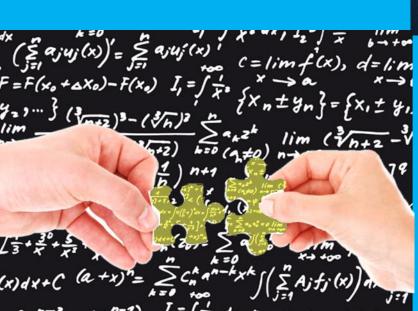




Digital trade integration in preferential trade agreements





Andrew D. Mitchell
Neha Mishra

ASIA-PACIFIC RESEARCH AND TRAINING NETWORK ON TRADE

Working Paper

NO. 191 | 2020

The Asia-Pacific Research and Training Network on Trade (ARTNeT) is an open regional network of research and academic institutions specializing in international trade policy and facilitation issues. ESCAP, WTO and UNCTAD, as key core network partners, and a number of bilateral development partners, provide substantive and/or financial support to the network. The Trade, Investment and Innovation Division of ESCAP, the regional branch of the United Nations for Asia and the Pacific, provides the Secretariat of the network and a direct regional link to trade policymakers and other international organizations.

The ARTNeT Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about trade issues. An objective of the series is to publish the findings quickly, even if the presentations are less than fully polished. ARTNeT Working Papers are available online at www.artnetontrade.org. All material in the Working Papers may be freely quoted or reprinted, but acknowledgment is requested together with a copy of the publication containing the quotation or reprint. The use of the Working Papers for any commercial purpose, including resale, is prohibited.

Disclaimer:

The designations employed and the presentation of the material in this Working Paper do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. Where the designation "country or area" appears, it covers countries, territories, cities or areas. Bibliographical and other references have, wherever possible, been verified. The United Nations bears no responsibility for the availability or functioning of URLs. The views expressed in this publication are those of the author(s) and do not necessarily reflect the views of the United Nations. The opinions, figures and estimates set forth in this publication are the responsibility of the author(s), and should not necessarily be considered as reflecting the views or carrying the endorsement of the United Nations. Any errors are the responsibility of the author(s). The mention of firm names and commercial products does not imply the endorsement of the United Nations.





WORKING PAPER

Digital Trade Integration in Preferential Trade Agreements

Andrew D. Mitchell¹ and Neha Mishra²

Please cite this paper as: Andrew D. Mitchell and Neha Mishra (2020), "Digital Trade Integration in Preferential Trade Agreements", ARTNeT Working Paper Series, No. 191, May 2020, Bangkok, ESCAP.

Available at: http://artnet.unescap.org

The authors also express their gratitude to ARTNeT secretariat for assistance in disseminating this work.

¹ Professor, University of Melbourne Law School; Director, Global Economic Law Network; PhD (Cantab); LLM (Harv); Dip Int Law (Melb); LLB (Melb); BCom (Melb) (email: andrew.d.mitchell@gmail.com)

² Postdoctoral Fellow, Centre for International Law, National University of Singapore; PhD (Melb); MPP (NUS); LLM (LSE); BA LLB (Hons) (NLSIU) (email: mishra.neha@gmail.com)

Abstract

The growth of digital trade is dependant upon greater interconnectivity across borders.

Several countries strive to achieve such interconnectivity and integration in digital trade

through international trade agreements. Digital trade integration is a complex,

multidimensional process that integrates regulatory structures/policy designs, digital

technologies and business processes along the entire global/regional digital value chain.

This paper sets out five foundational elements of digital trade integration: reducing digital

trade barriers; digital trade facilitation; digital trade regulatory frameworks and digital trust

policies; digital development and inclusion; and institutional coordination. It then

examines the extent to which Preferential Trade Agreements (PTAs) can or do contribute

to digital integration.

Some recent PTAs contain ambitious provisions to reduce regulatory barriers in digital

trade and facilitate cross-border data flows. However, most PTAs fail to holistically

support the five pillars of digital trade integration, and are particularly deficient in

supporting digital development and inclusion, incorporating adequate digital trade

facilitation measures, and facilitating meaningful international regulatory cooperation.

This paper provides various policy recommendations to address such deficiencies. This

paper also contains a case study of digital trade integration in the Association of

Southeast Asian Nations (ASEAN). It argues that the ASEAN framework currently

functions as a weak form of digital trade integration, focusing mainly on political goodwill

and high-level cooperation. Although the ASEAN Members are committed to enhancing

regulatory cooperation and strengthening their institutions on electronic commerce, the

development asymmetry coupled with the conflicting policy preferences of ASEAN

Members remains a key obstacle.

Keywords: Digital trade, Digital trade integration, Trade barriers, International trade,

PTAs, Trade facilitation, Trade policy, ASEAN

JEL Codes: F10, F13

Table of Contents

List of abbreviations	…iv
1. Introduction	1
2. Pillars of Digital Trade Integration	5
2.1 Reducing Digital Trade Barriers	6
2.2 Digital Trade Facilitation	8
2.3 Digital Trade Regulatory Frameworks and Digital Trust Policies	9
2.4 Digital Development and Inclusion	. 13
2.5 Institutional Coordination	. 14
3. Digital Trade Integration in Preferential Trade Agreements: Contribution of PTAs to Digital Trade Integration	
3.1 Pillar 1: Reducing Digital Trade Barriers 3.1.1 Non-discrimination Obligations 3.1.2 Cross-border Data Flows and Data Localisation 3.1.3 Tariffs on Electronic Transmissions	. 15 . 16
3.2 Pillar 2: Digital Trade Facilitation	. 19 . 22
3.3 Pillar 3: Digital Trade Regulatory Frameworks and Digital Trust Policies	. 26 . 29
3.4 Pillar 4: Digital Development and Inclusion	. 34
3.5 Pillar 5: Institutional Coordination	. 36
4. ASEAN: A Model of Digital Trade Integration?	. 40
4.1 Digital Integration in ASEAN	. 40
4.2 ASEAN Agreement on Electronic Commerce	. 41
5. Conclusion	. 48
References	. 50

List of figures

Figure 1: Five Pillars of Digital Trade Integration5
List of boxes
Box 1: Recommendations and Best Practices in PTAs to Reduce Digital Trade Barriers
19
Box 2: Recommendations and Best Practices in PTAs on Digital Trade Facilitation25
Box 3: Recommendations and Best Practices on Digital Trade Regulatory Frameworks
34
Box 4: Best Practices and Recommendations for Digital Development and Inclusion 36
Box 5: Recommendations and Best Practices for Institutional Coordination39

List of abbreviations

ACCEC ASEAN Coordinating Committee on Electronic Commerce

AEC ASEAN Economic Community

APEC Asia-Pacific Economic Cooperation

API Application Programming Interface

ASEAN Association of Southeast Asian Nation

CBPR Community-based participatory research

CPTPP Comprehensive and Progressive Trans-Pacific Partnership Agreement

DEPA Digital Economic Partnership Agreement between Chile, New Zealand

and Singapore

EU European Union

GATS General Agreement on Trade in Services

GATT General Agreement on Tariffs and Trade

GDPR General Data Protection Regulation

ICT Information Communication Technology

IP Intellectual Property

LDC Least Developed Country

MFN Most-Favoured Nation Treatment

MSME Micro, Small-sized and Medium-sized Enterprise

NT National Treatment

OECD Organisation for Economic Cooperation and Development

PTA Preferential Trade Agreement

SME Small-sized and Medium-sized Enterprise

TAPED Trade Agreements Provisions on Electronic-Commerce and Data

TPP Trans-Pacific Partnership

UNCITRAL United Nations Commission on International Trade Law

UNESCAP United Nations Economic and Social Commission for Asia and the

Pacific

USMCA United States-Mexico-Canada Agreement

USTR United States Trade Representative

WTO World Trade Organization

1. Introduction

The digitalisation of the economy necessitates countries align their domestic laws and policies and liberalise their markets to achieve greater connectivity and exchange of information across borders.³ A predominant shared interest among countries working towards such alignment and liberalisation is the goal of improving economic and social growth by exploiting the enormous opportunities enabled by digital trade.⁴ In that regard, governments are increasingly relying upon international trade agreements to achieve shared interests and goals, and greater digital trade integration. International trade agreements cover both the treaties of the World Trade Organization (WTO) as well as other preferential trade agreements (PTAs) (i.e. bilateral, regional and megaregional trade agreements).

Digital trade integration is a complex, multidimensional process that integrates regulatory structures/policy designs, digital technologies and business processes along the entire global/regional digital value chain. It requires free cross-border movement of not only digital services, products and technologies but also other manufactured goods (e.g. internet platform-driven trade), data, capital, ideas, talent as well as the availability of integrated physical and virtual infrastructure. Thus, digital trade integration is not only dependant on the removal of digital trade barriers⁵ but also requires extensive technology, legal and policy coordination across countries.⁶

Expectedly, achieving digital trade integration involves difficult policy choices and regulatory costs for governments and regulatory bodies, especially in developing countries and Least Developed Countries (LDCs). Despite such costs and challenges, we see an increasing number of regional initiatives aimed at digital trade integration such

³ Meltzer 2019; McKinsey Global Institute 2016

⁴ Digital trade and electronic commerce are used interchangeably in this paper. The authors rely on the WTO's definition of electronic commerce: 'the production, distribution, marketing, sale or delivery of goods and services by electronic means'. The authors believe this definition is broad and generic enough to cover modern-day digital trade.

⁵ OECD 2020a; USTR 2017

⁶ Ahmad 2019; Kerber and Schweitzer 2017; Weber 2014

as the Digital Single Market in the European Union (EU);7 the Digital Integration Framework in Association of Southeast Asian Nations (ASEAN);8 the Electronic Commerce Facilitation Framework in Asia-Pacific Economic Cooperation (APEC);9 the various digital trade initiatives at the Organisation for Economic Cooperation and Development (OECD)¹⁰ and the Digital Transformation Strategy in the African Union.¹¹ Not all these frameworks achieve the same degree of integration. For instance, the EU Digital Single Market is aimed at facilitating seamless digital trade in the EU through EUlevel regulations and is, therefore, a strong form of digital trade integration. 12 The APEC and OECD initiatives tend to focus on high-level principles and guidelines which Members can sign up to voluntarily, resulting in greater consistency of regulatory frameworks and greater interconnectivity among domestic markets in the region.¹³ We refer to this as a mixed or intermediate form of digital trade integration. In contrast, in the ASEAN region, we observe non-binding frameworks on digital integration that are largely focused on high-level cooperation. Although the ASEAN region has recently signed an agreement on electronic commerce (as discussed in Section 4), significant level of regulatory heterogeneity exists among ASEAN Members resulting in a fragmented digital trade market. Therefore, the digital trade integration in ASEAN is currently relatively weak.

In addition to regional unions, several PTAs increasingly contain comprehensive provisions on electronic commerce and related issues that can facilitate digital trade integration among its parties. Some of the key areas are cross-border data flows, data localisation, privacy protection, electronic signatures and authentication, paperless trading, cooperation in electronic commerce, and protection of proprietary trade secrets of technology companies. This paper assesses the extent to which PTAs can or do contribute to the integration of rules, regulations, principles, processes and technologies

.

⁷ European Commission 2020

⁸ See Section 4.

⁹ APEC 2017

¹⁰ See OECD. Digital Trade. Available from https://www.oecd.org/trade/topics/digital-trade/.

¹¹ African Union 2019

¹² For an overview of EU rules on electronic commerce, see European Commission. New EU rules on E-Commerce. Available from https://ec.europa.eu/digital-single-market/en/new-eu-rules-e-commerce.

¹³ See e.g. APEC Cross-Border Privacy Rules System; OECD Principles on Artificial Intelligence.

in digital trade (or digital trade integration).¹⁴ This paper focuses on PTAs for two reasons: (i) the WTO framework was designed well before the rapid digitalisation of the economy and therefore governments increasingly rely on their PTAs to address digital trade integration;¹⁵ and (ii) despite some progress in the ongoing Joint Statement Initiative on Electronic Commerce involving 84 WTO Members,¹⁶ the WTO has failed to deliver successful negotiations in electronic commerce.¹⁷

In Section 2, we formulate a framework that contains the foundational or pillars of digital trade integration. The five pillars of digital trade integration are: (2.1) reducing digital trade barriers; (2.2) digital trade facilitation; (2.3) digital trade regulatory frameworks and digital trust policies; (2.4) digital development and inclusion; and (2.5) institutional coordination. This section argues that these five pillars are not completely independent but rather mutually supporting by nature.

Section 3 evaluates how various provisions in PTAs (especially focusing on the Electronic Commerce Chapters) contribute to the five pillars of digital trade integration. While several recent PTAs contain ambitious provisions to reduce regulatory barriers in digital trade and facilitate cross-border data flows, most PTAs fail to sufficiently support all the five pillars of digital trade integration. In particular, existing PTAs are deficient in supporting digital development and inclusion, incorporating adequate digital trade facilitation measures, as well as fostering widespread international regulatory cooperation. Further, many PTAs are unable to facilitate a holistic digital trade regulatory framework given the conflicting domestic privacy and cybersecurity laws among trading partners.

Section 3 also provides our policy recommendations and best practices to strengthen digital trade integration in PTAs including: (i) incorporating binding provisions on non-

¹⁴ This paper does not cover how international trade agreements affect the provision of internet and broad services and infrastructure. Digital connectivity is a fundamental requirement for digital trade integration. However, it does not typically fall within the scope of electronic commerce or digital trade in international trade agreements.

