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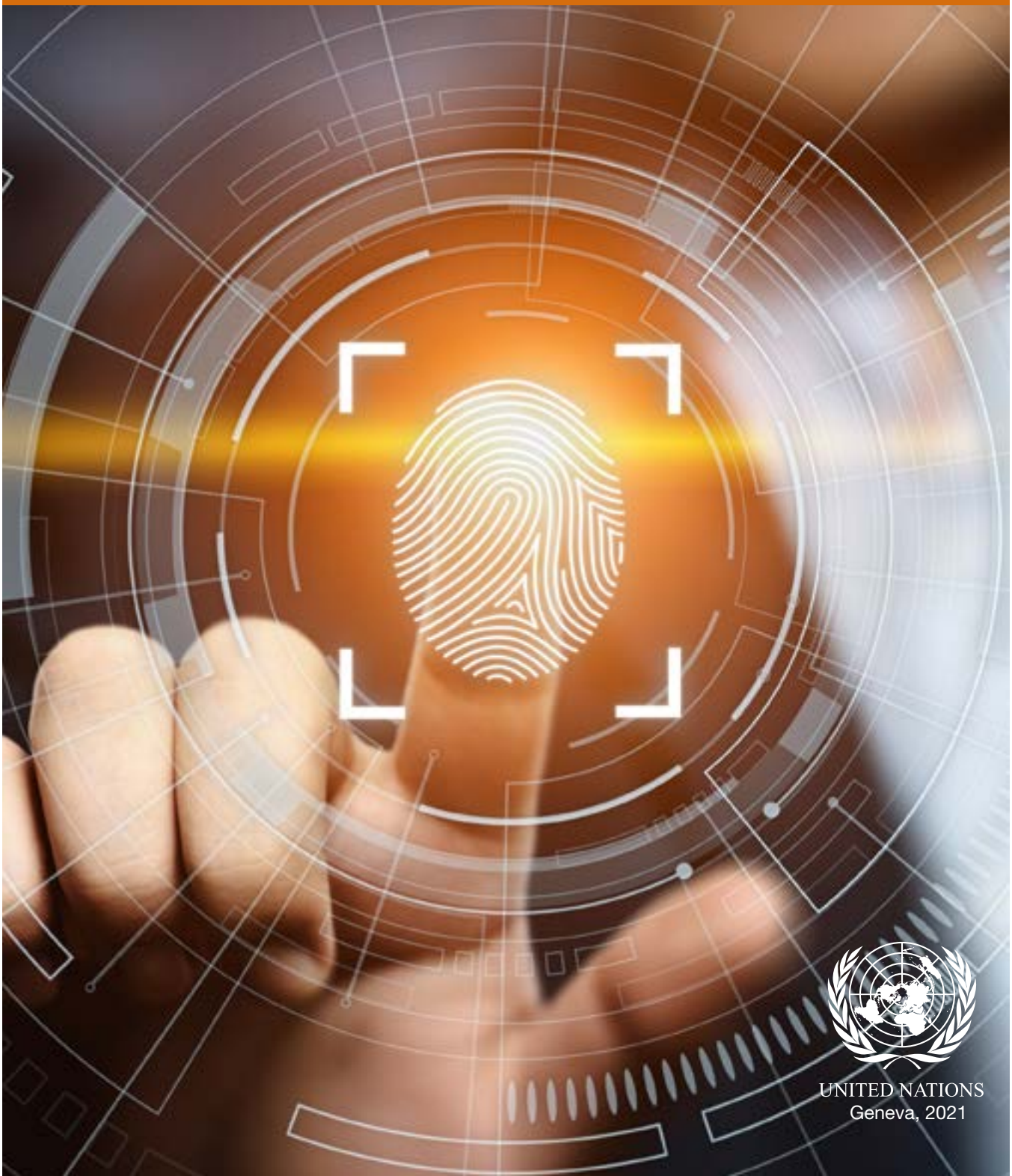
WHAT IS AT STAKE FOR DEVELOPING COUNTRIES IN TRADE NEGOTIATIONS ON E-COMMERCE?

THE CASE OF THE JOINT STATEMENT INITIATIVE



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PREFACE

Digitalization has greatly affected the world of trade in the past two decades with more and more goods and services being sold online. Like in previous technological revolutions, the benefits will be immense, but they will not materialize through a smooth, cost-free process. The net outcome will depend on policies undertaken at both national and international levels to build the capabilities needed for countries to take advantage of these transformations.

The current COVID-19 pandemic has further accentuated the shift towards electronic commerce as people and businesses have gone online to cope with various lockdown measures and travel restrictions. The crisis has also shed light on the significant digital divides that characterize the world, both between and within countries, raising concerns that the digital shift will result in widening divides and inequalities.

Governments are giving increasing attention to the treatment of electronic commerce in various trade agreements. Given that countries are at very different stages of e-trade readiness and give different priority to various trade policy objectives, their responses to the evolving landscape vary considerably. A significant number of members of the World Trade Organization (WTO) have chosen to engage in the Joint Statement Initiative (JSI) negotiations on electronic commerce, while many developing countries have chosen not to, preferring to first build their regulatory and institutional capacities and safeguard their policy space to pursue development objectives in this fast-evolving area.

Whether developing countries are party to these negotiations or not, the outcome will have implications for the governance of various dimensions of e-commerce and for the multilateral trading system as a whole. There is therefore a need for developing a better understanding of the possible implications of the ongoing e-commerce negotiations and binding commitments that may result therefrom.

It was against this background that the Division on International Trade and Commodities and the Division on Technology and Logistics decided to prepare this joint report. The report aims to provide evidence that can help the developing world acquire better understanding on the implication of the ongoing JSI negotiations in the WTO to their development prospect. By focusing on the development implications of aspects that may be covered in a possible negotiation outcome, it seeks to offer valuable inputs that can help countries assess various options for harnessing e-commerce for sustainable development.

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EXECUTIVE SUMMARY

The expansion of the digital economy has transformed the way we produce, consume and do business. Electronic commerce (e-commerce) — the sale or purchase of goods or services ordered over computer networks or online platforms — is a significant segment of the digital economy. With the rapid expansion of e-commerce, increasing calls were made for common rules in the framework of the World Trade Organization (WTO) for governing cross-border e-commerce in goods and services. Such calls were based on the perception that the multilateral trade rules that were built upon traditional forms of trade prevalent in the last century could not adequately address opportunities and challenges associated with e-commerce.

The launch of the Joint Statement Initiative (JSI) negotiations on e-commerce among a group of WTO members in 2019 was a significant trade policy development. Participation of a diverse group of WTO members with markedly differing policy preferences, contrasted with the non-participation of a large number of developing countries, in the midst of rapidly evolving digital ecosystems, business models and regulatory requirements, point to the highly complex nature of the negotiations. The negotiations would require finding a delicate balance in reconciling different regulatory practices and priorities across countries with respect to such sensitive public policy areas as privacy, personal data protection, competition, consumer protection and cyber security, as well as industrialization objectives for the digital economy.

One key question that confronts trade negotiators is what negotiated outcome would allow developing countries – both participant and non-participant – to harness potential benefits of e-commerce for sustainable development. The digital divide is still significant within and among countries, and many developing countries are yet to develop their own national policy frameworks to support their ability to harness the evolving digital economy.

Whether and how the outcome of the JSI negotiations should be multilateralized remain key questions that need to be addressed. Defining the JSI outcome as a plurilateral agreement or a regional trade agreement (RTA) does not appear to settle the institutional standing of the future e-commerce agreement. Procedurally, multilateralization, and agreement for a plurilateral agreement within the WTO framework, would require consensus, including from those WTO members that have opted not to participate in the negotiations.

In this connection, there is a need for careful consideration of the implementation mechanisms that would facilitate greater participation and possible future multilateralization of any negotiated outcome. Among the built-in mechanisms that could facilitate the gradual implementation are modulated commitments, so that developing countries could gradually assume a higher level of commitments in differentiated time frames. Some transitional implementation mechanisms, such as a scheduling approach of the type used in WTO's Trade Facilitation Agreement (TFA), which allows parties to take into account individual countries' implementation capacities, capacity-building support and capacity acquisition, might provide useful lessons.

The TFA-type implementation mechanism would not substitute the need for adequately defining the scope of the agreement and designing the content of the rules. As some proposed rules are novel issues for national regulatory systems and for the multilateral trading system, there is a need to carefully assess the development implications of internationally legally binding commitments which may constrain countries' policy options. Additionally, if rules are warranted, how they can be designed to best cater for individual countries public policy and development needs should be adequately addressed.

In the emerging global digital economy, it is important to understand how key development objectives associated with e-commerce may be tackled domestically and internationally through various trade and Internet governance fora. As far as the JSI negotiations are concerned, a key consideration for developing countries is whether the rules being developed in these negotiations provide the necessary regulatory space to allow them to shape their digital economies.

As a new data value chain, from raw data to "digital intelligence", has emerged, challenge arises particularly for developing countries to build and develop required skills and capacities to create and capture value from digital data. Policy makers across the globe are still considering various approaches for defining categories of data, including to establish ownership of data generated by individuals and communities when using digital platforms and possible compensation for those whose data are being used. These definitions would also be relevant in discussions surrounding "data sovereignty" rights. In this context, concerns exist over proposed rules in trade agreements in favour of unrestricted cross-border data flows.

Certain proposed e-commerce disciplines could have implications for government revenues. Persistent ambiguities of the existing moratorium on customs duties on electronic transmissions and the rapid technological advances which affect the volume of products transmitted electronically makes it particularly challenging for developing countries to assess the likely effect of foregoing permanently their ability to charge duties on electronic transmissions. Similarly, in discussing the *de minimis* threshold to apply to cross-border transactions, the issue has been raised on how to strike a balance between reduced government revenues from import duties and taxes and possible gains to economic agents, including consumers and Micro, Small and Medium-sized Enterprises (MSMEs), as the expansion of e-commerce will substantially increase the number of small, low-value parcels. The net effects of an increased *de minimis* value for developing countries still need to be ascertained.

Proposed provisions that call for establishing an enabling domestic legal framework to facilitate e-commerce have underscored the lack of implementation capacities in many developing countries, which currently do not possess national laws regulating domestic e-transactions and online consumer protection, for instance. These countries would need to weigh the costs required to establish such a regulatory framework against the benefits they could expect from a predictable and secure e-commerce environment resulting from effective regulation and from increased international regulatory cooperation. In the case of e-transactions, for example, regulations mainly seek to ensure the validity of contracts, and it would be desirable that national e-transaction laws be formulated in a manner to promote regional and global compatibility to minimize barriers to cross-border e-commerce. The protection of consumers in online e-commerce transaction is essential for enhancing trust, and international cooperation would be key for cross-border e-commerce.

In certain areas, interests of private sector actors and governments could be sharply different, pointing to the complexities of addressing wider socio-economic implications under trade agreements, as exemplified by the debate surrounding source code and intermediary liability. In the first case, regulatory friction may arise when governments seek to access source codes when required for what they consider legitimate public policy reasons, which may include transfer of technology. In the second case, governments may seek to hold intermediary platforms accountable for illegal or harmful content posted by the platform users. This is particularly relevant in cases where foreign-owned platforms have access to resources and technology useful for monitoring the online behaviour of platform users that regulators would not have.

For developing countries, irrespective of whether they are participating in the JSI negotiations or not, the formulation of adequate national regulatory frameworks to build digital capabilities should remain an essential component of a broader national development agenda. Efforts are warranted to strengthen their capabilities to engage in e-commerce and bridge the digital divide to help them take advantage of the digital economy for sustainable development. Such national efforts will also need to be increasingly supported by international development partners, including UNCTAD.

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ABBREVIATIONS AND ACRONYMS

3D	Three-dimensional
ACP	Africa, Caribbean and Pacific
AfCFTA	African Continental Free Trade Area
ASEAN	Association of Southeast Asian Nations
B2B	Business-to-Business
B2C	Business-to-Consumer
CETA	Canada-European Union Comprehensive Economic and Trade Agreement
CPTPP	Comprehensive and Progressive Trans-Pacific Partnership Agreement
DEA	Digital Economy Agreements
DEPA	Digital Economy Partnership Agreement
DPD	Data Protection Directive, European Commission
DSU	WTO Dispute Settlement Understanding
EPA	Economic Partnership Agreement
FTA	Free Trade Agreement
GATS	WTO General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GCIG	Global Commission on Internet Governance
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
GPA	WTO Government Procurement Agreement
ICT	Information and Communication Technology
ITA	WTO Information Technology Agreement
ITU	International Telecommunication Union
JSI	Joint Statement Initiative
LDCs	Least Developed Countries
MC11	Eleventh Ministerial Conference of the World Trade Organization
MC12	Twelfth Ministerial Conference of the World Trade Organization
MFN	most favoured nation
MSMEs	Micro, Small and Medium-sized Enterprises
SME	Small and Medium-sized Enterprises
MTS	multilateral trading system
OECD	Organization for Economic Co-operation and Development
RCEP	Regional Comprehensive Partnership Agreement
RTA	regional trade agreement
SDT	Special and Differential Treatment
TBT	WTO Agreement on Technical Barriers to Trade
TFA	WTO Trade Facilitation Agreement
TPP	Trans-Pacific Partnership Agreement
TRIPS	WTO Agreement on Trade-related Aspects of Intellectual Property Rights
UNCITRAL	United Nations Commission on International Trade Law

ABBREVIATIONS AND ACRONYMS

UNCTAD	United Nations Conference on Trade and Development
USMCA	United States-Mexico-Canada Agreement
WCO	World Customs Organization
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

INTRODUCTION

As e-commerce and the digital economy rapidly expanded, calls for developing new common rules to govern cross-border e-commerce in goods and services also grew. At the eleventh WTO Ministerial Conference (MC11), Buenos Aires, Argentina, 2017, a group of 71 WTO members agreed to start "exploratory" work towards future WTO negotiations on trade-related aspects of electronic commerce by releasing a Joint Statement on Electronic Commerce (JS2017). The initiative however did not achieve consensus among the entire WTO membership. After a year of exploratory discussions, in January 2019, 76 WTO members confirmed their "intention to commence WTO negotiations on trade-related aspects of e-commerce" with the stated objective of achieving a "high standard outcome" by issuing a follow-up Joint Statement (JS2019).[1] As of November 2020, the negotiations continue with the participation of over 80 WTO members.

The outcome of the negotiations can have important implications for the future development of e-commerce and for the evolution of the multilateral trading system (MTS). Strong heterogeneity in digital capacities and regulatory preferences across the JSI participants already makes it a dauting challenge to find common ground. Non-participation of a significant number of developing countries raises an important systemic question of what kind of format the future agreement could take within the WTO architecture and what effect it could have on non-participating countries. The situations are further compounded by the fact that the digital ecosystem is in a state of constant evolution, as are national regulatory requirements to support the digital economy.

While the precise scope and content of the future agreement is yet to be determined, possible e-commerce disciplines are likely to affect sensitive public policy areas such as privacy, personal data protection, competition, consumer protection and cyber security, as well as the economy-wide policy objective of fostering value addition in the digital economy. Achieving a "high standard outcome" covering these policy areas could impact the future of the digital economy and developing countries' gainful participation in these promising activities.

For developing countries which are not currently in the JSI negotiations, an important policy question is whether participating in the JSI negotiations enhances or restricts their efforts to develop the digital economy and their capacity to engage beneficially in e-commerce. If they choose to participate, there is need to ascertain what terms of the agreement should be sought through negotiations in order to support their national e-commerce development objectives. A vast majority of developing countries are yet to develop national policy and regulatory frameworks to effectively manage their digital economy and critically lack the readiness to take part in e-commerce. The digital divide remains a binding constraint for these economies.

Against this backdrop, the objective of this study is to provide an initial assessment of some salient issues at stake for developing countries in the JSI negotiations on e-commerce, and draw policy implications for their efforts at fostering the digital economy for development and building capacity to effectively participate in, and take advantage of, e-commerce.

The study is organized in two parts. Part 1 provides an overview of the JSI negotiations while Part 2 provides analytical account of selected issues in the JSI negotiations.

Part 1 starts with a brief review of e-commerce and the digital economy in chapter I to set the scene for subsequent policy discussions. Chapter II traces policy developments in e-commerce at the WTO leading to the launch of JSI negotiations. Chapter III then examines individual participants' regulatory approaches and regional rulemaking efforts in order to better understand negotiating dynamics and likely contours of possible future e-commerce disciplines.

Part 2 goes deeper into some salient issues of the JSI negotiations. Chapter IV examines systemic issues associated with JSI negotiations and discusses possible implementation mechanisms for the future agreement. Chapter V then turns to a set of substantive issues of the negotiations that are likely to be at the heart of the policy debate. The chapter examines the key issue of cross-border data flows, and discusses other domestic regulatory issues affecting the digital economy, including the moratorium on customs duties on electronic transmissions and *de minimis* for customs procedures; electronic authentication and consumer protection; and source code and intermediary liability affecting the digital platforms.

Part 1

The Joint Statement Initiative negotiations: An overview

1.

Recent trends in e-commerce and the digital economy

The digital economy covers a wide range of economic activities. It includes digital and Information and Communications Technology (ICT) sectors such as digital platforms, mobile application and payment services. Rapid expansion of the digital economy before the COVID-19 pandemic was due to the rising Internet connectivity and access to ICT goods and services (UNCTAD, 2017a). According to the International Telecommunication Union (ITU), global Internet traffic was 66 times higher in 2019 than in 2005, and the number of Internet users had more than doubled from 2010 to 2019 (ITU, 2020).[2]

E-commerce has been expanding rapidly…

The global value of e-commerce was estimated to have reached $26 trillion in 2018, increasing by 8 per cent from the previous year. This value represented around 30 per cent of the global GDP (UNCTAD, 2020a). The expansion of e-commerce has been accompanied by the rapid growth of trade in the digital economy. For example, between 2010 and 2019, exports of ICT services more than doubled from $303 billion to $636 billion, and exports of digitally deliverable services went from $1.87 trillion to $3.19 trillion.

