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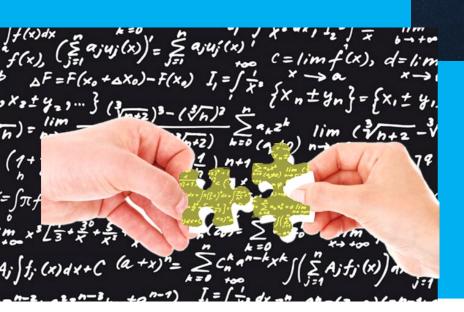
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E-commerce in Trade Agreements: India's Strategies and Options



Pritam Banerjee
Arpita Mukherjee
Aahana Srishti

ASIA-PACIFIC RESEARCH AND TRAINING NETWORK ON TRADE

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WORKING PAPER

E-commerce in Trade Agreements: India's Strategies and Options

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Abstract

The e-commerce sector is rapidly growing globally with the Asia-Pacific region accounting for 58 per cent of global retail e-commerce in 2022, and India, Singapore, China, and Japan leading this growth. The discussion on e-commerce and trade at the global level began in 1998 with the establishment of the Working Programme on E-commerce (WPEC) at the World Trade Organization (WTO), under which members agreed to a moratorium on customs duties for electronic transmissions. Progress on broader e-commerce trade rules within WPEC has been slow, which prompted the creation of the Joint Statement Initiative (JSI) on E-commerce in 2019. On July 26, 2024, 80 member countries reached a consensus on trade rules in a "stabilized text." Simultaneously, many nations have pursued standalone digital trade agreements or included digital trade chapters in broader trade agreements. India has not joined the JSI and opposes a permanent moratorium, citing evolving definitions of e-commerce and potential tariff revenue losses for developing countries. However, India has signed an agreement with a digital trade chapter with the United Arab Emirates and is negotiating similar chapters with other important trade partners.

Given this background, the paper presents the discussions on e-commerce in the WPEC and the JSI. It presents India's position in the WTO and trade agreements, its concerns, domestic regime and negotiating strategies and options. It provides data driven analysis of the impact of the moratorium on India's e-commerce trade and suggests why digital taxation may be better than a tariff for revenue collection. It compares India's autonomous regime (AR) with JSI obligations. It analyses trade agreements across parameters related to cross-border e-commerce trade, with a focus on agreements in the APAC region, in terms of their scope, coverage and depth of commitments. The paper concludes by providing a roadmap to move forward with discussions in the JSI and recommendations for India to find its stand in global negotiations.

Keywords: E-commerce, India, Trade Agreements, Cross-border trade, WTO

JEL Classification: F13, F68, O19

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List of Abbreviations

Al Artificial Intelligence
AR Autonomous Regime

ASEAN Association of East Asian Nations

BCD basic customs duty

BEPS Base Erosion and Profit Shifting

BPM6 Balance of Payment Statistics Manual

CAGR compounded annual growth rate

CEPA Comprehensive Economic Partnership Agreement

CIF Cost-insurance and freight

CPTPP Comprehensive and Progressive Agreement for Trans-Pacific Partnership

DDS Digitally Delivered Services
DEA Digital Economy Agreements

DEFA Digital Economy Framework Agreement
DEPA Digital Economy Partnership Agreement

DFFT Data Free Flows with Trust

DGFT Directorate General of Foreign Trade

DPDP Digital Personal Data Protection

DPI Digital Public infrastructure

DPIIT Department for Promotion of Industry and Internal Trade

ECC Electronic Commerce Convention

ECIPE European Council for International Political Economy

ET Electronic Transmission

EU European Union

FDI Foreign Direct Investment
FTA Free Trade Agreement
FTP Foreign Trade Policy

G20 Group of Twenty

GATS General Agreement on Trade in Services

GDP Gross Domestic Product
GST Goods and Services Tax

GVC Global Value Chain

IGOs Inter-Governmental Organisations

IMF International Monetary Fund

IT/ITeS Information Technology/Information Technology enabled Services

ITC International Trade Centre

JSI Joint Statement Initiative

LDC Least Developed Country

MeitY Ministry of Electronics and Information Technology

MFN Most Favoured Nation

MLEC Model Law on Electronic Commerce
MLES Model Law on Electronic Signatures
MOCI Ministry of Commerce and Industry
MoU Memorandum of Understanding

MSME Micro, Small and Medium Enterprises

NASSCOM National Association of Software and Service Companies

NBS Niryat Bandhu Scheme

NICDET Non-Imposition of Customs Duties on Electronic Transmission

NTFAP National Trade Facilitation Action Plans

OECD Organisation for Economic Co-operation and Development

ONDC Open Network for Digital Commerce

OVR Overseas Vendor Registration
PTA Preferential Trade Agreement

RBI Reserve Bank of India

RTA Regional Trade Agreement
SME Small and Medium Enterprise

TAPED Trade Agreement Provisions on Electronic Commerce and Data

TBT Technical Barriers to Trade
TFA Trade Facilitation Agreement

TRAI Telecom Regulatory Authority of India

UAE United Arab Emirates

UK United Kingdom

ULIP Unified Logistics Interface Portal

UNCITRAL United Nations Commission for International Trade Laws
UNCTAD United Nations Conference on Trade and Development

UNESCAP United Nations Economic and Social Commission for Asia and the Pacific

UPI United Payments Interface
UPU Universal Postal Union
USA United States of America

VAT Value-added Tax WBG World Bank Group

WCO World Customs Organization

WPDR Working Party on Domestic Regulations
WPEC Work Programme on Electronic Commerce

WTO World Trade Organization

1. Introduction

In the past decade, the global economy has seen unprecedented growth in digitalisation and e- commerce driven by fourth industrial revolution (4IR) technologies and, more recently, the coronavirus pandemic. With the rapid growth of e-commerce, its definition has also been evolving. The definitions of e-commerce by select international organisations are presented in Box 1.1. The "Handbook on Measuring Digital Trade (2023)" by the International Monetary Fund (IMF), Organisation for Economic Cooperation and Development (OECD), the United Nations Conference on Trade and Development (UNCTAD) and the World Trade Organization (WTO), makes a distinction between two types of digital trade under e-commerce: "digitally ordered trade" and "digitally delivered trade".

Box 1.1: Definition of E-commerce According to the OECD and WTO

The OECD (2011) defines e-commerce as, "anything that involves conducting electronic transactions, i.e., the sale or purchase of goods or services, whether between businesses, households, individuals, governments, and other public or private organisations, conducted over computer networks by methods specifically designed for the purpose of receiving or placing orders".

The WTO's Work Programme on Electronic Commerce (WPEC) defines electronic commerce as, "the production, distribution, marketing, sale, or delivery of goods and services by electronic means". The work programme recognises e-commerce as a cross-cutting issue, covering goods and services.

Source: https://www.wto.org/english/tratop e/ecom e/ecom work programme e.htm#what (last accessed July 30, 2024)

The definition given by OECD (2011) in Box 1.1 is the definition of "digitally ordered trade". It covers traditional physical goods traded across borders through online marketplaces like Amazon, Alibaba, or Rakuten and is supported by online payment systems such as PayPal, AmazonPay, and Alipay. These goods are subjected to the same customs duties, taxes, rules, requirements and procedures associated with tangible goods crossing borders and attract the applied rates of Most Favoured Nation (MFN) or preferential duty at the border. They have to follow the normal course of goods clearances and are subject to various regulations to protect human, animal and plant health, ensure safety and safeguard the environment. In 2023, global retail e-commerce sales, which are essentially digitally ordered goods, reached an estimated US\$5.8 trillion, and projections indicate a 39 per cent growth in this figure over the coming years. with expectations that it will surpass US\$8 trillion by 2027.² India's e-commerce exports, driven by a rise in demand for "Made in India" products, are rapidly growing, with exports expected to exceed US\$300 billion by 2030, and over 400 million product units being exported globally in 2023 (Amazon Global Selling, 2023). Digitally ordered trade also includes services, some examples of which are subscriptions to streaming media, online

1

² Source: https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/ (last accessed April 21, 2024).

software and gaming services, amongst others (for details, refer to IMF, OECD, UNCTAD and WTO, 2023).

"Digitally delivered trade" is defined as "all international trade transactions that are delivered remotely over computer networks"; and the handbook takes the view that digitally delivered trade can only cover services, such as Mode 1 or cross-border services³ trade (IMF, OECD, UNCTAD and WTO, 2023).

However, many experts differ from the view that digitally delivered trade essentially covers services and have advocated the inclusion of digitally delivered goods as well. This is because there are a host of goods that were traditionally delivered only physically but have been digitised today and are traded virtually. For example, books and journals, compact discs (CDs) and digital versatile discs (DVDs) with audio-visual content, etc., are now also traded virtually as audiobooks and online movies available for streaming on over-the-top (OTT) platforms (see WTO, 2018). The scope of digitised products is further likely to expand due to technological innovations such as 3D printing (see, Banga, 2019). Some studies have tried to estimate the size of digitally delivered goods (for example, see Banga, 2019 and 2022), but no robust estimate is available to date. The total value of global exports of digitally delivered services (DDS) (mostly Mode 1 services) was estimated by the WTO (see WTO 2024) as US\$4.25 trillion in 2023, with a year-on-year growth rate of 9 per cent to account for 13.8 per cent of world exports of goods and services. However, overall, there is no consensus among WTO members on the scope/coverage/definition on what electronic transmissions are, but in the context of trade, they are generally understood to refer to digitally delivered trade (Andrenelli and Gonzalez, 2019).

Thus, while the growth of the e-commerce sector has been exponential, with technologies and different business models evolving rapidly (see Banerjee, 2020), there is, as yet, no universal definition of the scope and coverage of the e-commerce sector. The definition of digital goods and services have also blurred, and discussions on the scope, definition and coverage of e-commerce continues. WTO (2024) recognises this and has "agreed to hold further discussions and examine additional empirical evidence on the scope, definition, and the impact that a moratorium on customs duties on electronic transmissions might have on development, and how to level the playing field for developing and least-developed country Members to advance their digital industrialisation".

For this paper, we shall limit our analysis to digitally delivered goods and services, since cross-border trade in tangible goods already has a well-defined regulatory architecture and ordering them virtually does not make a difference.

services are defined as those services which move from the territory of one member into the territory

The definition of services trade under the GATS is four-pronged, depending on the territorial presence of the supplier and the consumer at the time of the transaction. Out of these four, Mode 1

of any other member, or is, cross-border. For more, visit https://www.wto.org/english/tratop_e/serv_e/cbt_course_e/c1s3p1_e.htm#:~:text=Mode%201%3A%20Cross%2Dborder,Mode%202%3A%20Consumption%20abroad (last accessed on July 30, 2024).

While the definition, scope and coverage of e-commerce is still under discussion in various platforms, many regulatory aspects of cross-border trade in e-commerce are increasingly being discussed in different international organisations such as model laws on e-commerce in United Nations Commission on International Trade Law (UNCITRAL), paperless trade in United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), and digital taxation in OECD, etc. (OECD, 2021). In this paper, we touch upon some of these discussions.

1.1. Objective

Given this background, the objective of this paper is to present the discussions on ecommerce in the WTO, both the multilaterally agreed mandate of the Work Program on E-Commerce (WPEC), as well as the plurilateral Joint Statement Initiative (JSI) on ecommerce. The paper will also touch upon the discussions around e-commerce taking place in bilateral/regional trade agreements and other forums. It presents India's position and associated concerns. It further discusses the context of these positions considering the domestic regime and negotiating options available to India, keeping in mind its longterm interests in this area. Given that the moratorium on customs duties on electronic transmission has been one of India's major areas of policy concern, this paper provides a data driven analysis of the impact of the moratorium on customs duties on electronic transmissions on India's trade of digital goods and services. The JSI and bilateral agreements on e-commerce covers a wide range of regulatory issues and associated obligations. In light of this, this paper compares India's autonomous regime (AR) across this wide range of regulatory issues with JSI obligations. It also analyses the scope, coverage and depth of commitments in e-commerce under different trade agreements, with a focus on the trade agreements in APAC. The paper concludes by providing a roadmap for moving forward with discussions in JSI and recommendations for India.

1.2. Methodology

The paper is based on a literature review, secondary data analysis, analysis of developments in the WTO, bilateral/regional trade agreements of APAC countries, and mapping of India's domestic policy with trade agreements. It collates and analyses the inputs received from different stakeholders during the 1st Asia-Pacific E-Commerce Policy Summit, jointly organised by the Indian Council for Research on International Economic Relations (ICRIER), the United Nations Economic and Social Commission for Asia and the Pacific: Sub-regional Office for South and South-West Asia (ESCAP-SSWA), and MSL India in New Delhi on March 14 and 15, 2024, as well as the ESCAP Paperless Trade Week (June 3-7, 2024) in Bangkok, Thailand.

For the analysis of India's AR and tariff under different trade agreements, data has been taken from Goyal and Goyal (2023) and a concordance between 6- and 8-digit Harmonised System (HS) codes has been done using International Trade Centre (ITC)

Trade Map.⁴ Data on the export and import of select digital goods has been taken from ITC Trade Map itself. Data on select digitally traded services of India has been extracted from the UNCTAD Statistics based on the Balance of Payment Statistics Manual (BPM6).⁵

1.3. Layout of the Paper

Section 2 presents a brief overview of the discussions in the WTO WPEC, as well as on discussions in the plurilateral group – JSI. It also presents India's position in the WPEC, and its concerns related to the discussions in JSI.

Section 3 analyses the coverage and level of commitments on e-commerce and digital trade in bilateral trade agreements between APAC nations, including India. Based on data and evidence, Section 4 presents India's negotiating strategies and options.

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International Trade Centre (ITC) Trade Map provides, in the form of tables, graphs and maps, indicators on export performance, international demand, alternative markets and competitive markets, and a directory of importing and exporting companies. The trade map covers 220 countries and territories and 5300 products of the harmonised system (HS). The harmonised system correspondences provide the change in HS codes for the selected good in the study over the many HS code revisions in the past. It can be accessed at https://www.trademap.org/stCorrespondingProductCodes.aspx (last accessed on April 10, 2024).

The sixth edition of the Balance of Payments and International Investment Position Manual (BPM6, the Manual) serves as the standard framework for statistics on the transactions and positions between an economy. and the rest of the world. It is a framework by the International Monetary Fund (IMF) (Source: https://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm, (last accessed on April 10, 2024).

2. WTO and JSI on E-Commerce and India

This part provides a brief overview of the e-commerce discussions in the WPEC and JSI. Section 2.1 focuses on the evolution and status of discussions in WPEC in the WTO and developments in JSI. Section 2.2 discusses India's stand on e-commerce in the WPEC and presents its concerns on discussions in JSI and on the broader aspect of discussing trade rules in e-commerce on multilateral or plurilateral platforms.

2.1. WTO Work Programme on E-Commerce (WPEC)

E-commerce as a topic has been included within the framework of the WTO since the Ministers adopted the declaration on global electronic commerce at the second Ministerial Conference (MC2), urging the General Council to establish a comprehensive Work Programme on Electronic Commerce (WPEC) in 1998.⁶ This work programme was envisaged to be largely exploratory in nature, and was expected to focus on examining all trade issues related to global e-commerce, considering the economic, financial and development needs of developing countries. The WPEC had the broad mandate to work and define the scope and definition of e-commerce and digital trade, in addition to exploring other key related issues as they arose. Under the work programme, WTO members agreed to the practice of not imposing customs duties on electronic transmissions, also known as the "moratorium on customs duties". The moratorium since then has been renewed in each MC, and in MC 13, the moratorium was extended up until MC 14 or March 31, 2026, whichever is earlier, with the moratorium and the WPEC set to expire on that date (WTO, 2024).

While the moratorium on customs duties was first instituted in 1998, there has been a massive technology-fuelled change in the scope and coverage of the overall digital economy. E-commerce in 1998 was largely confined to digitally ordered goods and some services. Two and a half decades later, the presence of digitally ordered and delivered goods and services in the economy has become ubiquitous, but the WPEC has still not been able to build consensus on the scope of coverage and definition of e-commerce.

The WPEC would have been the ideal platform to discuss trade rules in e-commerce. However, it has not been able to take discussions beyond the moratorium. This may be due to the slow progress in the Doha Development Agenda in general, where the members have not been able to reach any decision on the substantive discipline of e-commerce, notwithstanding the ambitious agenda foreseen in the work programme. However, the discussions in WPEC are crucial to keep e-commerce alive on the multilateral agenda. Last year, there were eight dedicated discussions held between January and November 2023 (Ismail Y., 2023). In a recent dedicated discussion on e-commerce held on February 13, 2024, the delegations converged on three common elements — first, the need to pursue the reinvigorated work under the WPEC, as per the

Source: https://www.wto.org/english/thewto_e/minist_e/min98_e/ecom_e.htm (last accessed on September 4, 2024).

⁷ It is important to note that the moratorium is only a part of the WTO WPEC. Other issues that needed discussion include e-commerce trade rules and policy space for developing countries.

Source: https://docs.wto.org/dol2fe/Pages/FE Search/FE S S009DP.aspx?Language=E&CatalogueldList=303575,302421,302124,301689,300946,300208,298886,297

1998 mandate while keeping a particular focus on the development dimension, which is in alignment with India's position as discussed in Section 2.2; second, continue to cooperate with inter-government organisations (IGOs) and relevant stakeholders and, third, review the work under the WPEC as the General Council was instructed to, including the work carried out in the relevant bodies and to report on it in MC13.

However, in MC13, the existence of WPEC was linked to the moratorium, which is expected to continue till MC14 or March 31, 2026, whichever is earlier. This may be because, despite the WPEC's existence, countries have not been able to reach a consensus in the WTO on e-commerce trade rules, although they have been successful in reaching a consensus through bilateral, regional and digital trade agreements (see Section 3).

Countries such as India, Indonesia and South Africa have opposed the moratorium on customs duty in the WPEC, on the ground that it may lead to revenue losses for developing countries. Indonesia had imposed a border tariff on intangible goods in 2018 and later, introduced Chapter 99 in its HS codes to cover digitally traded goods, even though the tariff remains at zero.

Digital technology has been moving faster than the pace at which policy has been developed even in the developed world and, given the networked nature of the digital economy, such governance and regulation would be ineffective without robust cooperation among countries. Further, many countries have signed/have been signing trade agreements with a chapter on digital trade or digital trade-specific agreements, including regulatory provisions. On the domestic front, countries have been implementing regulations to align with international best practices like the UNCITRAL Model Laws, implementing paperless trade [in line with the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (CPTA) of ESCAP], and facilitating exports by small and medium enterprises (SMEs). The benefits of such domestic reforms cannot be reaped unless there is some harmonisation of standards and processes and regulatory co-operation. Therefore, there is a need for WTO member states to engage in genuine dialogue on these matters. One view is that while this would have been best carried out in the multilateral framework of the WPEC, lack of progress there necessitated the creation of the Joint Statement Initiative on E-Commerce (henceforth JSI). An alternative perspective is that some countries have preferred forming a plurilateral coalition in the form of the JSI to bypass the need for multilateral consensus.