¹⁵ Mitchell and Mishra 2018

¹⁶ WTO 2017; WTO 2019a

¹⁷ However, the Trade Facilitation Agreement and Information Technology Agreement facilitate some aspects of digital trade.

discriminatory treatment of digital products and restricting border duties on electronic transmissions; (ii) prohibiting data localisation measures and facilitating cross-border data flows necessary for conducting electronic commerce, subject to reasonable exceptions; (iii) developing binding provisions to facilitate electronic transactions for digital trade, including secure and interoperable electronic payment systems; (iv) requiring all PTA parties to adopt domestic frameworks on data protection and online consumer protection consistent with international guidelines, standards and best practices; (v) encouraging countries to develop interoperable regulatory frameworks on digital trade as well as encouraging the use of internationally recognised technical standards; (vi) providing for flexible implementation of commitments by LDCs and developing countries; (vii) mandating technical assistance and capacity building for LDCs and developing countries; and (viii) instituting a central coordinating body in PTAs to facilitate cooperation on digital trade, monitor implementation of electronic commerce provisions and align resources and funds for technical assistance/capacity building efforts in digital trade.

Section 4 discusses the digital trade integration model of ASEAN; this example is chosen given the diversity of membership in ASEAN as well as the importance of ASEAN in the global digital market. ¹⁸ It argues that the ASEAN model is currently a weak form of digital trade integration, focusing mainly on political goodwill and high-level cooperation. To strengthen it further, ASEAN Members must focus on strengthening regulatory coherence and the effectiveness of ASEAN-level institutions dealing with electronic commerce. Although ASEAN countries have made some efforts made to increase digital development and inclusion, particularly for the LDCs in the ASEAN region, a stronger coordination mechanism is necessary to align resources and implement structures for stronger digital trade integration in ASEAN. This integration, however, remains challenging as ASEAN institutions are generally weak and unable to synergise the divergent policy preferences of ASEAN Members.

¹⁸ Mik 2018

This paper concludes that PTAs can and should play an important role in promoting and strengthening digital trade integration. However, to achieve this, PTA parties must be fully committed, especially in supporting LDCs and developing countries, as well as to continue improving and aligning their domestic laws and policies pertinent to digital trade.

2. Pillars of Digital Trade Integration

This section considers the five foundational elements or pillars of digital trade integration: (2.1) reducing digital trade barriers; (2.2) digital trade facilitation; (2.3) digital trade regulatory framework and digital trust policies; (2.4) digital development and inclusion; and (2.5) institutional coordination mechanisms (see Figure 1). These five pillars do not stand independently; rather, they are mutually supportive by nature. In developing this framework, we have taken into account various policy challenges in digital trade. However, our proposed framework primarily focuses on the economic aspects of digital trade, although social benefits arising from digital trade are deeply interconnected with economic growth.

Figure 1: Five Pillars of Digital Trade Integration



Countries need to adopt a nuanced and multifaceted response in integrating these five pillars since digital trade integration is a multidimensional and multilevel process.

Differences in regulatory capacity and processes, levels of digital development and policy preferences among countries can be a major obstacle to achieve digital trade integration. At the same time, given the various benefits of remaining closely connected in a globalised digital economy, most countries have an incentive to overcome at least some obstacles in each of these pillars to seek greater integration with strategic regional or bilateral partners. Ultimately, however, perfect digital trade integration is unachievable; thus, countries should aim to move closer towards this framework depending on their resources, policy preferences as well as political and economic aims.¹⁹

2.1 Reducing Digital Trade Barriers

Several studies demonstrate the steady growth in barriers to digital trade and their adverse impact on the economy.²⁰ Market openness is essential for the digitalisation of the economy.²¹ This means that countries must get rid of digital trade barriers to the greatest extent possible to achieve digital trade integration. Certain developing countries have argued that digital trade barriers are essential for digital industrialisation;²² however, digital trade barriers generally lower consumer welfare in developing countries and LDCs and can slow the pace of digital inclusion.²³

Digital services and technologies are important enablers of digital trade. Restrictions on digital services and technologies often tend to be in the form of non-tariff measures rather than border measures such as customs duties.²⁴ Therefore, majority of digital trade barriers are non-tariff measures or behind the border barriers. For example, domestic laws and regulations often impose discriminatory and unreasonable requirements on foreign companies such as burdensome licensing or certification requirements,²⁵

¹⁹ Mitchell and Mishra 2018, p. 1073, 1079

²⁰ See e.g. OECD 2020a; https://ecipe.org/wp-content/uploads/2018/05/DTRI_FINAL.pdf. See other examples in https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2019/march/fact-sheet-2019-national-trade-estimate.

²¹ OECD 2018a

²² WTO 2017a

²³ Ahmad and Andonas 2015

²⁴ See e.g. USTR 2019.

²⁵ See e.g. WTO 2018.

mandatory cybersecurity²⁶ and privacy standards.²⁷ Another common digital trade barrier is restricting cross-border data flows through data localisation measures i.e. laws and regulations restricting data flows outside one's borders by requiring data to be stored and/or processed locally.²⁸ Some governments also impose data restrictions by requiring digital service suppliers comply with excessively burdensome administrative/certification requirements in domestic laws to conduct cross-border data transfers/processing.²⁹ Another barrier to digital trade is geo-blocking, which restricts access to internet content based on the geographical location of the user. For instance, in developing a Digital Single Market in the EU, the European Commission adopted a regulation to ban unjustified geo-blocking restrictions. 30

To promote digital trade integration, such barriers must be minimised to the greatest extent possible. As argued later in Section 3.1.1, the principle of non-discrimination in the Electronic Commerce Chapters of PTAs can help promote more competitive conditions for global/regional digital trade. Similarly, other obligations in international trade agreements such as obligations on market access and domestic regulation are also relevant in addressing and reducing digital trade barriers. Therefore, dispute resolution processes in trade agreements can be important in addressing digital trade barriers and thus promoting digital trade integration.

Since 1998, WTO Members have periodically agreed not to impose customs duties on electronic transmissions;³¹ this exemption, however, does not apply to any internal taxes or duties imposed on electronic transmissions. Consensus has also not been reached on whether this exemption also applies to the content of the transmission.³² Certain countries

²⁶ See e.g. Sacks and Li 2018.

²⁷ Mattoo and Meltzer 2018

²⁸ See discussion of various examples in Chander and Le 2015.

²⁹ See e.g. Binding Corporate Rules and Standard Contractual Clauses under the GDPR.

³⁰ Regulation (EU) 2018/302 of the European Parliament and of the Council of 28 February 2018 on addressing unjustified geo-blocking and other forms of discrimination based on customers' nationality, place of residence or place of establishment within the internal market and amending Regulations (EC) No. 2006/2004 and (EU) 2017/2394 and Directive 2009/22/EC

³¹ https://www.wto.org/english/news e/news19 e/gc 10dec19 e.htm

³² OECD 2019b

have recently argued that customs duties on electronic transmissions can be an important source of revenue for developing countries and LDCs and, therefore, must not be renewed.³³ However, other experts argue that such customs duties are inefficient digital trade barriers and an unstable and unreliable source of income for developing countries.³² Further, electronic transmissions are important in reducing trade costs and providing more choices to consumers.³² Thus, any customs duties imposed on electronic transmissions can be detrimental to digital trade integration, especially given the huge costs to domestic competitiveness, productivity and consumer welfare.³⁴

2.2 Digital Trade Facilitation

The second pillar of digital trade integration is digital trade facilitation, broadly covering all measures that facilitate transactions necessary to conduct cross-border digital trade.³⁵ Digital trade facilitation reduces trade costs as well as increases the speed, accuracy and efficiency of electronic transactions. Some of the essential components of digital trade facilitation are: (i) secure and interoperable electronic payment services; (ii) facilitating electronic authentication and verification, including adopting a common standard for electronic contracts and signatures; (iii) logistics, especially for small-value shipments common in the transactions of micro, small-sized and medium-sized enterprises (MSMEs); and (iv) paperless trading i.e. requiring exchange of trade-related data and documents in electronic form.³⁶

Interoperable electronic payments are essential to e-commerce transactions and especially important as consumers increasingly access internet platforms across borders to make purchases. Further, for smaller businesses in developing countries and LDCs, reliable and secure electronic payment systems are important to gain greater access to customers in the international market.³⁷ Paperless trading reduces administrative costs

³³ WTO 2019b

³⁴ Andrenelli and González 2019, p. 10

³⁵ APEC 2018, p. IX

³⁶ Framework Agreement on Facilitation of Cross-Border Paperless Trade in the Asia and Pacific, art 3(a)

³⁷ ASEAN. Study of MSMEs Participation in the Digital Economy. Available from https://asean.org/storage/2012/05/ASEAN-MSME-Full-Report-Final.pdf. p. 73, 83

for traders; for example, online customs procedures, single electronic window and electronic certificates of origin have all been found to reduce trade costs involved in cross-border transactions.³⁸

Digital trade facilitation requires countries to adopt relevant domestic electronic transactions laws.³⁹ International guidelines from United Nations Commission on International Trade Law (UNCITRAL) may be instructive in this regard.⁴⁰ The general regulatory framework for digital trade in cross-border data transfers, privacy and data protection, spam and online consumer protection further complements the regulatory framework for electronic transactions.⁴¹ Also, tariffs on electronic transactions (Section 3.1) can increase the costs of conducting electronic transactions. An important aspect of digital trade facilitation is the availability of robust competitive and secure technical standards for electronic transactions; thus, countries must refrain from imposing indigenous standards for electronic transactions as these may be less secure and not interoperable with prevailing international standards.

2.3 Digital Trade Regulatory Frameworks and Digital Trust Policies

The third pillar of digital trade integration consists of domestic frameworks on digital trade and digital trust policies. This pillar covers all domestic measures relevant to digital trade or those that foster digital trust either at an institutional/business or individual level including privacy and data protection; online consumer protection; cybersecurity; spam; competition and intellectual property. Further, domestic regulations affecting competitive conditions in the digital market are also essential to this pillar. Several studies have shown that regulatory differences among countries are emerging as a key constraint for foreign

³⁸ Mitchell and Mishra 2017

³⁹ Ibid

⁴⁰ UNCITRAL Model Law on Electronic Commerce United Nations Convection on the Use of Electronic Communications in International Contracts. In this regard, see Framework Agreement on Facilitation of Cross-Border Paperless Trade in the Asia and Pacific, art 10.

⁴¹ See Section 2.3.

service suppliers, especially MSMEs.⁴² Further, different regulations erode global connectivity of digital operations and may also prejudice the security of digital technologies.⁴³ Finally, conflict in domestic digital trade frameworks can dilute digital trust and especially make it difficult for SMEs and micro-enterprises to compete in the global digital market.⁴⁴

Privacy/data protection laws can be essential in three ways for digital trade integration. First, they protect the individual right to privacy and thus building digital trust bottom-up. 45 Second, they safeguard consumers from unethical or unauthorised data use, either by companies or governments. 46 Third, they facilitate cross-border data flows. An example of the third is the EU's General Data Protection Regulation (GDPR), which recognises the importance of cross-border data flows to the EU's economic integration. 47 However, the GDPR also imposes various restrictions on cross-border data transfers to countries that have not been approved by the European Commission as having an 'adequate' data protection framework. 48 Where data protection laws impose excessive or unreasonable requirements for cross-border data transfers, they hamper digital trade integration. In addition to the EU, certain international/regional institutions have also developed frameworks on privacy such as the OECD, 49 APEC 50 and ASEAN, 51 all of which recognise the importance of data flows in achieving economic integration.

Similarly, online consumer protection is necessary for digital trade integration. Such laws reduce information asymmetries between online sellers and buyers. They may also

⁻

⁴² OECD 2020a, p. 3, 12; The various trade costs that arise due to divergent regulations include specification costs, conformity assessment costs, and information costs. For more detail, see von Lampe et al. 2016.

⁴³ OECD 2019a

⁴⁴ OECD 2017, p. 9; Vásquez Callo 2018

⁴⁵ See e.g. European Commission, 2020. A European Strategy for Data, p. 10.

⁴⁶ Ibid

⁴⁷ GDPR art 1; See also European Commission, 2020. A European Strategy for Data, p. 5; https://ec.europa.eu/knowledge4policy/publication/regulation-free-flow-non-personal-data en

⁴⁸ GDPR art 45

⁴⁹ OECD 2013

⁵⁰ APEC 2014

⁵¹ ASEAN 2018

provide remedies to buyers against unfair or misleading practices⁵² and, thus, instil greater cross-border digital trust.⁵³ Certain organisations such as the OECD have proposed frameworks on online consumer protection.⁵⁴ Governments have also started acknowledging the role of international cooperation on cybersecurity issues in achieving economic integration.⁵⁵ However, the past few years have also seen the proliferation of domestic cybersecurity standards, especially in China, disrupting global digital operations of companies and arguably increasing the susceptibility of digital technologies to unauthorised manipulation.⁵⁶ Thus, a secure, coherent and consistent framework for cybersecurity is also essential to promote digital trade integration.⁵⁷ An important factor in coordinating cybersecurity and online consumer protection laws across the world is adequate involvement of non-state stakeholders.

Additionally, regulatory frameworks on intellectual property (IP) and competition in the digital sector can be critical for digital trade integration. The lack of provisions protecting IP interests of companies can deter digital innovation. For example, foreign companies are likely to shy away from markets where their proprietary trade secrets such as algorithms are not adequately protected as they are highly valuable assets for hi-tech businesses. Similarly, provisions regulating competitive conditions in the digital market are essential for digital trade integration.⁵⁸ As the digital economy evolves, these aspects are increasingly being debated by governments, although international consensus is still absent. However, a divided approach among countries in regulating competition in the digital sector is likely to reduce possibilities for digital trade integration.

Countries have various incentives to adopt interoperable and harmonious regulatory frameworks on digital trade and technical standards for various reasons. First, regulatory fragmentation or heterogeneity increases digital distrust, affecting both e-commerce

_

⁵² OECD 2014, pp. 4-5

⁵³ APEC 2020, p. 34

⁵⁴ OECD Guidelines for Consumer Protection in the Context of Electronic Commerce 1990

⁵⁵ See Section 3.3.2.