Some statistical information on the global expansion of e-commerce in 2018 (the last year for which data is available) includes the following:

- Over 1.45 billion people worldwide shopped online. This was just below 20 per cent of the world's population in 2018 or about one quarter of the population aged 15 and older.
- Business-to-business (B2B) transactions (which include sales over online market platforms and electronic data interchange transactions) amounted to $21 trillion, or 83 per cent of aggregate e-commerce sales. The remaining $4.4 trillion stemmed from business-to-consumer (B2C) transactions, which showed a massive increase of 16 per cent from the previous year (2017).
- But the uptake of e-commerce is not equally spread around the world: the top 10 countries accounted for 75 per cent of the global e-commerce sales in 2018.[3]

- The top 20 countries accounted for over 80 per cent of the total B2C ecommerce sales (Table 1). China and the United States together accounted for more than half of the global B2C e-commerce sales. Among the top 20 countries, the share of online-shoppers within all the internet users varies from 11 per cent in India and 14 per cent in Thailand to over 80 per cent in developed economies such as the United States, the United Kingdom, Germany, and Canada. Most people made e-commerce purchases domestically.
- Cross-border B2C e-commerce sales was estimated to be around 10 per cent of the total B2C e-commerce, but the number of people engaged in cross-border e-commerce is increasing. Some 23 per cent of all on-line shoppers (or 330 million online shoppers) made e-commerce purchases from abroad in 2018, compared to 17 per cent in 2016.

The expansion of e-commerce has been further fuelled by the spread of the COVID-19 across the globe, and emergency measures such as lockdown and confinement taken in many countries. The growth in global e-commerce since mid-March 2020 has accelerated as more businesses and consumers have reverted to online purchases (UNCTAD, 2020b). Demand for digital services including on-line entertainment and digital applications for remote work has surged. In China, for instance, the use of digital work application climbed nearly 40 per cent in a week between the end January and early February 2020 (UNCTAD, 2020a).

Table 1. Business-to-Consumer e-commerce sales, top 20 economies, 2018

		B2C e-commerce sales ($ billion)	As % of World B2C e-commerce	Online shoppers (million)	Online shoppers (% of Internet users)
1	China	1 361	31.0	610	73
2	United States	1 091	24.9	189	80
3	United Kingdom	266	6.1	41	87
4	Japan	163	3.7	49	49
5	France	109	2.5	36	75
6	Korea (Republic of)	102	2.3	27	60
7	Germany	101	2.3	54	82
8	Spain	72	1.6	21	62
9	Canada*	44	1.0	24	84
10	Hong Kong, China	38	0.9	2	38
11	Italy	32	0.7	18	47
12	Netherlands	28	0.6	12	84
13	Thailand	27	0.6	5	14
14	Mexico	26	0.6	24	33
15	Ireland	22	0.5	2	70
16	Australia	21	0.5	12	73
17	Russian Federation	20	0.5	30	34
18	Malaysia	19	0.4	15	53
19	India	17	0.4	27	11
20	Brazil	15	0.3	39	34
	20 above	*3 574*	*81.4*	*1 193*	*55*
	World	**4 390**	**100.0**	**1 452**	

Source: UNCTAD (2020), Estimates of Global E-commerce 2018, UNCTAD Technical Note on ICT for Development No.15.

... but not yet for everyone

While the pandemic highlighted that the potential role of e-commerce as an important economic solution to cope with the crisis, it also underscored the importance of bridging the digital divide, both within and across countries. (UNCTAD, 2020c)

The rapid expansion of the digital economy has transformed the way we do business in various sectors and can enhance the economic viability of small businesses. For MSMEs, increasing use of digital technologies enables them to reduce costs and market their goods and services to a broader range of customers. Online sales can be less expensive for MSMEs in terms of information and communication costs compared to traditional retail. In the same way, e-commerce platforms can help to "match" potential buyers to sellers regardless of their physical location. This helps small businesses improve their visibility in markets that otherwise would be challenging. Finally, online platforms can help to match small producers with available services suppliers such as logistics, shipping and payments.

However, in countries which do not yet have functioning technology or physical capacities and institutional frameworks that support e-commerce, such benefits are hard to accrue for MSMEs. The share of MSMEs receiving online orders is consistently lower than for large companies.

As documented by the UNCTAD Rapid eTrade Readiness Assessments, many countries still suffer from factors such as an unstable power supply, limited broadband and other infrastructure challenges that limit the expansion of e-commerce.[4] Half of the world's population remain offline. According to ITU, less than 20 per cent of households in Africa had Internet access in 2019 compared to 51 per cent in Asia and Pacific and 87 per cent in Europe.[5] Only one in five persons in least developed countries (LDCs) is connected to the Internet, and less than 2 per cent use the Internet to buy goods and services online (UNCTAD, 2019). Even if it is available, broadband connectivity is limited and expensive in many developing countries.

Indeed, UNCTAD B2C E-commerce Index for 2019 reveals a wide regional variation in terms of an economy's preparedness to support online shopping (Table 2). Only a quarter of the population in Africa uses the Internet compared to three quarters in Western Asia. In East, South and Southeast Asia, just over half of the population has internet access, which may act as the key bottleneck for B2C e-commerce. Low postal reliability is the main challenge for Latin America and the Caribbean. African countries in general lag behind other regions in all measures, pointing to the importance of catching up in all policy areas.

Table 2. UNCTAD Business-to-Consumer e-commerce index, by region, 2019

	Share of individuals using the Internet (2018 or latest)	Share of individuals with an account (15+, 2018 or latest)	Secure Internet servers (normalized) (2018)	UPU postal reliability score (2018 or latest)	2019 Index value	2018 Index value
World	57	60	55	49	55	55
Developed	86	93	87	82	87	86
Transition economies	67	58	62	65	63	65
East, South and Southeast Asia	53	59	57	59	57	57
West Asia	75	58	49	52	59	57
Latin America and the Caribbean	59	53	53	28	48	46
Africa	25	40	29	22	29	30

Source: UNCTAD B2C E-Commerce Index 2019: UNCTAD Technical Notes on ICT for Development No. 14.

Regulation matters, particularly for developing countries

There is a strong link between the existence of legal and regulatory frameworks on the one hand and the preparedness for e-commerce on the other. According to the UNCTAD Global Cyberlaw Tracker, as of 2020:

- 81 per cent of countries had put in place e-transactions laws;
- 56 per cent had adopted consumer protection laws or laws with provisions on consumer protection covering online purchases;
- 66 per cent had adopted data protection and privacy laws; and
- 79 per cent had cybercrime laws in place.[6]

While all developed countries have adopted and implemented laws and regulations in the above four areas, only a small number of developing countries (*e.g.,* Argentina, China, Chile, Indonesia, Malaysia, Peru, the Philippines, South Africa, Turkey, Viet Nam and Zambia) have laws and regulations in all four areas. Most developing countries and countries with economies in transition have enacted e-transactions laws and cybercrime laws. However, legislation concerning consumer protection and privacy protection lags far behind. While more than half of the LDCs have adopted e-transactions and cybercrime laws, less than half of them have laws in the other two areas. The lack of regulatory preparedness remains a key challenge to be addressed in bridging the digital divide in these economies.

II.

E-commerce in the context of the WTO

E-commerce is not a new issue in WTO. An increase of e-commerce was foreseen in the latter part of 1990s, which led to an important WTO ministerial declaration that confirmed the continuation of the practice of "not imposing customs duties on electronic transmissions" while examining various aspects of e-commerce and their possible implications to the WTO rules. As cross-border e-commerce rapidly expanded, a call for a greater multilateral regulatory cooperation to govern global e-commerce has increased and resulted in the current JSI negotiations on e-commerce.

A. The treatment of e-commerce in WTO

Contrary to general perception, e-commerce is not a "new" issue as such in WTO. Issues related to e-commerce were first introduced in the WTO by the Declaration on Global Electronic Commerce adopted at the WTO's Second Ministerial Conference in 1998. The Declaration called for the establishment of a work programme "to examine all trade-related issues relating to global electronic commerce" (WTO, 1998). The Declaration also stated that "(…) Members will continue their current practice of not imposing duties on electronic transmission". This so-called "moratorium" on customs duty on electronic transmissions has been regularly extended at successive Ministerial Conferences.

The WTO's Work Programme on e-commerce has been pursued by different bodies within WTO, which include three Councils (Trade in Services, Trade in Goods and Trade-Related Aspects of Intellectual Property Rights (TRIPS)) and one Committee (Trade and Development). The outcome of the discussions has been reported to the WTO General Council, which has also held discussions on cross-cutting issues such as classification of the content of certain electronic transmissions, development-related issues and fiscal implications of e-commerce and competition (WTO, 2001).

With the rapid expansion of the digital economy and e-commerce in the past decade, there have been increasing calls for developing new common rules for cross-border e-commerce in goods and services within the WTO framework. Such calls emerged from the perception that the existing WTO rules were based on the premise of traditional forms of trade prevalent in the last century, thus not adequate for addressing socio-economic opportunities and challenges arising from e-commerce. While substantive WTO rules, namely the General Agreement on Tariffs and Trade (GATT), the General Agreement on Trade in Services (GATS), the Agreement on TRIPS, contain elements and provisions that can be relevant to e-commerce, the conceptual framework of these agreements is not fit for the purpose of addressing trade-related aspects of e-commerce. For example, these agreements generally distinguish between trade in goods and trade in services and fail to address a wide range of regulatory issues associated with e-commerce. Moreover, in some WTO members' view, these rules do not adequately address some novel issues, particularly the flow of data.

B. The JSI negotiations on e-commerce

In 2017, in the run-up to MC11, a group of countries proposed to convert the work programme into negotiating mode with a new ministerial declaration but did not succeed. The failure to pursue the negotiating agenda in the multilateral context led the group of WTO members to opt for alternative ways forward, resulting in the JS2017 at MC11 presented by 71 WTO members representing 77 per cent of world trade. The JS2017 stated that the participating WTO members would initiate "exploratory work together toward future WTO negotiations on trade-related aspects of e-commerce" inviting all WTO Members to participate "without prejudice to participants' positions on future negotiations" (WTO, 2017). This e-commerce initiative was among the four MC11 open-ended "plurilateral" initiatives. The other three initiatives address the issues of investment facilitation, MSMEs and services domestic regulation.

Against the backdrop of the long-term stalemate of the Doha Round negotiations, as well as the search for new approaches and issues as advocated by some countries since the tenth WTO Ministerial Conference in 2015 (MC10), the JS2017 was hailed by some countries as "new ways of doing business" in the WTO which would allow willing countries to move faster on specific issues of particular relevance to modern trade.[7] By contrast, countries that did not support the negotiations expressed concerns that this approach might run counter to some core WTO principles, that the new issues lacked specific negotiating mandates, and that they were not prepared to take commitments in these new areas (Third World Network, 2017).

In 2019, following a year of exploratory discussions after the release of the JS2017, a group of countries issued a second Joint Statement at a Ministerial meeting held in the margin of the World Economic Forum Annual Meeting in Davos, Switzerland. This time, the number of countries supporting the joint initiative was 76, representing over 90 per cent of world trade. In the JS2019, they confirmed the parties' intention "(…) to commence WTO negotiations on trade-related aspects of electronic commerce" seeking to achieve "a high standard outcome that builds on existing WTO agreements and frameworks with the participation of as many WTO members as possible" (WTO, 2019).

China was not a signatory of the JS2017 but decided to join the JS2019. Its participation was important for achieving a critical mass of participants and has significantly changed the dynamics of the negotiation. Other countries have joined the initiative since January 2019, including Benin, Burkina Faso, Côte d'Ivoire, Indonesia, Kenya, Morocco, the Philippines and Saudi Arabia, bringing the total number of participants to 86 (Table 3). Developing countries such as India, South Africa, Viet Nam, Pakistan, Ecuador, the Plurilateral State of Bolivia, the Bolivarian Republic of Venezuela, as well as the vast majority of the members of the Africa, Caribbean and Pacific (ACP) states remain outside the initiative.

The launch of the negotiations was considered by some WTO members as significant for the credibility and integrity of the MTS. They view the negotiations as instrumental for reinvigorating the negotiating function of the WTO, restoring confidence in multilateral cooperation and creating a positive atmosphere in the midst of heightened trade tensions and systemic challenges. The imperative of revitalizing the MTS and sustaining the credibility of the WTO as a trade negotiating body was among the considerations that had motivated the initiative and participation of some countries.

The JS2019 was welcomed by business groups, such as the Global Services Coalition, which supported an ambitious WTO framework on e-commerce to facilitate customs clearance, digital transitions, transparency, trust, movement of information, access to a variety of e-commerce platforms, payments, technologies, social media and marketing tools, productivity software and shipping and logistical services.[8]

By contrast, there were views that the initiative would distract attention from the ongoing work programme on e-commerce and unfinished business of the Doha Round negotiations. Some civil society organizations denounced the negotiations as an attempt to support giant technology companies that seek to access markets globally; extracting and controlling personal and business data around the world; locking-in deregulation and evading future regulation; accessing an unlimited supply of cheap labour; and non-payment of taxes.[9]

Table 3. Participants in the Joint Statement Initiative 2019 (as of November 2020)

Developed countries	Transition economies	Latin America	Asia	Africa
Australia	Albania	Argentina	Bahrain	Benin*
Canada	Georgia	Brazil	Brunei Darussalam	Burkina Faso*
European Union (27 member countries)	Kazakhstan	Chile	China	Cameroon
Iceland	Montenegro	Colombia	Indonesia	Côte d'Ivoire
Israel	Republic of Moldova	Costa Rica	Kuwait	Kenya
Japan	Russian Federation	Ecuador	Lao People's Democratic Republic*	Nigeria
Liechtenstein	North Macedonia	El Salvador	Malaysia	
New Zealand	Ukraine	Guatemala	Mongolia	
Norway		Honduras	Myanmar*	
Switzerland		Mexico	Philippines	
United Kingdom		Nicaragua	Qatar	
United States		Panama	Republic of Korea	
		Paraguay	Saudi Arabia	
		Peru	Singapore	
		Uruguay	Thailand	
			Turkey	
			United Arab Emirates	
			Hong Kong, China	
			Taiwan Province of China	

Source: UNCTAD, based on the Joint Statement on Electronic Commerce (WT/L/1056) and various communications including INF/ECOM/18, 37, 38, 46, 48, 49, 50 and 53.

Notes:
- China, El Salvador, Georgia, Honduras, Mongolia, Nicaragua, Thailand, and the United Arab Emirates did not co-sponsor the JS2017 but joined the group for the JS2019.
- Cambodia was co-sponsor of the JS2017 but left the group.
- Asterisk "*" denotes LDCs.

The substantive negotiations started in March 2019 with the initial objective of making tangible progress by the G20 Meetings in June 2019 and concluding the negotiations in 2020, possibly at the twelfth WTO Ministerial Conference (MC12) which was planned to take place in June 2020.[10]

Coordinated by Australia, Japan, and Singapore, the negotiations are organized according to thematic issues which include the following: (i) enabling digital trade/e-commerce; (ii) openness and digital trade/e-commerce; (iii) trust and digital trade/e-commerce; (iv) cross-cutting issues; (v) telecommunications; and (vi) market access.

C. Developments under the COVID-19 pandemic

In January 2020, WTO members participating in the joint initiative issued a third statement indicating their aim to develop a consolidated negotiating text by MC12 in June 2020. They expressed their commitment to achieving a high standard outcome, with the participation of as many WTO members as possible. MC12 has since been postponed to 2021 owing to the COVID-19 pandemic. The JSI parties are aiming to arrive at a consolidated text on e-commerce by the end of 2020.[11]

To many countries, the pandemic and the rapid growth in the demand for e-commerce accentuated the importance of adopting global rules and standards for e-commerce, as was stressed by the supporters of the JSI negotiations during the WTO General Council Special Virtual Meeting on trade and the COVID-19 on 15 May 2020.[12]

A large group of developing countries, however, continued to underscore that the priority of the WTO members should be to reduce the existing digital divide rather than nose-diving into negotiating new rules, especially when they were yet to evaluate the overall impact of the COVID-19 on their digital economy. In LDCs, for instance, there are significant gaps in several policy areas regarding the digital economy, ranging from ICT infrastructure and payment solution to skills and regulatory frameworks.[13]

D. Scope and content of the JSI negotiations

At the time of preparing this study (November 2020), there appears to be a significant difference among countries on what should be the appropriate scope of the JSI negotiations. Certain members favour an ambitious coverage, hoping that the negotiated outcome would provide a means to improve the domestic regulatory environment affecting e-commerce, including on-line trust, security, competition and consumer protection; and improve the cross-border trading environment, including for cross-border data flows, a ban on localization requirements; and better protection of intellectual property including trade secrets and source code. Others have shown preference for a narrower focus on the basis of the 1998 Work Programme, or to focus specifically on the Internet-enabled trade in goods.

The JSI negotiations have identified a set of possible elements of future e-commerce disciplines that are grouped into several thematic areas (Table 4).[14] The focus would continue to be placed upon a few clusters of issues that aim at greater access and non-discrimination of digital products, data and online platforms, and regulatory coordination on cross-border data flows. While data is considered as a key economic resource in the digital economy, free data flows raise concerns on the part of governments and citizens, due in part to difficulties of assessing the risks and benefits associated with data, *e.g.,* how the data are collected and stored and who benefits from such data transactions.

Discussion on data also involves several sensitive regulatory issues, ranging from privacy and personal data protection to cyber security and upgrading in the digital economy (often referred as "digital industrialization"). Many developing countries are yet to develop national regulatory frameworks in these areas. Certain countries may prefer to restrict data flows and keep the data of their citizens in servers located within their territories for various regulatory purposes. This suggests a significant challenge in reaching an agreement that would strike a balance between promoting a smoother flow of data while respecting individual countries' rights to regulate and pursue legitimate public objectives.

The negotiations also address facilitation of e-commerce transactions and trade, including those addressing online trust through enhanced protection of individual, consumer and business rights. Negotiating issues in these areas may include standardization of e-transaction laws and technical standards, such as electronic authentication methods, e-signature and e-contracts, as well as customs procedures better adapted to the delivery of low-value, express shipments of products ordered online. Negotiations may also be needed to decide on the exact scope of the moratorium on customs duties on electronic transmissions, *e.g.,* whether the moratorium would only apply to the means of transmissions or also apply to the content transmitted electronically, and whether the moratorium may be exempted when it causes certain revenue implications to governments.