2.1.1. JSI on E-commerce

The need for a plurilateral framework for discussions on e-commerce was first raised by a few WTO members in 2015. In 2016, the USA put forward a non-paper on trade rules in e-commerce. Subsequently, in December 2017, at the MC11 in Buenos Aires, Argentina, 71 WTO members issued the JSI on advancing discussions on e-commerce. In January 2019, 76 WTO members confirmed the commencement of

^{251,295 743,295678&}amp;CurrentCatalogueldIndex=0&FullTextHash=371857150 (last accessed on April 21, 2024).

Source: https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://docs.wto.org/dol2fe/Pages /SS/directdoc.aspx%3Ffilename%3Dq:/JOBs/GC/94.pdf&ved=2ahUKEwiaueaivOeFAxXyxDgGHfeQCs0Q FnoECBoQAQ&usg=AOvVaw0XHgBsJ 00jXnGXgPLomOz (last accessed on November 2, 2022).

Source: https://www.wto.org/english/tratop_e/ecom_e/joint_statement_e.htm (last accessed on November 2, 2022).

negotiations and, as of June 2024, the JSI has grown to include 91 countries, accounting for 90 per cent of global trade.11 After five years of negotiations, on July 26, 2024, 80 member countries, with Australia, Singapore and Japan as co-conveners, reached a stabilised text (hereafter, referred to as the JSI text) (WTO, 2024c). The fact that only 80 out of 91 JSI members reached consensus highlights the lack of agreement on several key issues among participating members.

The JSI text has built upon previous negotiations in the JSI and covers six primary areas: (a) enabling electronic commerce (b) openness and electronic commerce (c) trust and electronic commerce; (d) transparency, co-operation and development (e) telecommunications and (f) exceptions. The JSI text incorporates the WTO Telecommunications Reference Paper¹² as an annex, provisions of which have already been implemented by 100 countries, including India. The text also proposes the establishment of a Committee on Trade-Related Aspects of Electronic Commerce, as well as a mechanism for reviewing the moratorium's impact five years after the agreement enters into force (WTO, 2024c).

An analysis of the discussions in the JSI, their broad policy objectives and the international framework for regulatory discussions, as presented in Table 2.1, has two key takeaways. First, there are existing agreements or frameworks that cover several of the specific issues, especially for digital trade facilitation, market access and regulatory coherence in digital trade. These include the UNCITRAL Model Laws, CPTA¹⁴ by ESCAP and certain provisions of the WTO Trade Facilitation Agreement (TFA).15 Second, there are several areas of digital trade that relate to genuine digital economic integration issues, such as electronic payments and consumer protection, where there are no existing international disciplines or international frameworks. This points to the need for a multilateral agreement on such issues. However, it needs to be pointed out that comprehensive provisions in many of these areas are already being negotiated in FTAs or bilateral digital economy agreements (please see Section 3 for a detailed discussion).

Despite some progress on these issues achieved in the JSI, the complexity and sensitivity of the issues being discussed there remain a significant challenge. The diverse nature of these issues has also led to varying levels of participation and changing positions among countries. For instance, key WTO members like India and South Africa

¹¹ Source: https://www.wto.org/english/tratop_e/ecom_e/joint_statement_e.htm (last accessed August 2, 2024).

Source: https://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm (last accessed on August 5, 2024).

Three UNCITRAL Model Laws are important with respect to the regulation of e-commerce and facilitating electronic transfers. These include UNICTRAL Model Law on Electronic Commerce ((UMMLEC); UNICTRAL Model Law on Electronic Signatures UMMLES and UNCITRAL Model Law on Electronic Transferable Records, 2017, UNMLETR. Available at https://uncitral.un.org/en/texts/e-commerce/conventions/electronic communications; and (last accessed on August 3, 2023).

¹⁴ Source: https://www.unescap.org/projects/cpta (last accessed on August 6, 2023).

¹⁵ Source: https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/L/940.pdf&Open=True (last accessed on August 6, 2023).

have refrained from joining the JSI, arguing that e-commerce trade rules should be discussed under the multilateral WPEC framework. While Indonesia joined the JSI in 2019, it has not yet signed the JSI text due to ongoing domestic consultations (WTO, 2024c). Similarly, the USA, initially a key advocate for e-commerce trade rules under the JSI, has not given its consent to the July 2024 text, partly due to the upcoming national elections in November 2024. Although the USA had earlier championed the creation of rules on cross-border data flows and source code, it later withdrew these proposals, fearing they might limit its ability to regulate e-commerce giants and address anti-competitive practices. There are also concerns related to national security and the associated need for countries to have the flexibility to regulate or monitor cross-border data flows, have access to source codes, or impose restrictions on specific business models and new technologies and application.

A related policy question is this: given the substantial differences between countries in the evolution of their domestic regimes and regulatory principles, can internationally negotiated disciplines or even broadly defined principles such as in the JSI text be implemented uniformly by countries? The JSI text is filled with "shall endeavour" commitments, making it difficult to ascertain the precise obligations of members (Elms, 2024). The challenge lies in achieving regulatory coherence among such a diverse membership of the JSI, especially when the bargaining power of developed, developing and least developed countries are different in trade negotiations.

Market access issues are influenced by both the level of market maturity and the presence of regulations that allow a country to confidently open its market without jeopardising key economic, social and security interests. This raises the question of the extent to which rulemaking for such areas can be effectively undertaken in such a diverse set of countries. It is also important to understand that technology is evolving, and even developed countries are designing domestic regulatory frameworks in areas such as artificial intelligence (AI), digital twins, automation, and 3D printing. In other words, even the most advanced digital economies are still debating their digital governance. International rulemaking, therefore, must give countries regulatory space and be pragmatic in its approach. Such rulemaking must also address the concerns and priorities of different countries, especially developing countries and LDCs, and consider the complex issues of standards, consumer protection, liability regimes in case of harm to humans or economic assets, anti-competitive practices and fraud, among others.

Table 2.1: Main themes and sub-issues discussed under JSI Agreement of E-commerce, their Policy Objectives and Existing International Frameworks for Policy Harmonisation

No	Theme/Issue	Specific Issue	Broad Policy Objective	Existing International Agreements or Frameworks	
1		Electronic transaction frameworks	Domestic Regulation: International Regulatory Coherence	UNMLEC/ UNMLETR/UNCUECIC	
2		Electronic Authentication and E- Signatures Facilitation and International Regulatory Coherence		UNMLEC/UNMLES/CPTA	
3		Electronic Contracts Facilitation and International Regu Coherence		UNMLEC/CPTA	
4	Enabling E- commerce	Electronic Invoicing	Facilitation and International Regulatory Coherence	UNMLEC/CPTA	
5		Paperless Trading	Facilitation and International Regulatory Coherence	UNMLEC/CPTA	
6		Single Window for Data Exchange and Interoperability	Facilitation and International Regulatory Coherence	WTO TFA/WCO Data Model	
7		Electronic Payments	Facilitation and International Regulatory Coherence	None	
8		Unique Consignment Reference Numbers**	Facilitation and International Regulatory Coherence	None	
9	Openness and E- commerce	Customs Duties on Electronic Transmission	Market Access: Border Measure	WTO WPEC Moratorium on Customs Duties on E-commerce	

No	Theme/Issue	Specific Issue	Broad Policy Objective	Existing International Agreements or Frameworks
10		Open Government Data	Domestic Regulation: International Regulatory Coherence	None
11		Access to and Use of the Internet for Electronic Commerce	Market Access: Behind Border	None
12		Online Consumer Protection	Domestic Regulation: International Regulatory Coherence	None
13		Unsolicited Commercial Electronic Messages or SPAM	Domestic Regulation: International Regulatory Coherence	None
14		Transparency	Domestic Regulation: International Regulatory Coherence	None
15	Trust and E- commerce	Cybersecurity	Domestic Regulation: International Regulatory Coherence	None
16		Access to Source Code**	Domestic Regulation: International Regulatory Coherence	None
17		Personal Data Protection Domestic Regulation: International Regulatory Coherence		None
18		Products That Use Cryptography	Domestic Regulation: International Regulatory Coherence	None
19	Cross-cutting	Cross-Border Electronic Transfer of Information/Data flows**	Market Access: Border Measure	None
20		Location of Computing Facilities	Market Access: Border Measure	None

No	Theme/Issue	Specific Issue	Broad Policy Objective	Existing International Agreements or Frameworks
	Issues: Market			
21	Access and regulation	Transparency, Domestic Regulation And Co-operation	Domestic Regulation: International Regulatory Coherence	RPDSR*
22		Capacity Building	Special and Differential Treatment	WTO SDT Provision
23	Cross-cutting Issues: Special and Differential	Implementation Periods for Developing Countries	Special and Differential Treatment	WTO SDT Provision
24	Treatment	Special and Differential provisions for Developing Countries and LDCs	Special and Differential Treatment	WTO SDT Provision
25	Telecommunication Disciplines Related to Telecommunication Services		Domestic Regulation: International Regulatory Coherence	GATS*

Sources: Collated by authors from https://www.wto.org/english/docs_e/legal_e/tfa-nov14_e.htm;
https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/INF/ECOM/87.pdf&Open=True;
https://uncitral.un.org/en/texts/ecommerce/conventions/electronic_communications;
https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=X-20&chapter=10&clang=_en;;
https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN24/38.pdf&Open=True,
https://www.wcoomd.org/DataModel (last accessed on August 2, 2024).

Note: *Agreement referred partially covers the gamut of issues under discussion in JSI. UMMLEC is UNICTRAL Model Law on Electronic Commerce; UMMLES is UNICTRAL Model Law on Electronic Signatures; UNMLETR is UNCITRAL Model Law on Electronic Transferable Records, 2017; UNCUECIC United Nations Convention on the Use of Electronic Communications in International Contracts (New York, 2005); CPTA is Framework Agreement on Facilitation of Cross-border Paperless Trade in the Asia Pacific by ESCAP; WTO TFA is Trade Facilitation Agreement; RPSDR is Reference Paper on Services Domestic Regulation; GATS is General Agreement on Trade in Services; WTP SDT is Special and Differential Treatment.

^{**} Not included in the JSI text agreed on July 26, 2024.

On the domestic front, given that multiple actors spread across countries (such as producers, consumers, and service providers) are affected by digital trade, cross-border regulation of digital economy would require a significant level of internal consultations with several stakeholders in a country as well as international co-operation and regulatory harmonisation. There is a need for the latter to develop norms and standard operating-procedures for cross-border e-commerce and for countries to implement global best practices in their domestic regimes, which may take some time and may not be possible without participating in trade negotiations.

While the JSI-led plurilateral approach has its issues of bypassing a consensus approach, the WTO WPEC is not free from flaws. Its existence and, thus, the survival of the only multilateral consensus driven platform for countries to engage in and discuss critical issues regarding the digital economy is hostage to the single-point agenda of the continuation of the customs moratorium. It can be argued that this position contradicts the very purpose of the WPEC, which was mandated to address the issues around scope, coverage and definition of e-commerce, and other areas of trade rules, apart from the moratorium.

2.2. India, WPEC and JSI

At the start of the Doha Round in 2001, in the WPEC, India showed strong interest in liberalising Mode 1 or cross-border trade in services and online service delivery. India played a key role in the inclusion of Annex C¹⁶ on Services of the Hong Ministerial Declaration in 2005, which provided a very ambitious and comprehensive roadmap for liberalisation of Mode 1 services. Specifically, the annex recommended that members make binding commitments at existing levels of market access (i.e., reflecting the existing level of market access available under the actual ARs of member states as opposed to what is committed under the General Agreement on Trade in Services or GATS) on a non-discriminatory basis across sectors of interest to Members for Mode 1. Given that AR on the ground for Mode 1 was and continues to remain quite liberal across most WTO member states, following through on the guidance of Annex C would have substantially achieved a significant portion of the intent of JSI on e-commerce as far as DDS are concerned.

India has also been a strong proponent of reforms in domestic regulation in services in a manner that leads to greater transparency and minimises impediments to trade and has been committed to the agenda of the Working Party on Domestic Regulation (WPDR).¹⁷ In fact, India has consistently objected to the plurilateral JSI on Domestic Regulation in Services emphasising that the Working Party on Domestic Regulations (WPDR) is the multilaterally mandated body as per GATS Article VI:4 on this issue.

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The objective of Annex C on Services under GATS is to liberalise trade in services with appropriate flexibility to member countries. It aimed to establish a framework for improving commitments under each mode of supply, treating MFN exemptions and the scheduling and classification of commitments. For more, visit https://www.wto.org/english/tratop e/serv e/key stages e.htm (last accessed on August 1, 2024).

The Working Party on Domestic Regulation (WPDR) is the forum where WTO members conduct negotiations to develop disciplines to ensure that domestic regulation measures in licensing, qualification and technical standards do not constitute unnecessary barriers to trade in services, in accordance with Article VI:4 of the General Agreement on Trade in Services (GATS). Accessible at https://www.wto.org/english/tratop e/serv e/wpdr e.htm (last accessed on August 3, 2024).

Further, Mattoo and Mentzer (2004) underline that GATS would always be the better platform for liberalisation of Mode 1 services, that includes DDS, as opposed to even the WPEC. There are several issues ranging from classification of new services and new specialisations related to DDS, and effective redressal of issues related to domestic regulation that makes GATS the better discussion platform.

India has opposed the permanent moratorium on customs duties, both in the WPEC and the JSI. Its position has been guided by the discussions on the loss of tariff revenue faced by developing countries like India due to the zero duties on the import of electronic products. However, it has opposed the JSI on other grounds as well. India objects to undermining the WTO's consensus-based framework, with powerful nations pushing their agendas. For example, the EU and Canada have tried to push through the expansion of the Information Technology Agreement (ITA) through the JSI, 18 an issue that clearly lies within the ambit of the GATT and its associated ITA-related mandate, while its linkage with JSI is very tenuous. Further, India fears participating in the JSI could pressurise countries to commit to liberalising areas like DDS when many of these emerging specialised digital services are yet to be clearly defined or standardised within the WTO framework. Some countries have tried to bring in the issue of small parcels and associated issues of de-minimis (low-value non-dutiable). This is again the backdoor entry of a contentious issue directly related to trade in goods. Many countries are very concerned about the influx of massive numbers of such small parcels, many using the postal channel that is subject to much lesser scrutiny. National regulators are legitimately concerned about revenue loss from goods not paying appropriate duties using these channels. Even more concerning is the use of these channels for illicit trade, including narcotics and other banned substances. These discussions are ongoing at the WCO and Universal Postal Union (UPU).

Another reason for India's opposition to the JSI is its alignment with domestic regulations. The domestic regimes of India and other developing countries are still evolving, and it cannot be assumed that these regimes will necessarily align with some of the mandatory/hard commitments contained in the JSI proposals. Additionally, some Indian policymakers fear that the JSI proposals could restrict the policy flexibility needed to regulate large technology firms from global digital powerhouses such as the United States and China. The inability to effectively regulate these e-commerce giants may result in predatory and anti-competitive behaviour, adversely affecting Indian firms, including start-ups in the digital and e-commerce sectors.

Another perspective suggests that India should have proactively developed its domestic regulatory framework for digital trade and e-commerce to address these valid concerns while simultaneously participating in JSI discussions. By doing so, India could have

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WTO, Joint Statement on Electronic Commerce, Communication by Canada and the European Union, Joint Proposal on the Information Technology Agreement and its Expansion, INF/ECOM/63. Available at

https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?MetaCollection=WTO&SymbolList=%22INF%2fECOM%2f63%22+OR+%22INF%2fECOM%2f63%2f*%22&Language=ENGLISH&SearchPage=FE_S_S001&languageUIChanged=true# (last accessed on September 9, 2024).

advanced its positions to safeguard its interests and ensured that international rules align with its need for robust regulatory mechanisms to prevent anti-competitive practices by global digital players. Prioritizing legal instruments and principles essential to competitive safeguards and market fairness could have been a strategic move. A step in this direction is the draft Digital Competition Bill, 2024, which seeks to curb practices such as self-preferencing and the misuse of user data by large digital enterprises.¹⁹

Given the rapid pace of technological change, India could have also advocated for a provision within the JSI to review the agreement every five years. Overall, as a large and influential developing country with strong regulatory institutions attuned to developing-world priorities, India's active participation in the JSI could have contributed to making the agreement more responsive to the genuine concerns of developing countries.

A comparison between key provisions of the JSI and India's AR/current domestic regulation is given in Table A2 in Appendix A. The comparison shows that there are JSI obligations such as those regarding cross-border interoperability of e-invoices and e-authentication where India's AR is still evolving and taking a commitment on it may not suit its development needs at this point of time.

Five key areas on which India has shared its concerns in WPEC and JSI, including provisions which have featured in the current JSI text as well as in previous discussions, are listed below followed by a detailed discussion on them.

- a. Permanent moratorium on customs duties on electronic transmissions
- b. Electronic transaction framework
- c. Cross-border data flows and data regulations
- d. Transfer or access to source codes
- e. Digitalisation of contracting

2.2.1. Permanent Moratorium on Customs Duties on Electronic Transmissions

India has been protesting the permanent extension of the moratorium on customs duties on electronic transmissions (hereby referred to as 'the moratorium') in not just the JSI but also at the multilateral level in the WTO WPEC. Its stance has been guided by the following factors.

 There is no official definition of "electronic transmissions" and the scope and coverage of the moratorium by WTO. While some argue that it applies to the content of the transmission, others argue that it applies to the transmission itself,

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The report by the Committee on Digital Competition Law defines the features of these large digital enterprises, which it calls "systemically significant digital enterprises (SSDEs)". For more details, visit https://prsindia.org/policy/report-summaries/digital-competition-law (last accessed on September 2, 2024).

- i.e., the medium (Andrenelli and Gonzalez, 2019). Due to this, estimates of the impact of the moratorium have varied.
- There is lack of clarity on what India can seek in return for supporting the moratorium, like it did for the food security peace clause during the Trade Facilitation Agreement (TFA) negotiations, which helped market the TFA politically as a victory within the country.²⁰
- There is a lack of enough analysis on trade data that can drive India's stand. The
 Ministry of Commerce and Industry (MoCI) has not yet collected, analysed and
 presented the data on tariff revenue loss due to moratorium.

