yet unchallenged in relation to digital trade, apart from some clarifications made by the Panel and the Appellate Body in the cases *Mexico – Telecoms*, *US – Gambling*, *China – Publications Audiovisual Services*, and *China – Electronic Payment Services*. Further clarification, either through WTO dispute settlement cases, or through active rule-making, is therefore necessary to confirm the applicability of GATS.

## 6. WTO Ministerial Decisions and new ways

### 6.1 Ministerial Decisions since the launch of the Work Programme

Besides the launch of the Work Programme, the response of the WTO as an organization with regard to the rise of e-commerce can be analysed through Ministerial Decisions issued as no other results have been conveyed, yet. Since the launch of the Work Programme on Electronic Commerce, Ministers of Member States have included language on e-commerce in most of their Ministerial Decisions made at Ministerial Conferences (MCs). However, content of those Decisions, so far, has been limited as they contain only the minimum consensus reached by Members in regard to electronic commerce.

The Geneva Ministerial Declaration on global electronic commerce of 1998 called for the establishment of a comprehensive work programme by the General Council as outlined earlier. The Declaration also established a moratorium on custom duties on electronic transmissions, stating that “[w]ithout prejudice to the outcome of the work programme or the rights and obligations of Members under the WTO Agreements, we also declare that

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<sup>180</sup> Schulz 2018, 12-24.

Members will continue their current practice of not imposing customs duties on electronic transmissions.”<sup>181</sup>

In the 2001 Doha Declaration, besides taking note of the work accomplished in the respective bodies, Ministers acknowledged that “electronic commerce creates new challenges and opportunities for trade for Members at all stages of development”<sup>182</sup> and recognized “the importance of creating and maintaining an environment which is favourable to the future development of electronic commerce.”<sup>183</sup> Ministers also upheld the existing moratorium on custom duties for electronic transmissions.

The 2005 Hong Kong Declaration and 2009 Geneva Decision, inter alia, take note of the reports submitted, state that the Work Programme is not yet complete, and agree to maintain the institutional arrangements for the Work Programme as well as the moratorium on custom duties on electronic transmissions until the next session.<sup>184</sup>

The 2011 Geneva Ministerial Decision is broader in its scope as, for the first time, language is included specifically making reference to developing and least-developed countries as well as SMEs. It also includes tasking of the General Council on these issues, including examination and monitoring of development-related issues, such as technical assistance, capacity building, and the facilitation of access to electronic commerce.<sup>185</sup> Before, Declarations only included more generic language on “development-related issues”. Ministers also instructed the General Council to consider recommendations on possible measures related to electronic commerce which can be seen as a first step towards widening the mandate of the Work Programme towards exploring possibilities for rule making.

The 2013 Bali Ministerial Decision has been the broadest in its scope so far. While maintaining some language of the 2011 Ministerial Decision, Ministers added language on technology-related issues, stating that “the Work Programme should continue to examine the trade related aspects of, inter alia, enhancing internet connectivity and access to information and telecommunications technologies and public internet sites, the growth of mobile telephony, electronically delivered software, cloud computing, the protection of confidential data, privacy and consumer protection.”<sup>186</sup> Thus, for the first time, besides naming relevant

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<sup>181</sup> WTO: *Ministerial Declaration of 25 May 1998*, WTO Doc. WT/MIN(98)/DEC/2.

<sup>182</sup> WTO: *Ministerial Declaration of 20 November 2001*, WTO Doc. WT/MIN(01)/DEC/1, para 34.

<sup>183</sup> Id.

<sup>184</sup> WTO: *Ministerial Declaration of 22 December 2005*, WTO Doc. WT/MIN(05)/DEC, para. 46; WTO: *Ministerial Decision of 11 December 2009*, WTO Doc. WT/L/782.

<sup>185</sup> WTO: *Ministerial Decision of 19 December 2011*, WTO Doc. WT/L/843.

<sup>186</sup> WTO: *Ministerial Decision of 11 December 2013*, WTO Doc. WT/MIN(13)/32, WT/L/907.



development related issues, Ministers made reference to relevant trade-related technological issues which can be interpreted as a sign of advancing the Work Programme as more concrete language was added. The 2013 Decision equally maintains tasking for the General Council related to considering recommendations on possible measures regarding e-commerce, and upholds the moratorium on custom duties, thus underscoring the will of Ministers to substantially advance on this issue. This interpretation is supported by the 2013 report of the General Council submitted to Ministers prior to MC9, stressing that “delegations demonstrated a high level of willingness to work towards a consensus text (...) showed flexibility and provided constructive comments and drafting suggestions.”<sup>187</sup>

In 2015 however, momentum was lost: the 2015 Nairobi Ministerial Decision does neither include tasking related to development issues or technological questions nor tasking of the General Council in relation to considering recommendations on possible measures.<sup>188</sup> Instead, Ministers instructed the Council to “hold reviews” and “report” to the next Ministerial Conference. Even though the decision makes references to “the existing mandate”<sup>189</sup>, the lack of clear language compared to prior Decisions points to a lack of consensus between Members on these issues. This is underscored by several draft proposals submitted by different groups of Member States<sup>190</sup> as well as disagreement between Members on the exact scope of the mandate of the Work Programme.<sup>191</sup> Only two key points from earlier decisions can be identified: the continuation of the work of the Work Programme as well as maintaining the moratorium on custom duties.

The latest 2017 Buenos Aires Decision has been the shortest Ministerial Decision on the issue of electronic commerce so far. While it brings clarity to the scope of the mandate, by agreeing to continue the work of the Work Programme based on the mandate given in the original 1998 document on the Work Programme on Electronic Commerce,<sup>192</sup> it nullifies progress achieved in prior Ministerial Decisions, such as in 2011 and 2013. As earlier Decisions, it maintains the practice of not imposing custom duties on electronic transmissions.

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<sup>187</sup> WTO: *General Council Report of 11 November 2013*, WTO Doc. WT/GC/W/676.

<sup>188</sup> WTO: *Ministerial Decision of 21 December 2015*, WTO Doc. WT/MIN(15)/42, WT/L/977.

<sup>189</sup> Id.

<sup>190</sup> WTO: *Documents Online*.

<sup>191</sup> WTO: *General Council Report of 24 July 2015*, WTO Doc. WT/GC/W/701, para. 1.5.

<sup>192</sup> WTO: *Ministerial Decision of 18 December 2017*, WTO Doc. WT/MIN(17)/65, WT/L/1032.

## 6.2 Positions of key WTO Member States

As outlined at multiple points in this paper, opinions of Members regarding the different aspects of electronic commerce are very diverse, consequently having led to hardly any progress achieved within the Work Programme, despite ongoing discussions for 20 years. The very limited scope of the most recent Ministerial Decisions points to a lack of consensus between Members on basically all relevant topics.