On-line trust encompasses issues related to cyber security, protection of personal information and privacy in enhancing consumers' confidence and trust in the e-commerce, as well as intellectual property rights for firms concerning source code (as expressed in algorithms) of digital products and services. The challenge would lie in reconciling different national regulatory approaches in these areas as the differences may be significant, such as in respect of personal data protection.

Table 4. Subject areas of negotiations

A: Enabling Digital Trade/E-Commerce	
Facilitating electronic transactions	• Electronic transaction frameworks • E-authentication, digital certification and e-signatures • E-contracts
Digital trade facilitation	• Paperless trading • Customs warehouses/free zones • Electronic invoicing • Electronic transferable record • Facilitation of logistics and e-payments
Customs Duties	• Customs duties on electronic transmissions
B: Openness and Digital Trade/E-Commerce	
Non-discrimination and liability	• Non-discriminatory treatment of digital products • Prior authorization • Interactive computer services (limiting non-IP liability)
Flow of information	• Cross-border transfer of information • Location of computing facilities • Location of financial computing facilities
Access to Internet and data	• Open government data • Access to the Internet • Access to online platforms/competition
C: Trust and Digital Trade/E-Commerce	
Trust and digital trade/e-commerce	• Online consumer protection • Spam
Privacy	• Protection of personal information/privac
Business trust	• Source code • ICT products that use cryptography
D: Cross-cutting issues	
Transparency	• Publication and accessibility of laws and regulations • Opportunities to comment • Mechanisms for reporting and notifications
Cybersecurity	• Cybersecurity
Capacity building	• Options for capacity building and technical assistance • Cooperation between stakeholders, agencies and international organizations
E: Telecommunications	
Updating Telecoms Reference Paper	
F: Market access	
Services market access Goods market access	
Other issues	
Preamble; Definitions; Scope; Principles; General provisions; Taxation; General exceptions; Dispute settlement	

Source: UNCTAD, based on Joint Statement on Electronic Commerce: Facilitator's Reports (INF/ECOM/R/1-7).

A proposed ban on "forced" technology transfer and disclosure of source code would prove to be yet another high-profile issue. While the proponents call for a general prohibition on access to or transfer of source code of software unless under exceptional circumstances, such as law enforcement, others maintain strong reservations.

Some of the above "novel" issues and their implication to development are discussed in detail in Chapter V.

III.

E-commerce disciplines: National and regional approaches

In order to better appreciate the dynamics of negotiations and the scope of possible e-commerce disciplines, it is useful to understand different perspectives expressed by WTO members, which are based on their competitive positions in global e-commerce, as well as on the type of regulatory frameworks on e-commerce they already have at the national level. Also useful is to examine RTA, as some of them already have provisions addressing issues concerning e-commerce. Different approaches to e-commerce under different RTAs may be taken as a useful reference when examining the scope and possible disciplines in the ongoing e-commerce negotiations.

A. Individual WTO members' approaches

The digital transformation of the global economy will impact countries in a differentiated manner. Opportunities will initially be captured by countries that are leading technological progress. Countries trailing behind will face certain difficulties in managing trade relations with them (Ciuriak and Ptashkina, 2019). The difference in market power in global e-commerce will be subsequently translated into their positions vis-à-vis the JSI negotiations on e-commerce.

The United States, China and the European Union are among the members which are active in the JSI negotiations. These economies are dominant players in e-commerce: They together represent over 70 per cent of global e-commerce sales.[15] Their negotiating positions, however, seem to differ particularly on issues that are new to the WTO, such as cross-border data flows, data protection, and cyber security.

The **United States** has underscored its commitment "to seeking a high-standard agreement that creates strong, market-based rules" and it will be aiming for "an ambitious, high-standard agreement that is enforceable and has the same obligations for all participants"[16] that covers not only e-commerce in goods *(i.e.,* trade in goods enabled by the Internet) but also free cross-border data flows and prevention of data localization. Such a position reflects the interest of United States-based firms that provide digital services of online search, social network and content services, whose business models heavily rely on data gathering, data mining, data analytics, and data processing.

The dominant market position of several digital platform companies based in the United States has been attributed, among other things, to the country's relatively liberal regulatory system, including: free speech right under the First Amendment to its Constitution; Section 230 of the Communications Decency Act, which immunizes interactive commuter services providers from legal claims arising from third-party speech published on their platforms; copyright infringement liability protections under the safe harbour provisions of the Digital Millennium Copyright Act;[17] and, consumer privacy regulations which are widely seen as less constraining.[18]

China's approach in the JSI negotiations on e-commerce appears to focus on enhancing cross-border e-commerce in goods *via, inter alia,* transparent and predictable regulatory environments for e-commerce and improved trade facilitation such as more efficient customs procedures for low-value express shipments.[19] In the JSI negotiations, China has emphasized the importance of seeking an open, transparent, inclusive and pro-development outcome, focusing on trade-related aspects of e-commerce on trade in goods as per the 1998 Work Programme while respecting the need for countries to protect their policy space and "right to regulate", including to assure privacy, public interests, national security and network security.

As regards cross-border flows of data, China supports certain control over data flows and data localization requirements. The Cyber Security Law of China essentially requires personal information gathered in China to be stored within the Chinese territory and to only be provided overseas subject to a security assessment. It reflects China's *sui generis* regulatory model, which relies on extensive government regulation of both hardware and content of the network connectivity, and which has supported the endogenous development of the Internet and the digital economy (Gao, 2018).

China's Provisional Regulations on the Management of International Networking of Computer Information Networks (1996) provides that connection to international networks should go through an international gateway provided by the Ministry of Posts and Telecommunications. Regulation on Internet Information Service (2000) prohibits a wide range of contents, including content endangering national security, leaking state secrets, harming state honour and interests, spreading rumours, or disrupting social order and stability. Internet service providers are liable for third-party generated contents; they are required to ensure that the content they provide themselves is legal but also not to copy, publish or distribute any illegal information produced by their users. This has had a dissuasive effect against the entry of foreign Internet service providers.

The **European Union** has indicated that its main focus in the JSI negotiations would be improving consumers' trust in the on-line environment, tackling barriers that prevent cross-border e-commerce sales, and addressing forced data localization requirements and forced disclosure of source code, *via*, *inter alia,* electronic authentication and trust services, consumer protection, and permanently banning customs duties on electronic transmissions.[20]

As regards cross-border data flows, the interest of the European Union seems to be focussed on privacy and personal data protection, as well as the ability to regulate the potential abuse of market power by large multinational technology firms, in line with its General Data Protection Regulation (GDPR), which became effective in May 2018. The GDPR essentially prevents transfers of personal data to countries outside the European Union unless they can guarantee "an adequate level of protection" (Box 1). The GDPR has significantly enhanced the scope and disciplines from its predecessor Data Protection Directive (DPD) regime adopted in 1995. The GDPR is applicable to all businesses offering goods and/or services to citizens in the European Union and imposes penalties on companies for breaches. The European Union's approach is also informed by its advanced regulatory framework for e-commerce under the Digital Single-Market Strategy published in 2015 (European Commission, 2015).

A number of developing countries in the JSI negotiations have highlighted the role of digital trade as a social and economic tool for development[21] and have expressed the hope that the future trade rules on e-commerce would contribute to levelling the playing field for all WTO members.[22] Many have called for scaling up trade-related development cooperation, including through Aid for Trade, to promote

Box 1. European Union's General Data Protection Regulation

The European Union has implemented expansive data protection and privacy rules through GDPR, which came into effect in 2018. Key provisions include:

- Defining personal data broadly as any information that may be used to identify a person.
- Requiring that personal data may only be transferred to countries outside the European Union if they can guarantee "an adequate level of protection".
- Requiring that firms may only collect data to be used for specific business purposes.
- Providing individuals expanded rights to obtain their personal data collected by firms.
- Providing individuals the "right to be forgotten" that may force firms to delete collected personal data.

Source: Regulation (EU) 2016/679, accessible at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02016R0679-20160504&qid=1532348683434

connectivity and narrow the digital divide, drawing on experiences gained in implementing the TFA. The case for supporting businesses of all sizes has also been highlighted.[23] However, because the degree of involvement in e-commerce significantly differs among JSI-participating developing countries, their negotiating priorities are not homogeneous, as demonstrated by examples below.

- **Brazil** has been among the more active members in the JSI negotiations. The country remains the largest e-commerce market in Latin America and has many consumers that are comfortable engaging in e-commerce transactions[24] and has relatively well-developed regulations for e-commerce covering consumer protection, data protection, cyber security, and intellectual property rights. It has also adapted its tax system to the digital environment, including streaming and cloud services, software, and other sectors of innovation (Thorstensen *et. al.,* 2019).
- **Chile, Colombia, Mexico and Peru** have opted to submit, in June 2019, a joint communication which builds on their regional integration agreement, *i.e.,* the Pacific Alliance FTA. The focus of their proposal is on possible cooperation disciplines covering topics such as laws and regulations relating to e-commerce, cross-border information flows and development of standards and codes of conduct.[25]
- **Indonesia** emphasized, in November 2019, that e-commerce was first and foremost a development issue and that the promotion of trade through e-commerce should not come at the expense of reasonable and justifiable public policy objectives. In contrast to most participants in the JSI negotiations, Indonesia has stated that the moratorium on customs duties should not be preserved permanently and that it should only cover electronic transmissions, and not the content transmitted.[26]
- **Côte d'Ivoire,** in December 2019, described its motivation for joining the JSI negotiations as a preference for examining all issues pertaining to e-commerce in a single forum as opposed to doing so in several bodies of the WTO under the Work Programme. It also proposed that an approach similar to that used in the TFA be adopted for the e-commerce rules, *i.e.,* a set of common principles applicable to all participating members associated with measures, specific to developing countries, which they implement as they develop the capacity to do so.[27]

A large number of LDCs and other developing countries have opted not to take part in the JSI negotiations. In particular, many LDCs have expressed their unpreparedness to take on additional commitments in this area for various reasons.[28] Non-participation in the JSI negotiations, however, should not be equated with a disinterest on the part of these countries in tackling existing digital divides and embarking on reforms supportive of e-commerce development as shown by a recent publication by UNCTAD (Box 2). Apart from LDCs, India indicated that it would be premature to take on multilateral obligations as the country was still in the process of framing its e-commerce policy. India also highlighted the importance of policy space in terms of ownership, use and flows of data in rapidly growing sectors such as cloud computing and data storage. Similarly, some African countries have highlighted the importance of "digital industrialization" and transformation and, for that goal, of first putting in place data regulation laws and digital industrialization plans.[29]

Box 2. Efforts undertaken in eT Ready beneficiary countries to promote e-commerce development

The UNCTAD eTrade Readiness Assessment (eT Ready) Programme demonstrates the keen interest of many developing countries and LDCs in identifying challenges to the development of e-commerce in their economies and undertaking reforms to address these challenges. To date, 27 assessments (eT Readies) have been conducted out of the 43 country requests received by UNCTAD. A recent monitoring exercise was conducted to capture progress made across the seven policy areas defined by eTrade for all initiative as constituting the building blocks for e-commerce development* by a first group of 18 countries having undertaken eT Readies. The monitoring exercise reviewed the implementation of the recommendations made in each eT Ready and found that four policy areas received the greatest attention by countries, *i.e.* payment solutions, ICT infrastructure and services, the legal and regulatory framework, and trade facilitation and logistics. These policy areas featured an implementation rate of the eT Ready recommendations of above 50 percent. It is also noteworthy that these policy areas tackle many of the same issues that are being discussed in trade negotiations, including the JSI. Another important finding of the monitoring exercise is that several among the beneficiary countries have since moved to adopt a national e-commerce development strategy (*e.g.*, Cambodia, Nepal, Senegal and Zambia), are in the process of doing so (*e.g.* Myanmar), or are seeking assistance from development partners to do so, including in the context of regional integration processes. Such strategies are essential for promoting public-private dialogue, policy coordination and mobilizing support for the inclusion of e-commerce in countries' overall development plans.

Source: UNCTAD (2020d).
Note: * These seven policy areas are: (i) e-commerce readiness and strategy formulation; (ii) ICT infrastructure and services; (iii) trade facilitation and logistics; (iv) lLegal and regulatory framework; (v)payment solutions; (vi) skills development, and (vii) access to financing.

B. Regional approaches to e-commerce disciplines

Issues concerning e-commerce – such as customs duties, non-discriminatory treatment to domestic regulatory framework, electronic signatures, consumer protection, data protection, paperless trading and unsolicited electronic messages among others – have already been addressed in some RTAs.[30] Different models of e-commerce provisions under RTAs point to divergent positions of countries in the JSI negotiations in terms of the scope, depth and strength of possible disciplines.

Among RTAs that were in force as of September 2017, 69 of them included an e-commerce chapter or articles dedicated to e-commerce (Wu, 2017). According to this study, the first RTA to include an explicit standalone chapter on e-commerce was the FTA between Australia and Singapore in force since July 2003, followed by four FTAs involving Australia, Singapore and the United States.[31] These countries spearheaded regional rulemaking in e-commerce, followed by Canada, the European Union, Japan and the Republic of Korea. It is worth noting that the majority of countries participating in these rule-making processes are developed countries, which may result in rules tailored for their particular needs.

The scope and the depth of disciplines related to e-commerce differ significantly across RTAs. At one end of the spectrum are RTAs that contain only a few binding provisions, such as permanent moratorium on customs duties for digital transmissions, along with a number of general hortatory provisions on cooperation between regulatory authorities. A study dated 2017 found that 19 RTAs included specific provisions on cross-border transfer of information, but most provisions were related to cooperation rather than disciplines. Only one RTA, *i.e.,* Republic of Korea-United States FTA, contained binding provisions on requirement on cross-border transfer of information, unnecessary barriers to cross-border transfer of information and exception to authorization of cross-border transfer of information respectively (Monteiro and Teh, 2017).

Even some recent RTAs concluded by developed countries, such as the European Union-Canada Comprehensive Economic and Trade Agreement (CETA) in 2016 (Box 3), contain only a few binding provisions on e-commerce on a limited range of issues, but mostly as best-endeavours.

At the other end of the spectrum, some recent RTAs address relatively novel issues related to digital trade, such as data flows, data localization and the treatment of source code. The original Trans-Pacific Partnership Agreement (TPP) concluded in 2016 is likely to have been the first proposed RTA that contained provisions covering an extensive range of issues related to e-commerce or "digital trade". Its disciplines on e-commerce were carried over to the subsequent Comprehensive and Progressive Trans-Pacific Partnership Agreement (CPTPP) concluded in 2018 (after the United States' withdrawal in 2017) by the remaining 11 TPP members. The disciplines were later transposed and further invigorated in the United States-Mexico-Canada Agreement (USMCA) concluded in 2018. The latter can be regarded as one of the agreements that contain the most comprehensive and elaborate disciplines on e-commerce (Box 4). Approaches adopted in CPTPP and the USMCA Agreement, in particular, the so-called "Digital 2 Dozen"[32] obligations that the United States promoted under TPP with a view to developing "the digital

Box 3. E-commerce provisions of the European Union-Canada Comprehensive Economic and Trade Agreement (Chapter 1)

Article 16.1: Definition

Article 16.2: Objective and scope

Article 16.3: Customs duty on electronic commerce

Article 16.4: Trust and confidence in electronic commerce (best endeavour)

Article 16.5: General provisions (best endeavour)

Article 16.6: Dialogue on electronic commerce (best endeavour)

Article 16.7: Relation to other chapters

Source: The Comprehensive and Economic Trade Agreement between the EU and Canada, accessible at: https://ec.europa.eu/trade/policy/in-focus/ceta/ceta-chapter-by-chapter/

Box 4. The United States-Mexico-Canada Agreement – Summary provisions on "digital trade"

Article 7.8. Express shipments subject to specific expedited customs procedures and no customs duty/tax under increased *de minimis* amount.

Article 19.3. No customs duties for digital products transmitted electronically.

Article 19.4. Non-discriminatory treatment of digital products.

Article19.5. Domestic electronic transactions frameworks consistent with the UNCITRAL model law.

Article19.6. Recognition of legal validity of electronic authentication and electronic signatures.

Article 19.7. Online consumer protection from fraudulent or deceptive commercial activities.

Article.19.8. Personal information protection.

Article 19.9. Paperless trading (best endeavour).

Article 19.10. Principles on access to and use of the Internet for digital trade (best endeavour).

Article 19.11. No prohibition of cross-border transfer of information by electronic measures.

Article 19.12. No requirement on the location of computing facilities.

Article 19.13. Measures against unsolicited commercial electronic communications.

Article 19.14. Cooperation (best endeavour).

Article 19.15. Cybersecurity (best endeavour).

Article 19.16. No requirement on the transfer of source code or algorithm expressed in source code.

Article 19.17. No liability of interactive computer services provider for harms related to information stored, processed by the service.

Article 19.18. Open government data (best endeavour).

Source: United States-Mexico-Canada Agreement, accessible at: https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement/agreement-between

economy through a free and open internet and commerce without borders", appear to form the basis of the United States' approach as regards the scope of the JSI negotiations.[33]

A few RTAs among developing countries have also included e-commerce chapters or disciplines. The Association of Southeast Asian Nations (ASEAN) Agreement on Electronic Commerce, signed in November 2019, addresses public policy issues such as privacy, data protection concerns, and national security considerations, in addition to operational e-commerce issues, such as facilitating electronic signatures and paperless trade. Some ASEAN members did not have domestic laws and policies on the issues covered in the agreement, while others had already agreed in principle to sign the TPP (predecessor to the CPTPP), which contained provisions that exceed the scope captured by the ASEAN Agreement on Electronic Commerce. The ASEAN members which are LDCs – Cambodia, Myanmar and Lao People's Democratic Republic – are exempted from certain obligations for a period of five years.