⁵⁶ See e.g. Ministry of Foreign Affairs and Trade, and New Zealand Trade and Enterprise 2017; Sacks and Li 2018.

⁵⁷ OECD 2020b, p. 47

⁵⁸ Doherty and Verghese 2019

businesses and consumers in all countries.⁵⁹ One common adverse effect is the reduction of choice and an increase in the prices of digital services and products. Another potential adverse effect of divergent laws and indigenous standards is the poor quality of digital products and services, including security and privacy concerns. Second, digital regulatory fragmentation also increases economic costs, such as increased trade and compliance costs. This may, in turn, reduce cross-border trade opportunities, especially for MSMEs.⁶⁰ Finally, regulatory alignment can also help MSMEs in developing countries and LDCs to offer new products and services in the global market. For example, consumers are more likely to buy a product from a trusted platform or website integrated with a trusted e-payment service, rather than a platform/e-payment service with a poor/unknown track record of security and privacy.

Across each of the individual components of this pillar, certain concerns are cross-cutting: transparency of regulations; interoperability of regulatory and technical frameworks (including mutual recognition); and regulatory coherence. Transparency of regulations would require all countries to publish all relevant laws and regulations promptly and provide adequate information to traders, including possible remedies for due process violations. Interoperability refers to the ability of diverse regulatory and technical infrastructures to be mutually compatible and workable. Interoperability can be most easily achieved through regulatory convergence or harmonisation. However, regulatory convergence or harmonisation is not possible across all the components of this pillar given the divergent political and regulatory practices among countries. For example, certain countries may prefer prescriptive laws and regulations while others may prefer market-driven self-regulatory regulations. An alternative to achieve interoperability is to facilitate mutual recognition or equivalency agreements that would reduce specification costs for traders by recognising relevant technical standards, certification requirements or regulations of trading partners. Finally, digital trade integration initiatives can deal

⁵⁹ OECD 2018b, p. 9

⁶⁰ Facebook and Asia Business Trade Association 2018, p. 6

⁶¹ See e.g. Article 2 (1) of Decision (EU) No. 2015/2044. See also Silveira and de Abreu 2018.

⁶² This is especially the case for data protection and privacy.

⁶³ von Lampe et al. 2016, p. 5; Mattoo and Meltzer 2018

with the issue of regulatory coherence by incorporating relevant international quidelines/principles by reference to domestic laws or high-level principles.⁶⁴

2.4 Digital Development and Inclusion

The fourth pillar of digital trade integration is digital development and inclusion. Studies have indicated that robust digital integration is only possible where more people are included in the global digital value chain⁶⁵ i.e. reducing disparities between developed and developing countries, and among rich and poor populations within a country.⁶⁶ In particular, digital inclusion is likely to play a key role in facilitating MSMEs in developing countries and LDCs.⁶⁷ This would require addressing some of the common problems faced by these enterprises such as lack of affordable and reliable digital tools and inadequate digital skills.⁶⁸ These problems are exacerbated in markets with stronger digital trade barriers and weak regulatory environments for digital trade.

The key elements of digital development and inclusion are: (i) technical assistance and capacity building; (ii) providing more time to developing countries and especially LDCs to undertake regulatory reforms; (iii) supporting digitalisation of MSMEs through various initiatives; and (iv) digital skills education, especially providing support to minorities. As discussed later in Section 3.2, some of these elements have been included in recent PTAs, albeit mostly in non-binding provisions. Not enough initiatives exist in the international policy community in promoting digital development and inclusion.⁶⁹ Therefore, all countries, especially developed countries, must play a greater role in establishing this fourth pillar of digital trade integration.

⁶⁴ Mitchell and Mishra 2019

⁶⁵ Economic Commission for Latin America and the Caribbean, 2018. Regional Digital Market: Strategic Aspects, p. 9.

⁶⁶ Hoppe et al. 2018, p. 2

⁶⁷ This is also tied to other factors such as financial inclusion (e.g. access to trade finance) and the general regulatory environment within the country.

⁶⁸ Hoppe et al. 2018, p. 18

⁶⁹ See e.g. eTrade For all.

2.5 Institutional Coordination

The fifth pillar of digital trade integration is institutional coordination to promote regulatory cooperation and effectively monitor the implementation of digital trade integration. Given the nature of the digital economy, institutional coordination should be understood broadly and includes not only intergovernmental collaborations but also other forms of multistakeholder, transnational and private-public collaborations. In practice, such collaborations are uncommon in the digital sector, especially at an intergovernmental level. These level. The level. include: delineating basic principles or guidelines on areas such as cybersecurity, privacy and consumer protection; establishing common technical standards for digital technologies; and promoting industry best practices at a global/regional level to ensure greater interoperability of digital technologies. Even the exchange of information on relevant topics among trading partners can play a significant role in improving policy coordination and transparency, thereby promoting digital trade integration.⁷¹ This is especially important given that harmonisation is not possible in all areas of digital trade regulation. Further, institutional coordination is necessary to effectively monitor the implementation of international trade agreements or other economic integration agreements.

3. Digital Trade Integration in Preferential Trade Agreements: Contribution of PTAs to Digital Trade Integration

This section discusses how PTAs contribute to digital trade integration. In examining the network of PTAs, we primarily utilise the dataset on Trade Agreements Provisions on Electronic-Commerce and Data (TAPED dataset) developed by researchers at the University of Lucerne.⁷² This dataset compiles provisions related to electronic commerce

⁷⁰ Some exceptions: e-WTP; e-Trade for All

⁷¹ von Lampe et al. 2016, p. 20

Available from https://www.unilu.ch/en/faculties/faculty-of-law/professorships/managing-director-internationalisation/research/the-governance-of-big-data-in-trade-agreements/

in PTAs from January 2000 to September 2019 and is available online.⁷³ In this section, we look at the relevant trade law provisions under each of the pillars described in Section 2, and the extent to which different provisions in PTAs contribute to these different pillars. This section is not a comprehensive or exhaustive evaluation of all Electronic Commerce provisions in PTAs,⁷⁴ but rather assesses relevant provisions in PTAs and their contribution to digital trade integration. As this paper is focused on digital trade integration, we primarily look at Electronic Commerce Chapters, although as and when relevant we also refer to other provisions/chapters.⁷⁵

This section argues that although PTAs increasingly contain provisions supporting the five pillars of digital trade integration, many of these provisions entail softer obligations or are ambiguously worded and, thus, subject to the political will of the PTA parties. Further, certain aspects such as digital development and inclusion are visibly missing in the majority of PTAs. Therefore, we provide detailed recommendations and best practices under each of the five pillars of digital trade integration.

3.1 Pillar 1: Reducing Digital Trade Barriers

3.1.1 Non-discrimination Obligations

Reduction of digital trade barriers can facilitate the free flow of digital services and technologies and enable more companies to trade across borders. Even MSMEs can use internet platforms to sell their products to different countries in the world. Thus, by

⁷⁴ Wu 2017; Huang 2017; Monteiro and The 2017; Willemyns 2020

⁷³ Burri and Polanco 2020

⁷⁵ As per the TAPED dataset, upto 2019, 108 PTAs included provisions on e-commerce but only 79 PTAs contained explicit Electronic Commerce Chapters but there were several variations. For instance, certain PTAs, especially in the early 2000s, contained a barebone framework on electronic commerce or covered specific aspects of digital trade such as paperless trading (e.g. Japan-Singapore Economic Partnership Agreement; Japan-Thailand Economic Partnership Agreement) or included a basic framework on electronic commerce without any commitments (Comprehensive Economic Co-Operation Between The Association Of South East Asian Nations And The People's Republic Of China; Framework Agreement on Comprehensive Economic Cooperation Between the Republic of India and the Association of Southeast Asian Nations; China-Georgia FTA) or more well-developed e-commerce chapters, especially recent PTAs such as CPTPP, USMCA, Australian PTAs. 13 of the 70 PTAs are only among developing countries, mostly recent.

promoting non-discriminatory environment for cross-border trade, PTAs play a key role in promoting digital trade integration. This is the main reason why several recent PTAs contain binding obligations on non-discrimination with respect to digital products. The principle of non-discrimination (Most-Favoured Nation Treatment (MFN) and National Treatment (NT)) prohibits governments from discriminating against foreign digital products and services and may thus help reduce digital trade barriers. While the MFN obligation prohibits governments from discriminating against digital products from specific foreign countries, the NT obligation requires governments to treat like foreign and domestic digital products in the same manner. However, Electronic Commerce chapters in most PTAs do not contain a specific provision on NT or MFN obligation applicable to digital products (although obligations in other chapters may still apply to digital products).⁷⁶ Principles of non-discrimination are subject to exceptions (for instance, most PTAs incorporate GATT art XX and GATS art XIV by reference). Thus, if and when digital trade barriers are necessary for reasons such as protecting public morals, maintaining public order or obtaining compliance with domestic laws, then countries may still be able to justify their measures.

3.1.2 Cross-border Data Flows and Data Localisation

Digital trade integration is only possible in an environment where data can flow freely across borders. These flows are essential for running internet platforms, operating cloud computing services, conducting data analysis and predictions, enabling future digital technologies such as IoT and keeping the world connected via electronic communications. Provisions specifically tailored to address data-restrictive measures

-

⁷⁶ While many of these PTAs are before 2010 (however, some early generation US FTAs such as US Jordan FTA contained a non-binding provision on national treatment for digital products), we also example of recent PTAs in the TAPED dataset with no non-discrimination obligations applicable to digital products. See e.g. Canada-Korea FTA despite having a dedicated e-commerce chapter does not contain a non-discrimination obligation; same holds true for NZ-Korea FTA. The CETA does not contain a NT obligation applicable to digital products. The EU-Mexico Modernised Global Agreement also does not contain a NT Obligation applicable to digital products. 75 of these FTAs include at least one developed country. Similarly, with respect to MFN treatment obligation applicable to digital products, we have found only 20 PTAs in the TAPED dataset that contain a binding provision. See e.g. AUSFTA art 16.4.1; and Singapore-Panama FTA art 13.3.2; CPTPP art 14.4; PAFTA art 13.4; Japan – Mongolia FTA art 9.4.1(a); USMCA art 19.4.

(especially data localisation) are likely to play a significant role in facilitating digital trade integration as they can help distinguish between protectionist measures and those that achieve important policy objectives.

Governments impose data-restrictive measures such as data localisation often to achieve various domestic policy objectives.⁷⁷ However, experts have argued that many data-restrictive measures have a hidden protectionist intent, thereby fragmenting the global digital market and creating a barrier to digital trade integration.⁷⁸ Given the importance of data flows in the current economy, some countries have entered into PTAs containing provisions on cross-border data flows. The relevant provisions typically prohibit data localisation measures as well as require governments to allow all cross-border data necessary for the conduct of electronic commerce businesses.⁷⁹ These provisions however, usually do not apply to government data and government procurement. Obligations on cross-border data flows and prohibitions on data localisation are subject to an exception in most PTAs. This exception is worded quite similarly across most PTAs (inspired by the erstwhile TPP):

Nothing in this Article shall prevent a Party from adopting or maintaining measures ... to achieve a legitimate public policy objective, provided that the measure:

- (a) is not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction
- (b) does not impose restrictions on transfers of information greater than are required to achieve the objective.⁸⁰

⁷⁷ Mitchell and Hepburn 2017

⁷⁸ Ahmed and Chander 2015; Cory 2017; Komaitis 2017

⁷⁹ As per TAPED dataset, 13 PTAs contain binding provisions on data localisation. In total, 28 PTAs contain provisions on cross-border data flows, binding or non-binding. See e.g. CPTPP art 14.11; USMCA art 19.11; and other FTAs involving Australia (e.g. PAFTA art 13.11); Singapore – Sri Lanka FTA. Typically, EU PTAs do not contain any obligation on cross-border data flows, although some recent PTAs between EU and other trading partners indicate that this topic may re-surface in the negotiating agenda in the future (see e.g. EU-Mexico Modernised Global Agreement art XX; similarly see EU-Japan EPA art 8.81). This suggests that the TPP-model is gaining traction worldwide.

⁸⁰ See e.g. CPTPP art 14.11.3, art 14.13.3 (followed in most subsequent PTAs). USMCA art 19.12 does not contain an exception in the data localisation provision.

Many PTAs also incorporate general exceptions in GATT and GATS by reference; thus, data localisation measures can also be justified under any of the specified exceptions such as protecting public morals or maintaining public order.

While provisions on cross-border data flows and data localisation are undoubtedly necessary to make PTAs digital economy-compatible, countries must incorporate reasonable exceptions to these provisions in their PTAs to preserve their right to protect legitimate policy concerns. While the TPP-type exception is beneficial and perhaps judicious, it leaves room for some legal uncertainty as 'legitimate public policy objective' can be interpreted very broadly and subjectively. In the future, PTA parties could agree upon an illustrative list of legitimate public policy objectives so as to provide more guidance to all the parties and prevent protectionist measures, while ensuring sufficient flexibility to deal with dynamic developments in the digital sector.