This can be seen when looking at draft Ministerial Decisions submitted to the General Council by delegations in the forerun of MC11. Draft Ministerial Decisions submitted were by eight different delegations and co-sponsors to the General Council, which were all consequently forwarded to Ministers.<sup>193</sup> Draft Decisions have been submitted by the African Group<sup>194</sup>, Bangladesh, China, the EU and co-sponsors, India, Japan and co-sponsors, Russia, as well as Singapore and co-sponsors. Interestingly, no proposal has been submitted by the US under its new administration. Efforts of the Chairman of the General Council to bridge differences between proposals have not been successful as proposals included a wide range of different standpoints that could not be brought together.<sup>195</sup> With lack of consensus at the working-level, results at the MC11 high-level discussions could hardly have been achieved.

In order to illustrate the difficulties of finding consensus on important issues, key points of Members' draft decisions shall be noted:

Four delegations and their co-sponsors called for the establishment of a new forum for discussions to advance the digital trade agenda of the WTO. The European Union and its co-sponsors called for establishing a Working Party on electronic commerce to "conduct preparations for and carry out negotiations on trade-related aspects of electronic commerce on the basis of proposals by Members."<sup>196</sup> In a similar vein, Russia called for the establishment of a new Working Group on electronic commerce "to provide Members with the appropriate forum for discussions on e-commerce issues and its development, including the possibility of developing international rules."<sup>197</sup> Members should be able to submit topics to the Working Group, including on elimination of trade barriers and trade facilitation. The proposal of Japan

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<sup>193</sup> WTO: *General Council: Report by the Chairman of 1 December 2017*. WT/GC/W/739.

<sup>194</sup> Without prejudice to participation of Nigeria in the Joint Ministerial Statement at the end of MC11 regarding e-commerce.

<sup>195</sup> WTO, WT/GC/W/739.

<sup>196</sup> WTO: *Communication from Australia, Canada, Chile, Colombia, The European Union, Israel, The Republic of Korea, Mexico, Montenegro, New Zealand, Norway, Paraguay, Peru and Ukraine of 30 November 2017*, WTO Doc. JOB/GC/140/Rev.5.

<sup>197</sup> WTO: *Communication from the Russian Federation of 06 October 2017*, WTO Doc. JOB/GC/137.

and co-sponsors equally called for establishing a Working Group tasked, inter alia, with the assessment of whether clarification and strengthening of current WTO rules regarding electronic commerce was necessary, as well as the identification of priority needs for developing countries.<sup>198</sup> China, in addition to maintaining the current discussions under the General Council, proposed to establish a forum for horizontal “Dedicated Discussions” on issues such as facilitation of cross border digital trade.<sup>199</sup> The four other draft Ministerial Decisions, however, only reiterated maintaining the current overall working structure of the Work Programme.

Three draft Ministerial Decisions raised concerns in relation to maintaining the customs moratorium on electronic submissions, despite the moratorium being one of the few deliverables of the current Work Programme. The African proposal pointed out that “the renewal of the moratorium should not be seen as automatic [as the](...) African Group is still discussing it in view of the revenue implications.”<sup>200</sup> In the same regard, Bangladesh proposed to grant the possibility to least developed countries (LDCs) to impose customs and quotas on digitally transmitted products, while advanced economies, as well as developing economies on a voluntary basis, should be restrained from implementing custom duties and quotas for all digitally transmitted goods and services originating from LDCs.<sup>201</sup> India, on the other hand, conditioned its acceptance of the moratorium to Members’ decision on TRIPS Non-Violation and Situation Complaints.<sup>202</sup>

Further issues brought up were the definition and classification of e-commerce products, as well as the call for further work on development-related issues and technological questions included in proposals of the African Group, Bangladesh, China, Japan and co-sponsors, and Russia.

However, India opposed any discussions on issues that went beyond the mandate of the existing Work Programme, and especially on binding rules regarding electronic commerce.<sup>203</sup> Subsequently, following the logic of the rule of consensus, its draft Decision submitted, being the shortest of all, is almost identical with the final Ministerial Decision adopted.

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<sup>198</sup> WTO: *Communication from Costa Rica; Hong Kong, China; Japan; Switzerland and the separate customs territory of Taiwan, Penghu, Kinmen and Matsu of 27 November 2017*, WTO Doc. JOB/GC/156/Rev.1.

<sup>199</sup> WTO: *Communication from China of 10 November 2017*, WTO Doc. JOB/GC/150.

<sup>200</sup> WTO: *Communication from the African Group of 21 November 2017*, WTO Doc. JOB/GC/155.

<sup>201</sup> WTO: *Communication from Bangladesh of 20 November 2017*, WTO Doc. JOB/GC/152/Rev.1.

<sup>202</sup> WTO: *Communication from India of 20 November 2017*, WTO Doc. JOB/GC/153.

<sup>203</sup> Suneja, Kirtika (2017): *India opposes e-commerce talks at WTO; submits document*. Economic Times of India. Online: <https://economictimes.indiatimes.com/news/economy/policy/india-opens-e-commerce-talks-at-wto-submits-document/articleshow/61907459.cms>.

### 6.3 New ways – a plurilateral approach?

Given the substantial differences between Members and the difficulties of reaching consensus on substantial matters at MC11, a group of 71 Member States, accounting for 77 percent of global trade,<sup>204</sup> issued a Joint Statement, stating to work more closely together on trade-related aspects of electronic commerce by initiating exploratory work towards future WTO negotiations.<sup>205</sup>

The initiative was mostly supported by advanced economies. Only some emerging and developing economies have joined and of all LDCs, only Lao People's Democratic Republic and Cambodia have signed the statement.<sup>206</sup> Low participation among developing countries in this declaration is interesting to note, given the before mentioned discussions: some scholars point out that especially SMEs from developing economies and LDCs will benefit most from digitalization of the trade.<sup>207</sup> On the other hand, many developing economies themselves state that they are currently still in the process of evaluating the implications of the digital economy and do not want to be part of any agreement that later might come as a disadvantage.<sup>208</sup> African countries additionally pointed out that the narrative of SMEs benefiting most from multilateral rules on digital trade was "false"<sup>209</sup>.

Nine proposals by delegations, including the US, on how to move forward in relevant aspects have been put forward in April 2018<sup>210</sup> in preparation for a meeting of the group to be held in May 2018.<sup>211</sup> Participation to negotiations is open to all Members.

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<sup>204</sup> WTO (2017a): *New initiatives on electronic commerce, investment facilitation and MSMEs*. Online: [https://www.wto.org/english/news\\_e/news17\\_e/minis\\_13dec17\\_e.htm](https://www.wto.org/english/news_e/news17_e/minis_13dec17_e.htm).