The Pacific Alliance FTA and its Modifying Protocol, signed in February 2014 by Colombia, Chile, Mexico and Peru, also contain provisions on e-commerce. The e-commerce chapter (Chapter 13) covers measures affecting electronic transactions of goods and services, including digital products. Parties agree not to charge customs duties for imports or exports of digital products transmitted electronically. Further, they are required to adopt or maintain legislation protecting the personal information of the users of e-commerce, as well as those which provide rights to users of electronic authentication and digital certificates. It also contains provisions on cross-border data flows, data localization, and imposing non-discrimination obligations for digital products on parties. The non-discrimination-related disciplines are similar to those contained in the CPTPP (three out of four countries are also parties to the CPTPP).[34]

The recently concluded Regional Comprehensive Partnership Agreement (RCEP) among 15 participating countries includes a chapter on e-commerce.[35] The chapter contains disciplines dealing with, *inter alia*, small and medium-sized enterprises (SMEs) and e-commerce, paperless trading, e-signature, e-authentication, online consumer protection, personal information protection, cyber security, data flows, and locating computer facilities. On the issue of consumer protection, RCEP members are encouraged to adopt and maintain transparent measures to address consumer protection. Further, RCEP members are not permitted to prevent the cross-border transfer of information by electronic means for the purposes of conducting business of a "covered person". However, members are provided regulatory space to maintain measures that are necessary to achieve a legitimate public policy objective. On data localization, each RCEP member may introduce its own measures regarding the use or location of computing facilities. The measures however should not be set as a condition for conducting business. RCEP members are expected to maintain their current practice of not imposing customs duties on electronic transmissions in accordance with the WTO moratorium. The chapter provides that members may adjust their practice to any future outcomes in the WTO on customs duties on electronic transmissions.

Outside Southeast-Asia and the Pacific rim, there are not many LDCs or developing countries that have entered RTAs with an e-commerce chapter (Wu, 2017). This trend may reveal the existing digital divide that inhibits their effective engagement in regulatory cooperation on e-commerce. A survey conducted in 2017 suggests that among lower middle-income countries, 15 were members of RTAs with e-commerce provisions,[36] while 13 upper middle-income countries had RTAs with e-commerce provisions.[37] In Africa, negotiations of the African Continental Free Trade Area (AfCFTA) will aim to develop continental rules for e-commerce.

Outside the RTA framework, some countries are negotiating agreements that deal exclusively with digital trade-related issues. Often referred to as Digital Economy Agreements (DEA), these agreements aim to establish digital trade rules and digital economy collaborations among members. Such agreements are a recent feature in the international treaty framework and their form and structure differs across agreements. For instance, the Digital Economy Partnership Agreement (DEPA) between Chile, New Zealand, and Singapore is a standalone agreement whereas the Singapore-Australia Digital Economy Agreement replace the e-commerce provisions contained in the existing Singapore-Australia FTA.

Despite differences in the form, the scope and the structure, these agreements largely cover similar topics such as recognition of electronic versions of export certificates, use of e-payments, and other trade facilitation-related issues. These agreements also encourage their members to collaborate on developing new rules and policy approaches pertaining to consumer trust, digital identities, cross-border data flows, addressing MSME-related challenges, and artificial intelligence.

To date, such agreements have been concluded amongst countries which have services-driven economies. The content of agreements appears to complement the ongoing JSI negotiations as well as other e-commerce and digital economy-related developments across international fora. However, subject matters and the depth of rulemaking contained within DEAs far exceed those being discussed in the JSI negotiations. For instance, the DEPA includes provisions for digital inclusion which aims at enhancing cultural links amongst *inter alia* indigenous peoples. DEPA also contains provisions on innovation and open data, digital identities, SME cooperation, and dispute settlement procedures by way of arbitration. These topics have thus far not been discussed in the JSI negotiations.

Part 2

Salient issues in the Joint Statement Initiative negotiations

IV.

Systemic challenges: The JSI negotiations and WTO

One major area of uncertainty concerning the ongoing JSI negotiations on e-commerce is what would be the nature of its outcome vis-à-vis the principle and the structure of WTO. Are the parties to the JSI negotiations aiming to "multilateralize" the outcome, *i.e.,* to include the outcome as an element within the WTO legal architecture? Or are they moving towards an issue-specific "plurilateral" agreement with a "high standard outcome" or anything else such as an RTA-type agreement? The majority of submissions in the JSI negotiations to date do not address this point relating to the nature of the outcome.[38] This chapter argues that the decision on the question will inevitably determine the scope and the level of ambition of the ongoing negotiations, and *vice versa*.

When a subset of 'like-minded' WTO members such as the JSI parties aim at agreeing on trade agreements, these can take the form of either plurilateral agreements within WTO, or RTAs outside WTO (Table 5). Plurilateral agreement and RTA are similar in that they have a limited number of participants but differ in that one is located within WTO and the other is located outside. Neither plurilateral agreements nor RTAs are new to the MTS. Different types of "plurilateral agreements" have existed throughout the history of GATT/WTO system. Also, relevant WTO rules allow for its members to formulate RTAs under certain conditions.

Table 5. Typology of "plurilateral" agreements

	Unconditional MFN (non-preferential)	Conditional MFN (preferential)
Within WTO	**(I)** Information Technology Agreement Post-Uruguay Round basic telecom and financial services agreements	**(II)** Agreement on Government Procurement
Outside WTO	**(IV)** None	**(III)** RTAs (GATT Art. XXIV, Enabling Clause, GATS Art. V) Mutual recognition agreements TiSA (negotiations suspended)

Source: UNCTAD.

A. Joint Statement Initiative outcome as a plurilateral agreement in the WTO

Negotiations on a plurilateral basis, be they for plurilateral agreements or for RTAs, may be favoured over multilateral ones as negotiations conducted among a group of 'like-minded' countries can facilitate a speedier conclusion of negotiations and a more ambitious outcome. Not all plurilateral agreements within WTO are however the same in terms of their impact on countries that are non-party to the plurilateral negotiations. They can be distinguished into two broad types based on how the negotiated outcomes are applied to third parties:

i. those which provide most favoured nation (MFN) benefits to all WTO members including those that are non-parties to the agreement, such as the Information Technology Agreement (ITA); and

ii. those which do not provide MFN benefits, as is the case in the Government Procurement Agreement (GPA).

ITA-type plurilateral agreement ("critical mass" agreement)

The ITA is a plurilateral agreement within the WTO framework. The core objective of the ITA, signed in 1996, was to improve market access on products in the information and telecommunication sector such as personal computers, tele-communication equipment and software. Under the ITA, the parties eliminated customs duties that applied to those products, and this zero-tariff treatment applied to imports from all WTO members. This is because the commitment was taken as an update to their own "schedule of concessions". The ITA was signed first by 29 WTO members but currently has the signatories of 81 WTO members. Under ITA-type plurilateral agreements, market access concessions are negotiated among participating countries, but the results are extended to all WTO members in accordance with the MFN principle.[39]

A critical factor in ITA-type agreements is to ensure that the negotiating parties have an incentive to extend the negotiated outcome to the non-participants who can free-ride the agreements. Successful ITA-type agreements have therefore ensured the participation of countries that account for "critical mass" of international trade, which enables the participants to establish meaningful reciprocity among themselves and satisfy their critical commercial interests before the negotiated outcomes are extended to non-participants on an MFN basis.

Can the outcome of the JSI negotiations take the form of ITA-type "critical mass" plurilateral agreement? With respect to whether the parties form a critical mass, the current JSI negotiations represent over 90 per cent of world trade and may be seen as covering "critical mass". However, it is still possible that certain JSI members opt not to extend the benefits secured through the negotiations to non-participants as what may be conceived as "critical mass" under traditional tariff negotiations like ITA may be different for negotiations on novel regulatory issues such as e-commerce disciplines.

Indeed, distinction needs to be drawn between the ITA and JSI negotiations as the content of negotiations are different. The ITA is a market access agreement that is based on pre-existing multilateral agreements, *i.e.*, GATT.[40] In its essence, the ITA serves as tariff reduction modalities as agreed among a sub-set of WTO members for modifying their respective schedules of tariff concessions. This is also the case with another proposed ITA-type plurilateral agreement discussed in the context of the Doha Round, *i.e.,* the Environmental Goods Agreement, which would have been amenable for incorporation into the WTO framework had it been completed.

The same principle applies to specific commitments as applied to trade in services. If JSI negotiations pertained solely to market access conditions affecting services trade as inscribed in WTO members' schedules of specific commitments, it would be conceivable that outcomes of JSI negotiations may be extended to all WTO members on an MFN basis in the same way as the ITA outcomes were extended to all WTO members.

Additional commitments under GATS Article XVIII are particularly relevant in this light as the provision formed the basis of the post-Uruguay Round (plurilateral) negotiations on basic telecommunication services. These negotiations led to the adoption of the Telecommunications Reference Paper providing regulatory framework for the sector as accepted by a number of the participants.[41] The Reference Paper provided domestic regulatory disciplines on such matters as competitive safeguards, interconnection, universal services, licensing, independent regulators and use of scarce resources (*e.g.*, frequency bands). The option remains particularly significant as some JSI participants seek to re-negotiate the existing GATS Telecommunications Reference Paper.[42]

It may be noted, however, that the JSI negotiations are not exclusively about market access improvement. The JSI negotiations entail a rule-making exercise on novel regulatory matters. While ITA-type plurilateral market access negotiations may be amenable to multilateralization through modification of individual members' tariff schedules or specific commitments on services, this may not be the case for plurilateral rule-making negotiations as they would require the agreement of all WTO members, *i.e.*, consensus, to incorporate a plurilateral agreement in the WTO legal framework, rather than amending member-specific tariff or services schedules.

GPA-type plurilateral agreement

The WTO's GPA represents another type of plurilateral agreement within the WTO framework. The GPA provides mutual access to the procurement markets of goods and services by the public authorities of parties to the agreement. As of 2020, there are 20 parties or 48 WTO members and observers as the GPA members. The GPA does not extend its benefits to non-participants with the commitments strictly applied on the basis of reciprocity because the agreement lacked the critical mass of participants. As a result, WTO members that are not party to the GPA cannot "free-ride" on the benefits negotiated among GPA members.[43]

The preference for the strict reciprocity may be due to the political sensitivity of the sector at home, as government purchases of goods and services are often closely related to the country's industrial or sectoral development policy. Also, the scale of government procurement in domestic economy is huge. According to World Bank (2020), the share of government procurement in gross domestic product (GDP) in 2018 was almost identical – at around 13 per cent - among 199 countries studied, whether they were low-income, middle-income, or high-income countries.

Process necessary for including the JSI agreement on e-commerce within WTO

In order to allow a sub-set of WTO members to form a GPA-type plurilateral agreement as contained in Annex 4[44] of the Marrakesh Agreement Establishing the World Trade Organization (WTO Agreement), and to incorporate such an agreement in the WTO architecture as a "covered agreement", requires consensus of all WTO members. Article X:9 of the WTO Agreement provides that incorporating a new Annex 4 agreement requires consensus at a Ministerial Conference. Indeed, there has been no precedent of GPA-type plurilateral agreements incorporated into the WTO framework since the conclusion of the Uruguay Round.[45]

To summarize, JSI parties are likely to face challenges if they are to consider negotiating the JSI as a plurilateral agreement. Irrespective of whether JSI parties decide to extend the benefits to all members as an ITA-type agreement or not as a GPA-type agreement, consensus from the WTO membership is likely to be required. Garnering consensus has not been possible to date and would be expected to be onerous in the future.

B. Joint Statement Initiative outcome as an RTA-type agreement outside WTO?

If incorporating the JSI outcome into the WTO framework as a "plurilateral agreement" proves to be difficult, the JSI parties might opt for making the future e-commerce agreement an RTA-type agreement. Under RTA-type agreement, benefits are provided on a preferential basis to the participants only as exception to the MFN principle and the agreement is located outside WTO. This might happen if the JSI parties opt for a "high-standard" outcome but do not wish to extend such benefits to "free-riding" non-parties. In such a case, the compatibility of the agreement with the relevant WTO disciplines would arise.

WTO Agreements recognize the legitimate role that RTAs play to facilitate trade between RTA parties and allow WTO members to enter RTAs under certain conditions as exception to the MFN principle. The WTO-compatibility depends on the subject matter and differs across three policy areas, namely: (i) market access in goods and service covered under GATT and GATS; (ii) intellectual property rights covered under the TRIPS; and (iii) issues not covered under WTO.

i. **Market access in goods and services:** RTAs being subject to the requirements of GATT Article XXIV or GATS Article V, such RTA-type agreements would need to generally meet the "substantially all the trade" requirements in coverage in goods and services.

ii. **Intellectual property rights:** TRIPS does not provide MFN exemption for RTAs as TRIPS entails no market access commitments. Thus, any TRIPS-plus disciplines that may be agreed in RTA-type plurilateral agreements *(e.g.,* trade secrets) would need to be extended to all WTO members on an MFN basis.

iii. **Issues not covered by WTO: RTA parties** are free to form issue-specific RTA-type plurilateral agreements

Particularly significant in this context is the compatibility of future e-commerce agreement with GATS Article V since electronic delivery of services falls within the scope of the GATS. Question arise as to how liberalization of specific services sectors only (ICT or telecommunication services relevant to e-commerce) or modes of supply (ICT or telecommunication services relevant to e-commerce) or modes of supply (mode 1 cross-border supply of services) should be assessed in view of the WTO requirement on "substantially all the trade" or "substantially all" sectoral coverage.[46,47] As the term "substantial coverage" in GATS Article V is understood in terms of numbers of sectors, volume of trade affected and modes of supply, its compatibility with GATS Article V disciplines might prove to be at least debatable.

C. What options for multilateralization?

Whether the JSI outcome may be multilateralized remains to be addressed. There appears to be the case for multilateralization given that neither plurilateral (ITA-type or GPA-type) agreements or RTA-type agreements as such would settle the legal standing of the future e-commerce agreement. Procedurally, multilateralization requires consensus, including from those countries that did not participate in the negotiations. This suggests that JSI parties may be required to address the concerns of these countries in the negotiated outcome if they are to aim at future multilateralization of the outcome.

In other words, there may be trade-offs between the form of the JSI outcome and the level of ambition. The greater the number of participants, the lower will the level of ambition likely to be. JSI parties may be constrained in setting the high standard outcome as they would need to factor in non-participants' policy preferences. The case for the high-standard outcome among a limited number of countries has indeed been debated as it might prove to be globally sub-optimal. The high-standard outcome might also dissuade developing countries from joining the agreement given their limited regulatory capacity. This may lead to fragmentation of international e-commerce regulations.

Such potential case for "multilateralization" may highlight the importance of introducing a built-in mechanism that would facilitate the gradual implementation and future participation of non-participating countries. Such a mechanism could take the form of modulated commitments, so that participant and non-participant developing countries could gradually assume a higher level of commitments in differentiated time frames or simply be exempted from any obligations under certain conditions and over a certain timeframe.

It is in this spirit that ideas have been put forward in the preparatory process to institute an "à la carte" approach to commitments or a "two-tier" approach to allow differentiation of commitments according to members' implementing capacities. Some transitional implementation mechanisms, such as a scheduling approach of the type used in the TFA, which allowed for modulation of commitments based on individual members' implementation capacities, capacity-building support and capacity acquisition, might provide useful lessons.

Trade Facilitation Agreement approach

The TFA has adopted an innovative differentiated and sequential approach to implementation. Its implementation mechanism (Section II) establishes the linkage between the extent and the timing of implementation of the TFA provisions with the implementation capacities of developing countries. Specific provisions (obligations) are classified into three categories A, B and C in terms of the implementation timeframe:

- **Category A**: Provisions for immediate implementation (upon entry into force).
- **Category B**: Provisions the implementation of which is subject to a transitional period as decided by individual countries.
- **Category C**: Provisions the implementation of which is subject to a transitional period and to the acquisition of implementation capacity through the provision of capacity-building support by donor countries and agencies.

Each member is free to self-designate provisions into one of the three categories, and it is recognized that when developing countries lack the necessary capacity, implementation is not to be required until the country acquires implementation capacity. LDCs will only be required to undertake commitments to the extent consistent with their individual needs or their institutional capabilities. Drawing on the approach, different variation of implementation arrangements could be considered for the future e-commerce agreement.

To the extent that lack of immediate institutional capacities and resources act as the major bottleneck for implementation, some countries may find the approach to be particularly useful. As countries seek to design adequate regulatory regimes to govern digital economy and build capacity, it would allow them to decide on which policies are essential for developing their digital economy and design their implementation schedules accordingly. Certain regulatory issues may need to be given higher priority for the national regulatory framework on e-commerce and might be considered for earlier implementation. These may well include laws related to e-transaction, consumer protection, data protection, privacy and cybercrime.

When countries do not possess regulatory and institutional capacities or infrastructure, deferred implementation over a transition period, subject to capacity-acquisition with the provision of capacity-building support, might be considered as an option. Such a mechanism may serve to foster greater inclusiveness of the agreement towards multilateralization if so decided.

The TFA-type implementation mechanism, however, would not substitute the need for adequately defining the scope of the agreement and designing the content of the rules. As some proposed rules are more controversial than others, there is need to ascertain whether such rules should remain in the scope of

the agreement, be selectively exempted for developing countries, particularly LDCs, or formulated with hortatory or best-endeavour language. The TFA itself includes a number of best-endeavour provisions (qualified with the proviso such as "to the extent practicable", "members are encouraged"). Consideration could be given to the applicability of the dispute settlement mechanism. Different disciplines may be differentiated in their legal enforceability. TFA (Article 20), for instance, exempts application of the Dispute Settlement Understanding (DSU) for certain provisions for two years for developing countries and for a maximum of 8 years for LDCs.[48]

D. How should Special and Differential Treatment be addressed?

For many years now, e-commerce has been recognized as a potential engine for trade, growth and development, as it lowers transactions costs, improves market access for MSMEs, and helps firms participate in global value chains. At the same time, technical and infrastructural challenges that prevent developing countries from achieving e-commerce uptake have been well documented. It is therefore not surprising that any initiative to promote the expansion of e-commerce would be expected to include a discussion of the special support or conditions that may be needed in favour of developing countries.

In the context of the JSI negotiations, this has been translated into a discussion on capacity building and technical assistance in a broad framework of special and differential treatment (SDT) for developing countries. One JSI participating country, for instance, put forward the need for bridging the digital divide; promoting more research, training and communication; and establishing an e-commerce for development programme.[49] Another participating country suggested that the importance of development issues and SDT should be taken into consideration in the JSI discussions in light of obstacles and challenges facing developing countries in making the best use of e-commerce for development.