UNCTAD (2021) highlighted that ambiguities in the scope of the moratorium on customs duties for electronic transmissions and rapid technological advances complicate developing countries' ability to assess the revenue impact of permanently foregoing such duties. For an importer of digitally traded goods and services, zero customs duties/moratorium, can lead to a loss in tariff revenue. Banga (2022) estimated that developing countries are expected to lose potential tariff revenue of at least US\$25 billion per annum from 2025 onwards because of the moratorium.²¹ This is a higher estimate than a previous UNCTAD study by Banga (2021), which estimated a loss of revenue of more than US\$10 billion globally because of the moratorium, 95 per cent of which would have been borne by developing countries. Banga has argued that with the growth in trade of digitised goods such as films, printed matter, video games, software, mobile applications, and sound and music, etc., the loss of tariff revenue for developing countries would be substantive. That is, as and when more products are digitalised and included in the spectrum of electronic transmissions, the potential revenue losses would become even larger. In an earlier study, Banga (2019) specifically brought out that India, which has one of the highest customs duties, will face the highest loss in tariff revenue among developing countries.

Banga (2022) also argues that the moratorium restricts the fiscal and regulatory policy space for developing countries and LDCs. It states that the digital infrastructure in these group of countries is not as advanced as those of developed countries and, thus, they require protection from competition and an increased flow of imports from the latter. The loss of opportunity for developing countries to use duties and taxes to provide some protection to smaller e-commerce players from unfair competition from global e-

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Source: https://indianexpress.com/article/india/india-others/understanding-the-permanent-solution-at-wto/ (last accessed on April 29,2024).

The methodology used by Banga (2022 and 2019) includes calculating the loss for a set of 49 digitised products for the period 2017-2020 [see Table A.1 in Appendix of Banga (2019)]. These 49 products are products which were earlier traded only physically but now are also electronically transmitted/traded virtually such as HS code 49011010 – Books and HS code 85234910 - CDs. The papers then compare the actual imports of these products into a country with a counterfactual estimated value of imports for which the rate of growth is taken as the average annual growth of past given years (1998-2010) when digitalisation played no role in the trade of these goods. The actual values turn out to be lower than the estimated values as they do not reflect the online imports of the selected goods and only account for the physical movements of goods. The difference between these counterfactual and actual imports shows the digitalisation process and the flow of goods through online medium.

commerce giants is also a matter of concern. The paper suggests that by imposing tariffs, developing countries can earn extra tariff revenue and employ them to develop their digital capabilities and improve their competitiveness to come at par with the developed world.

However, there are many studies that have questioned the data and arguments presented by Banga through her various papers. For example, Andrenelli and Gonzalez (2019) argue that the potential foregone customs revenue for developing countries, estimated at 0.08 per cent to 0.23 per cent of overall government revenue, is relatively low. Additionally, they highlight that the share of digitisable goods, estimated at 1.2 per cent of total trade, remains minimal and is unlikely to see significant growth, even with advancements in technologies like 3D printing. In a new study, Andrenelli and Gonzalez (2023) calculate the average share of foregone revenue in potential customs revenue as 1.09 per cent for lower middle-income countries like India.

Another study by Evenett (2021) notes that the estimates of revenue forgone calculated by Banga (2019) for India, Indonesia, South Africa and Sri Lanka amount to less than 0.2 per cent of each of these nations' total revenues obtained from domestic sources. Andrenelli and Gonzalez (2019) caution that revenue impacts may have been overestimated in some studies due to the use of bound tariffs, the assumption that all goods that could be digitised would be digitised, and the failure to account for the complementarities between electronic transmissions and growing trade in physical hardware. In their more recent study, Andrenelli and Gonzalez (2023) write that while low-income countries are at the greatest disadvantage of losing imports and exports of digital goods and services by 25 per cent and 3.2 per cent respectively, for middle income countries like India, the loss would much lower at 6 per cent and 0.4 per cent of imports and exports respectively.

There are some other studies which have highlighted other negative fallouts of doing away with the moratorium. For example, Makiyama and Narayan (2019) write that if countries ceased to uphold the moratorium and levied import duties on digital goods and services, they would suffer negative economic consequences in the form of higher prices and reduced consumption, which would in turn slow gross domestic product (GDP) growth and shrink tax revenue. With respect to India, they calculate that it will lose 49 times more in GDP than it would generate in duty revenues, assuming a scenario where a tariff imposition by India also leads to reciprocal tariffs.

A key consideration when assessing the impact of the moratorium on electronic transmissions is the actual customs duties that are applicable to goods – both autonomously and under trade agreements. This is especially relevant given the increasing trend of countries incorporating provisions on the non-imposition of customs duties on electronic transmissions (NICDET) in their trade agreements. The Trade Agreement Provisions on Electronic Commerce and Data (TAPED) database (Burri et al. 2022) shows that out of the 105 regional trade agreements (RTAs) with an e-commerce

chapter by the end of 2022, 100 of them had a NICDET provision. Andrenelli and Gonzalez (2023) contend that existing commitments and practices, such as NICDET provisions or other preferences granted in Regional Trade Agreements (RTAs), limit the ability of countries to raise tariffs on digitisable goods and electronic transmissions, even in the absence of the moratorium.

In light of the above, many experts have suggested that digital taxation may be a better way forward as compared to tariffs on e-commerce products. Andrenelli and Gonzalez (2023) mention that non-discriminatory consumption taxes can help offset potential revenue losses from customs duties and that if standard value-added tax (VAT) or goods and services tax (GST) is applied to digital trade, then they are likely to generate more revenue than the foregone customs revenue attributable to the e-commerce moratorium. Hanappi et al. (2024) show that not only is the maximal revenue potential of VAT on trade in digitised products greater globally – about 2.5 times higher than that of tariffs at current rates – but that VAT is also economically more efficient. A study jointly by the IMF, OECD, UN, World Bank and the WTO (2023) notes that while tariffs and VAT are not mutually exclusive, recent evidence shows that for most economies, VAT could generate higher revenue from taxing electronic transmissions with appropriate investment in the capacity of tax administrations. Industry and expert consultations by the authors also show that digital taxation may be a better solution than imposing moratorium and, many countries, including India, are discussing digital taxation in the OECD. The latter has come up with a "VAT digital Toolkit for Asia Pacific Countries". It has been developed by the OECD Centre for Tax Policy and Administration, in close strategic partnership with the World Bank Group (WBG). This toolkit covers the core components of a comprehensive VAT strategy directed at the main types of digital trade and e-commerce, particularly online sales of services, intangibles, and goods to private consumers by foreign businesses and digital platforms that often have no physical presence in their consumers' respective jurisdictions. The purpose of this toolkit is to provide practical guidance to address the challenges to imposing VAT on digital trade and ensure that these measures can be implemented efficiently and effectively at the national level by tax authorities within the APAC region. Further, in connection with the OECD's 2013 Action Plan on Base Erosion and Profit Shifting (BEPS), the OECD/G20 inclusive framework on BEPS has produced substantial guidance in recent years with respect to Action 1, "Addressing the Tax Challenges of the Digital Economy". This includes the question of "how to ensure the effective collection of VAT/GST with respect to the cross-border supply of digital goods and services.²²

At the unilateral level, countries such as Australia, Switzerland and regions like the EU have supported digital taxation, and countries like Singapore have come up with

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Source: https://www.oecd.org/tax/consumption/vat-digital-toolkit-for-asia-pacific.pd (last accessed on April 11, 2024).

innovative models like Overseas Vendor Registration (OVR)23 to impose GST on overseas suppliers.

Studies have also highlighted the importance of digital trade in the present era for developing countries. According to López-Gonzalez, Sorescu and Kaynak (2023), India's share in global digital trade has surged from 1 per cent in 1995 to 4 per cent by 2018. A study by CUTS International (2020) found that a 1 per cent increase in digital services exports leads to a 0.02 per cent increase in India's GDP.

Given the discussion above, we present the following analysis of the impact of the moratorium on India, using data from official government sources and global data bases which can help guide the country's stance on the moratorium.

The analysis is divided into three parts as follows.

a. Revenue foregone and India's trade agreements

To understand the revenue loss, we mapped the products mentioned in Banga (2022) with India's tariff lines at the 8-digit HS codes, and found that of 108 goods ²⁴ as per 2023 tariff lines (please see Table A1 in Appendix A),

- 14 products have zero basic customs duty (BCD)
- 86 products have 10 per BCD and
- six products have 20 per cent BCD.

The trade balance data was available for 76 goods, of which India did not trade in seven goods. Data for 32 goods was not available at the time of writing this paper. Out of the 69 goods which had a non-zero trade balance, India was a net exporter for 26 goods and a net importer for 43 goods. Amongst the net imported goods, eight of them presently attract no duty and for the remaining 35 goods, duties range from 5 to 20 per cent. While India could see a potential loss in tariff revenue due to the moratorium on the goods for which it is a net importer, it must be noted that India has already signed several FTAs with trade partners (see the column on "country preferences", in Table A1 in Appendix A). Further analysis has shown that for many of these goods, India has reduced duties to zero per cent under its FTAs, demonstrating that the country is not

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Through this OVR regime, all low-value goods and remote services (i.e., digital and non-digital services) supplied to Singapore consumers are subject to GST – regardless of whether the suppliers are local or overseas. In Singapore's experience, this has helped level the playing field between local and overseas suppliers as well as ensure the resilience of the GST system in a growing digital economy. Taking reference from similar OVR regimes in other jurisdictions and the international VAT/GST guidelines of the OECD, extensive industry consultations and early notification of the OVR regime, which eased the implementation and effective collection of GST, was helpful. Available at <a href="https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S009-DP.aspx?language=E&CatalogueldList=303575,302421,302124,301689,300946,300208,298886,297251,295743,295678&CurrentCatalogueldIndex=8&FullTextHash=&HasEnglishRecord=True&HasFrenchRecord=True &HasSpanishRecord=True# (last accessed on April 21, 2024).

For this paper, when we tried to map the 49 HS 6-digit tariff lines to India's current tariff regime, there arose an issue. While the selected products are defined at 6-digit HS codes by Banga (2022), tariff lines by the Government of India are given at the 8-digit HS codes, as presented in Goyal and Goyal (2023). To effectively map out the data on tariff lines, a concordance using International Trade Centre (ITC) Trade Map²⁴ was done. As the tariff lines are defined at 8-digit HS codes, all product categories under the 6-digit subheading level of the HS code for the 49 products were taken for analysis. This increased the number of products to 108 products (see Table A1 in Appendix A). For these products, India's trade balance data was also taken from the ITC Trade Map.

reliant on tariff revenue from these goods as a significant source of income (some examples are shown in Table 2.2). As India continues to actively negotiate trade agreements, more and more of such digital products will come to attract lower or zero basic customs duty (BCDs) under FTAs. Another related factor to consider is that imports may be beneficial for an economy as they can be intermediate goods that can help reduce costs, boost efficiency and help India participate more effectively in the global value chains (GVCs) for digital goods.

Table 2.2: Comparison of customs duties under India's Autonomous Regime (AR) and select FTAs (as of July 2024) for select HS codes.

Products and their 8-digit HS codes	AR (%)	Customs duty under 6 select FTAs* as of July 2024 (%)
8523 49 10 - Compact Discs	10	0
3706 10 20: Documentary shorts, and films certified as such by the Central Board of Film Certification	10	0
8523 80 60 2-D/ 3D computer graphics	10	0
9504 50 00- Video game consoles and machines, other than those of sub-heading 9504 30	20	0

Source: Goyal and Goyal (2024).

Note: *The 6 select FTAs that cover these goods include India-Australia Economic Co-operation Trade Agreement (ECTA), 2022, Indo-ASEAN FTA (AIFTA), 2010, Indo-Korea FTA, 2010, Indo-Malaysia PTA, 2011, India-Japan Comprehensive Economic Partnership Agreement (CEPA), 2011 and Indo-Singapore FTA, 2005.

b. Digital tax/GST may a better method of revenue collection

The tariff and tax revenue statistics for India for the year 2022-23 presented in Table 2.3 shows that the contribution of basic duties to total tax revenue is around 8 per cent. If the entire customs collections, inclusive of all cess and surcharges, are taken, then it is around 10 per cent of the total tax revenue collection. While there is no estimate of the contribution of digital goods and services in customs, given they are a small part of India's present trade, the estimate for actual revenue loss for digitised products would be very low. On the other hand, the contribution of GST to total revenue is as high as 40 per cent. For the financial year 2022-23, imports contributed Rs.4,82,695 crores to total GST collections of Rs.13,24,985 crore, that is, 26.17 per cent [GST Network GSTN), 2023]. This suggests that GST on digital goods may be a better way to collet tax than tariffs, which are being lowered autonomously and under trade agreements.

Table 2.3: Tax Revenue Statistics for India (2022-2023)

(in million USD)

Tax Revenue- Major Head	Actual 2022-2023 (approximate values)
Total – Basic Duties (including through Debit of Scrips)	20816.95
Total – Customs	26501.97
Total – Goods and Services Tax (GST)	105462.43
Total Tax Revenue	260559.78
GDP of India (2022-2023)	3347183.41
Basic duties as a proportion of Total Tax Revenue	7.99
Customs as a proportion of Total Tax Revenue	10.17
Total Customs as a proportion of GDP of India	0.79
Total GST as a proportion of total tax revenue	40.47

Source: Authors' calculations from data on https://www.indiabudget.gov.in/doc/rec/tr.pdf (last accessed on August 12, 2024) using the calculated average exchange rate between INR and USD from April 1, 2022 to March 31, 2023, i.e. 1 USD= 80.51 INR, with data available on https://www.rbi.org.in/scripts/referenceratearchive.aspx (last accessed on December 5, 2024).

c. India is a leading export of DDS

The removal of the moratorium will hurt the Indian exporting industry and India's large service exports. Unlike other developing countries and LDCs, India is a leading exporter of Mode 1 services, particularly information technology (IT)/IT-enabled services (ITeS),²⁵ and hence, benefits from zero-duty exports. As per WTO (2024b), India was the 4th largest exporter of DDS in 2023, after the USA, the United Kingdom (UK), and Ireland, and ahead of countries like Germany and China, and its exports have seen double-digit growth since 2020 (see Table 2.4). Amongst the top 30 exporters of DDS in 2023, India has or is currently negotiating a trade agreement with more than half of them, which indicates the importance of these services in India's trade basket. Some of these include the UK, France, Germany, UAE, Korea and Singapore (WTO, 2024).

Table 2.4: Exports in value and growth of DDS of India (2020-2023)

Year	2020	2021	2022	2023
Value of Exports (in billion US\$)	144	173	219	257
Growth rate (in percentage)	16	20	27	17

Source: WTO (2024b)

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Mode 1 Trade in services can include digitally delivered edtech and fintech, support services for logistics and manufacturing and a host of such professional and technical services, as well as recreational services such as audio-visual gaming. Available at https://www.wto.org/english/res_e/booksp_e/digital_trade_23_ch4_e.pdf (last accessed on April 28, 2024).

As the scope and definition of electronic transmissions (ET) is evolving (as seen in Section 1), unless the coverage of DDS is clear in the context of e-commerce, opposing the moratorium may not be in India's export interest. Using the WTO dataset²⁶ on trade in DDS, we present India's position in trade of these services below. The coverage of the DDS matches the definition of DDS in IMF, OECD, UNCTAD and WTO (2023).

India's dominance in DDS export can be understood from Figure 2.1, which shows that there has been a more than 8-fold rise in its exports of these services between 2005 and 2023. Further, India has remained a net exporter of DDS throughout this period.

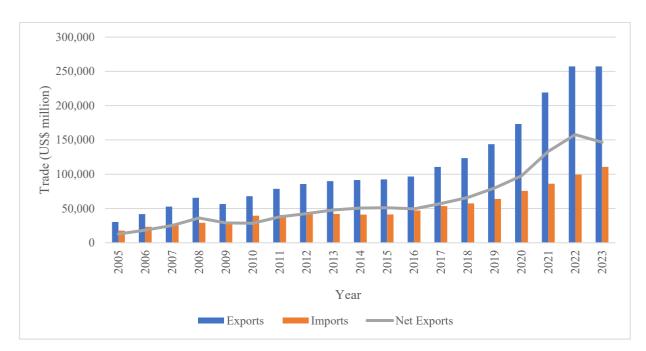


Figure 2.1: India's Exports, Imports and Net Exports of DDS (in US\$ million)

Source: Extracted from https://www.wto.org/english/res_e/statis_e/gstdh_digital_services_e.htm (last accessed on October 21, 2024).

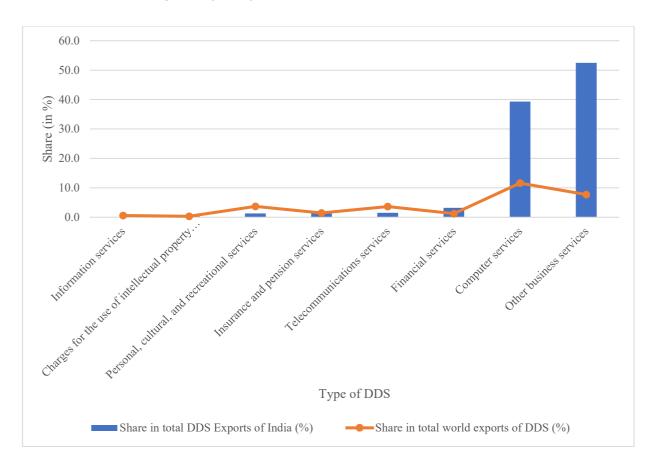
Note: Data is consistent with the Trade in Services by Mode of Supply (TiSMoS) dataset until 2022, which allows a more detailed breakdown for these services, and contains the first estimates for 2023.

In 2023, amongst the DDS, India's exports of computer services had the highest share (39.3 per cent of total India's DDS exports) accounting for as high as 11.06 per cent of the total world exports of these services, followed by the exports of financial services (3.3 per cent of total India's DDS exports), which have a world share in exports of 1.26 per cent (see Figure 2.2).

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Source: https://www.wto.org/english/res_e/statis_e/gstdh_digital_services_e.htm (last accessed on October 21, 2024).

Figure 2.2: Share of export of types of DDS in total exports of DDS by India and in total world DDS exports (2023)



Source: Extracted from https://www.wto.org/english/res e/statis e/gstdh digital services e.htm (last accessed on October 21, 2024).

Note: Data is consistent with the Trade in Services by Mode of Supply (TiSMoS) dataset until 2022, which allows a more detailed breakdown for these services, and contains the first estimates for 2023.

Another interesting fact to note is that India's growth of DDS exports has largely been higher than not only the growth of DDS exports in regions like North America, the European Union and Africa but also higher than the growth of world DDS exports between 2015 and 2023 (see Figure 2.3).

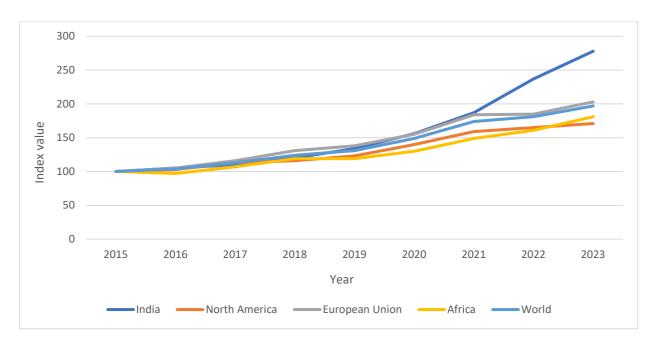


Figure 2.3: Growth of DDS Exports: India vs. select regions and the world

Source: Extracted from https://www.wto.org/english/res e/statis e/gstdh digital services e.htm (last accessed on October 21, 2024).