<sup>205</sup> WTO: *Communication from Albania; Argentina; Australia; Bahrain; Brazil; Brunei Darussalam; Cambodia; Canada; Chile; Colombia; Costa Rica; European Union; Guatemala; Hong Kong, China; Iceland; Israel; Japan; Kazakhstan; Korea, Republic of; Kuwait; Lao PDR; Liechtenstein; the former Yugoslav Republic of Macedonia; Malaysia; Mexico; Moldova, Republic of; Montenegro; Myanmar; New Zealand; Nigeria; Norway; Panama; Paraguay; Peru; Qatar; Russian Federation; Singapore; Switzerland; Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu; Turkey; Ukraine; United States; and Uruguay of 13 December 2017*, WTO Doc. WT/MIN(17)/60.

<sup>206</sup> LDCs as specified by the UN: UNCTAD (2018): *UN list of Least Developed Countries*. Online: <http://unctad.org/en/Pages/ALDC/Least%20Developed%20Countries/UN-list-of-Least-Developed-Countries.aspx>.

<sup>207</sup> See i.a. Ahmed & Aldonas 2015; UNCTAD 2017.

<sup>208</sup> WTO, WT/GC/W/728, para. 1.11.; WTO, JOB/GC/144.

<sup>209</sup> WTO, JOB/GC/144, para. 3.3, 3.4.

<sup>210</sup> Proposals submitted between 6 April and 16 April 2018. Number of submissions as of 21 April 2018 (WTO Documents Online).

<sup>211</sup> ICTSD (2018): *WTO Members Submit Proposals Aimed at Advancing Exploratory E-Commerce Work*. Bridges, 22, 13. Online: <http://www.ictsd.org/bridges-news/bridges/news/wto-members-submit-proposals-aimed-at-advancing-exploratory-e-commerce>.

This new initiative of 71 Member States could ultimately lead to a new, plurilateral agreement under the auspices of the WTO which would give other Members the option to join if they desired. The advantage of this way forward might be to reach an agreement sooner rather than later. However, for countries not initially participating, joining at a later stage might come as a disadvantage. Nevertheless, this opt-in, opt-out version could be a good way for advancing the WTO agenda on electronic commerce. It would help the organization to address the challenges that lay ahead in a digitized trade world rather sooner than later, to not lose its credibility or become simply outdated.<sup>212</sup>

Critics of this Joint Statement, on the other hand, emphasize the need to clarify open questions with relevance for all Members, such as the technological neutrality of the GATS, application of GATS modes 1 or 2, as well as classification of digitally delivered products, on a multilateral basis first.<sup>213</sup> In addition, a plurilateral approach would come at the risk of fragmentation of WTO-law in relation to basic issues.

Another way forward could be to widen the scope of the Trade in Services Agreement (TiSA) which is currently negotiated as a plurilateral agreement between 23 Members of the WTO to provide further liberalization in the services sector. TiSA negotiations address a number of issues related to digital trade, including data localization measures, transparency, and the need for regulation in this area.<sup>214</sup>

However, there has been no breakthrough that would suggest that a final agreement is imminent. In addition, again, the plurilateral approach would come at the cost of fragmentation of rules within the WTO and the question of interoperability with the GATS.<sup>215</sup> However, the TiSA might provide relevant input to build on when negotiating rules for digital trade on a multilateral basis.

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<sup>212</sup> See Rodríguez Mendoza, Miguel (2016): *A New Architecture for the WTO?* Primo Braga, Carlos A. & Hoekman, Bernard (eds.): *Future of the Global Trade Order*. San Domenico di Fiesole, Lausanne: European University Institute, 15-30.

<sup>213</sup> WTO, JOB/GC/144, para. 2.5.

<sup>214</sup> Ahmed & Aldonas 2015, 8.

<sup>215</sup> Burri 2013, 8.

## 7. Mid-conclusion: analysis of the response of the WTO to the rise of digital trade

The WTO established its Work Programme on Electronic Commerce in 1998, at the very beginning of the rise of the digital economy. Thus, it cannot be stated that the organization has overlooked the beginning of digitalization of trade.

Despite recognizing the, at that time, new phenomena from an early stage on, the organization has remained paralyzed ever since: 20 years have passed, with hardly any deliverables achieved. Apart from establishing a moratorium on custom duties on electronic transmission, Ministerial Decisions have not advanced the WTO agenda on digital trade. Small progress made in the years 2011 and 2013 has been reversed by recent decisions, especially the most recent one.

This paper has identified a number of open basic questions the WTO has not been able to answer yet.<sup>216</sup> In the first place, a clear definition of what is understood by the term e-commerce as well as a clear statement regarding classification of digitally transmitted products and services is pending. If GATS rules were to be applied, further clarification is needed on the correct mode of supply and the applicability of GATS provisions to digital trade as well as an update of GATS schedules.

Especially in the light of existing and rising barriers to digital trade, a commitment for applying GATS rules could be useful to address these barriers. This paper has shown that GATS provisions already address most barriers to digital trade. This is, inter alia, relevant in regard to market access, national treatment, possible domestic regulation provisions, and the GATS general exceptions. Also, the applicability of the Annex on Telecommunications, the 4<sup>th</sup> Protocol to the GATS, and the Reference paper to the digital economy has not been clearly confirmed yet and should therefore be clarified.

Against this backdrop, different variables can be identified that may have impeded progress.<sup>217</sup> Those variables should only serve as indicators at this point, further research on causality would be necessary to analyse the effects of the different variables on the Work Programme.

One part of the problem certainly is the way the WTO operates, relying on consensus of Members for rule-making. Hence, the above identified great diversity of interests of Members

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<sup>216</sup> For a tabularized overview, see table 1 in the annex of this paper.

<sup>217</sup> For a tabularized overview, see table 2 in the annex of this paper.

States in relation to the Work Programme can be named as a major reason. The stalled Doha-round is another barrier which not only impedes progress in related trade areas, but also questions the WTO as an institution, due to a lack of deliverables and puts further burdens on negotiations within the WTO in general.<sup>218</sup>

Another issue to be highlighted is how the Work Programme operates. Work is conducted within the respective bodies on an explorative basis. The bodies report to the General Council which then reports to Ministers, currently every two years. No real forum for permanent, more frequent, or more flexible discussions has been established. In the current, fast-developing, environment of the Internet economy, two years can be a substantial amount of time. Russia, for example, is of the opinion that the lack of a proper forum for orderly discussions is one of the main reasons why the Work Programme has not been able to deliver results as of today, with work on electronic commerce having become, in the words of the Russian delegation, “more chaotic than ever”<sup>219</sup>.