Among the concrete suggestions made were the provision of technical assistance by the WTO Secretariat in support of national digital networks, the establishment of a forum for inter-institutional cooperation and the establishment of a fund to support developing countries' integration into the digital economy and e-commerce.[50] Other countries expressed the need for an actionable provision that would ensure support to developing countries in strengthening their infrastructure and regulations related to the digital economy, as well as to possible revenue losses. Provisions in other WTO agreements were viewed as possible templates, including those of the TFA.[51]

SDT in the WTO: An evolving concept

The SDT for developing countries and LDCs has been an integral part of the GATT/WTO system. The principal objective is to help them participate in the MTS in a level playing field by, *inter alia,* allowing them to have flexibilities in the level of concessions and in the implementation of commitments, *e.g.,* a longer implementation period.

The way SDT has been applied over the years has however evolved. A noteworthy modification from the earlier approach used in GATT days and even to other agreements negotiated during the Uruguay Round came with the GATS. Instead of treating developing countries as a homogenous group, special treatment and flexibilities were tailored to individual countries and obtained *via* negotiation of specific commitments. The GATS allows developing countries to take on less commitments, have the option of imposing limitations or conditions on access to their services markets and have the possibility of discriminating against foreign suppliers if this is inscribed in their schedules of commitments.

Another notable innovation occurred recently with the TFA as noted above. The TFA allowed developing countries to have transitional implementation periods, providing them with the possibility to classify their commitments in various categories, including those that can be implemented immediately, those that will be implemented only following a transitional period, and finally those that would require technical or financial assistance to be implemented and the implementation capacity to be acquired. The TFA model of SDT has been considered particularly relevant to the JSI negotiations.

SDT in the JSI negotiations on e-commerce?

While the JSI negotiations are formally taking place outside the WTO framework, it nonetheless cannot be disconnected from the broader ongoing discussion on WTO reform and the SDT. Several developed-country members, for example, have expressed their views that developing countries which have become major trading forces in the past decades would no longer need to benefit from the SDT and associated flexibilities. The United States, for instance, has proposed to discontinue the existing practice of self-declaration of 'developing country status' and instead use selected criteria such as countries' *per capita* income level or their share in world trade.[52]

The digital economy does not display a traditional North-South divide. Two countries, namely the United States and China, represent the largest share of the global digital economy, *e.g.,* 90 per cent of the market capitalization value of the world's 70 largest digital platforms and 75 per cent of the world market for public cloud computing. Apart from China, however, other developing countries and LDCs tend to form the bottom of the pile in terms of their capacities to transform their economies through digitalization. Moreover, countries in the developed world, such as those in the European Union, in several respects also lag far behind the United States and China in the digital economy (UNCTAD, 2019). For many developing countries and LDCs, existing digital divides may leave many of them sidelined in cross-border e-commerce.

The African Group has argued that the provision of trade-related capacity-building initiatives such as the Aid for Trade initiative should not be conditional on their participation in negotiations of new issues in the WTO. They also reaffirmed that SDT remains an integral part of all WTO agreements and future multilateral outcomes. They suggested that all SDT that are embodied in schedules of concessions and commitments and/or in the rules and disciplines should be operationally effective.[53]

On the other hand, the United States has stated that with respect to digital trade, it aims to create "strong, market-based rules in this area and reduce the barriers around the world that threaten to undermine the growth of the digital economy, including restrictions on cross-border data flows and data localization requirements".[54]

The overall ambition of the JSI agreement would depend on specific provisions. Participating countries may negotiate for having an agreement that is non-binding, or with a best endeavour nature, or with enforceable rights and obligations for a broad range of issues to achieve a "high-standard" outcome. If an ambitious outcome is pursued, it would be important that SDT be granted to developing countries to provide flexibility and policy space where needed. Inspirations may be drawn from various WTO agreements offering examples of the SDT measures that could be used to address capacity constraints, persisting digital divides, and the need for policy space to allow countries to adapt to the fast-paced digital environment,

However, the right policy mix to ensure a fair distribution of the gains from e-commerce and the digital economy has not been identified due partly to a lack of reliable evidence and statistics to support evidence-based policymaking and negotiations, and effective monitoring of progress. Better availability of statistics and more research are needed to clarify the conditions required to assess the costs and benefits stemming from digitalization.

V.

Selected issues in the JSI negotiations from a development perspective

This section provides a discussion of selected salient issues in the JSI negotiations with the objective of highlighting some of the development dimensions that any future international trade rules may need to address. The purpose is not to suggest that developing countries represent a monolithic group that will adopt a single position on these topics. Individual countries will have to determine their approach after having established a balance between competing domestic interests and the trade-offs and concessions they are willing to make with negotiating partners. This will also require an assessment of how each negotiated outcome is likely to impact their economy and society. The objective here is rather to shed light on key development concerns raised by developing countries, including non-participating countries, and on how they are being addressed by proposed provisions in the JSI negotiations. The choice was made to group together related issues which may be discussed separately in the negotiations.

A. Issues concerning "data"

In today's increasingly digitalized economy, rapid technological progress has facilitated an exponential increase in firms' capacity to collect, transmit, process and analyze data. Global Internet Protocol traffic, a proxy for data flows, grew from about 100 gigabytes per day in 1992 to more than 45,000 gigabytes per second in 2017 (UNCTAD, 2019). Data-related activities are no longer mere side activities in the production of and trade in goods and services; instead, they have become a central feature of the production process and a key aspect of economic activity. An entirely new data value chain, from raw data to "digital intelligence" has evolved around firms that support the production of insights from data, from data collection/extraction to data storage and warehousing, data analysis and processing. Large amounts of resources, skills and capacities are however needed to leverage digital transformations. This implies that further digitalization and data-driven developments are likely to be associated with widening digital divides and income inequalities, at least initially.[55]

What are data?

An analysis of the international dimension of data is complicated as data are a particular kind of resource that still lacks a proper definition. Current WTO rules do not adequately address new aspects of data resulting from digital technologies progress that were not present at the time these rules were elaborated. It is noteworthy that while personal data and open government data have been defined in proposals put

forward in the JSI negotiations, data and data flows have not. And while any communication across the world leads to a "flow of data" it would be useful nonetheless to clarify what is understood by data flows in the context of the negotiations.[56]

It is important to distinguish between different categories of data and between different data-related aspects. First, much data and information associated with cross-border commercial transactions is not commercialized *per se*. Second, a huge amount of raw data is extracted by digital platforms, most often for free, on different aspects of the users, such as their location, preferences, relationships and behaviour. The data gathered from these transactions generate value for the owners of the digital platform once they are processed and monetized. International flows of these raw data are currently not adequately regulated as it is mostly the digital platforms collecting the data that control them. Third, data products (or digital intelligence) in the form of databases, insights and information that result from the processing of raw data can be considered as services. In this case, international flows are already regulated under international trade in services rules.

Data can also be classified as belonging to one or several categories, including: personal or non-personal; private or public; data for commercial or government purposes; volunteered, observed or inferred; non-structured and structured data; and sensitive or non- sensitive. When considering their positions on the various proposals, countries may need to take into account the implications of new trade rules proposed on the collection, storage, processing and use of all these different categories of data. And while agreement may be reached on the free movement of data of a technical nature —subject to intellectual property, security and other relevant legal considerations —data which are either about an individual or a community would require particular attention.

Who owns data?

In the data-driven digital economy there is ambiguity about ownership of data, which raises a number of problems. In the traditional economy, property rights determine who is the beneficiary of the value of the corresponding goods and services. With regard to data, the situation is less clear, as it is difficult to establish "ownership" of the data. Indeed, given the specific characteristics of data, ownership may not even be the appropriate term. What matters here is the control, access and rights over the data. Under the current circumstances, digital platforms that are in a position of collecting or extracting data can monetize such data. When using the services of digital platforms for free, the extraction of data implies that users become the product by giving their data.

Hence, data generated by the citizens, businesses and organizations within a country is a major economic resource in the digital economy, which can be harnessed to create economic value. Issues concerning "data sovereignty" arise particularly for cross-border flows. One issue in this context is the lack of any global mechanism for recognizing the "ownership" of data; once the data leave the home jurisdiction, the notion of ownership becomes blurred.

In a conventional economic framework, international economic transactions such as exports and imports of goods are registered at customs offices and recorded in a country's balance of payments, as are international financial transactions. However, this is not always possible for cross-border data flows. Firstly, many data flows have no explicit value attached to them. Secondly, it is difficult to determine the geographical origins and destinations of the flows and thus to assign territorial sovereignty and jurisdiction. It is not obvious when digital data cross borders.

Such complication poses particular challenges to policymakers at the national level who seek to reap the benefits associated with the new digital economy and are grappling with these issues. Some are preparing regulatory options that seek to address the ownership and control of data, and the compensation of individuals and communities whose data have been used to generate value. In many developing countries, policymakers also need to address the limited capabilities of domestic firms to exploit business opportunities that are required for digital data to be transformed into digital intelligence. For these reasons, there are views that the rush to conclude e-commerce or digital trade chapters in trade agreements is

imposing policy limitations that are not well understood by governments and restricting policy flexibility, even while countries have yet to determine what flexibilities may be needed (Geist, 2018; Ciuriak and Ptashkina, 2018).

What is data localization and why does it matter?

Data localization refers to several measures that Governments may impose on data, and includes local access requirements, local storage requirements and/or local processing of data requirements. Countries opposed to such measures have argued that data localization requirements have negative effects on trade as they may lead to increased costs of compliance on providers. They also contend that consumers may be negatively impacted.

Data localization measures may be of particular relevance for developing countries where cutting-edge digital technologies are not yet prevalent. In seeking to develop their technological capabilities, some developing countries believe that they should initially focus on leveraging the "local" resource of all-important data for digital value creation and capture. However, such data are of no use without the appropriate digital technologies and skills needed to transform them into digital intelligence. To the extent that frameworks for local "ownership" and control of various kinds of important data were developed, data could provide a significant bargaining chip to negotiate fair terms with global digital platforms seeking to work on local data and in domestic economies. Such frameworks could be employed to promote the development of digital industries, including through joint ventures with global corporations. This could be made a condition for mining local data. Building sufficiently strong domestic digital industries is required for a country to begin developing domestic digital technology capabilities (Ciuriak and Ptashkina, 2019).

Why rules on data flows can be contentious?

Some proposals that have been circulated in the JSI negotiations address cross-border data flows (or cross-border transfer of information by electronic means), data localization (or location of computing facilities), personal data (personal information) protection and open government data. Particular attention has surrounded the issues of data flows and data localization requirements in the negotiations as in the trade literature. Data flows, data localization and "privacy invasions by data collectors" are among the issues on which China, the European Union and the United States diverge significantly in their approaches.

Developing a policy framework for the control of data flows is particularly salient in the context of present-day national policy discussions as it addresses non-economic concerns such as human rights, privacy, intellectual property, consumer protection objectives and national security to name but a few, in addition to the distributional aspects of cross-border data flows among countries, and economic agents. At the international level, the inclusion of provisions on e-commerce in trade agreements is one option. Box 5 presents some examples of data-related provisions in RTAs.

But the issue is also of great relevance to Internet governance. For example, the Global Commission on Internet Governance (GCIG), which comprises a group of policymakers, academia, private sector, Internet technical community and civil society representatives expressed concern that the outcome of some trade agreements has significant implications for Internet governance, but non-governmental actors do not have access to the trade negotiation process in the way they have in multi-stakeholder discussions around Internet governance. (Global Commission for Internet Governance, 2016). With the role of the Internet in international trade set to grow further, it is important to explore ways of strengthening the dialogue between the trade and Internet communities (UNCTAD, 2017a).

As UNCTAD´s Digital Economy Report 2019 notes, many countries are hesitant to relinquish control over their data without getting anything in return. With data becoming an increasingly valuable resource in the digital economy, there are questions about the wisdom of allowing foreign firms to extract data without restraint. And with the global concentration of platforms, this "free flow of data" effectively means a "one-way flow".

Box 5. Data-related provisions in regional trade agreements

Reviews of the extent to which existing RTAs have included e-commerce (digital trade) provisions or chapters suggest that the scope of and depth of these provisions vary significantly and that countries have adopted a variety of approaches when it comes to the data-related provisions discussed here (Monteiro and Teh, 2017; Wu, 2017). Some of these approaches include:

- China's FTAs which touch upon e-commerce (*i.e.*, the China-Australia and the China-Republic of Korea agreements) adopt a rather cautious approach. They include provisions relating to the protection of personal information but no provisions on data/information flows (Burri, 2017).
- The ASEAN E-commerce Agreement includes provisions on data flows, data localization and personal data protection which are generally couched in best endeavour terms. The agreement commits member States to work together towards eliminating or reducing barriers to flow of information pursuant to appropriate safeguards and other legitimate public policy objective. Likewise, it mandates ASEAN members not to impose requirements on businesses seeking to set up operations to locate computer facilities in that market subject to their respective laws and regulations.
- The RTA between Mexico and Panama specifies that each party shall allow their persons and the other party's persons to transmit electronic information to and from its territory, as required in accordance with applicable legislation on the protection of personal data and taking into consideration international practices (Monteiro and Teh , 2017).
- The RCEP offers some flexibility with respect to the manner in which protection of personal information of e-commerce users is achieved. RCEP members may comply with these obligations if they adopt laws or measures which include comprehensive privacy, personal information protection laws and regulations, sector-specific laws covering personal information, or laws that provide for the enforcement of contractual obligations assumed by enterprises relating to protection of personal information.
- The CPTPP provides that members shall not prevent cross-border transfer of information by electronic means where the activity is for the purposes of conducting business. Some regulatory space is granted to CPTPP members to maintain measures contrary to this obligation if they are necessary to achieve a legitimate public policy objective, and that the measures do not impose restrictions on transfer of information greater than that required to achieve the policy objective. The CPTPP model has been described as the standard approach in "modernized" trade deals both large (*e.g.*, the USMCA) and small (the Singapore-Sri Lanka). But it has been highlighted that the criteria for the exception provided to the restriction on data localization are likely to be difficult to fulfil. (Geist, 2018)

The only two agreements among those reviewed (FTA between Japan and Mongolia and the Additional Protocol to the Pacific Alliance Framework Agreement) incorporate specific provisions on the use and location of computing facilities. The Additional Protocol defines computer facilities as computer servers and devices for the processing or storage of information for commercial purposes, excluding facilities used to provide public telecommunications services. (Monteiro and Teh, 2017).

At present, data are primarily, and effectively, subject to the jurisdiction of the territory of residence of the parties that exercise control over their storage and processing, which for now is taking place overwhelmingly in developed countries where most data controllers reside. Countries may wish to exercise effective economic "ownership" of and control over data generated in their territories by restricting cross-border flows of important personal and community data with a view to meeting development objectives such as:

- Development of the domestic data-driven digital economy and associated job creation;
- Prevention of misuse of data generated by citizens (in line with personal data protection);
- Protection of national security; and
- Strengthening data-related cyber security.

While data flows can harness the benefits of the digital economy, the associated gains need to be shared in a fair manner by the actors and countries involved in the value creation process. Moreover, the impact of cross-border data flow needs to be assessed beyond its economic impact and consider factors related to power relations, dependence, data privacy, value capture, as well as safeguarding sovereignty. This may necessitate exploring new, alternative approaches that take into account all relevant dimensions of data. Few governments would think that the collection and processing of people's data can be left entirely in the hands of private corporations.

Possible approaches for using data for development

In the emerging global digital economy, it will be necessary to ensure that developing countries have the necessary economic, legal and regulatory space to shape their digital economies in ways that serve the interests of their people, including by helping them to create and capture value from digital data. Whether they are participating in the JSI negotiations or not, it would be important to consider reviewing what measures they are implementing domestically which affect the set of data issues described above. The following areas may benefit from such reviews.

- **Identify data categories of interest**: Countries need to identify categories of data that are of particular interest to them and to clarify the definition of cross-border data flows that can inform their national policy discussions and/or trade negotiations. International data transfers are often bundled together with e-commerce and digital trade. However, while data flows can be closely linked to trade, and are quite important for trade in the digital economy, cross-border data flows in themselves may not involve either trade or e-commerce.
- **Upgrading in the data value chain**: Owing data is of no use if a country cannot transform them into digital intelligence which requires appropriate digital technologies and skills. Countries may also wish to consider the specific skills and capacity upgrading and value capture objectives that they wish to pursue. If they are to avoid dependence on a handful of countries in the increasingly data-driven economy, national strategies need to include the objective of moving up in data value chains, by enhancing domestic capacities from treating data as a raw material to processing digital data and using artificial intelligence.
- **Assessing trade-offs between access to data and protection of data**: Some proposals in the JSI negotiations suggest open government data, *i.e.*, encouraging governments to facilitate access to and use of data generated through government activities. As indicated earlier, as long as a country has not developed the digital technologies and skills needed to exploit this source of data such a measure is likely to benefit the more advanced businesses from countries with an established digital economy. It is important particularly for developing countries to assess the trade-off between opportunities that may create incentives to the development of their digital economies and possible burdens that these measures may impose on resource-limited institutions.
- **Developing a framework for data protection and privacy**: Developing countries may wish to reflect on how they can pursue privacy principles in a manner that is specific to their own jurisdictions. While countries could agree to the regulatory principles on the table, they do not necessarily have the institutional or human capacity required to adopt and implement them. In Africa, for example, less than half of all countries have the appropriate data protection legislation in place. Even where legislation exists, it is often not adequately enforced. This regulatory landscape is not necessarily due to lack of understanding of the importance of data protection issues. The African Union adopted the Convention on Cyber-security and Personal Data Protection (the Malabo Convention) in June 2014 already and personal data protection guidelines were also published (UNECA, African Union, AfDB, and UNCTAD 2019). Developing countries need to consider their domestic experiences to identify which factors are hindering the development of their regulatory frameworks and assess whether obligations for regulatory cooperation in trade agreements would benefit or hinder their efforts to improve their regulatory capacity.

The diversity of views and experiences of countries points to the need for more analysis and careful consideration of the different approaches, including flexibilities required to enable the achievement of legitimate public policy objectives. Privileged access to data provides a competitive advantage, which gives rise to issues of income distribution, market concentration and the absence of a level playing field for countries to participate in and benefit from the data-driven economy. Given the multifaceted nature of data, it is also important to consider what would be the most suitable forum for pursuing these discussions in a holistic manner which goes beyond the narrower trade perspective, or whether there is need of a high-level coordinating mechanism.