3.1.3 Tariffs on Electronic Transmissions

Customs duties on electronic transmissions (assuming that duty applies only to transmissions and not the electronic content) are highly trade-restrictive and likely to deter the pace of digital trade integration.⁸¹ As per the TAPED dataset, about 77 PTAs contain a binding provision requiring parties to not impose custom duties on electronic transmissions, which is analogous with the practice in WTO.⁸² Interestingly, India signed a trade agreement with Singapore in 2005 containing a binding obligation agreeing not to impose customs duties on electronic transmissions,⁸³ although it has recently argued at the WTO that such duties are important sources of revenue for developing countries.⁸⁴

⁸¹ OECD 2019b

⁸² See e.g. among the early generation PTAs: US-Jordan FTA in 2000 and other US FTAs such SAFTA art 14.3; Chile-US FTA art 15.3; and AUSFTA art 16.3 prohibit customs duties on electronic transmissions. In later years, Australia, US, Canada, Singapore have continued entering into PTAs with a prohibition on customs duties on electronic transmissions. The EU-Korea FTA art 7.48(3) also contains a prohibition on customs duties on electronic transmissions. China-Australia FTA art 12.3 contains a similar prohibition. More recent examples are CPTPP art 14.3.1; USMC art 19.3.1; PAFTA art 13.3.1; EU-Mexico Modernised Global Agreement art 3.1.1 (Chapter on Digital Trade).

⁸³ Comprehensive Economic Cooperation Agreement between the Republic of India and the Republic of Singapore, art 10.4.1

⁸⁴ WTO 2019b

Box 1: Recommendations and Best Practices in PTAs to Reduce Digital Trade Barriers

- 1. Incorporate binding provisions on non-discriminatory treatment of digital products in PTAs. Ideal if such provisions apply to both digital goods and services so as to avoid the debate whether something is a digital good or service, an issue which has stalled electronic commerce negotiations at the WTO.
- 2. Binding provisions facilitating cross-border data flows and prohibiting data localisation are increasingly necessary in PTAs. However, governments must devise reasonable exceptions to these obligations so that they can adequately safeguard legitimate policy objectives such as protecting privacy and security of data, preventing data misuse and ensuring trust in the digital ecosystem. Provisions on data flows work best when supplemented by PTA provisions facilitating a robust regulatory framework for digital trade (discussed in Box 3).
- Prohibit restrictive border duties on electronic transmissions.

3.2 Pillar 2: Digital Trade Facilitation

3.2.1 Facilitating Electronic Transactions for Cross-Border Trade and Paperless Trading

Increased use of electronic transactions in cross-border trade as well as paperless trading can increase the speed, reliability and efficiency of digital trade. For instance, electronic commerce companies often depend on electronic contracts and signature instead of paper-based contracts. To ensure the security of such transactions, electronic authentication and verification methods are necessary. Similarly, paperless trading is an essential component of digitalising e-commerce supply chains. One popular initiative is a single electronic window that allows all trade-related administration to be conducted using one platform electronically, thus making it significantly easy for smaller companies to navigate regulatory requirements to conduct cross-border digital trade. This is especially important for developing countries and LDCs desiring to integrate into global digital supply

chains. The advantages of such mechanisms are significant reduction of trade costs, increase in speed and efficiency of transactions, and more reliable outcomes for both traders and customers.⁸⁵

PTAs increasingly incorporate various provisions covering different aspects of electronic transactions and paperless trading. Many PTAs refer to the UNCITRAL Model Law on Electronic Commerce, 86 others less frequently refer to United Nations Convention on the Use of Electronic Communications in International Contracts. 87 Recent PTAs also contain expressly binding provisions on electronic signatures and authentications that recognise the validity of electronic signatures and electronic authentication methods. 88 In certain cases, however, certification by relevant authorities may be required to ensure the validity of electronic signatures. To prevent such authentication/certification from becoming an unnecessary constraint on traders, different electronic authentication methods must remain interoperable. However, such a requirement is relatively rare in PTAs. 89

Several of the relevant provisions on paperless trading can be found in a dedicated UN treaty on trade facilitation called the Framework Agreement on Facilitation of Crossborder Paperless Trade in Asia and the Pacific.⁹⁰ To date, Armenia, Bangladesh, Cambodia, China, Iran, Azerbaijan and Philippines have signed this framework agreement.⁹¹ This treaty recognises the importance of basic principles including non-discrimination, technological neutrality and development of transboundary trust in trade.⁹² This Agreement also requires all parties to endeavour to establish domestic legal

_

⁸⁵ Available from https://www.unescap.org/sites/default/files/19%20Apr%202017%20-TF%20in%20AP%20and%20WTO%20TFA.pdf.

⁸⁶ USMCA art 19.5.1; CPTPP art 14.5.1

⁸⁷ In fact, only 5 PTAs make it binding for parties to follow this convention such as CPTPP art 14.5.1 and Indonesia-Australia Comprehensive Economic Partnership Agreement art 13.9.1; PAFTA refers to it but is not binding (art 13.5.1).

⁸⁸ See e.g. CPTPP art 14.6; USMCA art 19.6, Chile - Brazil Bilateral Trade Agreement, EU-MERCOSUR Association Agreement, PAFTA art 13.9; US-Peru FTA art 15.6.

⁸⁹ See e.g. under CPTPP art 14.6.4 is only a best-efforts provision (shall encourage).

⁹⁰ Framework Agreement on Facilitation of Cross-Border Paperless Trade in the Asia and Pacific 2017

https://www.unescap.org/resources/framework-agreement-facilitation-cross-border-paperless-trade-asia-and-pacific.

⁹² Framework Agreement on Facilitation of Cross-Border Paperless Trade in the Asia and Pacific, art 5(1)

frameworks for paperless trading⁹³ and single electronic window systems,⁹⁴ and 'facilitate cross-border paperless trade by enabling exchange of trade-related data and documents in electronic form'.⁹⁵ To achieve these objectives, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) will establish a Paperless Trade Council consisting of one representative from each signatory of the agreement supported by a Standing Committee.⁹⁶ These two bodies will develop plans detailing 'concrete actions and measures with clear targets and implementation timelines necessary for creating a consistent, transparent and predictable environment for the implementation' of this framework agreement.⁹⁷ Information sharing and capacity building are also key elements of this framework agreement.⁹⁸

A large number of PTAs in the TAPED dataset do not contain provisions on paperless trading.⁹⁹ In general, Australia and New Zealand have actively entered into PTAs containing binding provisions on paperless trading:¹⁰⁰

- 1. Each Party shall accept the electronic format of trade administration documents as the legal equivalent of paper documents except where: (a) there is a domestic or international legal requirement to the contrary; or (b) doing so would reduce the effectiveness of the trade administration process.
- 2. The Parties shall cooperate bilaterally and in international forums to enhance acceptance of electronic versions of trade administration documents.
- 3. In implementing initiatives which provide for the use of paperless trading, the Parties shall take into account the methods agreed by international organisations.
- 4. Each Party shall endeavour to make all trade administration documents available to the public in electronic form.

⁹³ Framework Agreement on Facilitation of Cross-Border Paperless Trade in the Asia and Pacific, art 6

⁹⁴ Framework Agreement on Facilitation of Cross-Border Paperless Trade in the Asia and Pacific, art 7(2)

⁹⁵ Framework Agreement on Facilitation of Cross-Border Paperless Trade in the Asia and Pacific, art 7(1),

⁹⁶ Framework Agreement on Facilitation of Cross-Border Paperless Trade in the Asia and Pacific, art 11

⁹⁷ Framework Agreement on Facilitation of Cross-Border Paperless Trade in the Asia and Pacific, art 12(1)

⁹⁸ Framework Agreement on Facilitation of Cross-Border Paperless Trade in the Asia and Pacific, arts 13, 14

⁹⁹ 127 PTAs to be precise.

¹⁰⁰ See e.g. Malaysia – Australia FTA, art 15.9.

Some other PTAs contain soft obligations on paperless trading, including recent ones such as the Comprehensive and Progressive Trans-Pacific Partnership Agreement (CPTPP) and the *United States – Mexico – Canada Agreement* (USMCA).¹⁰¹ Moving forward, given the importance of electronic transactions, especially for developing countries, countries must incentivise the use of electronic authentication/signature and paperless trading in their PTAs. The technical standards used in electronic transactions should be robust, interoperable and secure to increase the resilience of the e-commerce supply chain. One of the key ways to do so is by incorporating relevant provisions in PTAs that are mutually binding and thus beneficial to all the parties and therefore can play a critical role in driving meaningful digital trade integration. For example, the Digital Economic Partnership Agreement between Chile, New Zealand and Singapore (DEPA) requires 'the implementation of measures related to e-invoicing... to support cross-border interoperability', consistent with 'international standards, guidelines or recommendations, where they exist'. 102 This provision will play a critical role in facilitating digital trade integration as it increases digital trust by enhancing compatibility of e-commerce transactions with established international standards and guidelines. In that regard, the Trade Facilitation Agreement at the WTO (which is already in force) could also play an instrumental role in facilitating electronic transactions necessary for conducting digital trade.

3.2.2 Logistics and Electronic Commerce

Provisions on logistics in PTAs are generally absent. However, DEPA contains a provision on logistics:¹⁰³

- 1. The Parties recognise the importance of efficient cross border logistics which would help lower the cost and improve the speed and reliability of supply chains.
- 2. The Parties shall endeavour to share best practices and general information regarding the logistics sector, including but not limited to the following:

¹⁰¹ USMCA art 19.9; CPTPP art 14.9

¹⁰² DEPA art 2.5

¹⁰³ DEPA art 2.4. The other recent example is the ASEAN Agreement on Electronic Commerce, discussed in Section 4.

- (a) Last mile deliveries, including on-demand and dynamic routing solutions;
- (b) The use of electric, remote controlled and autonomous vehicles;
- (c) Facilitating the availability of cross-border options for the delivery of goods, such as federated lockers:
- (d) New delivery and business models on logistics.

Despite being a non-binding provision, this provision can play a crucial role in digital trade integration. As discussed previously, the majority of MSMEs face problems in managing their logistics, especially for small-value shipments and managing demands in real-time. The above DEPA provision will enable parties to share information on the most pressing issues in logistics. It is also desirable (particularly for regional integration mechanisms) to set up a coordinating body that facilitates cooperation in cross-border logistics within the region so as to increase the speed and reduce the costs of deliveries. In our view, this can help in the speeding up the process of digital trade integration.

3.2.3 Electronic Payments

Provisions specific to electronic payments are generally rare in PTAs. One rare example of a PTA provision on electronic payments is found in DEPA:¹⁰⁴

- 1. Noting the rapid growth of electronic payments, in particular, those provided by new payment service providers, Parties agree to support the development of efficient, safe and secure cross border electronic payments by fostering the adoption and use of internationally accepted standards, promoting interoperability and the interlinking of payment infrastructures, and encouraging useful innovation and competition in the payments ecosystem.
- 2. To this end, and in accordance with their domestic legislation, Parties recognise the following principles:
- (a) Parties shall make regulations on electronic payments, including regulatory approval, licensing requirements, procedures and technical standards, publicly available in a timely manner.

¹⁰⁴ DEPA art 2.7

- (b) Parties agree to take into account internationally accepted payment standards to enable greater interoperability between payment systems.
- (c) Parties agree to promote the use of Application Programming Interface (API) and to encourage financial institutions and payment service providers to make available APIs of their financial products, services and transactions to third party players where possible to facilitate greater interoperability and innovation in the electronic payments ecosystem.
- (d) Parties shall endeavour to enable cross-border authentication and electronic know your customer of individuals and businesses using digital identities.
- (e) Parties recognise the importance of upholding safety, efficiency, trust and security in electronic payment systems through regulation. The implementation of regulation should where appropriate be proportionate to and commensurate with the risks posed by the provision of electronic payment systems.
- (f) Parties agree policies should promote innovation and competition in a level playing field and recognise the importance of enabling the introduction of new financial and electronic payment products and services by incumbents and new entrants in a timely manner such as through adopting regulatory and industry sandboxes.

The above DEPA provision is significant for digital trade integration in several ways: (i) it recognises the need for international standards for electronic payment systems, thereby preventing the proliferation of indigenous (and perhaps insecure) standards; (ii) it requires all trading partners to be transparent about their laws and regulations on electronic payment services, thus ensuring an open and competitive market for foreign players; (iii) it deals with anti-competitive concerns in the electronic payments industry by encouraging incumbents to share their APIs with third-party players; (iv) it incentivises the use of electronic KYC and authentication methods for electronic payment services, thereby reducing burdens on both digital traders and consumers; (v) it recognises the importance of a proportionate risk-based approach in regulating electronic payment systems; (vi) strikes a balance between promoting digital innovation in this dynamic area and protecting public interests by providing opportunities for regulatory and industry sandboxes. ¹⁰⁵

24

¹⁰⁵ See e.g. Regulatory Pilot Space (GSMA).

In the near future, countries must consider incorporating provisions on electronic payments in PTAs, especially if these agreements involve developing countries and LDCs as micro-enterprises as these countries often struggle to integrate in global e-commerce markets due to domestic restrictions on electronic payment systems. The DEPA model discussed above provides a solid foundation for developing provisions in the future.¹⁰⁶

Box 2: Recommendations and Best Practices in PTAs on Digital Trade Facilitation

- 1. Include binding provisions on electronic signatures and authentication, and paperless trading in PTAs. Interoperable standards are essential. Electronic transactions must rely upon international guidelines and standards.
- 2. Develop institutional mechanisms in PTAs for cooperation and sharing of best practices in cross-border logistics, especially small-value shipments.
- 3. Incorporate a DEPA-type provision on electronic payments in PTAs to ensure interoperable, secure and transparent electronic payment systems. Regulatory sandboxes can facilitate fintech innovations.

3.3 Pillar 3: Digital Trade Regulatory Frameworks and Digital Trust Policies

Digital trade integration necessarily requires coherent and consistent digital trade regulatory frameworks. Diverging or conflicting regulatory frameworks impose significant constraints on digital trade by increasing regulatory compliance costs for cross-border electronic commerce companies as well as reducing the efficiency and integrity of digital technologies. This section looks at various PTA provisions that facilitate different components of digital trade regulatory frameworks. As discussed earlier, regulatory coherence, interoperability and transparency are fundamental preconditions for building digital trade regulatory frameworks.¹⁰⁷ These topics are however under-addressed in

25

¹⁰⁶ These provisions would work best if complemented by a strong regulatory framework for digital trade (see Section 3.3).