Another issue that can be identified is the mandate given. According to some Members, the Work Programme does not have a mandate to work towards rule-making but is only of exploratory nature.<sup>220</sup> When the Work Programme was established however, a clearer mandate could have been given, for example clearly stating that one deliverable should be to identify barriers and ways the WTO can address them. A clear mandate from the beginning on might have led to more focused work within the Work Programme. Without that clear mandate, and induced by the dot-com crisis,<sup>221</sup> Member States lost interest very quickly, activity in the respective bodies waned, and momentum was lost. Even though momentum could be regained, the above outlined difficulties, such as need of consensus, become of importance again.

Another barrier for progress is the existing digital divide, related to significant knowledge gaps as well as infrastructure gaps: First, there is a knowledge gap, between Members of the WTO as many countries are not yet aware about all the implications digital trade will have on their economy and citizens as stated in their different communications. Second, many developing

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<sup>218</sup> Baldwin, Richard E. (2016b): *The World Trade Organization and the Future of Multilateralism*. Journal of Economic Perspectives, 30(1), 113; Primo Braga, Carlos A. & Hoekman, Bernard (2016): *Future of the Global Trade Order*. Primo Braga, Carlos A. & Hoekman, Bernard (eds.): Future of the Global Trade Order. San Domenico di Fiesole, Lausanne: European University Institute, IMD, 2.

<sup>219</sup> WTO, JOB/GC/131, para. 4.1.

<sup>220</sup> WTO, WT/GC/W/728, para. 1.8.

<sup>221</sup> Weber 2010, 13.

countries face substantial lack of infrastructure for conducting digital trade as outlined in chapter 3.1.

Additionally, a knowledge gap can be identified between the trade governance community and the Internet governance community as there has been no significant overlap between both until very recently.<sup>222</sup> Trade policy makers have simply not been aware of Internet specific rules, implications, and needs.

Until very recently, Members also adopted a “wait-and-see” approach instead of actively engaging in the subject. Few dispute settlement cases in relation to digital trade have been brought to the table so far, but each has brought significantly more clarity to open questions than 20 years of work in the Work Programme. Given the stalled negotiations, further clarification on open issues in relation to e-commerce is likely to happen in the near future only if a Member files a complaint against another Member. The WTO Secretariat itself does not have the right to do so itself, opposed to, for example, the EU Commission. However, Members still hesitate to engage actively in disputes related to digital trade. It could be argued that this is also partially due to uncertainty or lack of knowledge on this issue.

The paralysation of the WTO has created a vacuum and legal uncertainty in which governments are starting to impose barriers to digital trade. Businesses cannot be sure to be backed by international WTO trade rules, leading to hampered GDP growth globally, as outlined in chapter 3.

With fast technological progress, more uncertainties lay ahead, such as implications of additive manufacturing, just in time delivery, the classification of data within the WTO framework, the question of data ownership and potential abuse, or taxation of the digital economy. Special attention should be given to newly evolving technologies with the potential to disrupt trade in its traditional way. Additive manufacturing might only be the beginning.

As countries are increasingly implementing measures restricting digital trade, and a great number of barriers to digital trade already exists, there is a need for the WTO to act, given its core purpose of trade liberalization which is currently at risk in the digital space.

Ultimately, a deeper dilemma of the WTO-concept and architecture can be identified. The WTO was created for the liberalization of trade in an analogue world, formed by nation states. Ahmed and Aldonas (2015) point out that the current agenda of the WTO focuses on removing barriers to trade that were introduced in the first half of the 20<sup>th</sup> century.<sup>223</sup> With the rise of

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<sup>222</sup> Singh, Abdel-Latif & Tuthill 2016, 104, 105; UNCTAD 2017, 72-77.

<sup>223</sup> Ahmed & Aldonas 2015, 11.



the Internet, a borderless, digital, economy has risen, the world economy has changed. Thus, it can be questioned if current WTO concepts focusing on geographical notions will be able to lead to a comprehensive solution for digital trade, raising questions that go beyond classical liberalization.

## 8. Possible solutions to ensure liberalization of digital trade within the WTO framework

### 8.1 A view outside the WTO: The European Union and free trade agreements

When looking at possible solutions on how to evolve the WTO agenda on digital trade, a view outside the organization can be helpful as plurilateral rules for digital trade already exist in different contexts, such as within other international or regional organizations or free trade agreements (FTAs).

Of all international and regional organizations, the EU certainly seems to possess the most developed regulation in the area of digital trade. In difference to the WTO, which as an international organization of cooperation depends on decisions made by its diverse Member States in consensus, the EU is more flexible with regard to imposing new rules. Reasons for this include a solid legislating-system as well as less diversity between Member States in comparison to the WTO. With the European Commission, the EU also possesses its own administration with the power to propose legislation, implement decisions, and monitor compliance of Members. The WTO, on the other hand, only possesses a relatively small secretariat to support the intergovernmental work of Member States.

However, taking a closer look at EU regulation and the EU Digital Single Market can help to better understand possibilities in the field of digital trade and identify important issues for regulation.

The EU Digital Single Market has the goal to eliminate barriers to digital trade for businesses and consumers within the EU territory, based on three principle policy streams. In comparison to the WTO, the EU strategy has a stronger focus on consumer rights and protection.<sup>224</sup>

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<sup>224</sup> See also: Pitschas, Christian & Gerstetter, Christiane (2017): *Consumer Rights in International Trade Agreements*. Verbraucherzentrale Bundesverband. Online: [https://www.vzbv.de/sites/default/files/downloads/2017/03/20/17-03-18\\_study\\_vzbv\\_consumer\\_rights\\_in\\_trade\\_agreements.pdf](https://www.vzbv.de/sites/default/files/downloads/2017/03/20/17-03-18_study_vzbv_consumer_rights_in_trade_agreements.pdf).

One of the three main policy streams aims for better access for consumers and business to online goods and services, including through ending “unjustified” geo-blocking and reducing value-added tax (VAT) burdens for cross border digital businesses.<sup>225</sup> The pillar also includes plans on implementing a modern copyright framework, facilitating wider online availability of content across the EU, and ensuring that nation-based copyright rules do not impede innovation and research.

The second pillar aims to create a better environment for digital networks and services, including better access to telecoms-services for all EU citizens and businesses. It also focuses on adapting existing rules for audio-visual media to new business models for content distribution, analysing the role of online platforms, particularly with regard to transparency, information use, illegal content, and the relationship between the supplier and the platform.<sup>226</sup> It also tackles the issues of strengthening data- and cyber-security.