In this context, countries – whether parties to the JSI negotiations or not – need to make a clear assessment of whether they have a sufficient understanding on which types of cross-border data flows affect them most and the development implications thereof. They may also wish to consider whether, given the multidimensional character of data, trade negotiations are the most adequate forum for developing regulations on cross-border data flows or if they wish to take up these issues in an alternative setting.

B. Customs duties on electronic transmissions and government revenue

Since it was agreed in 1998, the moratorium on customs duties on electronic transmissions has been extended at the WTO Ministerial Conferences every two years. The moratorium was extended once again in December 2019 until MC12, which was to take place in June 2020 but was postponed to 2021.

In the past couple of years, whether to make the moratorium on customs duties on electronic transmissions permanent has become one of the most-debated issues on e-commerce. Much discussions stem from fundamental ambiguities associated with the scope of the coverage of products and services under this moratorium. Some WTO members consider the moratorium to be applied to customs duties on electronic transmissions, *i.e.*, the delivery service that provides services and products over the Internet. Others contend that the moratorium should be applicable to the content transmitted, and not only the means by way of which the content is being delivered. Another issue that is deeply debated is possible impact of permanent elimination of custom duties on electronic transmissions on government revenue. However, how to measure the impact of the moratorium itself has frequently raised as an issue. Unresolved questions relating to the scope of the term "electronically transmitted" often translate into disagreements on how to measure the impact of the moratorium.

Arguments for making the moratorium permanent

Proponents seeking to make the moratorium permanent argue that it can bring significant gains such as the following:

- The moratorium has helped digital trade flourish by preventing trade barriers such as burdensome customs duties.
- The moratorium has helped consumers access new products and services, and enabled businesses, in particular, MSMEs, to access new markets (ICC, 2019).
- The opportunity costs of the moratorium in terms of the revenue foregone (*e.g.,* loss of tariff revenue) are low and the benefits of conducting trade electronically with the moratorium in place exceeds the costs of lost revenue. The benefits of the moratorium should not focus solely on the revenue implications alone but also account for wider economic benefits. For instance, since electronic transmissions imply considerable reductions in transport costs, they can level the playing field for developing countries which tend to face higher transportation costs (OECD, 2019).
- Instituting customs duties could result in higher costs for consumers depending on the manner in which the tariff pass-through occurs (Amiti, Redding and Weinstein, 2019). This may result in a decline in domestic output and productivity (Fajgelbaum et al., 2019) and represents digital protectionism through a new form of import substitution.

- The current practice of the moratorium is a political commitment and may not be enforced through the WTO dispute settlement mechanism.

WTO members, including the United States, the European Union and Singapore, that have advocated for a permanent moratorium have proposed its inclusion in the JSI negotiations. In addition to this, these countries have also utilized RTAs and bilateral trade agreements as a medium to apply the permanent moratorium on parties to these agreements. A ban on custom duties is a common provision found in 72 RTAs with digital trade rules (Burri and Polanco, 2019). In some agreements, members make reference to the WTO Work Programme on Electronic Commerce and seek to cooperate to make this practice binding in the WTO framework. For instance, Article 76 of Japan–Switzerland FTA states "Recognising the importance of maintaining the current practice of not imposing customs duties on electronic transmissions, the Parties shall cooperate to make this practice binding within the framework of the World Trade Organization, with a view to considering its incorporation into this Agreement." Notably, the majority of RTAs and bilateral agreements that include a provision prohibiting the application of customs duties on electronic transmission are between developed and developing countries, and amongst developing countries themselves (Monteiro and Teh, 2017).

Arguments against making the moratorium permanent

Countries that have opposed the argument of making the moratorium permanent highlight the danger of making commitments on trade liberalization while the digital trade itself continues to evolve rapidly. The economic realities that prevailed in 1998 have significantly changed due to technological advances. It is a challenge for any government to fully assess the impact of trade opening to their socio-economic development in the long run.

In this context, certain countries that are sceptical about making the moratorium permanent point to various challenges, such as the following:

- Since digital trade has increased in magnitude to an extent unimaginable at the time, the imposition of the moratorium will result in "revenue leakage" or losses in customs revenue since countries will be restricted from imposing customs duties that they otherwise could have, absent the moratorium.[57]
- Lack of common understanding of the term "electronically transmitted" amongst WTO members has not been resolved. Should the JSI negotiations agree that it covers "content" that is transmitted electronically, a permanent ban on customs duty will effectively restrict the trade policy tools that countries can apply on the "content" of electronic transmissions. Studies estimating the impact of potential revenue loss range from $280 million to $8.2 billion depending on varying underlying assumptions including the trade flows covered and kinds of tariffs applied (WTO, 2016; Banga, 2019; Makiyama and Narayan, 2019).[58]
- While imposing customs duties on electronic transmissions was deemed not possible in 1998, technological progress in the tracing and valuation of electronic transmissions in the past two decades has made the levying of duties technically feasible. Due to the progress in tracing and valuation of electronic transmission, several countries, such as New Zealand, have also started imposing taxes on electronic transmissions.[59]

Indonesia has indicated that it could begin to apply custom duties on the content of electronic transmissions. During the negotiations to extend the moratorium on electronic transmission at MC11, Indonesia sought clarification regarding the scope of the moratorium by proposing to insert as a footnote "it is understood that such moratorium shall not apply to electronically transmitted goods".[60] The final text of the Ministerial Decision did not include this footnote owing to the lack of consensus.[61] Subsequently, in March 2018, Indonesia introduced in its tariff schedule a specific tariff line for electronically transmitted content which sets the architecture for enacting tariffs on electronically transmitted movies, e-books, and software.[62] As of November 2020, the duties were set at nil rate.

3D printing and customs revenue

Discussions over the impact of eliminating custom duties upon electronic transmission often refer to the advent of three-dimensional (3D) printing (also known as additive manufacturing) that can boost international trade in designs rather than in finished products. The nature of 3D printing is such that it alters the location of production of the goods as the manufacturing is moved closer to the consumer market, and relevant actors that traditionally participate in production and trade of goods are rendered redundant.

In a traditional model of trade, producers would manufacture goods and transport them to the country of import. At the border, this country of import had the opportunity to levy tariffs on the goods. However, due to the uniqueness associated with 3D printing, the opportunity to levy duty decreases since the process also involves services tasks, *i.e.,* design and transfer of digital files, which are transmitted electronically, and these tasks are printed within the country of import. Countries that oppose a permanent moratorium argue that putting such a mechanism in place would result in further revenue leakage and could be counter to the development of domestic productive capacity.

One thing to note here is that 3D printing is increasingly mainstreamed in today's global trade. For instance, while 3D printing capacity remains concentrated in a handful of developed economies, a number of 3D printing ventures are also found in developing countries such as Cambodia, Rwanda, Uganda and Togo (UNCTAD, 2019). Even when products are produced using a 3D printer, however, there might be a need to import the actual printing equipment and the raw material that is used to print the goods in question, and this would potentially influence the value of trade in the future.

The optimal level of the de-minimis threshold

A related issue on government revenue is the *de minimis* threshold. The *de minimis* level sets the threshold for customs valuation: an imported product whose value falls below the *de minimis* threshold would be exempted from custom duties and other taxes and would generally receive streamlined paperwork requirements associated with clearance procedures and compliance controls. The level of the *de minimis* threshold is particularly relevant to cross-border B2C e-commerce as it tends to increase the number of small, low-value parcels. Moreover, it also increasingly involves MSMEs gaining new access to international markets, but which may have limited experience in trade compliance.

For governments, *de minimis* is a topic of significance since it affects the quantum of revenue that can be collected through customs duties and taxes. Certain countries may raise concerns regarding *de minimis* values since it can have the effect of reducing their revenues from import duties and taxes, especially if they are reliant on such forms of revenue and lack efficient systems for effective revenue collection. Other countries contend that the cost of collecting duties and taxes should not be higher than the revenue collected. In this second case, raising *de minimis* level may be considered as welfare-improving but, at the same time, can also result in distributional effect amongst different economic agents, including consumers, business and government.

De minimis levels also matter to consumers since they pay lower prices for goods that fall below *de minimis* thresholds. *De minimis* thresholds are also important for businesses, particularly MSMEs, in both importing and exporting countries. When countries raise their *de minimis* levels, small businesses in other countries benefit since they may be able to export in a greater quantity without facing a higher tax. On the other hand, domestic suppliers and retailers competing with those exports may lose market share as a result. It is for this reason that domestic opposition is noted within countries when *de minimis* threshold increase is being considered. For instance, in the context of USMCA negotiations, Canadian businesses argued that an increase of its *de minimis t*hreshold from C$20 (Canadian dollar) to C$200 would give the United States businesses a tax advantage of 12.3 per cent (of the value of the goods shipped) over Canadian businesses.[63] A research institute studied the possible effects of Canada of the proposed increase and concluded that the government would lose C$117 million in revenue but, at the same time, would realize a cost savings of C$278 million and an overall efficiency gains of C$487 million for consumers and businesses (Howe Institute, 2016).

Raising *de minimis* thresholds to facilitate e-commerce should be considered as part of a national reflection: (i) encompassing an assessment of the cost of collection vs the amount of duties collected and (ii) about the broader policy agenda pertaining to modernization of border administration.[64] This broader policy agenda includes the revenue collection model, the move towards paperless trade procedures and understanding countries' real capabilities in terms of automation, data exchange, compliance and risk assessment. In view of the broader policy agenda associated with *de minimis* level, harmonization of a *de minimis* threshold at a fixed value in the WTO is not recommendable. However, the development of guidelines on which basis national administrations can determine the appropriate level of *de minimis* could be useful. Some guiding principles to consider when determining *de minimis* levels may include avoiding discrimination between foreign and domestic producers and ensuring fair and transparent procedures.

In the context of the JSI negotiations, it will be important to ensure that any rules regarding *de minimis* thresholds take into account the possibility of future technologies that might make border controls and collections of duties far easier and less costly. If a *de minimis* threshold is set at a level equivalent to the cost of collecting the duties and taxes, then in the long term the thresholds should go down. By the same token, it can be expected that the number of small parcels will continue to increase, thanks to expanding e-commerce and improved logistics operations, and governments will have a growing interest in lower *de minimis* values.

C. Regulatory framework for e-commerce

An essential part of the domestic agenda of governments in developing their digital economy consists of the establishment of legal frameworks that would reduce uncertainties associated with e-commerce in areas such as consumer protection, data privacy protection, facilitation of e-commerce, and cybersecurity. Given the increasing importance of cross-border e-commerce, some trade agreements now include provisions which encourage or require parties to introduce general regulatory frameworks in support of e-commerce or to integrate issues pertaining to e-commerce to existing regulations.

Domestic regulatory reforms have also been initiated and supported by the rules, policies, standards and practices which have emerged from a network of actors engaged in Internet governance. Many of the provisions adopted in the context of RTAs have drawn on the contributions of international bodies, including the United Nations Commission on International Trade Law (UNCITRAL), World Customs Organization (WCO) and World Intellectual Property Organization (WIPO) which are active in the area of e-commerce (Wu, 2017). Governments aim to ensure that the resulting regulation is supportive of the policy objectives pursued, while not placing excessive burdens on the various actors, irrespective of whether regulatory reforms stem from purely domestic processes or are spurred by developments promoted at regional or international level. The International Chamber of Commerce notes, for example, that trade agreements should aim to produce an investment-friendly and progressive light-touch approach to regulation (ICC, 2019).

Provisions on regulatory frameworks in RTAs vary in terms of their enforceability. In many cases the adoption of such regulations is not controversial, particularly when the development benefits are relatively straightforward. However, such regulations are still missing in many countries. That these provisions are often couched in best endeavour language suggests that some RTA members nonetheless wish to maintain policy space as to the pace and manner in which the regulations are adopted. Not only do governments consider the time and cost required to establish their domestic legal and regulatory frameworks, they must also assess the costs that such regulations (or their absence) will impose on businesses and consumers. Provisions on the establishment of regulatory frameworks for e-commerce often indicate the timeframe for compliance as well as technical assistance to be provided to developing countries.

Two examples of regulatory provisions in support of e-commerce are discussed below: one that acts to facilitate e-commerce (*i.e.,* electronic authentication) and the other that enhances consumer confidence (*i.e.,* consumer protection).

Electronic authentication

Measures to facilitate electronic transactions is one focused area of the JSI negotiations on e-commerce. Electronic authentication is "the process of establishing confidence in user identities electronically presented to an information system."[65] It can involve the use of third-party service providers to act as trusted intermediaries between the various communication parties. A closely related term is "e-signature" or "digital signature", which may be defined as "the result of a cryptographic transformation of data that, when properly implemented, provides origin authentication, assurance of data integrity and signatory non- repudiation".[66]

Electronic signatures may be provided by typing a name in an email, by incorporating the scanned image of a handwritten signature into a word processing file, or by signing an electronic document using a mathematical process (encryption technology). An electronic signature can also be achieved through biometric recording. In this case, a physical signature is recorded using some form of identifying data such as fingerprints or retina prints, collected in digital form and attached to a document. An electronic signature serves the purpose of ensuring authentication and integrity of electronic communications, with the aim of providing a similar level of reliability and security to traditional paper-based procedures.

Electronic signature and regimes are often established under an electronic transaction law. These laws offer a fundamental basis for conducting commerce and government activities online, including in respect of electronic authentication methods. They set the rules governing the formation of contracts when conducting business online (domestically or internationally) and give legal validity to electronic documents, records and signatures, including confirming their admissibility in court. Increasing global adoption and reliance on e-commerce and the provision of government services online (such as e-procurement) accentuate the need for countries to adopt e-transactions laws. The challenge is to find an approach that recognizes the regulatory autonomy of a country while avoiding unnecessary barriers to trade.

Ensuring regional and global compatibility of e-transactions laws is important in the digital economy. When preparing or revising e-commerce legislation lawmakers must therefore consider how to address the laws of countries in the same region or of trading partners in order to ensure compatibility of legal systems and trade policies. One solution is to extend legal recognition of e-signatures, electronic contracts and evidence at a national level to those originating in other jurisdictions. There are basically three methods to achieving that goal: (i) adopting uniform laws, whose content is similar if not identical; (ii) adopting explicit rules on cross-border recognition in national legislation (see, for instance, Article 12 of the UNCITRAL Model Law on Electronic Signatures); and (iii) adopting dedicated international legislation, preferably multilateral (such as the Electronic Communications Convention).

While over 71 states have adopted legislation inspired by the UNCITRAL Model Law on Electronic Commerce, international cooperation can be useful to harmonize e-signatures originating under different jurisdictions (UNCITRAL, 2018) (Box 6). Disparities across regions continue to persist. According to the UNCTAD Cyberlaw Tracker, in early 2020, while the quasi-totality (or 99 per cent) of European countries had e-transaction laws in place, this figure was of 91 per cent in the Americas, 82 per cent in Asia-Pacific and 61 per cent in Africa.

In the context of the JSI negotiations, discussions have also focused on whether countries' e-transaction legislations are technology-neutral. As a source of inspiration, existing provisions in some RTAs may offer a starting point for such discussions. As electronic transactions are increasingly important, governments are considering methods of regulating their authentication procedures. Forms of electronic authentication policies are included in more than half of RTAs with designated e-commerce chapters, but they differ significantly, possibly reflecting that countries have different preferences (Wu, 2017).

Proponents of electronic authentication standardization argue that it could reduce further barriers to cross-border trade and thereby facilitate e-commerce. For businesses selling across borders, complying with different standards may be challenging and inefficient. This is particularly the case for smaller sellers, such as SMEs, that may lack capacity to evaluate different electronic authentication requirements and bear the

Box 6. UNCITRAL Model law on electronic commerce in regional trade agreements

Many RTAs refer to the United Nations Commission on International Trade Law (UNCITRAL) 1996 Model Law on Electronic Commerce, and more than 70 countries have based legislation on the Model Law. It provides a set of standardized rules to reduce obstacles to e-commerce and create predictability for countries. Its priorities include:

- non-discrimination (laws must treat paper-based and electronic forms of communication equally);
- technological neutrality (laws cannot mandate specific technologies to evaluate validity); and
- functional equivalence (laws should create criteria that enable electronic communications to be considered equal to paper-based methods).

RTA references to the UNCITRAL 1996 Model Law can either be explicit (for instance, USMCA Art. 19.5) or implicit (for instance, Japan-Australia FTA, Art. 13.5). The UNCITRAL 1996 Model Law typically arises in e-commerce discussions in relation to authentication methods, as it is intimately related to the equal treatment of electronic and non-electronic communications. Additionally, the work of UNCITRAL enables greater conformity and uniformity between the policies of different countries in governing electronic authentication. UNCITRAL Model Laws serve as guides for countries drafting their own legislation, though countries may vary in their implementation efforts.

Source: UNCTAD.

costs. Additionally, many countries do not have laws governing electronic authentication, providing little protection and security to producers and consumers. By creating standardized electronic authentication methods, these countries may be better integrated into the global economy.

Not all countries agree that electronic authentication methods need to be included in the JSI agenda. Part of their concerns is that discussions on this topic are premature, and that the differences in national practices and existing RTA provisions on electronic authentication should be evaluated after some time. Others worry that creating rules enabling more methods of electronic authentication will give too much control to private actors. A further argument is that reducing the policy space of countries could lead to a race to the bottom, barring governments from mandating higher standards and protections for electronic authentication.[67]

One likely point of divergence is whether governments should be able to limit parties of electronic transactions to use only certain designated authentication technologies. Some RTAs allow private parties to electronic transactions to determine appropriate authentication technology. An advantage of this approach is increased flexibility. Additionally, if authentication technologies are challenged, parties are generally allowed to prove in court that their technologies comply with any legal requirements. A potential risk is that different private parties have different incentives. Consumers want their data to be protected. Sellers want to reduce transaction costs. Sometimes these misaligned incentives could lead sellers to inadequately protect consumer privacy and data. In contrast to the aforementioned agreements, other RTAs give governments or third parties the power to set stricter requirements for authentication technologies or require technology pre-approval. This limits the authentication technologies available to private buyers and sellers although it may lead to higher standards. This could increase consumer confidence in the technology and the seller.