Note: Data is consistent with the Trade in Services by Mode of Supply (TiSMoS) dataset until 2022, which allows a more detailed breakdown for these services, and contains the first estimates for 2023.

Index 2015=100

The above analysis shows that India currently is one of the biggest exporters of DDS and will continue so be in the future with the Indian government taking multiple steps to boost the digital economy of the country. India has been continuously working to develop its digital infrastructure capabilities and has invested heavily in developing its digital infrastructure through initiatives like the Open Network for Digital Commerce (ONDC), Aadhar, United Payments Interface (UPI); these all are a part of the digital public infrastructure (DPI) that India is keen to export to other countries. A report by the National Association of Software and Service Companies (NASSCOM) and Boston-based management consulting firm Arthur D Little International suggested that the DPI could help India become a US\$8 trillion economy by 2030 and the economic value added by DPI could increase from 0.9 per cent in 2022 to between 2.9 per cent and 4.2 per cent of GDP by 2030.²⁷

2.2.2. Issues related to electronic transmissions

E-transmissions can be understood as trade delivered digitally. India faces four associated issues with respect to the e-transmissions discussed in the JSI. These are discussed below.

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Source: https://www.livemint.com/technology/tech-news/digital-public-infrastructure-could-help-india-become-an-8-trillion-economy-by-2030-report-11708507348692.html# (last accessed April 12, 2024).

a. Electronics Transmission Framework

To facilitate e-commerce transactions, the JSI text encourages member countries to adopt a legal framework based on the UNCITRAL Model Law on Electronic Commerce (UNMLEC), 1996 and UNCITRAL Model Law on Electronic Transferable Records (UNMLETR), 2017 (WTO 2024c). The principle behind adopting these model laws is to facilitate e-commerce by ensuring that national laws are based on internationally acceptable rules that help in increasing legal predictability for electronic commerce. It is specifically intended for removing any legal obstacles to acceptance of electronically transmitted information or digital copies of physical documents thereby helping countries move to a more efficient and paperless eco-system for the management of cross-border trade. The current text requires members to recognise electronic authentication, electronic signatures, electronic seals and timestamps, and their legal validity for all regulatory and judicial purposes. It seeks similar recognition for electronic contracts and invoicing. The fundamental objective is to create an ecosystem for paperless trading where all statutory or commercial documents required for cross-border transactions can be facilitated with electronic documents that receive the same treatment as hard-copy paper versions.

India has also accepted the principle of maintaining a legal framework consistent with the UNCITRAL MLEC in its recent trade agreement with the UAE. This is in line with India's domestic reform objectives in trade and logistics facilitation as envisaged under the National Trade Facilitation Action Plans (NTFAP)²⁸ and National Logistics Policy.²⁹ Further, India is mostly consistent with specific JSI obligations, barring in a few areas, under the provisions of India's Information Technology (IT) Act, 2000 and the Bharatiya Sakshya Adhiniyam (BSA), 2023.³⁰ The "Jaipur Call for Action", issued under India's G20 presidency, includes non-binding principles on the digitalisation of trade documents. These principles stress the need to promote international paperless trade transactions, while also acknowledging the associated challenges.³¹

b. Trust and Electronic Commerce

The JSI text requires members to protect the legitimate rights of consumers of digital goods or digitally delivered goods and services and extends to consumers of DDS the same rights as applicable to transactions in the non-digital economy. Such protection covers acts of misrepresentation, false claims or failure to meet terms of sale or

Source: https://www.commerce.gov.in/international-trade/india-and-world-trade-organization-wto/trade-

facilitation/#:~:text=A%20new%20NTFAP%20for%20the,technology%20driven%20procedures%20 which%20are (last accessed on August 3, 2024).

Source: https://logistics.gov.in/policy-regulation/national-logistics-policy/ (last accessed on August 3, 2024).

Source: The BSA, 2023 has replaced the earlier Evidence Act 1872. Available at https://www.mha.gov.in/sites/default/files/250882 english 01042024.pdf (last accessed on August 13, 2024).

³¹ Source: https://www.g20.in/content/dam/gtwenty/gtwenty new/document/G20 Trade and Investment Ministers Meeting.pdf; https://www.g20.in/content/dam/gtwenty/gtwenty new/document/G20 Trade and Investment Ministers Meeting.pdf (last accessed on September 13, 2024).

contractual obligations related with online performance or delivery of DDS. The Indian AR broadly meets the requirements of these obligations (see Table A2 in Appendix A).

The current text also requires that JSI members have recourse against suppliers of unsolicited commercial electronic messages (also known as spam) and maintain a legal framework for the protection of personal data, including the cross-border transfer and processing of personal data. India's Telecommunications Act, 2023, adequately addresses the obligations associated with spam, while India's Digital Personal Data Protection Act (DPDA), 2023, meets the requirements data protection obligations with some exceptions. JSI also obligates members to address cybersecurity issues and put in place measures to address cybersecurity challenges in a manner that minimises trade barriers and adopts a risk-based approach. While India has adequate cybersecurity regulations in place, it does not apply a risk-based approach, as mentioned in the JSI text (see Table A2 in Appendix A).

The issues related to trust and electronic commerce are essential to a global digital economy, and the Indian AR is largely in sync with the broad principles covered in JSI text. However, there are some concerns with some of the specific requirements of these obligations (see note 7 with reference to Table A2 in Appendix A).

c. Openness and Electronic Commerce

The issues related to the moratorium on customs duties on electronic transmission have already been discussed in detail earlier. Another key issue under the broader category of Openness and Electronic Commerce is the concept of open government data. The JSI text involves a soft obligation to put government data in the public domain in a machine-readable and open format that can be searched, retrieved, used, reused and redistributed. India's AR is largely in sync with this obligation, and non-sensitive government data has been made available to registered citizens, but there are serious concerns around additional obligations related to the commercial use of such data, (as discussed in point 7 of note of Table A2 in Appendix A). There are currently no legal provisions associated with the obligations for net neutrality related to effective access and choice in the use of the internet for electronic commerce.

India has been a strong votary of open access to government data, and through its India Stack³² and Unified Logistics Interface Portal (ULIP),³³ it has demonstrated the utility of open but secure and managed access to government data in developing digital solutions and levelling the playing field for smaller start-ups to use such data to develop applications. Indian civil society has also been a strong supporter of net neutrality.³⁴

³² Source: https://indiastack.org (last accessed on August 3, 2024).

Source: https://pib.gov.in/PressReleasePage.aspx?PRID=1910298 (last accessed on August 3, 2024).

Source: https://internetfreedom.in/is-the-dot-doing-a-rethink-on-net-neutrality-we-press-fortransparency-and-enforcement-savetheinternet/ (last accessed on September 26, 2024).

d. Telecommunications

The obligations under the JSI text require JSI members to commit to the WTO Reference Paper on Regulatory Principles for Basic Telecommunications (called the Telecom Reference Paper). While in the Uruguay Round of the WTO negotiations, India made partial commitments to the Telecom Reference Paper, the country's AR is compliant with the Telecom Reference Paper. Further, in the recent India-Australia Economic Cooperation in Trade Agreement (ECTA), 2022, the chapter on telecommunication covers aspect not covered in the Telecom Reference Paper such as international mobile roaming and submarine cable systems, amongst others.

2.2.3. Cross-border Data Flow and Data Localisation

WTO member countries vary widely with respect to free flow of cross-border data and restrictions/conditions that can be imposed on such flows (Gao, 2020). Many WTO countries have imposed some form of data protection and are also concerned about cross-border sharing of sensitive data. The emergence of China as a global leader in ecommerce and recent geo-political tensions between China and JSI members like Australia, Japan, South Korea, etc., have generated increased debate and discussions on cross-border data flows (Zhang et al, 2024). While many countries are in favour of sharing data with trust, this can only mature as a concept when the legal institutional parameters of such 'trust' are defined. This includes the need for both an internationally agreed upon framework of principles that define how parties will be responsible for management of cross-border data in a manner where data is not compromised and assigning accountability.

In this regard, Japan tried to develop a consensus on this issue around the principle of Data Free Flows with Trust (DFFT) during its G20 Presidency in 2019.³⁷ DFFT supports a consensus-based approach among countries to develop common principles of governance and standards that would allow the free movement of data but would also ensure accountability and responsibility to prevent its misuse. It requires that countries evolve domestic laws establishing rules to handle and managing data and clearly define accountability and punitive measures for any breach of these laws.

The consensus arrived at by JSI members over the development of an international framework for cross-border flows has come under threat due to the USA raising concerns with it. In 2019, USA shared a communication with the JSI which supported cross border transfer of data and protection of source codes (WTO, 2019). However, in

Source: https://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm (last accessed on August 3, 2024).

For more details, visit https://www.dfat.gov.au/trade/agreements/in-force/australia-india-ecta (last accessed on October 21, 2024). Henceforth, the agreement is referred to as India-Australia ECTA (2022).

³⁷ Source: https://www.digital.go.jp/en/dfft-en (last accessed on August 2, 2024).

October 2023, it withdrew its support from these topics on concerns related to regulating large technology companies.³⁸

In India, data sharing is a sensitive issue. The country generates a huge amount of data with concerns that it may be used by big technology firms and other unethical players to further their own interests. There is also a resource and technology gap, i.e., some countries like the USA and China have developed technical know-how and a huge, welltrained human resource pool to process such large swathes of data, while countries like India, despite having a well-developed digital economy eco-system, are relatively resource constrained in this aspect. India's regulatory regime related to data protection is evolving, and the country has only recently implemented the Digital Personal Data Protection (DPDP) Act, 2023. Discussions are currently underway on non-personal data related regulations. While in some countries, non-personal data is under Intellectual Property Rights (IPR) regulation, India came up with a draft framework policy for the governance of non-personal data (National Data Governance Framework Policy, 2022³⁹). This draft framework policy aims to ensure that non-personal data and anonymised data from both government and private entities are safely accessible by the research and innovation eco-system and provide an institutional framework for data/datasets/metadata rules, standards, guidelines and protocols for sharing of nonpersonal data sets while ensuring privacy, security and trust. Further, India is also concerned about the USA trying to localise data as it is one of the largest processing hubs for USA-based companies and the USA accounted for around 55 per cent of its software exports in the year 2023 [Electronics and Computer Software Export Promotion Council (ESC), 2023].

India must prioritise developing robust domestic laws on the management and control of data, but it is also in its strategic interest to ensure relatively open regimes for cross-border data flows. This must be done with reasonable controls that prevent manipulation by unethical firms and state supported agencies that are inimical to India's national economic and strategic interests. This is especially important given that India is a large IT/ITeS exporter on the one hand, and on the other, it is one of the world's largest consumer markets with a large and growing middle-class that generates massive amounts of data. India also has an advantage of a large pool of technically skilled manpower and start-up/innovation ecosystem that can leverage this data successfully and mine the data generated in other countries, including sensitive data in the healthcare and financial sectors. Without a relatively open regime for cross-border data flows, India will stand to lose out on developing as a major service data mining and export hub.

At this stage, the best strategy for India would be to remain engaged in global negotiations and push for open cross-border data regimes with adequate restrictions to

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Source: https://www.reuters.com/world/us/us-drops-digital-trade-demands-wto-allow-room-stronger-tech-regulation-2023-10-25/ (last accessed on April 30, 2024).

The legal text is available at https://www.meity.gov.in/writereaddata/files/National%20Data%20Governance%20Framework%20Policy 26%20May%202022.pdf (last accessed on April 22, 2024).

attain legitimate public policy objectives. Excessive impediments to cross-border data flows will adversely impact the growth of data-led services where India can potentially emerge as the global leader [Consumer Unity & Trust Society (CUTS) International, 2020]. India should be a major proponent and driver of the architecture of the DFFT. Key stakeholders have suggested that India could even advocate for the creation of an international arbitration system focused on data localisation laws. This system would not only involve the development of common rules and penalties but also ensure their effective enforcement. It would serve as a legal framework to resolve disputes and ensure compliance with data localisation regulations across borders, positioning India as a key player in shaping global standards for data governance.

2.2.4. Transfer or Access to Source Code

Several WTO members, like Singapore, are of the view that countries should not impose mandatory requirements of transfer of or access to source codes owned by a company of another country as a precondition for imports, distribution, sale or use of such software, or of products containing such software. However, many others fear that accepting such a proposal would severely limit the sovereign ability of the government to demand source codes from foreign firms to ensure their effective compliance with taxation requirements or investigate anti-competitive and market distorting behaviour of dominant tech companies. Governments or other national agencies might need access to the source code for security reasons. While initially a believer in a more laissez-faire approach, USA has recently become a proponent of greater government oversight over source codes and in 2023, it withdrew its earlier proposals in JSI. US lawmakers have questioned the extraordinary secrecy rights that large technology companies enjoyed over their software's source code and algorithms, and how such a provision hurts the government's right to regulate companies and AI, (the latter can hurt social and civil liberties). Due to such concerns, source code is no longer covered in the JSI text.

From a business perspective, security issues, threat of IPR violations and anticompetitive practices are some of the serious concerns associated with the sharing of source codes. Imposition of universal disclosure requirements without adequate checks and balances may have some adverse effects.

a. It may discourage foreign companies from investing in the country in question, adversely impacting foreign direct investment (FDI) inflows. This is because, from the perspective of the business, firms make huge investments in research and development to develop different software and applications. Parting with their source code carries the risk of other parties stealing their innovations. Therefore, it is important for firms to have some discretion over responding to requests for source code transfer. Having no adequate checks and balances on the right of states to demand source codes may be against the principles of fair trade.

Source: https://www.japantimes.co.jp/commentary/2024/03/25/world/us-open-internet-wto/ (last accessed on April 30,2024).

b. From an Indian perspective, given that Indian companies are major exporters of IT/ITeS and Indian start-ups are scaling up and exploring foreign markets, they may also be adversely impacted by the absolute rights of the importing country to demand source codes without checks and balances.

This necessitates the need for India to look at the implications of disclosure requirements of source codes both as an exporter and importer. There is also a need for multistakeholder consultations in India regarding source code transfer, as the issue is not only being raised in the JSI discussions but also under trade agreements that India is negotiating. India has not covered this issue in its recent agreement with the UAE, but it will have to discuss this with the EU, the UK and other trading partners in the bilateral negotiations.

2.2.5. Digitalisation of Contracting and Trade Documents for E-Commerce

While digitalisation of trade and contract-related documentation has been progressing rapidly, not all countries are moving at the same pace, especially developing countries. There are also issues related to SMEs trading through e-commerce adjusting to such requirements. India is a major proponent of linking SMEs to global value chains (GVCs) through e-commerce platforms, and this was one of the key agenda items for India in the Sherpa track during its G20 Presidency. However, there are concerns in developing countries like India that such requirements may put undue burden on small firms, given that these SMEs are low on financial resources, face skill shortages and are generally less equipped than large firms of the developed countries in the use of technology.

It is also important to look at the benefits that these digital changes may bring for SMEs, like lowering the cost of transactions. Recognising these, the G20 New Delhi Leaders Declaration 2023 endorsed the Regulatory Toolkit for Enhanced Digital Financial Inclusion of MSMEs. It also endorsed the voluntary and non-binding G20 Policy Recommendations for Advancing Financial Inclusion and Productivity Gains through Digital Public Infrastructure (DPI). India has largely been supportive of the facilitation and regulatory coherence aspects of digitalisation of trade procedures, documents and transactional processes in its FTA with the UAE.

With respect to the issue of developing countries and LDCs lacking the resources to keep up with digital changes, there can be the option of applying special and differential treatment, providing them more time to adapt to these changes. This is line with the JSI text as it recognises that developing countries and LDCs may require additional time to comply with the provisions of the text and provides them with an additional period of five years (can be extended to seven years) to comply under Article 20 (for more, see WTO, 2024c).

⁴² Source: https://www.mea.gov.in/Images/CPV/G20-New-Delhi-Leaders-Declaration.pdf (last accessed on April 12, 2024).

Source: https://pib.gov.in/PressReleasePage.aspx?PRID=1951606 (last accessed on September 26, 2024).

Being a leader among developing countries in electronic contracting, signature use and trade facilitation, India could consider participating in the global debate on e-signatures, contracts, invoices, authentication, etc., and bring forward its experience of rapid adoption of digitalisation in governance in a developing country context.

3. Bilateral/Regional Trade Agreements: Digital Trade and E-commerce

Recently, there has been a trend amongst countries to have a separate digital agreement with regulatory commitments on e-commerce, and this trend has been led by APAC countries such as Singapore, which had signed five Digital Economy Agreements (DEAs)/Digital Economy Partnership Agreements (DEPAs), as of July, 2024. All India is strategically selecting its trading partners for recent trade negotiations, which includes some key export destinations like the EU, the UK and Australia, and these economies have a comprehensive digital trade chapter in their trade agreements. Given this increasing inclusion of disciplines on digital trade and e-commerce in FTAs, the broad architecture of global governance for digital trade is emerging through the adoption of principles in such agreements. In section 3.1, we present different types of bilateral/regional agreements covering e-commerce and digital trade. Section 3.2 focuses on the scope, coverage and depth of commitment, and Section 3.3 presents the key takeaways.

3.1. Different Types of Bilateral/Regional Trade Agreements on E- commerce and Digital Trade

Bilateral/regional co-operation on e-commerce can be in the form of a standalone agreement focusing on digital trade and e-commerce, or the topic can be a separate chapter in a comprehensive trade agreement covering all aspects of trade from goods to services to investment and trade facilitation and sustainable businesses. Out of the 513 trade agreements signed till November 2024, 244 contain provisions related to e-commerce and digital trade and over 100 have dedicated e-commerce or digital trade chapters. In Asia Pacific region alone, there were 81 signed and in force PTAs featuring e-commerce chapters or provisions as of 2022.

Some countries like Singapore, the USA and Japan have discussed digital economy partnership agreements with like-minded trading partners. Examples are the DEPA between Singapore, Chile, and New Zealand (signed on June 12, 2020, and entered into force for Singapore and New Zealand on January 7, 2021),⁴⁶ the DEA between Australia

Source: https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/singapore/eu-singapore-agreements en (last accessed on July 26, 2024).

Data collated from https://legal.tina.trade/app/search (last accessed on December 13, 2024).

Source: https://www.unescap.org/kp/2022/trade-agreements-asia-and-pacific-bigger-deeper-digital-and-more- (last accessed on April 21, 2024).