The third pillar, named “economy & society”, addresses barriers to digital trade. This includes ensuring free flows of non-personal data, working on standards and interoperability to ensure compatibility between systems, and enabling EU citizens to have the right skills to fully benefit from the digital economy.<sup>227</sup> The European Commission estimates the Digital Single Market to contribute €415 billion to the economy of the EU.<sup>228</sup>

In regard to WTO-law, the will to modernize existing rules and frameworks to make them fit for the digital age can certainly be identified as one of the key takeaways of analysing the EU Digital Single Market. It tries to create a balance between the rights of consumers, businesses, and IPR-holders. The WTO, on the other hand, has traditionally focused more on liberalization of trade, thus focusing on mainly on businesses and only to a lesser degree IPRs and consumers. However, in the digital economy, and with data becoming an important tradeable resource, the rights of consumers as important suppliers of the resource “data” will become important. Multilateral trade regulation will hardly be able to ignore this issue when aiming to initiate a sincere intent for digital trade regulation and liberalization. As shown in chapter 2.2, the consumer is becoming an important, active player in international trade, and thus the

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<sup>225</sup> Here and following: European Commission (2017a): *Better access for consumers and business to online goods*. Online: <https://ec.europa.eu/digital-single-market/en/better-access-consumers-and-business-online-goods>.

<sup>226</sup> European Commission (2017e): *Right environment for digital networks and services*. Online: <https://ec.europa.eu/digital-single-market/en/right-environment-digital-networks-and-services>.

<sup>227</sup> European Commission (2017d): *Economy & Society*. Online: <https://ec.europa.eu/digital-single-market/en/economy-society>.

<sup>228</sup> European Commission (2017b): *Digital single market: Bringing down barriers to unlock online opportunities*. Online: [https://ec.europa.eu/commission/priorities/digital-single-market\\_en](https://ec.europa.eu/commission/priorities/digital-single-market_en).

WTO will also have to ensure consumers' interests are met. The EU Digital Single Market gives some examples on this matter. In addition, EU regulation directly addresses questions essential to digital trade, such as free flows of non-personal data, the role of platforms, access to telecoms-services or data security. All those issues could potentially be addressed at the WTO level as well, widening the scope of the organization.

Another source for possible solutions to how to tackle the issue of digital trade at the WTO are FTAs as some have better managed to address digital trade than the WTO, by directly including provisions on digital trade and related topics, such as privacy or security.<sup>229</sup> Examples include the EU agreements with Canada (CETA) and Korea (KOREU)<sup>230</sup>, or the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the new version of the formerly negotiated Trans-Pacific Partnership (TPP). Especially the TPP, whose provisions on digital trade are now fully part of the CPTPP, has been cited by scholars to illustrate how provisions on e-commerce can be included in an international trade agreement.<sup>231</sup> This is why it seems useful to have a closer look at some provisions in the CPTPP regarding e-commerce. Chapter 14 of the CPTPP<sup>232</sup> addresses a broad range of issues related to electronic commerce, including specific provisions that clarify the obligations of countries not to restrict digital trade, hence creating greater legal certainty.<sup>233</sup> The agreement does, for instance, not allow to impose custom duties on electronic transmission (article 14.3), or to implement measures that prohibit cross-border flow of data, including personal data (article 14.11.2), or that require businesses to establish local computing facilities (article 14.13.2). The CPTPP is, thus, the first major trade agreement including language on binding commitments to protect free flow of information across borders.<sup>234</sup> However, like the GATS, the CPTPP allows Parties to take measures to achieve legitimate public policy objectives (articles 14.11.3 and 14.13.3). The agreement also addresses a wide range of other important issues, such as questions of source code, consumer protection and protection of personal information, or cooperation on

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<sup>229</sup> Mavroidis, Petros C. (2017): Trade Regulation, and Digital Trade. Columbia School of International and Public Affairs. Online:

[https://sipa.columbia.edu/sites/default/files/Mavroidis\\_Trade\\_Regulation\\_and\\_Digital\\_Trade\\_0502.pdf](https://sipa.columbia.edu/sites/default/files/Mavroidis_Trade_Regulation_and_Digital_Trade_0502.pdf), 1-4.

<sup>230</sup> Id.

<sup>231</sup> See i.a. Cory 2017, 14; Singh & Tuthill 2016, 113.

<sup>232</sup> CPTPP: Comprehensive and Progressive Agreement for Trans-Pacific Partnership. Chapter 14. (Signed 8 March 2018).

<sup>233</sup> Crosby 2016, 1.

<sup>234</sup> Sillman, Ari & Peterson, Erik R. (2017): *Digital Walls on the Rise*. A.T. Kearney. Online:

[https://www.atkearney.com/web/the-purchasing-chessboard/article/-/asset\\_publisher/9AutfSQfJm6Y/content/digital-walls-on-the-rise/236833](https://www.atkearney.com/web/the-purchasing-chessboard/article/-/asset_publisher/9AutfSQfJm6Y/content/digital-walls-on-the-rise/236833).

cybersecurity matters. Due to limitations in space, and having in mind the purpose of this paper, a deeper analysis of provisions in the TPP will not be made at this point.

The important point to make here is twofold: first, there are international trade agreements addressing directly open questions in relation to digital trade, its implications, and related issues in a straightforward way. Within these agreements, there is no need for interpreting and bending rules from analogue-ages to make them apt to 21<sup>st</sup> century trade. Important topics are rather named directly. The CPTPP does not only include provisions solely focusing on the liberalization of digital trade, but also important related issues, such as electronic authentication, handling of source codes or the question of how to handle data and consumer privacy. Hence, CPTPP reflects the more complex nature of digital trade, which includes more technical, security and ethical questions than classical trade in goods and services. Second, when the WTO is trying to include language on digital trade in its framework, the organization can rely on work on e-commerce that has already been done within the scope of many FTAs, thus not needing to come up with a completely new framework from scratch.

In a more general manner, Wunsch-Vincent (2008) highlights that many FTAs address the issue of digital trade in a direct way, by including a relevant definition of the term, clear recognition of the applicability of WTO rules and provisions of the FTA in question to the electronic supply of a service.<sup>235</sup> In addition, FTAs often established a clear and applicable customs duty moratorium on electronic transmission, non-discrimination and MFN treatment, as well as clear rules for domestic regulation based on GATS article VI. By using a negative list approach, FTAs have also ensured the inclusion of new services as well as more flexibility. Mavroidis (2017) additionally highlights the inclusion of provisions against data localization measures in many FTAs.<sup>236</sup>

A systematic assessment of FTAs in relation to digital trade could lead to finding the most useful provisions for potentially including them in WTO agreements.<sup>237</sup> Even though FTAs, where Parties often share similar interests, are not directly comparable with the multilateral forum of the WTO, where interests of Members can be very diverse, they still highlight how the WTO could work towards better addressing the issue of digitalization of trade.

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<sup>235</sup> Here and following: Wunsch-Vincent 2008, 12-17.

<sup>236</sup> Mavroidis 2017.