At the national level, UNCTAD recommends that countries adopt technology-neutral e-transactions laws and revise existing laws to achieve neutrality where necessary (UNCTAD, 2015). Countries should also seek to clarify the situation in cases where national legislation is inconsistent with relevant regional agreements. In addition, striving to grant legal validity to all forms of documents, records and signatures regardless of the technology used, subject to the necessary minimum requirements, may help facilitate e-transactions. It should be noted that the adoption of a technology-neutral e-transactions law does not

prohibit the use of a specified technological approach in particular business sectors, or for certain types of transactions, if promulgated by self-regulation, co-regulation or contractual freedom. Moreover, special technology requirements may also be set up for special transactions, such as those with public entities (e-government).

Online consumer protection

Online consumer protection regimes are essential for enhancing trust in electronic transactions. As with traditional consumer protection, they are based on the notion that the consumer is the weaker party and may require protection from unscrupulous practices by suppliers. Given that online transactions take place at a distance and that the identity of entities may be more difficult to verify online, the risks associated with fraudulent of untrustworthy players are increased. Among the potential problems that consumers may face in e-commerce transactions are that data may be stolen or misused. In conducting online transactions, consumers often share personal, contact, and financial information. Combined with the absence of adequate data protection policies, this information may be misused by sellers or accessed by cybercriminals. Many consumers may also not realize the amount of data that is being collected from them, nor the different uses that their data may have.

Furthermore, consumers often have limited information about online purchases. They may not have access to manufacturing or expiration dates on products listed online. Consumers also may not know the origins of products purchased online and whether the products are original or replica goods. If there are problems with online purchases, consumers may have fewer available remedies. Consumers often cannot visit the physical location of an online seller, if one even exists. Finally, online sellers may not make their return and refund policies clear to consumers. Many countries struggle to deal with these related issues to provide security to consumers and increase e-commerce transactions.

Cross-border e-commerce is associated with some additional challenges due to exchanges occurring between consumers and businesses from different jurisdictions. These challenges include uncertainty in receiving a product as described or ordered (for example, not a counterfeit or scam); hidden costs, particularly those associated with customs duties and currency conversion, as well as shipping or delivery; non-conformity of products purchased to local standards; the lack of clarity on protections afforded by a seller's jurisdiction, and; redress available in the event of a dispute and enforcement of awards due to consumers (UNCTAD, 2017b).

The objective of Governments in adapting consumer protection to the online environment is to provide a level of protection that is not less than that afforded in traditional forms of commerce. In reviewing existing consumer protection laws and frameworks, special features of e-commerce, such as the speed and discretion with which businesses and consumers can communicate, need to be taken into account. Where such measures have been put in place it is still necessary to ensure consumers and businesses are informed and aware of their rights and obligations in the digital marketplace. The ultimate outcome sought is the development of consumer protection mechanisms which are both transparent and effective.

Two sets of international guidelines on consumer protection have been revised recently to account for the online environment. The United Nations Guidelines for Consumer Protection and the Organization for Economic Co-operation and Development (OECD) Recommendation of the Council on Consumer Protection in E-Commerce, which were both revised in 2016. But some countries, including developing countries, did not wait for these guidelines to explore issues surrounding e-commerce and consumer protection. Examples include South Africa, which started addressing this issue as early as 2000, and Brazil, which developed an alternative dispute resolution allowing consumers to settle legal conflicts and disputes privately without initiating public litigation in 2014 (UNCTAD. 2017b).

Where countries develop their consumer protection legislations independently at the national level, this may give rise to difficulties in cross-border e-commerce. In case of divergence the question of the applicable law may become an issue. And as with other regulatory issues, while the need for consumer protection policies may be widely recognized, there exist different approaches in regulating consumer protection policies at the international level. Exchanges of experiences and the sharing of best practices are taking place in different fora including networks such as the African Consumer Protection Dialogue, ASEAN, the Global Privacy Enforcement Network, the Ibero-American Forum of Consumer Protection Agencies, the International Consumer Protection and Enforcement Network, the OECD and in UNCTAD's Intergovernmental Group of Experts on Consumer Protection Law and Policy. Such cooperation is also at times contained in various RTAs. There may be scope for international cooperation in developing a common understanding of consumer protection among countries with the objective of reducing the cost to exporters of having to adapt to different national laws. Cooperation can also contribute to solving jurisdictional issues and disputes that may arise in cross-border online transactions.

Enhanced online consumer protection can be expected to strengthen consumer confidence in e-commerce. But according to UNCTAD data as of April 2020, while 73 per cent of European countries and 71 per cent of those in the Americas had an online consumer protection legislation, the figure drops to 46 and 43 per cent respectively for Africa and the Asia-Pacific region. Among LDCs, there are greater gaps in coverage, with just 19 per cent having passed consumer protection laws. It should also be noted that among countries that have already passed consumer protection laws, there can be significant differences between their coverage.

The primary concern in the context of developing a common framework within the JSI e-commerce negotiations for consumer protection is that such regulations may restrict the policy options of member states, including potentially in relation to cross-border data flows. Some developing countries are still determining how they want to integrate e-commerce and trade in the digital economy into their development plans. They are concerned that possible WTO disciplines might interfere with their policy space to regulate e-commerce. Other countries may be concerned that they lack the capacity to effectively implement strong consumer protection obligations.

Existing RTAs show a variety of consumer protection provisions. The most common ones simply recognize the importance of consumer protection and the need to maintain and adopt effective measures to protect consumers from fraud and deceptive practices. Such policies may require states to create transparent consumer protection laws although they often do not have binding requirements. Other consumer protection provisions look to the principle of technological neutrality for guidance, seeking to protect e-commerce consumers to the same extent as non-e-commerce consumers (*i.e.* "functional equivalence"). Finally, some provisions seek to standardize business practices between countries in order to protect consumers. In some agreements, these provisions obligate governments to require that certain information is provided by sellers to e-commerce consumers, for example, about terms, conditions and prices. In other agreements, they simply call upon the governments to encourage businesses to provide this information.

While consumer protection provisions are found in e-commerce chapters in approximately two-thirds of RTAs, only a small number among them contain an obligation on governments to adopt or maintain consumer protection laws, *e.g.,* the CPTPP, the Australia–Singapore FTA, and the Japan–Mongolia FTA. It should be noted that these requirements are sometimes qualified as applying to the extent possible or in accordance with the country's laws and regulations. Most RTAs contain even softer language with provisions on the importance of measures that are aimed at protecting consumers from fraudulent and deceptive commercial activities or provisions calling for cooperation relating to online consumer protection among consumer protection agencies (Wu, 2017).

D. Other issues

Source code

Source code is a fundamental, human-readable component of a computer programme. The quality of a source code determines the performance of the software such as its ability to provide for software updates as well as debugging during its use. An algorithm is a set of instructions that a programme follows in order to accomplish a specific task. The algorithm forms part of a source code. Information contained in source codes and algorithms have gained significant prominence in recent times as they effectively embody the innovative technology itself. For this reason, innovators providing commercial services usually protect this information through intellectual property regimes. Both source codes as well as algorithms can be granted protection under copyright and trade secrets regimes.

Provisions dealing with source codes and algorithms have also become important features in e-commerce chapters of trade agreements. Countries calling to implement rules to protect source codes and algorithms in trade agreements argue that innovation depends on the ability to develop and use proprietary software. Their primary concerns arise in situations where countries demand foreign firms to provide their source codes, algorithms and encryption keys as a necessary condition for doing business in that country. This is because such practices may result in government sharing source code and algorithm with domestic competitors which could put the underlying intellectual property at risk and also undermine cybersecurity.

Countries proposing disciplines to protect source code and algorithms seek to support the interest of their businesses and promote incentives linked to innovation. They also ensure that transfer of technological know-how is made on voluntary and mutually agreed terms without government interference.

Some countries – predominantly developing countries – are against the idea of having trade agreements prohibit transfer of algorithms and source codes, arguing that putting restrictions on transfer of source codes can be raising barriers to effective transfer of knowledge and technology. In the past, technology transfer requirements had been used as a condition for foreign companies to enter a local market. Putting restrictions on transfer of source codes can hinder the country's ability to use this method of development which has been commonly used in the past. One important mode of technology transfer has been based on a system of patents. Once the patent expired, the "know how" was disclosed to the public, they could proceed to make use of it. However, if a patent involves a source code, then the "know how" contained in the source code – which is central to the technology – may not be permitted to be disclosed to the public should the source code be protected. This would result in a counterintuitive policy situation that would benefit the patent-monopoly holder rather than the countries receiving the technology (Reid Smith, 2017).

Provisions prohibiting requirements for the transfer of source codes could also put at risk a country's right to regulate against cybersecurity threats and conformity assessments of imports. To mitigate cybersecurity threats, the technology containing encryption needs to be tested for, amongst other things, "backdoors" which could result in cybersecurity breaches before they are permitted to be imported to and sold in a country. Under current WTO rules, member states have the right to ensure that imports are in line with its conformity assessment procedures. These procedures need to be aligned with the WTO Technical Barriers to Trade (TBT) Agreement. Prohibiting requirements for the transfer of source codes may limit the utility of conformity assessment procedures by regulatory authorities (Reid Smith, 2017). Moreover, Article 39 of the TRIPS Agreement, which deals with trade secrets, provides legal protection to owners of source codes.

Countries engaging in this discussion recognize that source codes may have implications on judicial proceedings. In fact, access to source codes has been part of cases relating to anti-trust law and taxation law. For instance, when brakes of cars made by a global automobile manufacturer stopped working with several fatal car accidents as a result, the United States' regulators enlisted experts to check the source code of the software of the foreign supplier and identified the underlying technical problems.

It is reasonable to assume including disciplines to protect source codes in trade agreements is not the same thing as wanting to introduce complete prohibition on requirements on transfer of source codes.

Recently negotiated trade agreements contain disciplines protecting source codes. The basic premise of these disciplines states that a government cannot require a firm or an individual of another party who owns software to transfer or provide access to the source of that software as a condition for being permitted to supply the service or trade by electronic means.

However, as the discussions surrounding source codes takes shape, the scope of the exception's clause has also become more specific. For instance, while the Japan–Mongolia FTA provide exceptions to source code provisions for critical infrastructure and CPTPP provide exceptions for patents, the text of the USMCA further broadens the scope of the exceptions by permitting for source codes to be transferred to a regulatory or judicial body for a "specific investigation, inspection, examination, enforcement action or judicial proceeding." Notably, while USMCA and CPTPP seek to protect developers' rights over their software source code against the demands of disclosure, the USMCA also incorporates source code-related algorithms into the subject of protection which makes it distinct from other trade agreements. Mega-regional trade agreements such as CPTPP may also assert influence over future bilateral trade agreements, as was the case in the revised Australia–Singapore FTA which introduced language that is identical to that used in the CPTPP.

As revealed by the case of CPTPP which involves Brunei Darussalam, Mexico, Mongolia and Viet Nam not all developing countries have opposed provisions to protect source code. The European Union negotiating mandate for FTA with Indonesia also includes disciplines to protect source code.

The JSI negotiations on this topic remains indecisive. Countries that have proposed disciplines on algorithm and/or source code include the European Union, Japan, Republic of Korea, Singapore, Ukraine, and the United States. China, on the other hand, has submitted proposals that do not include provisions relating to algorithm and source code. This not only reflects a division within the WTO, but also points to a contentious issue of forced technology transfer that has contributed to deteriorating trade relations between China and the United States.

Countries that are involved in the JSI negotiations would need to identify their positions on two broad questions: should disciplines relating to source codes and algorithms be included in the JSI? If so, what should the scope of the exceptions to the prohibition on transfer of algorithms and source codes be? In responding to these questions, countries should remain mindful of their economic aspirations and public policy objectives, including ICT infrastructure as well as domestic digital value addition policies to assess whether and how these provisions can assist in upgrading the technological capabilities of domestic players.

Intermediary liability

Internet intermediaries bring together and facilitate transactions between third parties over the Internet. Platforms offering social networking services, online search engines, content aggregation services and Internet-based messaging services are all examples of existing Internet intermediaries. These intermediaries build trust with customers through user reviews, feedback, and other e-commerce content. With that said, illegal activities such as sale of counterfeit products and transmission of unauthorized copies of copyrightable works can also take place on these platforms. As Internet intermediaries become increasingly important to e-commerce and the digital economy, an urgent question to address is whether digital platforms that serve as intermediaries should be immune from liability, or potentially liable for the behavior and content posted online by the users of the platforms.

Platform intermediaries are typically private firms that provide online infrastructure that permits for communication and commerce. In recent times, some platform intermediaries have acquired significant economic power and occupy dominant economic positions in their markets. Some intermediaries function as search engines and portals while others serve as participative networking platforms. Still others function as intermediaries for e-commerce sellers and buyers. Some countries have existing laws and regulations that provide immunity to online intermediary companies with limited exceptions. Others have recently implemented rules under which such platforms can be held liable.

Countries that propose intermediary liability protection in trade agreements often consider it to be a cornerstone principle of the digital economy. Some of the arguments that are made in favour of intermediary liability protection include the following:

- It is difficult for online intermediaries, which cater to the needs of millions of consumers daily, to run their services if they are held accountable for any issues relating to consumer protection which may cause harm to its users.
- Intermediary platforms cannot monitor all relevant online content. While certain large firms may hire additional staff and develop artificial intelligence programs to enhance monitoring, smaller firms may not find it feasible to do so.
- Opening the possibility of a legal challenge to an intermediary platform is likely to result in a marked decline in small and nascent technology firms and start-ups that have few resources. This will effectively become a barrier to entry for new players.
- It is argued that it is not practical for online companies to bear the burden of proactively removing impermissible content. For instance, online intermediaries are likely to be unaware when a counterfeit product is sold using the online platform, or if user's post is defamatory or invades another person's privacy. They rely on user feedback and reporting to learn when content is impermissible or offensive, and subsequently build measures to regulate the content.
- On issues relating to posting of online content and privacy, placing liability on intermediaries could result in over-censorship by online technology companies. If online platforms are held liable for user posts, they may seek to limit any potentially impermissible post. This could lead them to limit content and topics or block users altogether. After all, the benefit of any single post is limited to intermediaries, while the liability of a single impermissible post could be significant. This may limit the right to free speech and expression online, which many countries consider as essential rights.

For these reasons, certain countries propose rules to protect the intermediary platform from liabilities. This concept is not new in some domestic legal frameworks. For instance, intermediary liability protection laws exist in the form of the E-Commerce Directive in the EU and Section 230 of the Communications Decency Act in the United States. These laws enable Internet services to host, process, and distribute user-generated content while at the same time not be treated as the creator of the content for purposes of determining liability.

Inclusion of these rules in trade agreements is relatively new. As of 2017, a total of eight RTAs included provisions on intermediary liability (Monteiro and Teh, 2017). The majority of these agreements were signed by the EU and the Republic of Korea, independent of each other, with their respective trading partners. These trading partners predominantly featured developing countries and countries with economies in transition such as Colombia, Georgia, Moldova, Peru, and Ukraine. More recently, the digital trade section of USMCA, which bears textually resemblance to Section 230 of the Communications Decency Act, contains provisions on intermediary liability protection. Article 19.17(2) of USMCA provides that parties shall not "adopt or maintain measures" that create civil liability for suppliers or users of "an interactive computer service as an information content provider … except to the extent the supplier or user has, in whole or in part, created, or developed the information." Some proponents of intermediary liability protections even seek protection from liability for non-Intellectual Property content posted by users, such as defamation and other speech-related harms, to be included in trade agreements.

At the same time, many countries argue that online intermediaries should not have immunity from user content. Supporters seeking to place liability on platform intermediaries argue that online intermediary firms can and should monitor their user content for impermissible content. They further argue that intermediaries are not neutral in their approach to content, and that intermediary immunity limits the remedies available to victims of illegal online behaviour. Imposing liability on the intermediary may induce the firm to proactively act against illegal or harmful content.

Given the complexities involved with intermediary liability and its overlap with consumer protection, tackling counterfeit products, and freedom of expression, issues surrounding the efficacy of intermediary liability protection in trade agreements remain ambiguous at best. Several countries have implemented domestic laws that aim to regulate online intermediaries to achieve diverse objectives.

- Article 38 of China's E-Commerce Law (2019), which seeks to combat counterfeit products, states that "Where e-commerce platform operators know or should know that goods or services sold or provided on the platform do not comply with requirements for personal or property security, or otherwise violate consumers' lawful rights and interests, and do not take necessary measures, they bear joint liability with the on-platform business in accordance with law."
- Germany's Act to Improve Enforcement of the Law in Social Networks (2017) require social networks to remove unlawful content within 24 hours of being notified.
- Singapore's Protection from Online Falsehoods and Manipulation Act (2019) aims at safeguarding against the use of online accounts for information manipulation by regulating certain aspects of services provided by Internet intermediaries.
- The revised text of the TPP Agreement also demonstrates a divide amongst countries to include intermediary liability protection in trade agreements. This is because the "safe harbor" provision was removed from the CPTPP after the United States withdrew from the TPP.

No multilateral disciplines on intermediary liability exist in either the WTO or WIPO. Given the novelty of this topic, countries engaging in the JSI negotiations should consider whether provisions relating to intermediary liability protection align with their economic, social and political aspirations. They should also consider whether a trade agreement is the appropriate channel to introduce these changes. Further, countries should consider reflecting upon the policy space they would like to maintain to regulate Internet intermediaries in the future. Countries should also consider the scope of limitations to protection of intermediaries – whether discussions are limited to intellectual property issues, or they can be extended more broadly to include non-intellectual property issues.

CONCLUDING REMARKS

The world of trade continues to transform as the economy and society become increasingly digitalized. The expansion of the digital economy has changed the way we produce, consume and do business. Already, half of global trade in services comprises those that can be digitally delivered, and cross-border e-commerce accounts for a rising share of all e-commerce. The COVID-19 pandemic gave a further impetus to a whirlwind growth of e-commerce and underscored the importance of digital solutions for the post-pandemic recovery and economic activities under the "new normal".

As with trade in general, e-commerce can contribute to higher welfare, economic growth and sustainable development under the right conditions. Huge digital divides and differences in the readiness of many developing countries to engage in, govern and reap benefits from e-commerce affect the ability of different countries to benefit from the digital economy for development. It is against this backdrop that setting the right conditions at the national and international levels for the beneficial growth of e-commerce has to be high on countries' development agenda.