¹⁰⁷ See Section 2.3.

PTAs, especially in Electronic Commerce Chapters.¹⁰⁸ For instance, although transparency is a prerequisite for digital trade integration, only 20 PTAs to date contain binding provisions on transparency concerning electronic commerce.¹⁰⁹

3.3.1 Privacy and Data Protection Provisions

60 PTAs between 2010 and 2019 contain provisions on data protection/privacy.¹¹⁰ Many of these provisions recognise the importance of cooperation on data protection in ecommerce without incorporating specific obligations, especially in the early-generation PTAs. However, with the increasing significance of online privacy, several countries have more recently entered into PTAs containing comprehensive provisions on privacy and data protection. As further discussed below, not all these approaches are identical; however, they may contribute to digital trade integration in different ways. For instance, CPTPP art 14.8 contains the following provision on privacy and data protection:¹¹¹

- 1. The Parties recognise the economic and social benefits of protecting the personal information of users of electronic commerce and the contribution that this makes to enhancing consumer confidence in electronic commerce.
- 2. To this end, each Party shall adopt or maintain a legal framework that provides for the protection of the personal information of the users of electronic commerce. In the development of its legal framework for the protection of personal information, each Party should take into account principles and guidelines of relevant international bodies.¹
- 3. Each Party shall endeavour to adopt non-discriminatory practices in protecting users of electronic commerce from personal information protection violations occurring within its jurisdiction.

¹⁰⁸ However, WTO law contains obligations on transparency that will apply to e-commerce regulations, see e.g. GATS art III.

¹⁰⁹ See e.g. SAFTA art 14.2; Singapore-Jordan FTA art 5.2; Comprehensive Economic Cooperation Agreement between the Republic of India and the Republic of Singapore art 10.6. Surprisingly, recent megaregionals such as CPTPP, USMCA etc. do not have a binding transparency obligation. China however agreed to a binding transparency obligation in ChAFTA art 12.4. Similarly, see ASEAN-Australia-NZ-FTA art 10.3

¹¹⁰ Calculations based on the TAPED dataset.

¹¹¹ Closely worded provisions have also been incorporated in several other PTAs such as those entered into by Australia, Japan and Singapore.

- 4. Each Party should publish information on the personal information protections it provides to users of electronic commerce, including how: (a) individuals can pursue remedies; and (b) business can comply with any legal requirements.
- 5. Recognising that the Parties may take different legal approaches to protecting personal information, each Party should encourage the development of mechanisms to promote compatibility between these different regimes. These mechanisms may include the recognition of regulatory outcomes, whether accorded autonomously or by mutual arrangement, or broader international frameworks. To this end, the Parties shall endeavour to exchange information on any such mechanisms applied in their jurisdictions and explore ways to extend these or other suitable arrangements to promote compatibility between them.

The provision in USMCA on data protection is somewhat similar but incorporates some additional provisions that provide for a more robust framework based on international guidelines and principles:¹¹²

- 2. To this end, each Party shall adopt or maintain a legal framework that provides for the protection of the personal information of the users of digital trade. In the development of this legal framework, each Party should take into account principles and guidelines of relevant international bodies, 4 such as the APEC Privacy Framework and the OECD Recommendation of the Council concerning Guidelines governing the Protection of Privacy and Transborder Flows of Personal Data (2013).
- 3. The Parties recognize that pursuant to paragraph 2, key principles include: *limitation on collection; choice; data quality; purpose specification; use limitation; security safeguards; transparency; individual participation; and accountability.* The Parties also recognize the *importance of ensuring compliance with measures to protect personal information and ensuring that any restrictions on cross-border flows of personal information are necessary and proportionate to the risks presented....*

¹ For greater certainty, a Party may comply with the obligation in this paragraph by adopting or maintaining measures such as a comprehensive privacy, personal information or personal data protection laws, sector-specific laws covering privacy, or laws that provide for the enforcement of voluntary undertakings by enterprises relating to privacy.

¹¹² USMCA art 19.8

6. Recognizing that the Parties may take different legal approaches to protecting personal information, each Party should encourage the development of mechanisms to promote compatibility between these different regimes. The Parties shall endeavour to exchange information on the mechanisms applied in their jurisdictions and explore ways to extend these or other suitable arrangements to promote compatibility between them. The *Parties recognize that the APEC Cross Border Privacy Rules system is a valid mechanism to facilitate cross-border information transfers while protecting personal information.*¹¹³

DEPA art 4.2 is somewhat similar to USMCA but incorporates additional provisions:

- 7. The Parties shall exchange information on how the mechanisms in paragraph 6 are applied in their respective jurisdictions and explore ways to extend these or other suitable arrangements to promote compatibility and interoperability between them.
- 8. The Parties shall encourage adoption of data protection trustmarks by businesses that would help verify conformance to personal data protection standards and best practices.
- 9. The Parties shall exchange information on and share experiences on the use of data protection trustmarks and shall endeavour to mutually recognise other Parties' data protection trustmarks as a valid mechanism to facilitate cross-border information transfers while protecting personal information.

The above provisions on data protection/privacy in various PTAs contribute to digital trade integration in the following ways: (i) the reference to international guidelines and recommendations from the OECD, APEC and other international organisations as a basis for framing domestic data protection laws can ensure consistency in the regional digital trade framework (although the TAPED dataset indicates that only 36 PTAs contain such requirements);¹¹⁴ (ii) recognising possible data transfer mechanisms such as APEC CBPR and other data protection trustmarks can ease business and data flows among trading partners; (iii) providing the option to countries to adopt varied mechanisms for data protection including sectoral measures and self-regulatory mechanisms (such as the

¹¹³ Emphasis added.

¹¹⁴ EU PTAs are cautious in specifying appropriate rules on data protection, although they require full compatibility with international standards (see e.g. EU Korea FTA art 7.48.2).:

The Parties agree that the development of electronic commerce must be fully compatible with the international standards of data protection, in order to ensure the confidence of users of electronic commerce

CPTPP) can ensure greater regulatory space;¹¹⁵ (iv) requiring all trading partners to incorporate basic frameworks on data protection would ensure higher levels of trust among partners;¹¹⁶ and (v) encouraging countries to deal with regulatory differences through appropriate mutual recognition arrangements can reduce trade costs and increase economic efficiency. As discussed in Section 2.3, countries have various incentives to agree on implementing basic regulatory frameworks on regulatory areas such as data protection as they are likely to increase digital trust, reduce economic inefficiencies as well as ensure the free flow of data among the parties to PTAs, thereby facilitating digital trade integration.

In a proposal for data provisions in trade agreements, the EU has proposed a very different kind of provision on data protection:¹¹⁷

Each Party may adopt and maintain the safeguards it deems appropriate to ensure the protection of personal data and privacy, including through the adoption and application of rules for the cross-border transfer of personal data. Nothing in this agreement shall affect the protection of personal data and privacy afforded by the Parties' respective safeguards.

This gives countries carte blanche to adopt a privacy framework, irrespective of their trade commitments. In general, such a provision is less suitable for digital trade integration as it can lead to conflicting regulatory frameworks on data protection.

3.3.2 Online Consumer Protection, Cybersecurity and Spam

Online consumer protection is an important requirement for conducting digital trade. Several PTAs, however, do not contain a dedicated provision on consumer protection in

¹¹⁵ However, if countries adopt very weak mechanisms for data protection, it can be harmful for digital trade integration

¹¹⁶ This is especially the case with PTAs such as the DEPA and USMCA, which identify the basic principles of data protection, thus providing high-level principles for domestic data protection frameworks of all trading partners.

from http://trade.ec.europa.eu/doclib/docs/2018/may/tradoc_156884.pdf, where EU proposes a carte blanche for privacy provisions in future trade agreements.

their Electronic Commerce Chapters. 118 Some PTAs contain a provision on online consumer protection, but it is not binding: 119

- 1. The Parties recognise the importance of adopting and maintaining transparent and effective consumer protection measures applicable to electronic commerce as well as measures conducive to the development of consumer confidence in electronic commerce.
- 2. The Parties recognise the importance of cooperation between their respective competent authorities in charge of consumer protection on activities related to electronic commerce in order to enhance consumer protection.
- 3. The Parties recognise the importance of adopting or maintaining measures, in accordance with their respective laws and regulations, to protect the personal data of electronic commerce users. 120

Some recent treaties have however recognised the importance of online consumer protection and thus included hard provisions, such as USMCA, CPTPP and EU-Mexico Modernised Global Agreement.¹²¹ Similarly, the TPP-inspired language on online consumer protection is also found in several Australian FTAs, which is usually worded as:¹²²

- 1. The Parties recognise the importance of adopting and maintaining transparent and effective measures to protect consumers from fraudulent and deceptive commercial activities, when they engage in electronic commerce.
- 2. For the purposes of this Article, fraudulent and deceptive commercial activities refer to those fraudulent and deceptive commercial practices that cause actual harm to consumers, or that pose an imminent threat of such harm if not prevented, for example:
- (a) a practice of making misrepresentations of material fact, including implied factual misrepresentations, that cause significant detriment to the economic interests of misled consumers;
- (b) a practice of failing to deliver products or provide services to consumers after the consumers are charged; or

¹¹⁸ In the TAPED dataset, 108 PTAs do not have a provision on consumer protection.

¹¹⁹ See e.g. Japan-EU EPA art 8.78. While many non-binding provisions are found in early generation PTAs, even new generation agreements such as CETA also do not contain binding provisions.

¹²⁰ Japan-EU EPA art 8.78

¹²¹ USMCA art 19.7; CPTPP art 14.7; EU-Mexico Modernised Global Agreement art 7 (Chapter on Digital Trade)

¹²² Indonesia-Australia FTA art 13.6

- (c) a practice of charging or debiting consumers' financial, telephone or other accounts without authorisation.
- 3. Each Party shall adopt or maintain consumer protection laws to proscribe fraudulent and deceptive commercial activities that cause harm or potential harm to consumers engaged in online commercial activities.
- 4. The Parties recognise the importance of cooperation between their respective national consumer protection agencies or other relevant bodies on activities related to cross-border electronic commerce in order to enhance consumer welfare and affirm that the cooperation under Article 16.5 of Chapter 16 (Competition) includes cooperation with respect to online commercial activities.

PTAs that require all parties to adopt basic frameworks on online consumer protection can be a significant contributor to digital trade integration. Various consumer surveys have indicated growing concerns among digital users regarding deception and fraud on the internet.¹²³ These concerns are especially amplified in cross-border transactions, as consumer rights are more difficult to enforce in the case of misrepresentation, fraud and failed deliveries. Several initiatives have focused on methods of online mediation and dispute resolution, such as the online dispute resolution process of eBay¹²⁴ and internet courts in China.¹²⁵ DEPA art 6.3.8 is among the rare PTAs that recognises the importance of such mechanisms:

The Parties endeavour to explore the benefits of mechanisms, including alternative dispute resolution, to facilitate the resolution of claims over electronic commerce transactions. 126

Trading partners seeking a meaningful digital integration must consider the appropriate role of online dispute resolution mechanisms in electronic commerce. This might include explicitly recognising the role of internet platforms or other non-state bodies that deal with online disputes in electronic commerce. Such recognition could also be made explicit in

¹²³ CIGI and IPSOS 2018

¹²⁴ Rule 2017

https://www.chinalawblog.com/2018/12/chinas-internet-courts-are-spreading-online-dispute-resolution-is-working.html

¹²⁶ Another example is the ASEAN Agreement on Electronic Commerce, art 5(3).

their PTA provisions. While the DEPA provision is a soft provision requiring parties to only 'endeavour' to explore the benefits of online dispute resolution mechanisms, future PTAs may impose more elaborate or harder obligations on the participating countries. In doing so, however, PTA parties must consider the capability of developing countries and LDCs to adapt to and monitor private online dispute resolution systems.

Cybersecurity protection is also an important consideration in digital trade. However, Electronic Commerce Chapters in most PTAs are silent on cybersecurity. As per the TAPED dataset, only 43 PTAs contain provisions relevant to cybersecurity, the majority of which are high-level provisions requiring trading partners to cooperate on cybersecurity issues. Certain recent PTAs such as the CPTPP and USMCA as well as Australian PTAs contain binding provisions on spam. While cybersecurity issues typically fall outside the expertise of trade bodies, cybersecurity cooperation is an essential element of digital trade integration. Further, conflicting cybersecurity standards across countries is detrimental to the integrity and security of digital technologies and services. Therefore, countries must use PTAs to set up meaningful cooperation and information exchange on different relevant areas such as cybersecurity threats and security standards. Such mechanisms must also take into account relevant developments in other international expert bodies such as the International Telecommunications Union as well as private/multistakeholder institutions dealing with standard-setting for digital technologies.

3.3.3 IP and Competition Provisions

The discussion of IP and competition law concerns in digital trade merits an elaborate discussion, which falls outside the scope of this paper. However, for this paper, we note the importance of IP-related and competition-related provisions in fostering digital trade integration. Some of the key issues relevant to IP are protection of proprietary trade secrets of technology companies, internet intermediary liability for online content, and enforcement of copyright provisions, especially in light of the fair use doctrine. Concerning

⁻

¹²⁷ See e.g. CPTPP art 14.13; USMCA art 19.13; PAFTA art 13.13.

competition, the most relevant issues are non-discriminatory access to the internet, network neutrality and, more recently, mechanisms or practices on data sharing. Expectedly, most PTAs do not cover these issues adequately. However, these aspects are vital in creating fair and competitive conditions in regional/global digital markets and therefore likely to also surface in future PTAs. In that regard, DEPA art 9.3 sets out a comprehensive but non-binding provision on data innovation:

- 1. The Parties recognise that cross-border data flows and data sharing enable data-driven innovation. The Parties further recognise that innovation may be enhanced within the context of regulatory data sandboxes where data, including personal information, is shared amongst businesses in accordance with the applicable domestic laws.
- 2. The Parties also recognise that data sharing mechanisms, such as trusted data sharing frameworks, and open licensing agreements, facilitate data sharing and promote its use in the digital environment to:
- (a) Promote innovation and creativity; (b) Facilitate the diffusion of information, knowledge, technology, culture and the arts; and (c) Foster competition and open and efficient markets.
- 3. The Parties shall endeavour to collaborate on data-sharing projects and mechanisms, and proof of concepts for new uses of data, including data sandboxes, to promote data-driven innovation.