<sup>237</sup> Wunsch-Vincent & Hold 2012, 32.

## 8.2 Addressing open basic questions for the WTO regarding digital trade

As shown in this paper, the WTO as an organization is at a difficult point: while digital trade is becoming an increasingly important discipline in international trade, results within the Work Programme on Electronic Commerce have not been achieved so far, and opinions on digital trade and its liberalization vary substantially between Members. However, the WTO possesses a strong framework as a basis to address barriers to of digital trade, including rules on transparency and MFN, and is consequently still the most appropriate organization to create binding rules for multilateral digital trade.<sup>238</sup>

Before dealing with more sophisticated issues, the WTO will have to address a number of basic questions that have been outlined in this paper. In difference to trade in goods and services, the development of an analytical framework including a defined terminology of what is understood by electronic commerce or digital trade and indicators for measurement is a key precondition for any further regulatory work to be carried out by the WTO. While common sense has been enough for understanding what is entailed by the concepts of trade in goods and services, this is not the case for digital trade.

This does not mean that a *new* definition for digital trade has to be found. Rather, the question of defining the concept of digital trade for the purposes of the WTO could be seen in connection with the question of applicability of WTO agreements to digital trade.

From the standpoint of trade liberalization, at the first view, it would be most beneficial to categorize all digitally supplied products as products ruled by the GATT, while all services should remain subject to the GATS. Even though some indicators imply the potential applicability of the GATT, discussions mostly point to classifying all digitally delivered products and services as services under the GATS as indicated earlier.

If done so, from the standpoint of WTO-law, a formal definition of what is included within the concept of digital trade would then not be necessary anymore as all *goods* would be subject to the GATT (leading to the need to adjust *de minimis* as outlined in chapter 4.2.1) while all services (including all digitally delivered products and services) would be subject to the GATS.<sup>239</sup> The broad working definition of electronic commerce could be maintained solely for the purpose of the Work Programme or new initiatives.

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<sup>238</sup> Burri 2013, 5.

<sup>239</sup> Of course, for the purposes of statistics, a definition for digital trade, or different dimensions of digital trade, will still be necessary. This will equally be important for determining the value of countermeasures Members can impose against other Members if those implement barriers to digital trade. Research and discussions on

The framework provided by the GATS seems to be well equipped to address current and future issues in regard to digital trade, legal certainty about the applicability of GATS rules to digitally delivered products and services would, however, be necessary. Even though the WTO dispute settlement system has led to some clarification, judicial decisions cannot substitute political consensus on these matters.<sup>240</sup>

Classifying all electronically delivered products and services as services subject to the GATS would lead to a couple of implications that would need to be resolved.

Clarification on the issue of how to include and classify new arising services, for example, through using the most current CPC-list or through an automated inclusion process, is needed. In this regard, clarification on the different modes of supply is necessary. A clear commitment for mode 1 for digitally supplied products and services by Members would bring clarity, not only from a legal, but also from a political perspective. If consensus on this issue is not achieved, the Panel and Appellate Body could further examine this issue in future dispute settlement cases related to digitally delivered products and services, based on decisions already made. Even though this does not seem to be an elegant solution, so far, it has only been the dispute settlement system bringing clarification to open questions regarding digital trade.

As a minimum solution, Member States should update their individual GATS schedules with regard to services included and modes of supply. This would ensure that their commitments take fully into account the effects of the Internet on trade, given that many services not exist or existed in a different manner when schedules were negotiated. The WTO, in this regard, could support and guide Members, wanting to update their scheduled commitments, to prevent broad de-liberalization. In this regard, the scheduling of entire service sectors could be a possible solution to also include new, arising services within an industry. However, in the light of Members posing more and more barriers to digital trade, success of this approach is questionable, and de-liberalization could be a possible result.

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the issue of statistical measurement is currently carried out by the OECD, the WTO, UNCTAD, and other organizations, as well as academic scholars. Those discussions will have to be continued.

<sup>240</sup> See Burri, Mira (2015): *Designing Future-Orientated Multilateral Rules for Digital Trade*. Sauvé, Pierre & Roy, Martin (eds.): Research Handbook on Trade in Services. Cheltenham, Northampton: Edward Elgar Publishin; available through: Research Gate: [https://www.researchgate.net/profile/Mira\\_Burri/publication/271803010\\_Designing\\_Future-Oriented\\_Multilateral\\_Rules\\_for\\_Digital\\_Trade/links/54d1d9ba0cf25ba0f041eb96/Designing-Future-Oriented-Multilateral-Rules-for-Digital-Trade.pdf](https://www.researchgate.net/profile/Mira_Burri/publication/271803010_Designing_Future-Oriented_Multilateral_Rules_for_Digital_Trade/links/54d1d9ba0cf25ba0f041eb96/Designing-Future-Oriented-Multilateral-Rules-for-Digital-Trade.pdf), 6.

A more useful solution from a liberalization-standpoint would be the introduction of negative lists as done in many FTAs: this approach would lead to a widespread liberalization in the services sector as, in the first place, all services would be fully scheduled, including new services as they arise. Governments could then make restrictions specifically to the services they deem necessary. This would ensure new arising digital services to be automatically included in the schedules of all Members, thus, leading to further liberalization in the first place. However, while Members seem to be open to the inclusion of such negative lists in FTAs, implementation on a multilateral level seems rather difficult.

If GATS rules apply, practical implications of the question on how to treat digital products and their physical counterparts will have to be considered, even if likeness is not given from a legal perspective.

Another important point will be to address barriers to digital trade more directly as done by many FTAs. GATS provisions cover most relevant measures related to digital trade as indicated in chapter 5.4. However, this should be highlighted in a more straightforward way, for example, by an explanatory note of the WTO Secretariat, summarizing key clarifications of the Panel and Appellate Body with regard to digital trade. Members could then decide if they wish to include clearer language in the GATS addressing relevant barriers. However, it is equally important that any kind of solution does not harm the level of liberalization already existing. If updating the WTO agreements is desired by Members to better address barriers, language could be used from existing FTAs, such as the CPTPP, including on cross-border data flows or making the customs moratorium on digital transmissions permanent.

Another possible solution would be the negotiation of a new multilateral agreement on electronic commerce as mentioned earlier. However, besides other reservations, it can hardly be believed that a new multilateral agreement on electronic commerce could easily be negotiated within the WTO against the backdrop of the stalled Doha Round.

A plurilateral approach as now initiated at MC11 on the other hand cannot be the solution for solving open basic questions on e-commerce, it can only be a forum for further discussions. If only a group of Members advances on the issue of digital trade, this will ultimately lead to a fragmentation of WTO-law regarding e-commerce as even basic questions have not been answered yet in the multilateral forum.<sup>241</sup> Advancing on these basic questions on a plurilateral basis can hardly be imagined as implications of classification, GATS modes, or applicability of

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<sup>241</sup> Comapre in this regard: Baldwin 2016b, 114.