Trade negotiations and agreements, framed in such a manner as to promote a balanced outcome with a strong development dimension, can contribute to setting the right conditions for countries to progress towards sustainable development. The JSI negotiations have the potential to contribute to this process, but this is not given. It will ultimately depend on the content of the agreement, the balance that is achieved between the interests of different members, and the extent to which development considerations are integrated into the provisions of an eventual agreement, which, taken together, are likely to influence the shape of national regulatory regimes affecting e-commerce in developing countries.

This study examined salient issues at stake for developing countries under the JSI e-commerce negotiations and provided an initial discussion of the development dimension both from systemic and substantive perspectives. The outcome of these negotiations is potentially significant for the future regulation of e-commerce and the digital economy, and it may affect the future direction of the MTS. Overall, the negotiations could influence the efforts of developing countries to derive effective benefits from international trade as a catalyst to achieve the Agenda 2030 for sustainable development.

There is a need to carefully assess the development implications of internationally legally binding rules which may constrain countries policy options and to ascertain which rules should be covered by an eventual agreement.

Moreover, some of the topics included in the JSI negotiating agenda reflect the interests of the major digital powers and their superstar firms which are reaping first-mover advantages. If rules are warranted, they should be designed in such a way as to allow individual countries to address their public policy objectives and development needs, and contribute to levelling the playing field for less technologically advanced countries. In the emerging global digital economy, it will be particularly important to ensure that developing countries have the necessary economic, legal and regulatory space to shape their digital economies in ways that serve the interests of their populations, including by helping them to create and capture value from digital data.

Whether and how the outcome of the JSI negotiations should be multilateralized remain questions that JSI parties need to address. Neither plurilateral agreements nor RTA-type agreements as such would settle the legal standing of the future e-commerce agreement. Procedurally, multilateralization and even agreement for a plurilateral agreement within the WTO framework would require consensus, including from those countries that opted not to participate in the JSI negotiations. The JSI negotiations may thus need to consider ways to address the concerns of these countries.

Such complexities call for careful consideration of the implementation mechanisms by which future multilateralization of the negotiated outcome could take place. Among the built-in mechanisms that could facilitate the gradual implementation and future participation of countries that are currently not at the negotiating table are modulated commitments, so that developing countries could gradually assume a

Box 7. UNCTAD resources on trade, e-commerce and the digital economy

As the focal point within the United Nations for the integrated treatment of development and interrelated issues in the areas of trade, finance, investment, technology and sustainable development, UNCTAD's portfolio of expertise encompasses many of the essential elements of policies and regulatory framework affecting developing countries' ability to engage in and benefit from e-commerce. The diverse areas of expertise coordinated under a holistic development-centred approach has enabled a unique contribution of UNCTAD in this area. Some of its resources for members include the following:

Fostering the intergovernmental dialogue and consensus building

- Intergovernmental Group of Experts on E-commerce and the Digital Economy
- Working Group on Measuring E-commerce and the Digital Economy
- Intergovernmental Group of Experts on Competition Law and Policy
- Intergovernmental Group of Experts on Consumer Protection Law and Policy
- Global and regional eCommerce weeks
- Trade Policy Dialogue

Building the knowledge base through research and analysis

- Digital Economy Report
- eTrade Readiness Assessments
- Cyberlaw Tracker
- UNCTAD Technical Notes on ICT for Development

Technical assistance and capacity building

- E-commerce and Law Reform
- Measuring E-commerce and the Digital Economy
- ICT Policy Reviews and E-commerce Strategies
- Digital ID
- Train For Trade – e-commerce course
- Trade Negotiations
- Trade Policy Framework reviews
- Services Trade and Development, including Services Policy Reviews
- Trade facilitation and ASYCUDA
- Competition policy and consumer protection policies and framework
- Intellectual property rights
- South-South cooperation

Source: UNCTAD.

higher level of commitments in differentiated timeframes. A scheduling approach of the type used in the TFA, which relate individual countries' commitments to their implementation capacities, capacity-building support and capacity acquisition, might be warranted.

To the extent that the major bottleneck for implementation is the lack of immediate institutional capacities and resources of some countries, this approach would prove to be particularly useful. As countries seek to design adequate regulatory regimes to govern e-commerce and the digital economy and build capacity, it would allow them to decide on which policies are essential for developing their domestic digital economy and design implementation schedules accordingly. For instance, the adoption and implementation of laws and policies related to e-transaction; consumer protection; data protection and privacy; and cybercrime might constitute fundamental elements of e-commerce readiness and may be candidates for early implementation.

When countries do not possess regulatory and institutional capacities or infrastructure, a deferred implementation over a transition period, subject to capacity-acquisition with the provision of capacity-building support, could be made an option for developing countries. This would warrant concerted efforts internationally to continue to support developing countries in building digital regulatory capabilities and e-commerce readiness. This should work for greater inclusiveness of the agreement and be instrumental for possible multilateralization.

Ultimately, developing countries – whether they are participating or not – are confronted with the policy challenge of making their emerging digital economy effectively work for sustainable development. The formulation of adequate national regulatory frameworks and strategies to build digital capabilities and promote e-commerce should remain an essential component of a broader national development agenda. Efforts are warranted at the national level – supported by technical assistance and capacity-building activities – to strengthen their readiness and capabilities to engage in e-commerce and bridge the digital divide to help them take advantage of the vibrant digital economy. On the basis of longstanding experience in supporting developing countries' gainful integration into the international trading system and pioneering work on the digital economy, UNCTAD would be ready to contribute to this process (Box 7).

ENDNOTES

1 According to the main proponents of the JSI negotiations, the "high-standard agreement" is considered as one that creates strong, market-based rules that is enforceable and has the same obligations for all participants, covering cross-border data flows. See also WTO (2019).

2 UNCTADStats.

3 The United States remains the largest e-commerce market, representing around 35 per cent of the global e-commerce market, followed by East Asian countries (Japan, China, and Republic of Korea), the European Union members (the United Kingdom, France, Germany, Italy), Australia.

4 See UNCTAD. Rapid eTrade Readiness Assessment of Least Developed Countries (eT Ready). Available at: https://unctad.org/topic/ecommerce-and-digital-economy/etrade-readiness-assessments-of-LDCs.

5 See ITU. Individuals using the Internet 2005-2019. Available at: https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx.

6 See UNCTAD. Summary of Adoption of E-Commerce Legislation Worldwide. Available at: https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Global-Legislation.aspx.

7 WTO (2015). Nairobi Ministerial Declaration (WT/MIN(15)/DEC, 19 December). The declaration noted on paragraph 30 that "(w)e recognize that many Members reaffirm the Doha Development Agenda" but "(o)ther Members do not reaffirm the Doha mandates, as they believe new approaches are necessary to achieve meaningful outcomes in multilateral negotiations."

8 Global Services Coalition (2019). Letter to WTO Ministers to Re-Double Efforts to Make Progress Toward a High Standard E-Commerce Framework, 18 January. Also see, European Services Forum (2019). ESF Position Paper on the WTO Joint Statement Initiative towards launching negotiations for an International Agreement on E-Commerce, 14 January. Available at: https://www.bsa.org/files/policy-filings/10062019wtoecommultiassoc.pdf.

9 Civil Society Organizations Against E-commerce Rules (2019). Statement from Civil Society Organizations Against E-commerce Rules in the World Trade Organization, 25 January.

10 Supportive of the negotiations, the G20 Summit in June 2019, under the Japanese presidency, held the first joint Trade and Digital Economy Ministerial meeting and launched the "Osaka Track" to promote international policy discussions, inter alia, international rule-making on trade-related aspects of electronic commerce at the WTO. India, South Africa and Indonesia did not participate in the Declaration. See, G20 Osaka Declaration on Digital Economy (29 June 2019). Available at: https://www.meti.go.jp/pre%20ss/2019/06/20190628001/20190628001_01.pdf.

11 WTO (2020). Press Release: Negotiations on e-commerce continue, eyeing a consolidated text by the end of the year, 23 October. Available at: https://www.wto.org/english/news_e/news20_e/ecom_26oct20_e.htm.

12 The statement made by the EU representative at the 15 May General Council meeting summarizes this point. See, European Union (2019). EU Statement at the Informal General Council Meeting, 15 May. Available at: https://eeas.europa.eu/delegations/world-trade-organization-wto/79401/eu-statement-informal-general-council-meeting-15-may-2020_en.

13 See UNCTAD. Rapid eTrade Readiness Assessment of Least Developed Countries (eT Ready). Available at: https://unctad.org/topic/ecommerce-and-digital-economy/etrade-readiness-assessments-of-LDCs.

14 Based on facilitators report. WTO. Joint Statement on Electronic Commerce: Facilitator's Reports (INF/ECOM/R/1 – INF/ECOM/R/7).

15 It should be noted that most of digital platforms are based in the United States and China. See UNCTAD (2019).

16 Office of United States Trade Representative (2019), USTR Robert Lighthizer on the Joint Statement on Electronic Commerce, 25 January. Available at: https://ustr.gov/about-us/policy-offices/press-office/press-releases/2019/january/ustr-robert-lighthizer-joint.

17 In the context of the ratification of USMCA Agreement, the debate as to the adequacy of incorporating the intermediary immunities in the USMCA Agreement based on the United States domestic law. See, for instance, World Trade Online (2019). Tech industry defends internet liability protections in USMCA as Pelosi pushes for removal. Available at: https:// insidetrade.com/trade/tech-industry-defends-internet-liability-protections-usmca-pelosi-pushes-removal

18 Chander A (2013). The electronic silk road: How the web binds the world together in commerce, Yale University Press, quoted in Gao H (2018). Generally, Approaches adopted in CPTPP and the USMCA Agreement, in particular the so-called "Digital 2 Dozen" obligations that the United States promoted under the Trans-Pacific Partnership with a view to developing "the digital economy through a free and open internet and commerce without borders", appear to form the basis of the United States' position as regards the scope of the JSI negotiations on e-commerce.

19 WTO (2019). Joint Statement on Electronic Commerce: Communication from China (INF/ECOM/19, 24 April).

20 WTO (2018). Establishing an enabling environment for electronic commerce: Communication from the European Union (JOB/GC/188, 16 May).

21 WTO (2019). Joint Statement on Electronic Commerce: Communication from Brazil (INF/ECOM/27/Rev. 1, 9 July).

22 WTO (2019). Joint Statement on Electronic Commerce: Communication from Indonesia (INF/ECOM/47, 22 November).

23 See, for instance, WTO (2019). Elements of a potential approach under the framework of the Joint Statement on Electronic Commerce: Communication from Argentina, Colombia and Costa Rica (INF/ECOM/1, 25 March).

24 Meltzer, JP (2018). A Digital Trade Policy for Latin America and the Caribbean. Inter-American Development Bank.

25 WTO (2019). Joint Statement on Electronic Commerce: Communication from Chile, Colombia, Mexico and Peru (INF/ECOM/35, 20 June).

26 WTO (2019). Joint Statement on Electronic Commerce: Communication from Indonesia (INF/ECOM/47, 22 November).

27 WTO (2019). Déclaration conjointe sur le commerce électronique: Communication présentée par la Côte d'Ivoire (INF/ECOM/49, 16 December).

28 See, for instance, discussion at UNCTAD's Panel Discussion on the Development Implications of the Proposed WTO Plurilateral Negotiations on Electronic Commerce, 5 April 2019, held at UNCTAD eCommerce Week 2019. Available at https://unctad.org/meeting/panel-discussion-development-implications-proposed-wto-plurilateral-negotiations-electronic.

29 See, for instance, African Union (2019). Press Release: African Leaders call for a common Digitalization Agenda, 15 May. See also, Foster C and Shamel A (2018).

30 "RTAs" referred to throughout the study include those preferential trade agreements concluded by two countries (bilateral agreements) as well as among a group of countries that do not belong to a same region (inter-regional agreements).

31 These are: The United States-Chile FTA (2004), the United States-Singapore FTA (2003), the United States-Australia (Australia) and the Thailand-Australia FTAs (2005).

32 Office of the United States Trade Representative (2016), The Digital 2 Dozens. Available at: https://ustr.gov/about-us/policy-offices/press-office/reports-and-publications/2016/digital-2-dozen.

33 WTO (2018). Communication from the United States (JOB/GC/178, 12 April).

34 Callo-Muller, M (2019).

35 Australia, Brunei, Cambodia, China, Indonesia, Japan, Laos, Malaysia, Myanmar, New Zealand, the Philippines, Singapore, South Korea, Thailand, and Vietnam.

36 Cambodia, El Salvador, Georgia, Guatemala, Honduras, India, Indonesia, Jordan, Lao People's Democratic Republic, Mongolia, Morocco, Nicaragua, the Philippines, Ukraine and Viet Nam.

[37] Belize, Bulgaria, China, Colombia, Costa Rica, Dominican Republic, Jamaica, Malaysia, Mexico, Panama, Peru, Romania and Thailand.

[38] See, WTO (2019). Communication from Canada (INF/ECOM/34, 11 May); WTO (2019). Communication from China (INF/ECOM/19, 24 April); WTO (2019). Communication from China (INF/ECOM/32, 9 May); WTO (2019). Communication from Korea (INF/ECOM, 9 May).

[39] This is a variation of traditional tariff reduction approaches as was originally conceived in GATT 1947, namely, exchanging concessions among members having initial negotiating rights, and resulting concessions are extended to all members on an MFN basis. The GATT/WTO tariff negotiations presume that reciprocity requirements are satisfied among countries representing a substantial amount of international trade before the resulting concessions are extended to all countries on an MFN basis.

[40] These plurilateral market access negotiations are based on GATT and GATS disciplines providing progressive liberalization, including GATT Articles II, XXVIII and XXVIII bis for tariffs, and GATS Articles XVIII, XIX, XX, XXI for services.

[41] According to GATS Article XVIII, measures which affect trade in services that are not subject to scheduling commitments under Article XVI of the GATS (market access) and Article XVII of the GATS (national treatment) can be inscribed in a WTO member's schedule.

[42] See, WTO (2018). Communication from the European Union (JOB/GC/194, 12 July).

[43] It should be noted that the Agreement on Government Procurement is a special case as it addresses a policy area that was excluded from WTO's general principle of MFN and national treatment obligations, that is, it is an agreement meant to restore otherwise non-mandatory minimum standards (MFN and national treatment) obligations on government procurement among its members only (conditional MFN).

[44] Annex 4 of the WTO Agreement entitled "Plurilateral Trade Agreements" contains WTO-covered plurilateral agreements, including the GPA, Originally, it contained the following: Agreement on Trade in Civil Aircraft, International Dairy Agreement and International Bovine Meat Agreement. The latter two agreements were terminated in 1997.

[45] The Revised Agreement on Government Procurement finds legal sanctity within Article XXIV:7(b) and (c) of the GPA which permits for negotiations to improve and update its text, extend its coverage and eliminate discriminatory measures.

[46] According to GATS Article V:1, a two-fold requirement need to be met: (i) the RTA must have substantial coverage, and (ii) it must provide for the absence or elimination of substantially all forms discrimination among participants in terms of national treatment. In reality, RTAs formed involving or among developing countries enjoy a degree of lower compliance thresholds both under relevant GATT and GATS disciplines.

[47] See, WTO (2019). Communication from the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu (INF/ECOM/24, 29 April).

[48] For example, the Trans-Pacific Partnership (Art. 14.18) used dispute settlement exceptions as a type of transition period digital services taxes for two developing Members, *i.e.*, Malaysia and Singapore, enabling them to change their policies to comply with the agreement.

[49] WTO (2019). Joint Statement Initiative on Electronic Commerce, Communication from China (INF/ECOM/19, 24 April).

[50] WTO (2019). Joint Statement Initiative on Electronic Commerce, Communication from Côte d'Ivoire (INF/ECOM/46, 14 November).

[51] WTO (2019). Joint Statement Initiative on Electronic Commerce, Facilitator Report on the Sixth Negotiating Round (19-22 November 2019) (INF/ECOM/R/6, 9 December).

[52] WTO (2019). Draft General Council Decision - Procedures to Strengthen the Negotiating Function of the WTO: Communication submitted by the delegation of the United States (WT/GC/W/764/Rev.1, 25 November).

[53] WTO (2019). African Group Declaration on WTO Issues (WT/L/1054, WT/GC/199, TN/C/19, 8 January).

54 Office of the United States Trade Representative (2019), Statement issued by USTR Robert Lighthizer on the Joint Statement on Electronic Commerce on 25 January 2019. Available at: https://ustr.gov/about-us/policy-offices/press-office/press-releases/2019/january/ustr-robert-lighthizer-joint.

55 This section draws heavily from UNCTAD (2019).

56 Further, "data" can be considered as part of the digital infrastructure of an economy – this is mostly Internet of Things data but it also is the data that flows across borders encoding e-commerce transactions and cloud services. Countries have national security and sovereignty interests in data in this role. See, Centre for International Governance Innovation (2020). Available at https://www.cigionline.org/publications/toward-robust-architecture-regulation-data-and-digital-trade.

57 WTO (2018). Communication by India and South Africa (WT/GC/W/747, 12 July); WTO (2019). Communication by India and South Africa (WT/GC/W/774, 4 June).

58 The methodology used in Banga (2019) included potential revenue loss arising from trade flows being fully digitized as well as revenue not collected on trade flows that could have already been digitized.

59 WTO (2019). Communication by India and South Africa Council, (WT/GC/W/774, 4 June).

60 WTO (2017). Statement by Indonesia – Facilitator's consultation on electronic commerce (WT/MIN(17)/68, 18 December).

61 WTO (2017). Work Programme on Electronic Commerce – Ministerial Decision of 13 November 2019 (WT/MIN(17)/65), 18 December).

62 See, Chapter 99 of Indonesia's Customs Tariff Act.

63 See, Chambre de Commerce du Canada, Protect Canadian Business by Keeping the De Minimis Threshold Low. Available at: http://chamber.ca/download.aspx?t=0&pid=5c0acdf4-e48c-e711-a31e-005056a00b05.

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66 United States Department of Commerce (2009). National Institute of Standards and Technology, Recommendations for Digital Signature Timeliness, NIST Special Publication 800-102 (September).

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