For more details refer https://www.mfat.govt.nz/en/trade/free-trade-agreements/free-trade-agreements/free-trade-agreements/free-trade-agreements-in-force/digital-economy-partnership-agreement-depa/overview/ (last accessed June 05, 2023).

and Singapore (entered into force on December 08, 2020)⁴⁷ and the Japan-US Digital Trade Agreement (signed on October 7, 2019, and entered into force on January 1, 2020).⁴⁸ Through DEAs, countries aim to develop international frameworks to foster interoperability of standards and systems, and to support businesses, especially SMEs, to engage in digital trade and electronic commerce.

The DEPA between Chile, New Zealand and Singapore covers a wide range of areas including business and trade facilitation (for example, paperless trading), treatment of digital products (including customs duties on electronic transmissions and nondiscriminatory treatment of digital products), data sharing issues, trust issues like cybersecurity and online safety, emerging technologies, digital identities, digital inclusions, SME partnerships, transparency and a mechanism to settle disputes. The Australia-Singapore DEA upgraded the digital trade arrangements between Australia and Singapore under the Comprehensive and Progressive Agreement on the Trans-Pacific Partnership (CPTPP) (signed on March 8, 2018, and effective from December 30, 2018)⁴⁹ and the Singapore-Australia FTA (effective from July 28, 2003, with subsequent amendments entering into force on 24 February 2006, 13 February 2007, 11 October 2007, 2 September 2011, 1 December 2017, and 8 December 2020). 50 Compared to these, the Australia- Singapore DEA has more robust provisions to ensure that businesses, including those in the financial sector, can (a) transfer data across borders (b) avoid being required to establish or use local data storage centres in either jurisdiction and (c) benefit from enhanced protection for source codes. This agreement also established new commitments on compatible e-invoicing and e-payment frameworks; and created benchmarks to improve safety and consumer experiences online.

At a regional level, the Association of Southeast Asian Nations (ASEAN) announced the ASEAN Digital Economy Framework Agreement (DEFA) in September 2023, making it the world's first regional digital economy pact. It is expected to unlock the value of ASEAN's digital economy, which is projected to triple through the adoption of digital technologies from approximately US\$300 billion to almost US\$2 trillion by 2030.⁵¹ The DEFA seeks to offer a comprehensive roadmap to empower businesses and stakeholders across ASEAN. To support this, ASEAN has also come up with a Digital

⁴⁷ The DEA amends the Singapore-Australia Free Trade Agreement (signed on June 29, 2015) to replace the existing Electronic Commerce chapter with a new Digital Economy chapter. For more details refer to https://www.dfat.gov.au/trade/services-and-digital-trade/australia-and-singapore-digital-economy-agreement (last accessed June 05, 2023).

For more details refer to https://www.mofa.go.jp/na/na2/page24e_000261.html (last accessed June 05, 2023).

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) is a free trade agreement (FTA) between Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, Peru, New Zealand, Singapore and Vietnam. For more details, visit https://www.dfat.gov.au/trade/agreements/in-force/cptpp/comprehensive-and-progressive-agreement-for-trans-pacific-partnership (last accessed on October 3, 2024). Henceforth, the agreement will be referred to as CPTPP (2018)

For more details, visit https://www.dfat.gov.au/trade/agreements/in-force/safta/singapore-australia-fta (last accessed on October 3, 2024). Henceforth, the agreement will be referred to as Singapore-Australia FTA (2020)

Source: https://seads.adb.org/solutions/why-aseans-digital-economy-framework-agreement-could-make-region-new-digital-powerhouse (last accessed on April 12, 2024).

Economy Agreement Leadership (DEAL) project which aims to provide balanced resources to parties interested in DEAs in general and the ASEAN DEFA in particular. Regarding cross-border data flows, the ASEAN framework on digital data governance states: "Data flows should be accompanied by assurances that safeguards are in place to protect and secure the information regardless where the data goes. These safeguards should be harmonised to prevent the development of fragmented regulatory regimes, which may negatively impact data flows and increase business compliance costs." 53

Digital trade and e-commerce have for long been part of bilateral and regional trade agreements, but more recent agreements have broadened the scope and coverage. For example, India's earlier trade agreements, like the ones with Japan (India-Japan CEPA, 2011)⁵⁴ and the Republic of Korea (India-Korea CEPA, 2009),⁵⁵ mentioned co-operation in e-commerce, but there has been no development in this area after the trade agreement was signed. However, for the first time, a detailed chapter on e-commerce has been negotiated in the India-UAE CEPA that was signed on February 18, 2018, and entered into force on May 1, 2022.⁵⁶ India is also discussing an e-commerce/digital trade chapter in trade negotiations with the EU, Australia, Canada and the UK, although the scope and coverage may vary across these different trade agreements.

3.2. Scope, Coverage and Depth of Commitments in Digital Trade under Different Comprehensive Agreements

To understand the scope and coverage of digital trade under different agreements, we examine 12 trade agreements that have a chapter on e-commerce or digital trade or are DEAs/DEPAs. We selected 16 key provisions related to e-commerce or digital trade to gauge the strength of commitments⁵⁷ by the countries. These are presented in Table 3.1.

The following are three key observations:

a. Varying levels of hard and soft obligations/commitments across agreements: Different trade agreements exhibit varying levels of commitments, which has been classified as soft obligation and hard obligations in Table 3.1. For instance, while agreements such as the Canada-Korea FTA (2015) and the EU-

From 2023 to 2026, the Centre for Regions, Trade and Geopolitics of the World Economic Forum, with support from the ASEAN Korea Co-operation Fund and in collaboration with the ASEAN Secretariat and ASEAN Member States, will facilitate ASEAN's transformation into an inclusive and sustainable digital economy. For more, visit https://www.asean-deal.org/home (last accessed on September 3, 2024).

Source: https://asean.org/wp-content/uploads/2012/05/6B-ASEAN-Framework-on-Digital-Data-Governance-Endorsedv1.pdf (last accessed on September 9, 2024).

For more details, https://www.commerce.gov.in/international-trade/trade-agreements/india-japan-cepa/ (last accessed on October 20, 2024).

For more details, visit https://commerce.gov.in/wp-content/uploads/2023/05/INDIA-KOREA-CEPA-2009.pdf (last accessed on October 20, 2024).

For more details, visit https://commerce.gov.in/wp-content/uploads/2022/03/Chapter-9.pdf (last accessed on October 18, 2024). Henceforth, the agreement will be referred to as India-UAE CEPA (2022)

The strength of commitment is divided under two heads, namely, "hard obligation/mandatory requirement", i.e., 'shall' based obligation or commitments to undertake, and "soft obligation" (endeavour-based obligation/agreement to co-operate/engage in dialogue).

Canada CETA (2017) have soft obligations on provisions like paperless trading and e-invoicing, other agreements like the Australia-Singapore DEA (2020) and the Australia-UK FTA (2021) include hard obligations on these provisions as well as on cross-border information flows and domestic electronic transactions frameworks. The CPTPP (2018) sets high standards for e-commerce, which have influenced subsequent agreements like the United States-Mexico-Canada Agreement (USMCA) (signed on November 30, 2018, revised on December 10, 2019, and effective from July 1, 2022)⁵⁸ and the US-Japan Digital Trade Agreement (DTA) (signed on October 9, 2019, and effective from January 1, 2020).⁵⁹ The push for hard obligations/commitments in certain areas in the JSI has largely been driven by the CPTPP countries.

- b. Consistency in specific provisions: Certain provisions tend to be consistent across the different agreements. For example, hard obligations/strong commitments are generally observed regarding issues like dealing with spam, online consumer protection, e-authentication and electronic signatures. However, provisions related to open access to internet services, addressing cybersecurity threats and Al-related issues still primarily rely on dialogue-based approaches having soft obligations.
- c. India-UAE has soft obligations: All the agreements analysed, except for the India-UAE digital trade chapter, commit to the permanent moratorium on customs duties on electronic transmissions or digital products. In contrast, the India-UAE digital trade chapter ties this provision to ongoing discussions and outcomes in the WTO WPEC. Obviously, several FTA partners of India support a permanent moratorium on customs duty. However, most provisions in India's trade agreements have soft obligation/best endeavour, reflecting the fact that even if the domestic regime is consistent with the provision, India prefers to take soft obligations to retain policy space.

Table 3.1 highlights the growing importance of digital trade provisions in FTAs and the varying levels of commitment among different countries. It underscores the need for continuous dialogue and updates to these agreements to keep pace with technological advancements and emerging challenges in digital trade.

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For more details, visit https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement (last accessed on October 3, 2024).

For more details,
https://ustr.gov/sites/default/files/files/agreements/japan/Agreement_between_the_United_States_a_nd_Japan_concerning_Digital_Trade.pdf (last accessed on October 3, 2024).

Table 3.1: Comparison of select trade agreements with a digital trade or e-commerce chapter and DEAs/DEPAs

Selected FTAs (year of entry into force) Key Provisions	Canada - Korea FTA (2015)	EU- Canada CETA (2017)	CPTPP (2018)	EU - Japan FTA (2019)	US- Japan DTA (2019)	AUS- Hong Kong FTA (2020)	US MCA (2020)	AUS- Singapore DEA (2020)	AUS- UK FTA (2021)	EU-UK TCA (2021)	UK- Singapore DEA (2021)	India - UAE CEPA (2022)
Non-imposition of customs duties on electronic transmission/digital products	х	х	х	х	х	х	х	х	х	х	x	o
Non-discriminatory treatment of digital products	Х	Х	х								Х	
Protection of personal information	Х	Х	х	х	х	Х	Х	Х	х	х	Х	0
Location of computing facilities as a condition for conducting business			х		х		Х	Х				
Cross-border information flow	Х	0	х		х	Х	Х	Х	х	х	Х	0
Prohibition on mandatory disclosure of source code			х		х	Х	Х	Х	х		Х	
Domestic electronic transactions framework	0		х	0	х	Х	Х	Х	х	х	Х	0
Unsolicited commercial messages or spam			х	0	х	Х	Х	Х	х	х	Х	
Online consumer protection	0		х	0	х	Х	Х	Х	х		Х	0
E-authentication and electronic signature certificates		0	х	х	х	Х	Х	Х	х	х	Х	0
E-invoicing	0	0	х	0	х	Х	Х	Х	х	х	Х	0
Paperless trading	0	0	х	х	х	Х	Х	Х	х	х	Х	0
Open access to internet services								х	0		0	0
Prohibition on imposing barriers on information communication technology goods which use cryptography	0		0			0	0	х	0		x	0
Addressing cybersecurity threats			0				0	0	0	Х	0	0
Open government data					Х			х	Х		Х	

Source: Collated by authors from texts of select agreements.

Note: The columns show different FTAs by select jurisdictions and the rows show the key provisions in the e-commerce/digital trade chapter. The symbol X stands for "hard obligation/mandatory requirement", i.e., 'shall' based obligation or commitments to undertake, and O stands for "Soft obligation" (endeavourbased obligation/agreement to co-operate/engage in dialogue). A blank shows that the provision has not been covered in the agreement.

To explore the differences and similarities, we examine three trade agreements, namely, Australia-UK Free FTA (signed on December 17, 2021 and entered into force on May 31, 2023), 60 the EU-New Zealand FTA (signed on July 9, 2023 and entered into force on May 1, 2024), 61 and the CPTPP (2018) and compare these agreements with the India-UAE CEPA, 2022. As India has included a chapter on digital trade in its trade agreement with the UAE and is negotiating trade agreements with the EU, the UK, and Australia, it is important to understand the expectations of India's trading partners with respect to e-commerce/digital trade.

Most recent agreements focus on several issues also being taken up in the JSI. For example, the six areas under which a JSI member's submissions are discussed (like enabling electronic commerce, openness and electronic commerce, trust and digital trade, cross-cutting issues, telecommunications, and market access) are covered in the trade agreements that India is discussing bilaterally, although the scope and coverage vary. Overall, all of India's trading partners with whom bilateral negotiations in digital trade is gaining momentum are members of JSI and current and future bilateral agreements will possibly reflect the debates in the JSI. In the JSI too, members have different positions with respect to the scope and coverage of ecommerce, the kind of restrictions there should be on free flow of data, the list of exclusions (sectors kept out of the agreement), etc. This is also reflected in their trade agreements as has been discussed with some examples below.

3.2.1. Definition, Scope, Coverage and Exceptions

All bilateral agreements try to define and bring clarity to important terms related to e-commerce/digital trade. However, there are certain differences in the definition, scope, coverage and exceptions mentioned in these agreements. For example, the Australia-UK FTA (2023) and the EU-New Zealand FTA (2024), in their definition of electronic authentication, mention the "origin" of data while the India-UAE CEPA (2022) and CPTPP (2018) do not cover the "origin" of data.

The interest of the country negotiating the agreement determines the scope and coverage of the sector, and it varies widely across agreements. For example, with the UK's strong interest in cryptocurrency, the Australia-UK FTA covers cryptography, which is not in other agreements like the India-UAE CEPA (2022) or EU-New Zealand FTA (2024). Audio-visual services are not covered in the digital trade chapter of the EU agreements like the EU-New Zealand FTA (2024), reflecting the EU sensitivities

For more details, visit https://www.austrade.gov.au/en/how-we-can-help-you/australian-exporters/free-trade-agreements/united-kingdom#:~:text=The%20Australia%2DUK%20Free%20Trade,force%20on%2031%20May%202023. (last accessed on October 21, 2024). Henceforth, the agreement is referred to as Australia-UK FTA (2023)

For more details, visit https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-regions/new-zealand/eu-new-zealand-agreement_en (last accessed on October 21, 2024). Henceforth, the agreement is referred to as EU-New Zealand FTA (2024)

in negotiating audio-visual services. The EU generally takes an exclusion or carve out for audio-visual services in its trade agreements, and this has an implication for India as the country negotiates its trade agreement with the EU. India is among the largest producers and exporters of audio-visual services and many of them are now delivered online. The country has one of the largest and most successful film, music and television content development industries in the world, and its online audio-visual exports are rising. At the same time, India is concerned about discussing issues like cryptocurrency under trade agreements. An issue that all countries agree should not be covered in the digital trade chapter of bilateral or regional agreements is government procurement, and there is an exclusion/carve out for the same. The carveouts and exception clauses in trade agreements are carefully drafted to preserve policy space for participating countries; these also differ with respect to agreements. For example, experts have pointed out that CPTPP (2018) provides more comprehensive provisions for exceptions for developing countries than JSI on digital trade. Therefore, it may be interesting for India to look at the CPTPP (2018) as the country prepares itself to negotiate digital trade chapters.

3.2.2. Commitment vs. Co-operation

Most of the digital/e-commerce trade chapters in bilateral agreements cover the core issues discussed under the JSI, but they differ on soft versus hard obligations, i.e., best endeavour, co-operation or commitments. For example, while the India-UAE CEPA (2022), as mentioned above, mainly covers 'best endeavour' or 'try to' rather than regulatory commitment, in other trade agreements such as the CPTPP (2018), the Australia-UK FTA (2023) and the EU-New Zealand FTA (2024), there are certain regulatory commitments (see Table 3.1). Bilateral agreements are also used to harmonise standards, based on international best practices. For example, the obligations for domestic electronic transactions framework are consistent with the principles of the UNCITRAL Model Law on Electronic Commerce 1996 or the United Nations Convention on the Use of Electronic Communications in International Contract, where all three agreements seek hard obligations. In contrast the India-UAE CEPA (2022) has only soft commitments.

In all four agreements, the FTA partners have soft obligations for paperless trading and have agreed that they shall endeavour to make the trade administration documents available to the public in electronic form and accept a trade administration document submitted electronically as the legal equivalent of the paper version of those documents. This is aligned with ESCAP CPTA, which also seeks soft obligations from parties to mutually recognise trade related data and documents in electronic form (UN, 2016).

With respect to cross-border transfer of information, agreements such as CPTPP (2018) have strong commitments on cross-border data flow by electronic means. The CPTPP (2018) recognises that countries may have their own regulatory requirement to achieve a legitimate public policy objective. However, this should not discriminate

or impose disguised restrictions on trade. The India-UAE CEPA (2022) also recognises the importance of information flows in facilitating trade and acknowledges the importance of protecting personal data. However, India has so far been unwilling to make any commitments in this area.

Regarding source code, the CPTPP (2018), Australia-UK FTA (2023) and the EU-New Zealand FTA (2024) state: "neither party shall require the transfer of, or access to, source code of software owned by a person or other party, as a condition for the import, distribution, sale, or use of that software, or of a product containing that software, in its territory". This counters the obligation on source code in India's draft National E- commerce Policy of February 2019, issued by the Department for Promotion of Industry and Internal Trade (DPIIT) (DPIIT, 2019). Since public procurement is not covered in digital trade chapters, a company may be required to transfer the source code if it works on a government project. The provisions of the digital trade chapter are only applicable under most trade agreements on business-to-business transactions.

Most trade agreements have a provision for co-operation in e-commerce, with recent ones clearly listing the areas of co-operation. The areas of co-operation vary across agreements. For example, the Australia-UK FTA (2023), CPTPP (2018) and India-UAE CEPA (2022) have similar areas for co-operation, covering exchanging information, experiences and best practices on laws and regulations related to digital trade. However, in the case of cybersecurity, while agreements such as the Australia-UK FTA (2023), CPTPP (2018) and the EU-New Zealand FTA (2024) recognise the importance of co-operating on cybersecurity matters, the India-UAE CEPA (2022) does not. Trade agreements also provide scope for co-operation in areas like challenges faced by SMEs in cross-border trade through e-commerce platforms/express delivery to ensure that countries collaborate to reduce regulatory barriers to cross-border trade.

3.3. Key Takeaways from Bilateral Agreements

There are two key takeaways from the discussions of bilateral agreements. First, while they broadly reflect the provisions in the JSI text, many go beyond them and ensure hard obligations/commitments by the parties. For example, the New Zealand-Chile-Singapore DEA⁶² puts in hard obligations/commitments for the parties to provide a *de minimus* shipment value and allow cross-border transfer of information by electronic means, including personal information. Second, India's focus in FTAs has been on regulatory co-operation rather than taking on regulatory commitments. Discussions with stakeholders show that Indian companies are (a) keen to ensure that their source code for business-to-business transactions are protected (b) they benefit from the

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Source: The text of the Agreement can be found at https://www.mti.gov.sg/Trade/Digital-Economy-Partnership-Agreement#:~:text=The%20DEPA%20is%20a%20first,issues%20brought%20about%20by%20di gitalisation (last accessed on August 8, 2024).

moratorium on customs duty (c) there is no excessive regulatory burden and (d) the country adheres to international best practices. As Indian firms go global, our consultations found that these criteria will be important in deciding their investment locations.