WTO agreements are relevant for all Members. As digital transformation is affecting more and more sectors of the economy, questions regarding digital trade and cross-border data flows might become relevant for trade in goods and services in all sectors. As a consequence, these issues will need multilateral participation in order to be addressed and resolved, if the multilateral nature of the WTO is to be maintained. Creating a plurilateral agreement, besides the risk of fragmentation of WTO-law also bears the risk of fragmentation between Members: countries not participating in the first place could feel left out and their interests would not be represented, leading to disadvantages for them in the digital economy. This could possibly lead to a greater digital divide than already existing.

### 8.3 Overcome root causes of standstill

While existing literature mainly focuses deliverables to be achieved,<sup>242</sup> those approaches do not go far enough. Given the stalled negotiations on e-commerce for 20 years now, not only possible outcomes have to be discussed, but also how to overcome the root causes for the existing standstill outlined in chapter 7.

While changing the way the WTO operates (by consensus) might be too ambitious to discuss at this point in regard to digital trade, other issues can be addressed in a simpler manner.

The establishment of a permanent, more flexible forum for multilateral discussion regarding digital trade would be important in the light of speeding up negotiations and improving the operational work on e-commerce. Those discussions should additionally be mandated to go beyond the scope of the current Work Programme, including to explore possibilities for rule-making as well as exploring the applicability of GATS rules to digital trade. The Joint Statement by 71 Member States at MC11 and subsequent work can be a significant step into this direction but cannot be the ultimate solution as outlined in chapter 8.2.

Many Member States have reiterated the need for further work and discussions to fully understand the implications of digital trade on their economy. Hence, building common knowledge amongst WTO Members on digital trade and its implications could be one of the key deliverables of the WTO in the short-term, possibly driven by the WTO Secretariat and backed by other Members. It will be essential for the WTO to provide a framework in which no Member State feels left behind or discriminated against others. Given the strong digital

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<sup>242</sup> i.a. Burri 2013; Burri 2015; Farrokhnia & Richards 2016; Fleuter 2016; Lee-Makiyama 2011; López González & Jouanjean 2011; Wunsch-Vincent 2008.



divide between advanced and developing economies<sup>243</sup>, it will be crucial to build bridges and include all voices within the organization to make true the WTO promise of a more inclusive international trade, also in the digital sphere. In this regard, capability and capacity building programmes for developing countries would be a way to support Member States to better benefit from the emerging digital economy.

In order to address the knowledge gap between trade policy makers and Internet policy makers, the WTO and other organizations from the trade ambit, such as the OECD or UNCTAD, should enter into a regular, more coordinated dialogue with internet governance organizations, for both sides to learn from each other and to coordinate Internet and trade regulation more closely.<sup>244</sup>

If the WTO is to better address electronic commerce, it will be upon its Members to take the necessary steps and to move forward. As long as countries continue to implement barriers to digital trade and many questions remain unanswered, it is upon the Members to become more active in filing claims related to digital trade in order to eliminate those barriers and achieve further clarity on the applicability of WTO rules to digital trade. While many claims have been filed related to classical trade in goods, cases related to digital trade have been rare.

Ultimately, in the long-term, the issue of the scope of the WTO will have to be addressed as the approach of mainly addressing trade barriers of the analogue world might not be sufficient to succeed in the future.

It will be important for the WTO to define all trade-related aspects of the digital economy that will be relevant for its work besides liberalization. The EU and co-sponsors have proposed a tentative framework mapping issues in four categories and numerous sub-categories that could serve as a basis for the way forward. Categories include regulatory frameworks, open markets (liberalization), initiatives facilitating the development of e-commerce and enhanced transparency of the multilateral trading framework.<sup>245</sup> This broad spectrum shows the many aspects related to digital trade possibly relevant for multilateral regulation under the auspices of the WTO.

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<sup>243</sup> See chapter 2.2; in the same regard: WTO (2017c): *WTO-eWTP-WEF Enabling E-commerce Launch Event: Remarks by DG Azevêdo*. Online: [https://www.wto.org/english/news\\_e/spra\\_e/spra206\\_e.htm](https://www.wto.org/english/news_e/spra_e/spra206_e.htm).

<sup>244</sup> See Singh, Abdel-Latif & Tuthill 2016, 115.

<sup>245</sup> World Trade Organization: Communication from Canada, Chile, Colombia, Côte d'Ivoire, the European Union, the Republic of Korea, Mexico, Paraguay and Singapore of 22 July 2016. WTO Doc. JOB/GC/97/Rev.1.

While this paper has focused on the aspect of liberalization of digital trade, in line with the current agenda of the WTO, further research and work within the WTO will have to be undertaken on other trade related aspects of digital trade with relevance for the WTO, possibly based on the other three categories proposed by the EU.

Lessons can be learned, inter alia, from classical trade in goods, where rules on many trade related issues have been addressed by the WTO besides pure liberalization of trade, such as sanitary and phytosanitary measures, trade-related environmental measures or non-product related process and production measures.

Possible solutions could be to work towards an international framework that is similar to the EU Digital Single Market, including rules on competition and stronger rules on non-discrimination within the WTO framework, connecting digital trade with the UN Sustainable Development Goals (SDGs), as well as focusing on rights of consumers. The most recent *Facebook – Cambridge Analytica* scandal has shown that pure liberalization of digital trade can lead to imbalances between businesses, governments and citizens, especially regarding data. Thus, providing a balanced framework not solely focusing on liberalization will be essential.

Other issues to be included could be the development of infrastructure or the facilitation of adopting new technologies, consequently leading to a more comprehensive approach. Addressing the issue of corporate taxation and specifically tax avoidance by big digital players will also be one of the major challenges related to the digital economy in the near future. In this regard, the WTO could serve as a forum for negotiations for taxation in digital trade.<sup>246</sup> A fair framework for taxation of e-commerce activities with taxes fairly divided by countries where value is added<sup>247</sup> could also help developing countries that might lose income through fewer custom duties as more and more trade becomes digitized. A reformed WTO, with a wider scope, could also address these issue that originally were not under its auspices.

However, this would mean for Members to hand over some of their regulation sovereignty in these areas to the WTO. A fact that most Members will hardly be willing to do.

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<sup>246</sup> See Chen & Smekal 2009.

<sup>247</sup> Value creation could, for example, possibly also include the providing of data by customers, not only monetary value.