The above provision can play a constructive role in helping DEPA Members align their domestic data strategies and facilitate the growth of digital technologies in competitive markets.

Box 3: Recommendations and Best Practices on Digital Trade Regulatory Frameworks

- 1. Include a binding provision requiring PTA parties to adopt data protection frameworks consistent with international guidelines and standards. Set out examples of such international guidelines/standards or high-level principles to ensure greater certainty and acknowledge common outcomes.
- 2. Recognise relevant data trustmarks and certification mechanisms in PTAs, if they have gained sufficient international recognition and feasible. Necessary to drive down costs and increase reliability of such mechanisms.
- 3. Encourage countries to develop mutual recognition arrangements for privacy frameworks. International guidelines may serve as a baseline.
- 4. Incorporate binding mechanisms for parties to cooperate on cross-border enforcement of online consumer protection laws, cybersecurity management and spam. Online dispute resolution methods, where available, must be duly recognised.
- 5. Encourage internationally recognised and interoperable technical standards on privacy and data protection.
- 6. Provide guidelines that can help PTA parties develop and align their national data strategies to promote fair and open competition in the digital sector.

3.4 Pillar 4: Digital Development and Inclusion

Several developing countries and LDCs have underdeveloped physical digital infrastructure and a weak regulatory environment for digital trade. To date, PTAs have largely failed to address the issue of digital development and inclusion. Some PTAs allow for a staggered implementation of commitments by developing countries and LDCs, ¹²⁸ but do not contain sufficient mechanisms to enable developed country partners to provide technical assistance and capacity building to their developing country and LDC partners. Similarly, provisions on facilitating the digitalisation of MSMEs are generally very weak (if

34

¹²⁸ See e.g. ASEAN Agreement on Electronic Commerce (discussed in Section 4).

present at all).¹²⁹ While domestic policies play a predominant role in fostering digital development and inclusion, PTAs can also make a valuable contribution to this objective. For instance, various initiatives have been proposed at the WTO such as integrating MSMEs by offering them technical assistance, trade finance and simplifying customs procedures.¹³⁰ These provisions are usually absent in PTAs.

Similarly, digital inclusion of minorities is largely not addressed in PTAs. DEPA contains a provision on digital inclusion, which may play a positive role in promoting digital inclusion and thereby facilitating greater digital trade integration:¹³¹

- 1. The Parties acknowledge the importance of digital inclusion; that all people and businesses have what they need to participate in, contribute to, and benefit from the digital economy.
- 2. The Parties also recognise the importance of expanding and facilitating digital economy opportunities by removing barriers. This could include enhancing cultural and people-to-people links, including between Indigenous Peoples, and improving access for women, rural populations, and low socio-economic groups.
- 3. To this end, the Parties shall cooperate on matters relating to digital inclusion, including participation of women, rural populations, low socio-economic groups and Indigenous Peoples in the digital economy. Cooperation could include:
- (a) sharing of experience and best practices, including exchange of experts, with respect to digital inclusion;
- (b) promoting inclusive and sustainable economic growth, to help ensure that the benefits of the digital economy are more widely shared;
- (c) addressing barriers in accessing digital economy opportunities;
- (d) developing programs to promote participation of all groups in the digital economy;
- (e) sharing methods and procedures for the collection of disaggregated data, the use of indicators, and the analysis of statistics related to participation in the digital economy; and (f) other areas jointly decided by the Parties.

35

¹²⁹ See e.g. CPTPP (Chapter on SMEs).

¹³⁰ See e.g. Communication from China: Joint Statement on Electronic Commerce, WTO Doc INF/ECOM/40 (23 September 2019).

¹³¹ DEPA Module 11

Therefore, to ensure digital development and inclusion, countries must develop robust mechanisms, especially to support LDCs, including providing additional time to LDCs to comply with their commitments on electronic commerce/digital trade in PTAs, as well as setting up strong institutions to align resources, training materials, as well as funds to support digitalisation in LDCs and developing countries (as discussed in Section 3.5). A DEPA-type provision on digital inclusion can also be beneficial in addressing the growing digital divide in many countries across the world. Given the various economic and social opportunities created by digital development and inclusion, such provisions not only benefit LDCs and developing countries but also align with the economic interests of developed countries.

Box 4: Best Practices and Recommendations for Digital Development and Inclusion

- 1. Provide flexibility to LDCs and developing countries (where necessary) to implement commitments on electronic commerce in PTAs with due regard to the time needed for them to develop their regulatory frameworks and digital infrastructure.
- 2. LDCs and developing countries must receive adequate support from the more developed PTA parties for technical assistance and capacity building. Institutionalise this arrangement through binding provisions. Special support must be made available to MSMEs in LDCs and developing countries to go digital.
- 3. Incorporate an institutional mechanism in PTAs for parties to coordinate and manage funds for technical assistance and cooperation on digital development/inclusion.
- 4. A DEPA-type provision (see above) can be incorporated requiring mandatory cooperation on improving digital inclusion of minorities. Cross-cutting links must be drawn between the other pillars of digital trade integration and this pillar.

3.5 Pillar 5: Institutional Coordination

The fifth pillar of digital trade integration stands on robust institutional coordination. This section discusses the various institutional mechanisms (formal or informal) found in PTAs

that can play a positive role in promoting digital trade integration. Expectedly, most PTAs contain weak mechanisms for international cooperation on electronic commerce (in most cases, there is no specific body instituted to facilitate cooperation). The EU-Japan EPA contains one of the strongest provisions on cooperation on electronic commerce, although no institutional mechanism is established to conduct the cooperation dialogues:¹³²

- 1. The Parties *shall*, where appropriate, cooperate and participate actively in multilateral fora to promote the development of electronic commerce.
- 2. The Parties *agree to maintain* a dialogue on regulatory matters relating to electronic commerce with a view to sharing information and experience, as appropriate, including on related laws, regulations and their implementation, and best practices with respect to electronic commerce, in relation to, inter alia: (a) consumer protection; (b) cybersecurity; (c) combatting unsolicited commercial electronic messages; (d) the recognition of certificates of electronic signatures issued to the public; (e) challenges for small and medium-sized enterprises in the use of electronic commerce; (f) the facilitation of cross-border certification services; (g) intellectual property; and (h) electronic government.¹³³

Similarly, majority of PTAs do not generally acknowledge the role of industry inputs, standards and best practices in developing a digital trade framework. Some PTAs recognise or support industry-led development in electronic commerce¹³⁴ and self-regulation in electronic commerce. However, experts have increasingly recognised that digital trade growth requires an elaborate collaboration between governments and the industry through increased communication between relevant stakeholders, development of joint initiatives (if possible), implementing sandboxes to test new technologies, and setting up of trustmarks or certification schemes. Horther, in order to maintain an integrated internet infrastructure, countries may also need to support internet multistakeholder bodies such as the Internet Engineering Task Force, World Wide Web

¹³² Art 8.80

¹³³ Emphasis added.

¹³⁴ See e.g. Australia-Chile FTA art 16.5.3(b).

¹³⁵ See e.g. USMCA art 19.14.1(d).

¹³⁶ OECD Consumer Guidelines; OECD, 2019. Engaging and Consulting on Trade Agreements, October 2019, p. 2.

Consortium and Internet Society. Currently, PTAs remain silent regarding the role of internet multistakeholder institutions in internet governance.¹³⁷

A single coordination body in a PTA is an essential requirement for digital trade integration, especially when trading partners have diverging laws and policies or very different levels of development. For example, this body can support common standards and regional/global best practices in different aspects of digital trade. The ASEAN Agreement on Electronic Commerce contains such a mechanism to cooperate and discuss e-commerce issues. Additionally, this body can be made responsible for monitoring the implementation and operation of the PTA. The DEPA provides for such a provision by setting up a Joint Committee with a broad mandate:

The (Joint) Committee's functions shall be:

- (a) to consider any matter relating to the implementation or operation of this Agreement, including the establishment of subsidiary bodies and the terms of accession;
- (b) to consider any proposal to amend or modify this Agreement;
- (c) to consider ways to further enhance digital economy partnership between the Parties;
- (d) to develop arrangements for implementing this Agreement; and
- (e) to take any other action as Parties may agree.

Further, digital trade integration extends beyond cooperation on electronic commerce. For instance, digital trade integration also requires domestic/international policies on development of digital skills, setting up of physical digital infrastructure and providing digital training to smaller companies and enterprises. Not all PTAs can cover these provisions, but they may be included in economic integration schemes in regional as well as megaregional trade bodies. Framing specific electronic commerce rules in PTAs have certain advantages such as ensuring legal certainty and providing greater regulatory coherence and coordination among trading partners. But if the rules are too precise or specific, they may be soon become redundant as digital technologies evolve. Very few

¹³⁷ Mishra 2019

¹³⁸ Hoppe et al. 2016, pp. v, 60-61

¹³⁹ See Section 4Error! Reference source not found..

¹⁴⁰ DEPA Module 12.3

PTAs provide mechanisms for monitoring the implementation of electronic commerce provisions;¹⁴¹ this could, however, be an important contributor to ensuring stronger digital trade integration.¹⁴² Ultimately, digital trade integration is dependent on devising appropriately suited rules and mechanisms, setting up the correct institutions as well as choosing the most suitable partners/alliances.

Box 5: Recommendations and Best Practices for Institutional Coordination

- 1. Develop strong mechanisms for electronic commerce cooperation in PTAs. Cooperation on electronic commerce issues must be made mandatory.
- 2. A single coordinating body must be set up in the PTAs to ensure greater cooperation on relevant issues in electronic commerce with equal representation from all PTA parties.
- 3. The coordinating body can be assigned the following functions:
 - (i) facilitate sharing of information and best practice on electronic commerce;
 - (ii) organise and coordinate technical assistance for developing countries and LDCs;
 - (iii) enhance regulatory coherence through regulatory support programmes for LDCs and, where applicable, developing countries;
 - (iv) monitor implementation of the electronic commerce provisions/chapter in PTAs;
 - (v) consider parties' suggestions for amendment of the electronic commerce provisions on a regular basis; and
 - (vi) develop strong institutional networks between the parties and other relevant international/regional institutions, transnational bodies and multistakeholder internet institutions.

¹⁴¹ A parallel example in the WTO context is the Trade Policy Review Mechanism.

¹⁴² OECD, 2019. Engaging and Consulting on Trade Agreements, October 2019, p. 4. In a related context, see APTA art 4; art 14.

4. ASEAN: A Model of Digital Trade Integration?

The Association of Southeast Asian Nations or ASEAN is a regional intergovernmental organisation consisting of the following members: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. This section focuses on the ongoing initiatives in the ASEAN region to foster digital trade integration, particularly focusing on the ASEAN Agreement on Electronic Commerce. It evaluates the extent to which this agreement contributes to digital trade integration in ASEAN. This section argues that despite being a holistic regional initiative for digital trade integration, the ASEAN Agreement on Electronic Commerce is not as comprehensive as some other recent PTAs such as CPTPP, USMCA, Pacific Alliance and the DEPA. However, this Agreement successfully sets up an institutional framework that can promote regulatory cooperation and alignment in digital trade in the coming years, subject to the political will of the ASEAN Members.

4.1 Digital Integration in ASEAN

ASEAN Members are well aware of the benefits of digital integration. They have adopted various instruments (a large majority of which are non-binding) to support digital integration. For instance, the ASEAN Digital Integration Framework sets out an ambitious agenda for the development of electronic commerce in ASEAN across all issues, including cybersecurity, consumer protection and promoting MSMEs.¹⁴⁴ Similarly, the ASEAN Economic Community Blueprint (AEC) 2025¹⁴⁵ provides that developing an integrated, cohesive, innovative, resilient, people-centric and global ASEAN is a vital aim of the community.¹⁴⁶

Nowt however that the ASEAN region was an early starter in electronic commerce; in fact, it was the first regional organisation to set up an electronic commerce framework. See generally UNCTAD, 2013. Review of e-commerce legislation harmonization in the Association of Southeast Asian Nations, p. ix. See also ASEAN Secretariat, 2001. E-ASEAN Reference Framework for Electronic Commerce: Legal Infrastructure.

¹⁴⁴ ASEAN Integration Report, p. xviii

¹⁴⁵ Previously, ASEAN Members had agreed upon the AEC Blueprint 2015, setting much less ambitious goals.