4. Conclusion and the Way Forward

As the discussions in the previous sections underline, cross-border e-commerce is expanding rapidly and will play a crucial role in future trade agreements. The issues on trade rules related to cross-border e-commerce being debated in the JSI are vital for the global economy, especially for major exporters of digitally delivered goods and services like India. It also needs to be noted that India's AR is largely aligned with the obligations of the JSI stabilised text, with a few important reservations (see Table A2 in Appendix A). Thus, India's opposition to the JSI text is not primarily due to its content, but the institutional framework of JSI as an approach to negotiating trade rules by undermining the existing multilateral mandate of the WPEC. This paper has discussed the fundamental elements of India's opposition to a plurilateral JSI-led framework.

Given this scenario, Section 4.1 provides a brief overview of issues and topics that need further discussion internationally followed by Section 4.2 which underlines what could be India's position on e-commerce and digital trade, with a focus on trade negotiations and domestic reforms. It also explains why India should play an important role in shaping the future global architecture of digital trade, given the importance of DDS in India's own exports and India's increasingly prominent role in the global digital economy.

4.1. Future discussion on e-commerce at the global level

There is need for greater discussion on e-commerce regulations globally, with focus on the concerns of the LDCs and developing nations like India. Specifically, there are five areas that need discussions and collaboration; these are listed below.

4.1.1. Clarifying the scope and definition of electronic transfers and e-commerce

There are three aspects a universal definition of e-commerce sector should consider. First, there has to be clarity on whether e-commerce includes only DDS (part of Mode 1 services) or digitally delivered goods also. This is because, in the coming future, Mode 1 services will include in its ambit many service specialisations that combine traditional occupations with digital technologies – for example, security services, medical and health services, manufacturing services, and a host of professional and technical services. These new services and business models are likely to emerge as drivers of India's export growth in the near future and there is need to ensure that there is general agreement on their classification and regulatory treatment by different countries, and, therefore, on the principles governing market access and national treatment.

Second, there is a need to categorise 3D printing – whether it should be categorised as a digitally delivered good or a technical professional service. A related issue with

3D technology is with respect to the use of machine-to-machine (M2M) technology.⁶³ When M2M is combined with 3D printing, it complicates the determination of a product's origin, as the production process can involve multiple locations and devices, challenging traditional rules of origin provision in trade agreements

The third area where greater clarity is needed is the dutiable aspect of a cross-border transaction, i.e., whether both carrier and content are liable for duties.⁶⁴ Most countries, and indeed, the WCO do not have an established standard for the classification of such digital goods, underlining the definitional challenge that exists.

As technology evolves rapidly and business models follow, not having a consensual understanding with respect to the scope, coverage and definition of the e-commerce sector will lead to a proliferation of approaches detrimental to the development of an integrated global digital market. For example, while this paper has clearly shown that the current application of the customs moratorium has a limited impact on revenues, the future trajectory of taxation of the digital economy, both at and behind the border, needs to be much better understood to arrive at common principles.⁶⁵

4.1.2. Building trust in cross-border transfer of data

Consumers and businesses have data sensitivities, and cross-border data transfer or the possibility of foreign entities accessing data outside their jurisdiction can only happen when there is trust. The fundamentals of a system defined by DFFT are such that a top-down approach will not be fruitful as countries have varied political systems of domestic regulatory architecture. Therefore, a bilateral/regional approach with scope for multi-stakeholder discussions and consultations in multiple global platforms across institutionally, geopolitically and geographically aligned countries may help to address concerns. The ASEAN in APAC has already started working on this and may be able to provide a framework for regional co-operation.

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M2M (Machine-to-Machine) technology refers to the communication between devices or machines without human intervention. It involves the exchange of data between devices, often over a network, enabling automation and real-time monitoring in various industries. For more, visit https://www.techtarget.com/iotagenda/definition/machine-to-machine-M2M (last accessed on September 3, 2024).

Taxes can be applied on only the content, i.e., the value of the movie, music, software or the remotely managed real-time surveillance done using a drone, or the carrier, i.e., electronic bits or the digital application through which this content is delivered, or both. Some would argue for both seeking a parallel with merchandise trade where customs duties and equalisation levies (i.e. domestic indirect taxes) are applied on a cost, insurance and freight (CIF) basis, thus including both content and carrier. Others would argue otherwise.

The current diversity of approaches can be summarised from Taxation of the Digitalized Economy: Developments Summary, KPMG Report, June 2024, available at https://kpmg.com/kpmg-us/content/dam/kpmg/pdf/2023/digitalized-economy-taxation-developments-summary.pdf (last accessed on January 16, 2025)

4.1.3. Developing domestic institutional frameworks and regulations

Negotiated outcomes on trade can only succeed when at least the major players have figured out the domestic institutional frameworks and regulations for that sector. As the implications of digital economy play out, i.e., as more and more sectors and activities get digitalised and start falling under the broad ambit of either digitalised goods or services, more and more countries/regional groups, including the ones that account for the bulk of economic activity such as the USA, EU, India, Japan and Korea to name a few, would need more policy space for both regulatory and taxation purposes. Another major player, China, has a state-led system that is a cause for concern for many countries, both within and outside APAC, due its lack of transparency.

4.1.4. Ensuring Consumer Protection through regulatory cooperation

The UNCTAD Global Cyberlaw Tracker⁶⁶ reports that amongst 142 countries for which data was available, only 59 per cent have consumer protection laws, although 81 per cent of countries have e-transaction laws, around 80 per cent have cyber-crime laws and 71 per cent have privacy laws. This indicates that, despite the critical role of consumer confidence in business-to-consumer (B2C) e-commerce, many developing and transition economies, especially in Africa and Asia, still lack adequate legal frameworks to protect online consumers (WTO, 2022). Therefore, to boost ecommerce trade and ensure consumer protection, regulatory co-operation amongst WTO member nations is required. In this context, India issued a communication to the WTO on "Consumer Protection in E-commerce" dated December 8, 2023. The communication emphasised the need for regulatory co-operation in consumer protection in the case of e-commerce and invited members to a) share their experiences in consumer protection within e-commerce b) discuss ways to enhance co-operation between enforcement agencies on this issue and c) explore the WTO's potential role in strengthening consumer protection in e-commerce. This is a good step, and India can take similar proactive positions on other regulatory aspects related to e-commerce to drive global discussions forward.

4.1.5. Reforming the JSI on e-commerce to making it more consensus-based

Elms (2024) pointed out that unless the JSI text is integrated into the WTO framework and the new rules are universally applied, the agreement will offer limited guidance for future alignment of digital policies. WTO members need to define a roadmap that would make the JSI a legitimate exercise that is respectful of the multilateral consensus-based system of the WTO and which takes into account the serious

The UNCTAD Global Cyberlaw Tracker is the first ever global mapping of cyber laws. It tracks the state of e-commerce legislation in the field of e-transactions, consumer protection, data protection/privacy and cybercrime adoption in the 194 UNCTAD member states. For more, visit <a href="https://unctad.org/topic/e-commerce-and-digital-economy/e-commerce-law-reform/summary-adoption-e-commerce-legislation-worldwide#:~:text=The%20UNCTAD%20Global%20Cyberlaw%20Tracker,the%20194%20UNCTAD%20member%20states (last accessed on October 18, 2024).

concerns outlined earlier in Section 2. During the consultations, stakeholders argued that the fundamental elements of that roadmap could include the JSI fulfilling the following conditions:

- a. Securing a multilateral mandate for negotiations, possibly as an Annex 4 Agreement, 67 which is crucially dependent on achieving consensus amongst WTO members
- b. Aligning the JSI with consensus-backed definitions, scope and coverage of e-commerce that would emerge from WPEC
- c. Deferring any permanent moratorium on duties and taxes until these definitions are established.

4.1.6. Creating policy space for regulation of digital giants

Consumers and businesses worldwide have serious concerns about an excessively 'light touch' regulatory approach around the digital economy and its political and social impact, given that there are some large global digital giants. Many countries would like to retain policy space for regulating the digital economy, which could include policy instruments related to the use of discriminatory taxes, specific licensing requirements and differential fees, and oversight on anti-competitive and trade distorting practices requiring conditional access to algorithms and source-codes. However, such regulations should not be a barrier to trade and should not be used for trade protectionism.

4.2. India's stand on JSI, the moratorium and domestic reforms

While India is not a part of the JSI, many important discussions regarding developing trade rules on e-commerce are being held in the JSI and these are then taken up by countries in their trade agreements. This contrasts with the slow progress in the WPEC. Thus, it is important for India to understand the developments and discussions in the JSI as (a) the JSI members are covering the same issues in their trade agreements and (b) India might become a recipient rather than a rule maker in this sector if it not a part of the JSI. India's concerns and its objections to JSI under its current format is legitimate, but it is equally important for India to play an important role in shaping the future global architecture of digital trade, given the importance of DDS in India's own exports and India's increasingly prominent role in the global digital economy.

Annex 4 of the Marrakesh Agreement consists of plurilateral agreements, such as the Agreement on Trade in Civil Aircraft and the Agreement on Government Procurement. Unlike the agreements in the first three annexes, which are binding all WTO member states, the plurilateral are binding only on those WTO member states that have accepted them. For more, visit https://www.wto.org/english/docs e/legal e/04-wto e.htm (last accessed on August 12, 2024).

Many policy makers have argued that joining the JSI can help India express its concerns and play an active role in driving global regulation on e-commerce and digital trade. It also needs to be pointed out that the argument that India has never joined or benefitted from plurilateral arrangements is technically incorrect. India partly adopted the WTO Reference Paper on Telecommunication Services in 1996 in its domestic regulations, which contributed to the telecommunications boom in the country. Although India's telecommunication sector was still developing when it made this commitment during the Uruguay Round, the adoption of the reference paper helped spur its growth. This, in turn, enabled India to become one of the largest knowledgebased digital economies in the world. Further, in recent trade agreements such as the India-Australia ECTA (2022), the provisions are clearly WTO Telecommunications Reference Paper plus, i.e. they cover broader issues and entail higher commitments on telecommunications related aspects. Thus, India has not only agreed to be part of the plurilateral regulatory agreements within the WTO but is willing to commit to even deeper obligations through bilateral agreements than those established in these plurilateral agreements.

There is a need to review some of the issue-specific substantive positions taken by India – for example its position on the moratorium on customs duties on electronic transmissions. Indian technology associations such as NASSCOM have supported the moratorium; its members are key exporters and may face import duties if the moratorium is removed. It is of the opinion that unless there is clarity on the scope and coverage of e-commerce trade, and until such time as data related to its impact on major IT/ITeS exporting countries like India is available, it is better to continue with the moratorium and explore the option of a digital tax.⁶⁸ In other words, as a key exporter of DDS, it is in India's interest to have status-quo on the moratorium until the scope and definition of the sector is finalised. This is because the lapse of the moratorium without a clearly defined scope and definition could potentially lead to countries seeking to impose taxes and duties in a manner that is injurious to India's DDS exports.

India also needs to seriously address the gaps in domestic policies for the digital sector because, irrespective of its participation in the JSI, the formulation of adequate national regulatory frameworks to build digital capabilities is an essential component of the broader national development agenda (UNCTAD, 2021). Some of the key issues that need to be considered under this are discussed below.

4.2.1. Developing National Classification and Definition

To drive global discussions on scope and definition, India needs to first develop its own understanding of this matter. To that extent, it needs to classify digitally delivered goods as well as services. Some other countries have started or are doing it, and India may look at them (for example, Indonesia's addition of a new chapter (Chapter 99) to

Source: https://community.nasscom.in/sites/default/files/report/20521-20200124-nasscom-consultationpaper-ecommercemoratorium.pdf (last accessed on April 12, 2024).

its tariff system, which covers intangible goods (i.e., software and other digital products) that previously were not covered under the Indonesian tariff system) while designing the classification. Such an addition can help account for digital trade going forward with its dedicated HS codes.⁶⁹

4.2.2. Planning for major disruptions like 3D printing

India should set up a task force that includes all relevant government and private sector stakeholders to study the implications of 3D printing on the Indian economy and arrive at a 3D printing regulatory roadmap. It should also focus on taking the lead in developing common customs and taxation principles that would be appropriate for the treatment of 3D printing in forums such as the World Customs Organization (WCO).

4.2.3. Developing national positions and policies on critical issues for the digital economy

The whole suite of regulatory reforms associated with the digital economy should be completed expeditiously. These include but are not limited to the following.

- a. Cross-border flow and access to data: The Indian government needs to ensure a balance between the needs of the ITeS and DDS exports, which require cross-border data for their businesses, and the interests of India's citizens and national security.
- b. *Pro-competitive policies*: It needs to develop a comprehensive regulatory architecture that addresses issues related to market distortions and anti-competitive policies by dominant players in the digital economy. This includes the conditions under which agencies can demand access to the source codes and algorithms of such firms.
- c. Other elements of digital regulation: These include addressing some of the missing elements in regulations such as promoting interoperability of e-authentication and mutual recognition of e-signatures, adopting a risk-based approach to cybersecurity threats, etc. (for details, see point 2 of note under Table A2 in Appendix A).
- d. The scope, coverage and exception clauses in trade agreements: It is important to have multi-stakeholder consultations on what the scope, coverage and exception clauses of digital trade/e-commerce should be under a trade agreement. The exception clauses may be carefully drafted to give enough policy space.

4.2.4. Digital Industrialisation Action Plan

There is also a need for a comprehensive digital industrialisation action plan. The government has already initiated several schemes such as Start-up India, Digital India, etc., and created many national public digital platforms like India Stack Global, API

⁶⁹ Source:

 $[\]frac{https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/TFAQ/IDN2.pdf&Open=True}{(last accessed on April 12, 2024).}$

(Application Programming Interface) Setu (platform), etc.⁷⁰ Elements of what such an action plan can include are presented below.

- a. Targeted schemes to support digitally delivered goods and services: Production Linked Incentive-like schemes for specific digitally delivered goods and services should be introduced to enable India to leverage its demographic dividend and respond to emerging global opportunities. These can be in specific areas such as 3D printing that can reduce the cost of importing intermediate inputs to improve India's competitive advantage. For example, the cost and transit time to import high-quality inner lining for high-end sports shoes from locations in Vietnam or Thailand could be substituted by simply 3D printing them in India, making India a much more competitive location for the manufacture of such sport shoes.
- b. Support capacity building: Schemes like the Skill India mission can focus on automation, advanced analytics, remote controlled robotics, additive manufacturing, etc., to train a significant portion of India's STEM (Science, Technology, Engineering, or Mathematics) graduates to become employable in these sectors. This would also help the inflow of FDI and participation in GVCs in the digital economy since they are driven by accessibility to suitable human resources on a large scale.
- c. Revisit the Special Economic Zone (SEZ) Policy: The SEZs helped India's IT/ITeS sectors grow and the SEZ policy can be improved and upgraded to benefit the digital service trade sector too. While the government came up with the Development of Enterprises and Service Hubs (DESH) Bill, 2022, it never became a law due to concerns regarding tax concessions and net foreign exchange (NFE) earning requirements. The government can revisit the discussion on this to boost digital services trade with lower barriers for cross-border data flows, mandatory recognition of e-signatures by entities, measures to promote paperless trading, etc.
- d. **Promote green technology:** This can be done, for example, by the sustainable (green) data storage sector leveraging India's "National Solar Mission" and other such initiatives and creating specific zones where such facilities can be developed at low cost on account of basic infrastructure being developed through government support. The goal should be to make India an attractive investment destination for such activities.

India needs to step up its efforts internationally to take the lead in developing a global architecture that is not only in the best interests of its firms and but also serves to protect the interests of most developing countries. Industry bodies like the Confederation of Indian Industries (CII) and NASSCOM have strongly demanded a transparent and predictable regulatory approach for the e-commerce sector by the

Source: https://www.investindia.gov.in/team-india-blogs/digital-india-revolutionising-tech-landscape#:~:text=The%20foundation%20of%20India's%20digital,%2D22%20to%20205%2D26 (last accessed on August 12, 2024).

Indian government. There is need for multi-stakeholder consultations in the country and discussions with the private sector on prioritising regulatory reforms and identifying areas where institutional capacity building is needed. Consultations will also help to develop India's position on e-commerce in trade agreements, which will benefit industry, bring in investment and create jobs. India can take a more proactive role in capacity building in other developing countries to enhance their share in global e-commerce trade and benefit SMEs and exports. While the WPEC would have been the ideal place for any discussion on globally accepted trade rules on e-commerce, this pathway seems highly unlikely under existing circumstances. Therefore, India could consider the JSI as an option, subject to its concerns associated with the JSIs in general being addressed. The primary concerns include JSIs tending to dilute multilateral nature of WTO and the focusing on new areas while several core issues in the WTO remain unresolved.

India also needs to prioritise policy initiatives and reforms at home to complement this effort. This investment made now will pay rich dividends for India's growth. In this regard, the Government of India has shown promise. It has been actively taking steps to promote the sector. Apart from the measures in the Union Budget (2024-25) as mentioned in section 2.2.1, the 2023 foreign trade policy also has provisions to facilitate e-commerce exports (DGFT, 2023). Given these policy efforts in the right direction, its existing economies of scale in exports of DDS, the rapidly growing domestic digital economy and the absolute numbers of potential digital economy professionals it will have, no other country is better placed than India to gain from the global digital revolution if it adequately prepares itself.