## 9. Conclusion

This paper has pointed out a great number of trade restrictive measures that governments are implementing in the digital economy, constituting a new kind of digital protectionism. It was shown that the WTO framework is already well equipped to address these barriers, if open key questions are clarified. The WTO as an established multilateral forum is still the ideal place for addressing new questions arising around trade, including digital trade. It possesses widely accepted core principles, such as transparency and non-discrimination between Members, as well as a – still – solid dispute settlement system.<sup>248</sup> As highlighted, a plurilateral approach cannot be the solution for answering basic questions regarding digital trade. Even though there currently is a lack of progress at the multilateral level regarding digital trade, FTAs cannot be the solution for determining binding rules for digital trade due to the risk of increased fragmentation ultimately harming the multilateral system.

This paper has identified open key open issues for the WTO that need to be addressed in relation to digital trade and has indicated proposals for possible solutions. To do so, root causes for the current standstill, outlined in this paper, need be addressed, in order to achieve progress more quickly. The GATS, if applied, provides a solid framework for addressing rising barriers in the digital sphere as this paper has shown, even though many issues could be addressed in a more direct manner, if Members wished to do so. While the GATT would provide a more liberalized regime than the GATS, its application in regard to digital trade seems not to be very likely as Members would probably not be willing to liberalize digital trade to that extent. Further research on application of GATT rules to e-commerce is necessary.

For addressing digital trade in a comprehensive manner, widening of the scope of the organization will be necessary and further discussions on this issue will have to be held, going beyond the scope of this paper. The WTO is a creation of nation states and therefore granting the possibility to its Members to relatively freely regulate trade issues according to their interests. The Internet, on the other hand, has created a borderless digital world, a global

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<sup>248</sup> The functioning of the WTO dispute settlement system is currently at risk due to the US blocking the appointment of Appellate Body Members. By September 2018, the number of members of the Appellate Body will be down to three, the minimum number of judges for the body to carry out its work (O’Grady, Sean (2018): *The World Trade Organisation is terrified of Donald Trump and will not stop the global trade war*. The Independent. Online: <https://www.independent.co.uk/voices/world-trade-organisation-donald-trump-global-trade-war-tariffs-china-eu-a8285286.html>; WTO (2018a): *Appellate Body Members*. Online: [https://www.wto.org/english/tratop\\_e/dispu\\_e/ab\\_members\\_descrp\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/ab_members_descrp_e.htm)).

community, even though countries are starting to nationalise the Internet within their borders. Some do so with great success, such as China.

Close negotiations and cooperation with Internet governance related organizations will be necessary to include all relevant issues with regard to the Internet in an adequate manner. Without addressing issues related to the Internet economy and digital trade at a multilateral level, further nationalization of the Internet might be the result.

It will be essential now for the WTO to bring together advanced economies, wanting to move forward on trade related issues of the digital economy, and developing economies, feeling that their interests are not sufficiently heard. The multilateral forum will have to listen to the needs of all Members, with a special focus on developing economies and LDCs.

Ultimately, by not responding to new emerging trade topics including digital trade, the WTO weakens its position. The multilateral trade system under the auspices of the WTO is currently at risk. Given the stalled Doha Round, many discussions have been ongoing on whether or not the WTO is still the adequate forum for addressing 21<sup>st</sup> century challenges of trade, also in relation to digital trade. Critics have come from many sides, including scholars and Member States. In the US, the Trump administration has left no doubt that it sees little value in the organization. By blocking nomination of judges for the Appellate Body, it further undermines the work of the organization and might ultimately leave it dysfunctional.

Being an easy target is certainly partially due to hardly having delivered any results since the launch of the Doha Round, putting the organization in a weak position. Hard work will be necessary to make the WTO apt for 21<sup>st</sup> century challenges, including digital trade, and for the organization to leave the current crisis stronger than it has been before. Delivering results on open issues related to digital trade soon, inter alia based on proposals for solutions pointed out in this paper, could be one step in this direction.

## 11. Annex

Table 1: Open basic issues for the WTO regarding digital trade and possible solutions

Issues	Possible solutions
Definition of e-commerce / digital trade	<ul style="list-style-type: none"> <li>- Keep working definition</li> <li>- If all digitally delivered products and services are to be services subject to the GATS, no further definition of e-commerce is necessary</li> </ul>
Need for clarification of applicability of agreements	<ul style="list-style-type: none"> <li>- Classification of all tangible goods including if ordered or paid for via the Internet as products subject to GATT</li> <li>- Classification of all digitally delivered products and services as services subject to the GATS</li> <li>- (Possibly: classification of all digitally delivered products as goods under the GATT)</li> <li>- (Classification of all other services as services subject to the GATS)</li> </ul>
Need for clarification on GATS modes of supply	<ul style="list-style-type: none"> <li>- Consensus by Members to classify as mode 1</li> <li>- Until agreed on: examination of different modes of supply by Panel / Appellate Body in next DS-cases related to digital trade</li> </ul>
Need for Members to update GATS schedules	<ul style="list-style-type: none"> <li>- Incorporation of most frequent CPC-list</li> <li>- Use of a negative list approach</li> </ul>
Need to address rising barriers	<ul style="list-style-type: none"> <li>- If classification as services under GATS:               <ul style="list-style-type: none"> <li>- Recognize the already existing provisions in the GATS, the Annex on Telecommunications, the 4<sup>th</sup> protocol to the GATS, and the Reference Paper</li> <li>- Include language in the GATS directly addressing relevant issues such as data localization measures based on language used in FTAs</li> </ul> </li> <li>- (If classification under GATT, work would need to be carried out respectively)</li> </ul>

Source: Own elaboration

Table 2: Root causes of standstill and possible solutions to overcome

Root causes	Possible solutions
Operating of WTO, including need for consensus	Long term: WTO reform leading to a more flexible and agile organization
Operating of the Work Programme	Establish a permanent forum for more active, flexible negotiations
Mandate of the Work Programme	Widen the scope of the mandate including provisions towards rule-making
Digital divide & knowledge gaps	<ul style="list-style-type: none"> <li>- Building a common knowledge between WTO Members by capacity and capability building through WTO Secretariat and Members advanced in digital trade</li> </ul>

	<ul style="list-style-type: none"> <li>- Engage with Internet governance organizations in a regular, coordinated dialogue</li> </ul>
Members inactive leading to few DSB cases	<ul style="list-style-type: none"> <li>- More engagement and activity by Members in the short- to mid-term until clarification is achieved on a policy level</li> </ul>
Narrow scope of the WTO / Trade liberalization focus of WTO	<p>Widen scope of the WTO in the long-term:</p> <ul style="list-style-type: none"> <li>- Identify trade related issues of digital economy with relevance for WTO possibly based on proposal by the EU and co-sponsors (JOB/GC/97/Rev.1) and in close work together with other organizations</li> <li>- Develop more comprehensive framework as digitalization affects more and more areas of trade</li> </ul>

Source: Own elaboration

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