¹⁴⁶ ASEAN Integration Report, p. xvii

The ASEAN Framework for Digital Data Governance (2018) is also another critical instrument for digital integration in ASEAN. This framework aims to 'develop forward-looking and enabling frameworks and policies that facilitate the growth of the digital economy'. One of the main reasons for the development of this framework is to facilitate digital trade and investments in the region. He key areas envisaged under this framework are: data integrity and trustworthiness; accountability in data governance and data protection; data security; for cross-border data flows within ASEAN; digital trust; and digital development and inclusion. For uninstitutional mechanisms establish an integrated approach to data governance in ASEAN: ASEAN Data Classification Framework; ASEAN Cross-Border Data Flows Mechanism; ASEAN Digital Innovation Forum; ASEAN Data Protection and Privacy Forum. 155

Other important initiatives concerning digital integration in ASEAN are the ICT Masterplan 2020 (to, among other things, establish an accessible, inclusive and affordable digital economy) and Masterplan on ASEAN Connectivity focusing on the development of the both the physical as well as regulatory infrastructure for information communications and technology in ASEAN.¹⁵⁶

4.2 ASEAN Agreement on Electronic Commerce

ASEAN Members signed the ASEAN Agreement on Electronic Commerce in 2018. This agreement will be monitored by the ASEAN Coordinating Committee on Electronic Commerce (ACCEC). The ASEAN Agreement provides for ambitious objectives: ¹⁵⁷

¹⁴⁷ ASEAN Framework for Digital Data Governance (2018) [2]

¹⁴⁸ ASEAN Framework for Digital Data Governance (2018) [2]

¹⁴⁹ ASEAN Framework for Digital Data Governance (2018) [11]

¹⁵⁰ ASEAN Framework for Digital Data Governance (2018) [12], [30]

¹⁵¹ ASEAN Framework for Digital Data Governance (2018) [13]

¹⁵² ASEAN Framework for Digital Data Governance (2018) [20]

¹⁵³ ASEAN Framework for Digital Data Governance (2018) [20]

¹⁵⁴ ASEAN Framework for Digital Data Governance (2018) [24]

¹⁵⁵ ASEAN Framework for Digital Data Governance (2018) [4]

¹⁵⁶ Liu 2019

¹⁵⁷ ASEAN Agreement on Electronic Commerce, art 2

The objectives of this Agreement are to:

- (a) facilitate cross-border e-commerce transactions in the ASEAN region;
- (b) contribute to creating an environment of trust and confidence in the use of e-commerce in the ASEAN region;
- (c) deepen co-operation among Member States to further develop and intensify the use of e-commerce.

In order to achieve these objectives, the Agreement provides that each ASEAN Member should 'provide an enabling legal and regulatory environment' for electronic commerce, taking into account international standards and guidelines as well as possibilities for alignment with other ASEAN Members.¹⁵⁸

The Agreement contains provisions on different regulatory aspects of digital trade. The Agreement imposes strong obligations on paperless trading and electronic signatures, including recognising the need for interoperability in electronic authentication methods. 159 With regard to online consumer protection, the Agreement requires all Members to adopt relevant domestic laws and regulations (Cambodia, Lao PDR and Myanmar are granted an additional five years), without specifying for any international principles or guidelines as a baseline. However, this Agreement helpfully recognises the need to 'encourage the use of alternative dispute resolution to facilitate the claims over e-commerce transactions'. The Agreement also contains provisions requiring intra-ASEAN cooperation on issues including online consumer protection, privacy protection and cybersecurity. With respect to personal data protection, the Agreement contains a relatively stricter provision, requiring all Members 'to adopt or maintain measures to protect the personal information of users of e-commerce' and 'take into account international principles, guidelines and criteria of relevant international bodies'. 163

¹⁵⁸ ASEAN Agreement on Electronic Commerce, art 5

¹⁵⁹ ASEAN Agreement on Electronic Commerce, art 7(1), art 7(2)

¹⁶⁰ ASEAN Agreement on Electronic Commerce, art 3.

¹⁶¹ ASEAN Agreement on Electronic Commerce, art 5(3)

¹⁶² ASEAN Agreement on Electronic Commerce, art 3(3), art 8

¹⁶³ ASEAN Agreement on Electronic Commerce, art 5

The Agreement contains a strong provision on data localisation (inapplicable to financial services):¹⁶⁴

Member States agree not to require, subject to their respective laws and regulations, a juridical person of another Member State and its affiliated companies to locate their computing facilities in their respective territories as a requirement of operating a business in their respective territories.

However, ASEAN Members can impose data localisation measures if they are necessary to achieve the public policy and security objectives listed in GATS art XIV and GATS art XIVbis, as these two provisions are incorporated mutatis mutandis into the Agreement. The Agreement however does not contain any binding provisions on cross-border data flows.

The ASEAN Agreement on Electronic Commerce recognises also certain new areas of international cooperation that can be critical to digital trade integration such as digital education, trade facilitation, competition, cross-border logistics and electronic payments. The scope of cooperation under this Agreement extends to various activities such as information sharing and identification of best practices on e-commerce, implementing projects for assisting Members to develop their regulatory frameworks and investigation and resolution of online frauds and misrepresentations. Unlike many PTAs, the ASEAN framework on cooperation is binding i.e. all ASEAN Members are required to cooperate on the specified areas of electronic commerce.

The ASEAN Agreement on Electronic Commerce also contains mostly soft provisions on electronic payment and logistics. The provision on electronic payment recognises the importance of 'safe and secure, efficient and interoperable e-payment systems.¹⁶⁹ At the same time, this provision also acknowledges that there could be a difference in the

¹⁶⁴ ASEAN Agreement on Electronic Commerce, art 6 (b)

¹⁶⁵ ASEAN Agreement on Electronic Commerce, art 14

¹⁶⁶ ASEAN Agreement on Electronic Commerce, art 4.

¹⁶⁷ ASEAN Agreement on Electronic Commerce, art 6(1)

¹⁶⁸ ASEAN Agreement on Electronic Commerce, art 6(2)

¹⁶⁹ ASEAN Agreement on Electronic Commerce, art 9(1)

readiness of Members 'in terms of capacity, infrastructure and regulation of e-payment systems'. 169 It also sets out an obligation on electronic payments: 170

Each Member State shall encourage the use of safe and secure, efficient, and interoperable e-payment systems to facilitate e-commerce in accordance with its laws and regulations.

Given that the Agreement acknowledges the regulatory constraints of individual ASEAN Members, the impact of the above provision in facilitating cross-border electronic payments in ASEAN is unclear. The provision on logistics is even weaker as it requires all Members to 'endeavour to lower the cost and improve the speed and reliability of the supply chains'. As cross-border logistics and electronic payments are both critical for digital trade, especially for MSMEs in ASEAN region, these provisions do not sufficiently contribute to digital trade integration. ASEAN Members could however develop other collaborations to develop more regional integration in logistics and electronic payments.

From an assessment of the above provisions, it appears that the basic thrust of this Agreement is developing consistent regulatory frameworks on electronic commerce in ASEAN, reducing digital trade barriers and instituting mechanisms to resolve consumer concerns for e-commerce transactions across the entire region. Another critical factor in promoting digital trade integration, as discussed in Section 2, is transparency. This Agreement provides a strong binding obligation on transparency. The above factors, as discussed in Section 2, are foundational pillars for digital trade integration within any region.

The ASEAN Agreement on Electronic Commerce can be complemented by other institutional mechanisms established to boost regulatory cooperation in ASEAN on electronic commerce. The key instruments are as follows: (i) ASEAN High-Level Principles for Electronic Commerce; (ii) ASEAN Strategic Action Plan for Consumer

¹⁷⁰ ASEAN Agreement on Electronic Commerce, art 9(2)

¹⁷¹ ASEAN Agreement on Electronic Commerce, art 10(2)

¹⁷² ASEAN Agreement on Electronic Commerce, art 7(6)

¹⁷³ ASEAN Agreement on Electronic Commerce, art 13

Protection 2016-2025; (iii) ASEAN Competition Enforcers Network; (iv) ASEAN Framework on Personal Data Protection; (v) ASEAN International Mobile Roaming Framework; (vi) ASEAN Declaration on Cybercrime; and (vii) initiatives on cybersecurity to standardise Incident Reporting Framework across the region, establishing ASEAN-CERT and the ASEAN Leader's Statement on Cybersecurity Cooperation. These instruments are non-binding and intended to serve as a guideline for ASEAN Members.

The various instruments on digital trade and governance, as well as the ASEAN Agreement on Electronic Commerce, demonstrate the ambition of ASEAN to promote digital trade integration. However, ASEAN institutions (such as ACCEC) can only be effective to the extent that they are able to encourage Members to follow these frameworks/instruments voluntarily. This is not entirely impossible, for instance, given the relative success of a similar approach in APEC (eg, APEC CBPR). However, the diverging levels of economic/digital development and regulatory infrastructure among ASEAN countries will continue to pose challenges. Thus, digital development and inclusion, as well as digital trade facilitation, should be key priorities for ASEAN. For example, under the ASEAN ICT Masterplan 2020, ASEAN Members agreed upon the importance of digital skills and education in building an inclusive digital economy. ASEAN Members must also consider adopting stronger disciplines on cross-border logistics and e-payments. The provision on 'stakeholder engagement', which is rather unique to ASEAN agreement, can enable different forms of collaboration to increase digital development and inclusion: 176

Each Member shall regularly engage with relevant stakeholders, including the private sector, academic institutions, international organisations and other relevant partners, to promote the exchange of information and generate feedback, inputs or proposals on the development of e-commerce.

Compared to some recent PTAs such as the DEPA and CPTPP (both of which include at least one ASEAN Member), the ASEAN Agreement on Electronic Commerce is weaker.

¹⁷⁴ ASEAN ICT Master Plan 2010, pp. 12-13

¹⁷⁵ ASEAN Agreement on Electronic Commerce, art 10

¹⁷⁶ ASEAN Agreement on Electronic Commerce, art 11

For instance, the Agreement does not contain a binding framework for cross-border data flows. The provisions on online consumer protection and data protection, for instance, are not as detailed as more recent PTAs such as USMCA and DEPA, although the ASEAN Agreement is significantly more comprehensive and stronger than most old generation PTAs. Further, other aspects such as digital trade facilitation and digital development are not dealt with adequately, despite introduction of soft provisions in some new areas such as cross-border logistics, electronic payments and stakeholder engagement. The absence of binding provisions in these areas is unfortunate, given that LDCs and developing countries in ASEAN are likely to benefit significantly from strengthening agreement on these areas. Further, while the ASEAN has developed various regulatory frameworks on data protection, 177 cybercrime 178 and consumer protection, 179 they are merely set out as guidelines rather than baselines for developing domestic regulations — a lost opportunity given that cooperation and coordination processes in ASEAN have generally been weak in the past.

We consider the ASEAN model of digital trade integration to be a relatively weak form of digital trade integration as: (i) it does not establish binding frameworks or guidelines for ASEAN Members to devise their local domestic frameworks; and (ii) the ASEAN Agreement on Electronic Commerce does not provide ASEAN institutions such as ACCEC¹⁸⁰ with sufficient tools to ensure regulatory alignment as well as strictly monitor enforcement of the Agreement.¹⁸¹ (iii) the ASEAN Agreement does not contain a dispute settlement mechanism. A weaker model of digital trade integration will particularly harm MSMEs that cannot navigate diverging regulatory frameworks and domestic laws in ASEAN states.¹⁸² It may also impact whether e-commerce users in the region are able to exercise their consumer rights across borders. Further, as some developing ASEAN states are members of more comprehensive frameworks such as the CPTPP, digital

¹⁷⁷ ASEAN Framework on Personal Data Protection 2016

¹⁷⁸ ASEAN Declaration to Prevent and Combat Cybercrime 2017

¹⁷⁹ ASEAN High-Level Principles on Consumer Protection 2017

¹⁸⁰ The ACCEC was set up in 2016 under the ASEAN Work Programme on Electronic Commerce and played an instrumental role in the development of the ASEAN Agreement on Electronic Commerce.

Although outside the scope of this paper, the lack of an integrated digital physical infrastructure (e.g. telecommunications networks) is a significant hurdle for intra-ASEAN digital trade.

¹⁸² EU ASEAN Business Council, 2018. Ensuring Success in the Digital Economy for ASEAN, p. 3.

growth in LDCs such as Myanmar, Lao PDR and Cambodia is likely to lag far behind, leading to a greater digital divide in the region.

However, the value of the ASEAN model should not be discounted. The ASEAN model adopts an integrated approach combining frameworks (albeit non-binding) relevant to all the five pillars of digital integration. While we suggest various areas of reform, ASEAN Members can still use the existing framework to expand their digital economy¹⁸³ and develop necessary digital infrastructure within the region.¹⁸⁴ In the long run, with adequate alignment of resources by ASEAN-level committees and stronger structures for regional cooperation, it may possible for less developed ASEAN Members to adopt relevant laws and regulations on data protection, cybersecurity etc. The ASEAN community could also learn from practices in other regional initiatives among developing countries (eg, Pacific Alliance) where the Members have agreed on a supranational dispute resolution mechanism for the protection of consumers in cross-border electronic transactions.¹⁸⁵ These changes could strengthen digital trade integration in ASEAN.

-

¹⁸³ As per a report by Bain and Co, the ASEAN digital economy contributes to 7% of its GDP as opposed to 16 % in China and 35% in the US. See Hoppe et al. 2018, pp. iv, 4, 38-39.

¹⁸⁴ See e.g. ASEAN-Japan Cybersecurity Capacity Building Centre. See also ASEAN Integration Report, p. 149.

¹⁸⁵ Vásquez Callo 2018, p. 177, 187, 194

5. Conclusion

Digital trade integration is a complex, multidimensional and multilevel phenomenon. The paper identifies five pillars of digital trade integration: (i) reducing digital trade barriers; (ii) digital trade facilitation; (iii) digital trade regulatory frameworks and digital trust policies; (iv) digital development and inclusion; and (v) institutional coordination. This paper argues that certain provisions in PTAs (especially in the Electronic Commerce Chapters) can contribute to digital trade integration. For instance, provisions on non-discrimination and prohibitions on data localisation reduce digital trade barriers; provisions on paperless trading and electronic signature can facilitate electronic transactions necessary for digital trade; provisions on data protection, consumer protection, intellectual property and competition in the digital sector support a domestic regulatory framework for digital trade. However, existing PTAs are usually deficient in supporting digital development and inclusion as well as fostering widespread international regulatory cooperation. Further, many PTAs are unable to facilitate a holistic digital trade regulatory framework given the conflicting domestic privacy and cybersecurity laws among trading partners.