References

- Amazon Global Selling (2023). Exports Digest. Honed by Heritage: India's Exports Story. Vol 5. Amazon. Available at https://sell.amazon.in/grow-your-business/amazon-global-selling/exports-digest-2023 (last accessed on September 27, 2024).
- Amazon Global Selling (2024). Exports Digest. Tech in Trade: Building the future of E-commerce exports. Vol 6. Amazon. Available at https://sell.amazon.in/grow-your-business/amazon-global-selling/exports-digest (last accessed on September 27, 2024).
- Andrenelli, A. and J. Lopez Gonzalez (2023), "Understanding the potential scope, definition and impact of the WTO e-commerce Moratorium", *OECD Trade Policy Papers*, No. 275, OECD Publishing, Paris, https://doi.org/10.1787/59ceace9-en (last accessed on April 30, 2024).
- **Banga, R. (2019),** "Growing Trade in Electronic Transmissions: Implications for the South", *UNCTAD Research Paper*, No. 29, UNCTAD, Geneva. Available at https://ourworldisnotforsale.net/2019/ser-rp-2019d1 en.pdf (last accessed on April 10, 2024).
- Banga, R. (2020). Quantifying the impact of the Moratorium on Customs Duties on Electronic Transmissions. UNCTAD. Available at https://www.wto.org/english/tratop_e/ecom_e/ecom_webinar_13jul2020_e/banga.pdf (last accessed on April 30, 2024).
- **Banga**, R. (2021). Joint Statement Initiative on E-Commerce (JSI): Economic and Fiscal Implications for the South. *UNCTAD Research Paper*, (58). Available at https://unctad.org/system/files/official-document/ser-rp-2021d1_en.pdf (last accessed on April 30, 2024).
- Banga, R. (2022), "WTO Moratorium on Customs Duties on Electronic Transmissions: How much tariff revenue have developing countries lost?", South Centre Research Paper 157. Available at https://www.southcentre.int/wp-content/uploads/2022/06/RP157 WTO-Moratorium-on-Customs-Duties-on-Electronic-Transmissions EN.pdf (last accessed on April 10, 2024).
- **Banerjee P. (2020),** "E-Commerce Logistics: Operational Challenges and Strategic Issues". In Pralok Gupta (eds.), "E-Commerce in India: Economic and Legal Perspectives". Sage, https://doi.org/10.4135/9789354791390 (last accessed on August 10, 2024).
- Burri, M., M. Vásquez Callo-Müller and K. Kugler (2022), TAPED: Trade Agreement Provisions on Electronic Commerce and Data, available at https://www.unilu.ch/fileadmin/fakultaeten/rf/burri/TAPED/Codebook TAPED
 Burri Vasquez Polanco Jan2022.pdf (last accessed on April 1,.2024).
- Burri, M., Vásquez Callo-Müller, M., & Kugler, K. (2024). The Evolution of Digital Trade Law: Insights from TAPED. World Trade Review, 1–18. doi:10.1017/S1474745623000472 Available at https://www.cambridge.org/core/journals/world-trade-review/article/evolution-

- of-digital-trade-law-insights-fromtaped/8C9B4DA7D7FA50B10913BD7575929750 (last accessed on April 17, 2024).
- CUTS International, (2023). Data localisation: India's double-edged sword. CUTS Institute for Regulation & Competition (CIRC). Retrieved from https://cuts-ccier.org/pdf/data-localisation-indias-double-edged-sword.pdf (last accessed on August 9, 2023).
- Data Bridge Market Research (2023), Asia-Pacific E-Commerce Market Industry Trends and Forecast to 2030, August, available at https://www.databridgemarketresearch.co m/reports/asia-pacific-e-commercemarket (last accessed on May 29, 2024).
- Department for Promotion of Industry and Internal Trade (DPIIT). (2019). Draft national e-commerce policy. Government of India. Available at https://dpiit.gov.in/sites/default/files/DraftNational e-commerce Policy 23February2019.pdf (last accessed on September 10, 2024).
- Director General of Foreign Trade (DGFT) (2023). Foreign Trade Policy 2023, Chapter 9. Available at https://content.dgft.gov.in/Website/dgftprod/2a0f81fa-fdb9-4d01-acd4-e35865edf903/FTP2023_Chapter09.pdf (last accessed on April 12, 2024).
- European Centre for International Political Economy (ECIPE) (2019). The Economic Losses from Ending the WTO Moratorium on Electronic Transmissions. Policy Brief 3. Available from https://ecipe.org/publications/moratorium/ (last accessed on August 1, 2024).
- **Evenett, S. (2021).** "Is the WTO Moratorium on customs duties on e-commerce depriving developing countries of much needed revenue?", *St Gallen Endowment for Prosperity through Trade*. Available at https://currentthoughtsontrade.com/wp-content/uploads/2021/11/S.-Evenett-WTO-Moratorium-12-Nov-2021 -finalised.pdf (last accessed on April 2, 2024).
- Electronics and Computer Software Export Promotion Council (ESC), (2023).

 Statistical Year Book 2023 India's Electronic Computer Software and ITeS Industry and Export. Available at https://www.escindia.in/publications/ (last accessed on September 10, 2024).
- Elms D. (2024). The e-commerce JSI reaches landmark at the WTO. Hinrich Foundation.

 Available at https://www.hinrichfoundation.com/research/article/digital/the-e-commerce-jsi-reaches-landmark-at-the-wto/ (last accessed on August 11, 2024).
- **Gao, H. (2022).** Data sovereignty and trade agreements: Three digital kingdoms. Available at https://www.hinrichfoundation.com/resea rch/article/digital/datasovereignty-trade-agreements-digital-kingdoms/ (last accessed on September 23, 2024).
- Goods and Services Tax Network (GSTN), 2023. Annual Report 2022-23. Available at https://www.gstn.org.in/assets/mainDashboard/Pdf/Statutory-

- <u>documents/Annual-Report-of-GSTN-2022-23.pdf</u> (last accessed on September 13, 2024).
- **Goyal A. and Goyal A. (2023).** BIG's Easy Reference Customs Tariff for Imports-Exports – Part I and II. Academy of Business Studies.
- **Goyal A. and Goyal A. (2024).** BIG's Easy Reference Customs Tariff for Imports-Exports – Part I and II. Academy of Business Studies.
- International Monetary Fund (2009), Balance of payments and international investment position manual, International Monetary Fund. Available https://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf (last July 30, 2024).
- International Monetary Fund. (2018). Towards a Handbook on Measuring Digital Trade: Status Update. Washington, D.C. Available at https://www.imf.org/external/pubs/ft/bop/2018/pdf/18-07.pdf (last accessed on August 9, 2024).
- IMF, OECD, UNCTAD and WTO (2023). Handbook on Measuring Digital Trade: Second edition. Available at https://www.imf.org/en/Publications/Books/Issues/2023/08/17/Handbook-on-Measuring-Digital-Trade-Second-edition-537466 (last accessed on August 9, 2024).
- IMF, OECD, UN, World Bank, and WTO (2023). Digital Trade for Development. Available at https://www.wto.org/english/res_e/booksp_e/dtd2023_e.pdf (last accessed on August 31, 2024).
- **Ismail, Y. (2023).** The Evolving Context and Dynamics of the WTO Joint Initiative on E-commerce. Available at https://www.iisd.org/system/files/2023-04/wto-joint-initiative-e-commerce-fifth-year-stocktake-en.pdf (last accessed on April 23, 2024).
- López-Gonzalez, Sorescu and Kaynak (2023). Of bytes and trade: Quantifying the impact of digitalisation on trade. OECD Trade Policy Papers. Available at https://www.oecd-ilibrary.org/trade/of-bytes-and-trade-quantifying-the-impact-of-digitalisation-on-trade 11889f2a-en (last accessed August 31, 2024).
- Makiyama, H. L., & Narayanan, B. (2019). Economic Losses from Ending the WTO Moratorium on Electronic Transmissions. European Centre for International Political Economy. Available at https://ecipe.org/wp-content/uploads/2019/08/ECI 19 PolicyBrief 3 2019 LY04.pdf (last accessed on April 21, 2024).
- Organisation for Economic Co-operation and Development (OECD), (2011).

 OECD Guide to Measuring the Information Society 2011, Paris: OECD Publishing. Available at https://www.oecd-ilibrary.org/science-and-technology/oecd-guide-to-measuring-the-information-society-2011_9789264113541-en (last accessed on August 2, 2024).
- Organisation for Economic Co-operation and Development (OECD) (2019).

 Electronic transmissions and international trade shedding new light on the moratorium debate. Trade Policy Papers 233. Paris. Available at

- https://www.oecd-ilibrary.org/trade/electronic-transmissions-and-international-trade-shedding-new-light-on-the-moratorium-debate_57b50a4b-en (last accessed on August 2, 2024).
- United Nations (UN) (2016). Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific. United Nations. Available at https://digitallibrary.un.org/record/3882345?ln=en&v=pdf (last accessed on October 3, 2024)
- United Nations Conference on Trade and Development (UNCTAD) (2021). What is at stake for developing countries in trade negotiations on e-commerce? The case study of Joint Statement Initiative. United Nations. Available at https://unctad.org/system/files/official-document/ditctncd2020d5_en.pdf (last accessed on September 24, 2024).
- World Trade Organization. (2018). World Trade Report 2018: The future of world trade How digital technologies are transforming global commerce. Available at www.wto.org/english/res-e/publications-e/world-trade-report18-e.pdf (last accessed on August 1, 2024).
- World Trade Organization. (2019). INF/ECOM/5. Communication from the United States.

 Available at https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/INF/ECOM/5.pdf&Open=True (last accessed on October 20, 2024).
- World Trade Organization (2023). WT/GC/W/857. Communication from India. Consumer Protection in E-commerce. Available at https://docs.wto.org/dol2fe/Pages/FE Search/FE S S006.aspx?MetaCollection=WTO&IssuingDateFrom=01%2f12%2f2022&IssuingDateTo=01%2f02%2f2023&ConcernedCountryList=%22India%22&SubjectList=%22consumer+protection%22&Language=ENGLISH&SearchPage=FE S S001&languageUIChanged=true# (last accessed on August 23, 2024).
- World Trade Organization (2024a). Thirteenth Ministerial Conference (MC13).

 World Trade Organization. Available at https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN24/38.pdf&Open=True (last accessed on August 9, 2023).
- World Trade Organization (2024b). Global Trade Outlook and Statistics: April 2024.

 World Trade Organization. Available at https://www.wto.org/english/res e/publications e/trade outlook24 e.htm (last accessed on August 9, 2024).
- World Trade Organization (2024c). Joint Statement Initiative on Electronic Commerce 26 July 2024. INF/ECOM/87. Available at https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/INF/ECOM/87.pdf&Open=True (last accessed on September 10, 2024).
- **Zhang, C., Chen, X., Yang, J., & Gao, X. (2024).** Nexus between digital trade and security: Geopolitical implications for global economy in the digital age. *Asian Review of Political Economy, 3*(10). Available at https://doi.org/10.1007/s44216-024-00032-6 (last accessed on September 27, 2024).

Append ix A

Table A1: Tariff lines (8-digit HS Codes) for India for the digitised products identified in Banga (2019)

SI. No.	HS Code	Level	HS CODE 2022 (6 digit)	Item Description	Unit	Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
1	3705 00 00	-		Photographic and cinematographic films	kg	10	12	24.3	Free	UAE Aus SA Sg Kr ASN My Jp LDC	0.50%	-2,946
	3706			Cinematographic film, exposed and developed, whether or not incorporating sound track or consisting only of sound track								
	3706 10		370610	Of a width of 35 mm or more								
				Feature Films:								
2	3706 10 11		3706 10	Made wholly in black and white and of a length not exceeding 4,000 m	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
3	3706 10 12		3706 10	Made wholly in black and white and of a length exceeding 4,000 m	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
4	3706 10 13		3706 10	Made wholly or partly in colour and of a length not exceeding 4,000 m	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
5	3706 10 14		3706 10	Made wholly or partly in colour and of a length exceeding 4,000 m	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	108
6	3706 10 15		3706 10	Children's films certified by the Central Board of Film Certification to be "children's film"	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
7	3706 10 20		3706 10	Documentary shorts, and films certified as such by the Central Board of Film Certification	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	-1

SI. No.	HS Code	Level	нЅ СОDE 2022 (6 digit)	Item Description	Unit	Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
8	3706 10 30		3706 10	News Reels and clippings	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
				Advertisement shorts and films:								
9	3706 10 41		3706 10	Made wholly in black and white	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
10	3706 10 42		3706 10	Made wholly or partly in colour	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
				Other children's film								
11	3706 10 51		3706 10	Patch prints, including logos intended exclusively for the entertainment of children	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	-17
12	3706 10 52		3706 10	Children's film certified by the Central Board of Films Certification to be "children's film"	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
13	3706 10 59		3706 10	Other	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	0
			3706 10	Educational shorts, and films:								
14	3706 10 61		3706 10	Certified as predominantly educational by the Central Board of Film Certification	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
15	3706 10 62		3706 10	Patch prints, including logos intended exclusively for educational purposes	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
16	3706 10 63		3706 10	Teaching aids including film strips of educational nature	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	0

SI. No.	HS Code	Level	нЅ СОDE 2022 (6 digit)	Item Description	Unit	Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
17	3706 10 69		3706 10	Other	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	0
18	3706 10 70		3706 10	Short films not elsewhere specified or included	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
				Other								
19	3706 10 91		3706 10	Audio-visual news or audio-visual views materials including news clippings	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
20	3706 10 92		3706 10	Master positives, exposed negatives, dupes and rush prints as are not cleared for public exhibition	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
21	3706 10 99		3706 10	Other	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	2
	3706 90			Other								
				Feature Films:								
22	3706 90 11		3706 90	Made wholly in black and white and of a length not exceeding 4,000 m	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
23	3706 90 12		3706 90	Made wholly in black and white and of a length exceeding 4,000 m	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
24	3706 90 13		3706 90	Made wholly or partly in colour and of a length not exceeding 4,000 m	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
25	3706 90 14		3706 90	Made wholly or partly in colour and of a length exceeding 4,000 m	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available

SI. No.	4S Code	-evel	HS CODE 2022 (6 digit)	tem Description	Unit	Basic (%) (SCH)	GST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
26	3706 90 15		3706 90	Children's films certified by the Central Board of Film Certification to be "children's film"	m	10	Dec-18	· • • •	Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
27	3706 90 20		3706 90	Documentary shorts, and films certified as such by the Central Board of Film Certification	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
28	3706 90 30		3706 90	News reels and clippings	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
				Advertisement shorts and films:								
29	3706 90 41		3706 90	Made wholly in black and white	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
30	3706 90 42		3706 90	Made wholly or partly in colour	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
				Other children's film								
31	3706 90 51		3706 90	Patch prints, including logos intended exclusively for the entertainment of children	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
32	3706 90 52		3706 90	Children's film certified by the Central Board of Films Certification to be "children's film"	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
33	3706 90 59		3706 90	Other	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
				Educational shorts, and films:								
34	3706 90 61		3706 90	Certified as predominantly educational by the Central Board of Film Certification	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available

SI. No.	HS Code	Level	НЅ СОDE 2022 (6 digit)	Item Description	Unit	Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
35	3706 90 62		3706 90	Patch prints, including logos intended exclusively for educational purposes	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
36	3706 90 63		3706 90	Teaching aids including film strips of educational nature	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
37	3706 90 64		3706 90	Certified as predominantly educational, by Central Board of Film Certification, of width below 30mm	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
38	3706 90 69			Cinematographic film, exposed and developed, whether or not incorporating soundtrack or consisting only of soundtrack, width < 35 mm: Other educational shorts and film	m	10	0.67		Free	UAE Aus SA Sg Kr ASN My Jp LDC	0.50%	1
39	3706 90 70		3706 90	Short films not elsewhere specified	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
				Other								
40	3706 90 91		3706 90	Audio-visual news or audio-visual views materials including news clippings	m	10	Dec-18		Free	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
41	3706 90 92		3706 90	Master positives, exposed negatives, dupes and rush prints as are not cleared for public exhibition	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	not available
42	37 06 90 99		3706 90	Other	m	10	Dec-18		Free*	UAE Aus SA Kr ASN My Jp LDC	0.50%	-3
	4821			Paper or paperboard labels of all kinds, whether or not printed								
	4821 10		482110	Printed								

SI. No.	HS Code	Level	нЅ СОDE 2022 (6 digit)	Item Description	Unit	Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
43	4821 10 10		482110	Paper tags	kg	10	18	31	Free PIMS	SA LDC	1.10%	-11,658
44	4821 10 20		482110	Labels	kg	10	18	31	Free PIMS	SA MERC LDC	1.10%	-4,493
45	4821 10 90		482110	Other	kg	10	18	31	Free PIMS	SA LDC	1.10%	-13,833
	4821 90											
46	4821 90 10		482110	Labels	kg	10	18	31	Free PIMS	SA MU LDC	1.10%	-4,126
47	4821 90 90		482110	Other	kg	10	18	31	Free PIMS	SA MU LDC	1.10%	-20,739
	4901			Printed books, brochures, leaflets and similar printed matter, whether or not in single sheets								
	4901 10	-	490110	In single sheets, whether or not folded								
48	4901 10 10		490110	Printed books	u	10	0	11	Free	UAE Aus SA Sg LDC Kr ASN My Jp	1.10%	2,13,477
49	4901 10 20		490110	Pamphlets, booklets, brochures, leaflets and similar printed matter	u	10	5	16.6	Free	UAE Aus SA Sg LDC Kr ASN My Jp	1.10%	5,904
50	4901 91 00		490191	Dictionaries and encyclopaedias, and serial instalments thereof	u	10	0	11	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	1,684
51	4901 99 00		490199	Other	u	5	0	11	Free	UAE SA Sg Kr ASN My Jp MU LDC	1.10%	-4,201

SI. No.	HS Code	Level	нЅ СОDE 2022 (6 digit)	Item Description	Unit	Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
	4902			Newspapers, journals and periodicals, whether or not illustrated or containing advertising material								
	4902 10	-	490210	Appearing at least four times a week								
52	4902 10 10		490210	Newspapers	kg	Free	0	0	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	-106
53	4902 10 20		490210	Journals and periodicals	kg	Free	0	0	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	109
	4902 90	-	490290	Other								
54	4902 90 10		490290	Newspapers	kg	Free	0	0	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	42
55	4902 90 20		490290	Journals and periodicals	kg	Free	0	0	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	-2,444
	4903			Children's Picture, Drawing or Colouring Books								
56	4903 00 10		490300	Picture book	kg	10	0	11	Free	UAE Aus SA Kr ASN My Jp LDC	1.10%	-963
57	4903 00 20		490300	Drawing or colouring books	kg	10	0	11	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	24,199
58	4904 00 00		490400	Music, printed or in manuscript, whether or not bound or illustrated	kg	Free	0	0	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	-292
	4905			MAPS and hydrographic or similar charts of all kinds, including atlases, wall, maps, topographical plans and globes, printed								

SI. No.	HS Code	Level	HS CODE 2022 (6 digit)	Item Description	Unit	Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
59	4905 20 00	-	In Rashmi Banga; 490591, currently 490520	In book form	kg	Free	12	12	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	
	4905 90			Other								
60	4905 90 10			Geographical, hydrological, astronomical maps or charts	kg	Free	12	12	free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	84
61	4905 90 20		In Rashmi Banga; 490510, currently 490590	Globe	kg	Free	12	12	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	5,799
62	4905 90 90		In Rashmi Banga; 490510, currently 490590	Other	kg	Free	12	12	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	245
63	4906 00 00		490600	Plans and drawings for architectural, engineering, industrial, commercial, topographical or similar purposes, being originals drawn by hand; handwritten texts, photographic reproductions on sensitised paper and carbon copies of the foregoing	kg	Free	18	31	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	-17,601
	4907 00	-	490700	Unused postage, revenue or similar stamps of current or new issue in the country in which they have, or will have, a recognised face value; stamp-impressed paper; banknotes; cheque forms; stock, share or bond								