This paper provides various policy recommendations and best practices to strengthen digital trade integration in PTAs, including: (i) incorporating binding provisions on non-discriminatory treatment of digital products and restrict border duties on electronic transmissions; (ii) prohibiting data localisation measures and facilitating cross-border data flows necessary for conducting electronic commerce, subject to reasonable exceptions; (iii) developing binding provisions to facilitate electronic transactions for digital trade including secure and interoperable electronic payment systems; (iv) requiring all PTA parties to adopt domestic frameworks on data protection and online consumer protection consistent with international guidelines, standards and best practices; (v) encouraging countries to develop interoperable regulatory frameworks on digital trade as well as encourage the use of internationally recognised technical standards; (vi) providing for flexible implementation of commitments by LDCs and developing countries; (v) mandating technical assistance and capacity building for LDCs and developing countries; and (vi) instituting a central coordinating body in PTAs to facilitate cooperation on digital trade,

monitor implementation of electronic commerce provisions and align resources and funds for technical assistance/capacity building efforts in digital trade.

Finally, this paper discusses the strengths and limitations of the digital trade integration model in ASEAN. Although the ASEAN framework is holistic and covers critical aspects underlining the five pillars of digital trade integration, it is currently a weak form of digital trade integration as it is mostly reliant on political goodwill and weak structures of cooperation. This paper recommends that ASEAN Members must consider other mechanisms to strengthen regulatory coherence and support the LDCs in the ASEAN region to bridge the existing digital divide.

References

- African Union, 2019. African Digital Transformation Strategy and African Union Communication and Advocacy Strategy among major AU initiatives in final declaration of STCCICT3, 26 October 2019, Press Release. Available from https://au.int/en/pressreleases/20191026/african-digital-transformation-strategy-and-african-union-communication-and.
- Ahmad, U., 2019. The Importance of Cross-Border Regulatory Cooperation in an Era of Digital Trade. *World Trade Review,* 18(S1), S99-S120.
- Ahmad, U. and G. Andonas, 2015. Addressing Barriers to Digital Trade. *Think Piece*, E15 Initiative.
- Ahmed U. and A. Chander, 2015. Information Goes Global: Protecting Privacy, Security, and the New Economy in a World of Cross-border Data Flows. *Think Piece*, E15 Expert Group on the Digital Economy, November 2015
- Andrenelli, A. and J. L. González, 2019. Electronic transmissions and international trade shedding new light on the moratorium debate. *OECD Trade Policy Papers*, No. 233, OECD Publishing. Available from http://dx.doi.org/10.1787/57b50a4b-en.
- APEC, 2014. APEC Privacy Framework, November 2004. Available from http://www.apec.org/Groups/Committee-on-Trade-and-Investment/~/media/Files/Groups/ECSG/05_ecsg_privacyframewk.ashx.
- APEC, 2017. APEC Cross-Border E-Commerce Facilitation Framework, Doc no 2017/SOM3/027anx02.
- APEC, 2018. Promoting Cross-border E-Trade Under the Framework of Regional Trade Agreements (RTAs) / Free Trade Agreements (FTAs): Best Practices in the APEC Region, December 2018. Available from https://www.apec.org/Publications/2018/12/Promoting-Cross-border-E-Trade-under-the-Framework-of-RTAs-FTAs---Best-Practices-in-the-APEC-Region.
- APEC, 2020. Regulations, Policies and Initiatives on E-Commerce and Digital Economy for APEC MSMEs' Participation in the Region APEC. Available from https://www.apec.org/-/media/APEC/Publications/2020/3/Regulations-Policies-and-Initiatives-on-E-Commerce-and-Digital-Economy-for-APEC-MSMEs-Particip.pdf.
- ASEAN, 2018. Framework on Data Protection. Available from https://asean.org/storage/2012/05/10-ASEAN-Framework-on-PDP.pdf.

- Burri, M. and R. Polanco, 2020. Digital Trade Provisions in Preferential Trade Agreements: Introducing a New Dataset (Advanced Access). *Journal of International Economic Law*, pp. 1-34.
- Chander, A. and U. P. Le, 2015. Data Nationalism. *Emory Law Journal*, 64(3), p. 677.
- CIGI and IPSOS, 2018. CIGI-Ipsos Global Survey on Internet Security and Trust. Available from https://www.cigionline.org/internet-survey-2018.
- Cory, N., 2017. Cross-Border Data Flows: Where are the Barriers and What Do They Cost?, May 2017, pp. 3-4.
- Doherty, S. and A. S. Verghese, 2019. Competition Policy in a Globalized, Digitalized Economy. *World Economic Forum White Paper*, December 2019.
- European Commission, 2020. Shaping the Digital Single Market. Available from https://ec.europa.eu/digital-single-market/en/policies/shaping-digital-single-market.
- Facebook and Asia Business Trade Association, 2018. Enabling Small and Medium Enterprises in the Digital Age. Available from https://asiabusiness.trade/s/Enabling-SMEs-in-the-Digital-Age-SME-Summit-June-2018-ABTA.pdf
- Hoppe, F. et al., 2018. Advancing Towards ASEAN Digital Integration. Bain and Company.
- Huang, J., 2017. Comparision of E-commerce Regulations in Chinese and American FTAs: Converging Approaches, Diverging Contents and Polycentric Directions?. *Netherlands International Law Review*, 64(2), p. 309.
- Kerber, W. and H. Schweitzer, 2017. Interoperability in the Digital Economy. *Journal of Intellectual Property, Information Technology and E-Commerce Law (JIPITEC)*, 8(1).
- Komaitis, K. 2017. The "Wicked Problem" of Data Localization. *Journal of Cyber Policy*, 3(2), pp. 355, 361-2.
- Liu, H. W., 2019. Data Localization and Digital Trade Barriers: ASEAN in Megaregionalism, p. 380.
- Mattoo, A. and J. P. Meltzer, 2018. International Data Flows and Privacy the Conflict and Its Resolution. *Journal of International Economic Law,* vol. 21, p. 769.
- McKinsey Global Institute, 2016. Digital Globalization: The New Era of Digital Flows. Available from
 - https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/McKinsey%20Digital/Our%20Insights/Digital%20globalization%20The%20new%20era%20of%20global%20flows/MGI%20Digital%20globalization%20Executive%20summary.ashx.

- Meltzer, J., 2019. Governing Digital Trade. World Trade Review, 18(S1), S23-S48.
- Mik, E., 2018. "Legal and Regulatory Challenges to Facilitating e-Commerce in ASEAN", in Hsieh, L. and B. Mercurio (eds.), *ASEAN Law in the New Regional Economic Order: Global Trends and Shifting Paradigms*, p. 342. Cambridge University Press.
- Ministry of Foreign Affairs and Trade, and New Zealand Trade and Enterprise, 2017. Understanding China's Cybersecurity Law, September 2017. Available from https://www.mfat.govt.nz/assets/China/Understanding-Chinas-cybersecurity-law.pdf
- Mishra, N., 2019. Building Bridges: International Trade Law, Internet Governance, and the Regulation of Data Flows. *Vanderbilt Journal of Transnational Law*, 52(2), p. 463.
- Mitchell, A. and J. Hepburn, 2017. Don't Fence Me, in: Reforming Trade and Investment Law to Better Facilitate Cross-Border Data Transfer. *Yale Journal of Law & Technology*, vol. 19, p. 182.
- Mitchell, A. and N. Mishra, 2017. International Trade Law Perspectives on Paperless Trade and Inclusive Digital Trade. *ARTNeTWorking Paper*, no. 170. UNESCAP.
- Mitchell, A. and N. Mishra, 2018. Data at the Docks: Modernizing International Trade Law for the Digital Economy. *Vanderbilt Journal of Entertainment & Technology Law*, 20(4), 1073-1134.
- Mitchell, A. and N. Mishra, 2019. Regulating Cross-Border Data Flows in a Data-driven World. *Journal of International Economic Law*, 22(3), p. 389.
- Monteiro, J.-A. and R. Teh, 2017. Provisions on Electronic Commerce in Regional Trade Agreements. July 2017. Available from https://www.wto.org/english/res_e/reser_e/ersd201711_e.pdf.
- OECD, 2013. OECD Recommendation of the Council concerning Guidelines governing the Protection of Privacy and Transborder Flows of Personal Data. *OECD Privacy Guidelines*.
- OECD, 2014. Consumer Policy Guidance on Intangible Digital Content Products. Available from https://doi.org/10.1787/5jxvbrjq3gg6-en.
- OECD, 2017. Services Trade Policies and the Global Economy. Available from https://dx.doi.org/10.1787/9789264275232-en.
- OECD, 2018a. Digital Trade and Market Openness, OECD Doc No. TAD/TC/WP(2018)3/FINAL, 9 August 2018, p. 7.
- OECD, 2018b. Barriers to Trade in Digitally Enabled Services in the G20. Available from http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=TAD/TC/WP (2018)23/FINAL&docLanguage=En.

- OECD, 2019a. Regulatory Effectiveness in the Era of Digitalisation, June 2019. Available from https://www.oecd.org/gov/regulatory-policy/Regulatory-effectiveness-in-the-era-of-digitalisation.pdf.
- OECD, 2019b. Shedding new light on the debate about duties on electronic transmissions, OECD Trade Policy Brief, December 2019.
- OECD, 2020. The OECD Services Trade Restrictiveness Index Policy Trends up to 2020, January 2020. Available from https://www.oecd.org/trade/topics/services-trade/documents/oecd-stri-policy-trends-up-to-2020.pdf.
- OECD, 2020b. Going Digital Integrated Policy Framework, February 2020. Available from https://doi.org/10.1787/dc930adc-en.
- Rule, C., 2017. Designing a Global Online Dispute Resolution System: Lessons Learned from eBay. *University of St Thomas Law Journal*, 13(2), pp. 354-369.
- Sacks, S and M. Li, 2018. How Chinese Cybersecurity Standards Impact Doing Business in China. *CSIS Briefs*, 2 August 2018.
- Silveira, A. and J. C. de Abreu, 2018. Interoperability solutions under Digital Single Market: European e-Justice rethought under e-Government paradigm. *European Journal of Law & Technology*, 9(1), online.
- USTR, 2017. Key Barriers to Digital Trade. Available from https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2017/march/key-barriers-digital-trade.
- USTR, 2019. Factsheet on 2019 National Trade Estimate: Key Barriers to Digital Trade. Available from https://ustr.gov/about-us/policy-offices/press-office/fact-sheet-2019-national-trade-estimate.
- Vásquez Callo, M. del C., 2018, Situating the Pacific Alliance in Global Electronic Commerce Regulation, in: Pierre Sauvé et al. (eds.15). *The Pacific Alliance in a World of Preferential Trade Agreements*, p. 177, 179. Springer.
- von Lampe et al., 2016. Trade-Related International Regulatory Co-operation. *OECD Trade Policy Papers*, no. 195, p. 9.
- Weber, H., 2014. Legal Interoperability as a Tool for Combatting Fragmentation. Global Commission on Internet Governance. Available from https://www.files.ethz.ch/isn/187125/gcig_paper_no4.pdf.
- Willemyns, I., 2020. Agreement Forthcoming? A Comparison of EU, US, and Chinese RTAs in Times of Plurilateral E-Commerce Negotiations (Advanced Access). *Journal of International Economic Law*, online.
- Wu, M., 2017. Digital Trade-Related Provisions in Regional Trade Agreements: Existing Models and Lessons for the Multilateral Trade System. Overview Paper, RTA

- Exchange, Inter-American Development Bank and International Centre for Trade and Sustainable Development, November 2017, p. 8.
- WTO, 2017a. Communication from the African Group, Work Programme on Electronic Commerce, Report of Panel Discussion on Digital Industrial Policy and Development. *WTO Doc JOB/GC/133*, 21 July 2017.
- WTO, 2017b. Joint Statement on Electronic Commerce. WTO Doc WT/MIN, (17)/60, 13 December 2017.
- WTO, 2018. Viet Nam's Measures on Cybersecurity Products Questioned at Import Licensing Meeting, 22 October 2018. Available from https://www.wto.org/english/news_e/news18_e/impl_23oct18_e.htm.
- WTO, 2019a. Joint Statement on Electronic Commerce. WTO Doc WT/L/1056, 25 January 2019.
- WTO, 2019b. Communication from India and South Africa, The E-Commerce Moratorium and Implications for Developing Countries. *WTO Doc WT/GC/W/774*, 4 June 2019.



The Asia-Pacific Research and Training Network on Trade -ARTNeT – is an open network of research and academic institutions and think-tanks in the Asia-Pacific region, supported by core partners AFD, ESCAP, UNCTAD, UNDP and WTO. ARTNeT aims to increase the amount of high quality, topical and applied research in the region by harnessing existent research capacity and developing new capacities. ARTNeT also focuses communicating these research outputs for policymaking in the region including through the ARTNeT Working Paper Series which provide new and policy-relevant research on topics related to trade, investment and development. The views expressed in this publication are those of the authors and do not necessarily reflect the views of the United Nations and ARTNeT secretariat or ARTNeT members.

Readers are encouraged to quote or reproduce material from ARTNeT Working Papers for their own publications, but as the copyright holder, ARTNeT requests due acknowledgement and a copy of the publication.

This and other ARTNeT publications are available from artnet.unescap.org



ARTNeTontrade



@ARTNeTontrade



ARTNeT Group



artnetontrade@un.org

ARTNeT Secretariat, United Nations ESCAP
Rajadamnern Nok Avenue
Bangkok 10200, Thailand

Tel: +66(0) 22881410

Fax: +66(0) 22881027