SI. No.	HS Code	Level	HS CODE 2022 (6 digit)	certificates and similar documents of title, similar	Unit	Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
				documents of title								
64	4907 00 10		490700	Unused postage, revenue or similar stamps of current or new issue in the country in which they have, or will have, a recognised face value	kg	10	18	31	Restd.	UAE Aus SA Kr ASN My Jp LDC	1.10%	288
65	4907 00 20		490700	Bank notes	kg	10	18	31	Restd.	UAE Aus SA Kr ASN My Jp LDC	1.10%	0
66	4907 00 30		490700	Documents of title conveying the right to use information technology software	kg	10	18	31	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	-27,837
67	4907 00 90		490700	Other	kg	10	18	31	Restd.	UAE Aus SA Kr ASN My Jp LDC	1.10%	4,672
	4908			Transfers (Decalcomanias)								
68	4908 10 00	-	490810	Transfers (decalcomanias), vitrifiable	kg	10	18	31	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	-1,738
69	4908 90 00	-	490890	Other	kg	10	18	31	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	-10,804
	4909 00	-	490900	Printed or illustrated postcards; printed cards bearing personal greetings, messages or announcements, whether or not illustrated, with or without envelopes or trimmings								
70	4909 00 10		490900	Greeting or wedding cards	u	10	18	31	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	3728

SI. No.	HS Code	Level	нѕ соDE 2022 (6 digit)	Item Description	Unit	Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
71	4909 00 90		490900	Other	u	10	18	31	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	181
	4910 00	-	491000	Calendars of any kind, printed, including calendar blocks								
72	4910 00 10		491000	Advertising calendar	u	10	18	31	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	1,606
73	4910 00 90		491000	Other	u	10	18	31	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	3,898
	4911			Other printed matter, including printed pictures and photographs								
	4911 10	-	491110	Trade advertising material, commercial catalogues and the like								
74	4911 10 10		491110	Posters, printed	kg	10	18	31	Free	UAE SA Sg Kr ASN My Jp LDC	1.10%	-1,087
75	4911 10 20		491110	Commercial catalogues	kg	10	18	31	Free	UAE SA Sg Kr ASN My Jp LDC	1.10%	-5,068
76	4911 10 30		491110	Printed inlay cards	kg	10	18	31	Free	UAE SA Sg Kr ASN My Jp LDC	1.10%	88
77	4911 10 90		491110	Other	kg	10	18	31	Free	UAE SA Sg Kr ASN My Jp LDC	1.10%	-10,952
78	4911 91 00		491191	Pictures, designs and photographs	kg	10	18	31	Free	UAE Aus SA Sg Kr ASN My Jp LDC	1.10%	5592
	4911 99		491199	Other								

SI. No.	HS Code	Level	HS CODE 2022 (6 digit)	Item Description	Unit	Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
79	4911 99 10		491199	Hard Copy (printed) of computer software	kg	10	18	31	Free	UAE Aus SA Sg Kr ASN My Jp MU LDC	1.10%	-2,003
80	4911 99 20		491199	Plan and drawings for architectural engineering, industrial, commercial, topographical or similar purposes reproduced with the aid of computer or any other devices	kg	10	18	31	Free	UAE Aus SA Sg Kr ASN My Jp MU LDC	1.10%	-66,625
81	4911 99 90		491199	Other	kg	10	18	31	Free	UAE Aus SA Sg Kr ASN My Jp MU LDC	1.10%	-11,146
	8523			Discs, tapes, solid-state non-volatile storage devices, "smart cards" and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, but excluding products of Chapter 37								
	8523 49	2012	852349	Other								
82	8523 49 10		852349	Compact disc (Audio)	u	10	18	31	Free	UAE Aus SA ASN Kr My Jp LDC	0.80%	-296
83	8523 49 20		852349	Compact disc (Video)	u	10	18	31	Free	UAE Aus SA ASN Kr My Jp LDC	0.80%	-2,228
84	8523 49 30		852349	Stamper for CD audio, CD video and CD-ROM	u	10	18	31	Free	UAE Aus SA ASN Kr My Jp LDC	0.80%	-107
85	8523 49 40		852349	DVD	u	10	18	31	Free	UAE Aus SA ASN Kr My Jp LDC	0.80%	-777

SI. No.	HS Code	Level	HS CODE 2022 (6 digit)	Item Description	Unit	Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
86	8523 49 50		852349	Matrices for production of records; prepared record blank	u	10	18	31	Free	UAE Aus SA ASN Kr My Jp LDC	0.80%	-238
87	8523 49 60		852349	Cartridge tape	u	10	18	31	Free	UAE Aus SA ASN Kr My Jp LDC	0.80%	-3
88	8523 49 70		852349	1/2" video cassette suitable to work with digital VCR	u	10	18	31	Free	UAE Aus SA ASN Kr My Jp LDC	0.80%	0
89	8523 49 90		852349	Other	u	10	18	31	Free	UAE Aus SA ASN Kr My Jp LDC	0.80%	-10,759
	8523 51	-	852351	Semi-conductor media								
90	8523 51 00		852351	Solid state non-volatile storage devices	u	10	18	31	Free	UAE Aus SA ASN Kr My Jp LDC	0.80%	- 5,36,677
	8523 52		852352	Smart cards								
91	8523 52 10		852352	SIM cards	u	Free	18	18	Free	UAE SA Kr ASN My Jp LDC	0.80%	42,809
92	8523 52 20		852352	Memory cards	u	Free	18	18	Free	UAE SA Kr ASN My Jp LDC	0.80%	-25,497
93	8523 52 90		852352	Other	u	Free	18	18	Free	UAE SA Kr ASN My Jp LDC	0.80%	-21,469
	8523 59		852359	Other								
94	8523 59 10		852359	Proximity cards and tags	u	Free	18	18	Free	UAE SA Kr ASN My Jp LDC	0.80%	-19,452

SI. No.	HS Code	Level	HS CODE 2022 (6 digit)	Item Description	Unit	Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
95	8523 59 90		852359	Other	u	10	18	31	Free	UAE SA Kr ASN My Jp LDC	0.80%	-20,414
	8523 80	-	852380	Other								
96	8523 80 10		852380	Gramophone records	u	10	18	31	Free	UAE Aus SA Sg ASN Kr My Jp LDC	0.80%	380
97	8523 80 20		852380	Information technology software	u	Free	18	18	Free	UAE SA Sg Kr ASN My Jp LDC	0.80%	- 1,93,153
98	8523 80 30		852380	Audio-visual news or audio visual views	u	10	18	31	Free	UAE Aus SA Sg ASN Kr My Jp LDC	0.80%	-124
99	8523 80 40		852380	Children's video films	u	10	18	31	Free	UAE Aus SA Sg ASN Kr My Jp LDC	0.80%	0
100	8523 80 50		852380	Video tapes of educational nature	u	10	18	31	Free	UAE Aus SA Sg ASN Kr My Jp LDC	0.80%	0
101	8523 80 60		852380	2-D/ 3D computer graphics	u	10	18	31	Free	UAE Aus SA Sg ASN Kr My Jp LDC	0.80%	-82
102	8523 80 90		852380	Other	u	10	18	31	Free	UAE Aus SA Sg ASN Kr My Jp LDC	0.80%	-43,109
	9504			Video game consoles and machines, table or parlour games, including pintables, billiards, special tables for casino games and automatic bowling equipment, amusement machines operated by coins, banknotes, bank cards, tokens or by any other means of payment								

SI. No.	HS Code	Level	HS CODE 2022 (6 digit)	Item Description		Basic (%) (SCH)	IGST (%)	Total Duty (%) with SWS of 10% on BCD	Import Policy and NTBS	Country Preferences	Rodtep Rate / CAP Value w.e.f 16 Jan. 2023	Balance in Value (2023) in US\$
103	9504 30 00	-	950430	Other games, operated by coins, banknotes, bank cards, tokens or by any other means of payment, other than automatic bowling alley equipment		20	18	44	Free	Aus SA ASN Kr My Jp LDC	1%	-21,368
104	9504 40 00	-	950440	Playing cards	u	20	12	36.6	Free	Aus SA ASN Kr My Jp LDC	1%	7,815
105	9504 50 00	-	950450	Video game consoles and machines, other than those of sub-heading 9504 30	u	20	18	44	Free	Aus SA ASN Kr My Jp LDC	1%	-81,823
	9504 90	-	950490	Other								
106	9504 90 10		950490	Chess set, all types	u	20	12	36.6	Free	Aus SA ASN Kr My Jp LDC	1%	4,142
107	9504 90 20		950490	Carrom board, with or without coins and strikers	u	20	12	36.6	Free	Aus SA ASN Kr My Jp LDC	1%	2,715
108	9504 90 90		950490	Other	u	20	12	36.6	Free	Aus SA ASN Kr My Jp LDC	1%	-11,277

Source: Goyal and Goyal (2023) and Goyal and Goyal (2024).

Note: Aus – Australia; SA – South Africa; ASN – ASEAN; Kr – Korea; My – Malaysia; Jp – Japan; LDC – Least Developed Country; UAE – United Arab Emirates; Sg – Singapore; MERC – MERCOSUR, u – units, kg – kilogram.

Table A2: Comparison of JSI provisions with India's Autonomous Regime (AR)

	Enabling E-commerce							
	JSI Proposed Obligation	Nature of Obligation	Indian Autonomous Regime (AR)					
1	Legal framework governing electronic transactions that is consistent with the principles of the UNCITRAL Model Law on Electronic Commerce 1996	Moderate: Shall endeavour	FULLY CONSISTENT India's Information Technology (IT) Act, 2000, is consistent with UNCITRAL Model Law principles, and India is a signatory to the UNCITRAL Model Law on E-commerce, 1996, except for the provisions on certification and electronic signatures					
2	Avoid undue regulatory burden on electronic transactions	Moderate: Shall endeavour	CONSISTENT WITH INDIA'S CURRENT APPROACH IN FTAs and AR The principle of light touch regulation that ensures that are no undue regulatory burden imposed on digital transactions is also present in India-UAE FTA.					
3	Facilitate input by interested persons in the development of its legal framework for electronic transactions	Moderate: Shall endeavour	FULLY CONSISTENT Paragraph 9.2 (a) of Chapter 9 of the Manual of Parliamentary Procedure in the Government of India provides that the Ministry/Department concerned will formulate the legislative proposals in consultation with all the interested persons and authorities concerned					
4	Facilitating the use of electronic transferable records by adopting a legal framework that uses the UNCITRAL Model Law on Electronic Transferable Records 2017 as a reference	Moderate: Shall endeavour	NOT CONSISTENT India is not signatory to UNCITRAL Model Law on Electronic Transferable Records, 2017 and does not have comprehensive law on E-transferable records					
5	Full acceptability, validity, and admissibility of electronic signatures for all legal and regulatory purposes, including for adjudication purposes (as evidence)	Hard: Shall	CONSISTENT Section 5 of the IT Act, 2000, provides legal recognitions to e-signature. The BSA, 2023, also provides for the admissibility of e-signatures as evidence.					
6	Allow the parties in a transaction decide what is the appropriate manner of authentication. But exceptions can be made for certain categories of transactions where there is need for a standardised and robust authentication process	Hard: Shall	IT Act, 2000, allows parties to authenticate electronic records using any technique that is considered reliable but provides certain guidelines for reliability. In addition, there are specified authentication procedures for certain categories of transactions, including a 2-step authentication process and authentication linked to India's universal					

	Enabling E-commerce							
	JSI Proposed Obligation	Nature of Obligation	Indian Autonomous Regime (AR)					
			ID database (Aadhar). Digital Signature (End Entity) Rules, 2015, specify the need for recognised certifying agencies for e-signatures					
7	Full acceptability, validity and admissibility of electronic time stamps and electronic seals for all legal and regulatory purposes, including for adjudication purposes, while allowing parties to determine the appropriate manner for their authentication. Exceptions can be made for specific categories of transactions that merit a more standardised and robust authentication process	Hard: Shall	DOMESTIC REGIME UNCLEAR/NON-EXISTENT There is currently no adequate regulatory regime covering e-time stamps or e-seals. However, time stamps and e-seals are used by the customs administration for some of their procedures					
8	Interoperability of electronic authentication	Soft: Shall encourage	DOMESTIC REGIME UNCLEAR/NON-EXISTENT Currently, no examples of interoperability exist between India and another country. But nothing in AR prevents this					
9	Mutual recognition of e-signatures	Soft: May pursue	DOMESTIC REGIME UNCLEAR/NON-EXISTENT Currently, no examples of MRAs exist between India and another country. But nothing in AR prevents this provision to be implemented					
10	Full acceptability, validity and admissibility of electronic contracts for all legal and regulatory purposes, including for adjudication purposes	Hard: Shall	CONSISTENT Section 10A of the IT Act, 2000, provides full legal recognition to electronic contracts					
11	Full acceptability, validity and admissibility of electronic invoices for all legal and regulatory purposes, including for adjudication purposes (as evidence)	Hard: Shall	PARTIALLY CONSISTENT Electronic invoices have been specified under Rule 48(4) of CGST Rules and are mandatory for specific categories of businesses. E-invoices are also accepted by Indian customs (digital copy of original). However, there is no specific legal provision that supports the validity and acceptability of e-invoices across the board.					
12	Allow cross-border interoperability of electronic invoices	Moderate: Shall endeavour	DOMESTIC REGIME UNCLEAR/NON-EXISTENT Currently, no examples of interoperability exist between India and another country. Lack of a comprehensive legal provision supporting legal validity and acceptability of e-invoices will hinder such an MRA					

	Enabling E-commerce							
	JSI Proposed Obligation	Nature of Obligation	Indian Autonomous Regime (AR)					
13	All agencies involved in the process of export and import (customs and other agencies responsible for regulation of entry into and exit of goods from the country), will transit towards a paperless system	Hard: Shall for customs Moderate: Shall endeavour for agencies other than customs	PARTIALLY CONSISTENT Indian customs is fully compliant and is moving towards a paperless system. However, not all the other border /allied product clearing agencies have shifted towards this.					
14	Development of a single window	Moderate: Shall endeavour	CONSISTENT India is fully compliant. Indian Customs Single-Window Interface for Facilitating Trade (SWIFT) meets the requirements of JSI objectives and is consistent with WCO standards					
		Openness and I	E-commerce					
	JSI Proposed Obligation	Nature of Obligation	Indian Context					
1	Permanent moratorium on imposition of customs duties for electronic transmissions	Hard: Shall	OPPOSED While India is not imposing such duties in adherence to the temporary moratorium on such duties as agreed at the WTO, it would want to preserve the right to impose such duties, especially because the scope and definition of electronic transmission remains unclear and is still evolving.					
2	Open accessibility for non-sensitive government data, preferably in a digital, searchable, retrievable and machine-readable format	Moderate: Shall endeavour	CONSISTENT India is largely consistent with the requirements of JSI. The National Data Sharing and Accessibility Policy (NDSAP) and the Draft India Data Accessibility & Use Policy, 2022, broadly share the same objectives and principles					
3	Open access to internet and internet-based services and applications, and ensuring that there is transparent network management where no unfair means to restrict access (or reduce quality of access) to give undue advantage to certain players take place.	Moderate: Shall endeavour	DOMESTIC REGIME UNCLEAR/NON-EXISTENT Indian stakeholders have largely supported the JSI principles on net neutrality and greater transparency of network management. However, there are no codified laws.					
		Trust and E-c	commerce					
	JSI Proposed Obligation	Nature of Obligation	Indian Context					

	Enabling E-commerce							
	JSI Proposed Obligation	Nature of Obligation	Indian Autonomous Regime (AR)					
1	Adoption of measures that will protect consumers from misleading, fraudulent and deceptive commercial activities that cause harm, or potential harm, to consumers engaging in e-commerce.	Hard: Shall	FULLY CONSISTENT India is fully compliant under Section 2(7) of the Consumer Protection Act, 2019, that extends the coverage of the Act to both online and offline commerce; Section 2(47) defines unfair trade practice as non-exhaustive in nature, thus covering all aspects included in JSI					
2	Afford a level of protection to digital and online consumers that is not less than that extended to offline consumers	Soft: Shall Recognize	FULLY CONSISTENT The Consumer Protection Act, 2019, governs both offline and online transactions, and there is equality in the treatment of both kinds of consumers					
3	Promote access to redress or recourse mechanisms for consumers transacting cross-border	Soft: Shall Promote	DOMESTIC REGIME UNCLEAR/NON-EXISTENT Cross-border transactions are currently not covered under Consumer Protection Act, 2019					
4	Adoption of measures that will allow recipients of unsolicited electronic messages to prohibit or limit reception of such messages, and require their prior consent by the suppliers of such commercial messages	Hard: Shall	FULLY CONSISTENT The Telecommunications Act, 2024, has adequate provisions on the same.					
5	Adopt measures that ensure that electronic messages are clearly identifiable, disclose on whose behalf they are sent, and contain the necessary information to enable recipients to request cessation free of charge and at any time.	Moderate: Shall endeavour	FULLY CONSISTENT The Telecommunications Act, 2024 has adequate provisions on the same					
6	Adopt measures that provide access to either redress or recourse against suppliers of unsolicited commercial electronic messages that do not comply with the measures adopted	Hard: Shall	FULLY CONSISTENT The Telecommunications Act, 202,4 has adequate provisions on the same					
7	Adopt or maintain a legal framework that provides for the protection of the personal data	Hard: Shall	FULLY CONSISTENT The Telecommunications Act, 2024, has adequate provisions on the same					

	Enabling E-commerce								
	JSI Proposed Obligation	Nature of Obligation	Indian Autonomous Regime (AR)						
8	Take into account principles and guidelines developed by relevant international bodies or organisations with respect to the legal framework for the protection of personal data	Hard: Shall	FULLY CONSISTENT The Telecommunications Act, 2023, principles are aligned to the principles and practices of international experts and bodies						
9	Make publicly available its personal data protection laws including guidance on how individuals and firms can pursue remedies and seek redress, and how commercial entities can comply with legal requirements	Hard: Shall	FULLY CONSISTENT The Telecommunications Act, 2024, has adequate provisions on the same						
10	Promote development of mechanisms that lead to greater compatibility between legal approaches taken by different JSI members for personal data protection	Soft: Shall encourage	DOMESTIC REGIME UNCLEAR/NON-EXISTENT						
11	Develop adequate capacities for agencies responsible for cybersecurity incident response, and collaborate to identify and mitigate cybersecurity threats (malicious, intrusions, malware and malicious code), share information for awareness and best practices.	Moderate: Shall endeavour	SUBSTANTIALLY CONSISTENT The Digital Personal Data Protection Act, 2023, adequately covers relevant obligations except that it does not cover personal data that is collected offline and digitised subsequently						
12	Adopt risk-based approaches based on risk management principles to respond to and mitigate cybersecurity threats	Moderate: Shall endeavour	DOMESTIC REGIME UNCLEAR/NON-EXISTENT Current administrative processes related to cybersecurity measures are not fully aligned with risk based approaches						

Source: Collated by authors from India's domestic legislations and regulations, and JSI proposals and stabilised text (dated July 26, 2024).

Note: Some more details on the JSI text and Indian regulations are given below:

1. **Electronic Transactions Framework:** The JSI text (July 26, 2024) requires members to endeavour to adopt or maintain a legal framework governing electronic transactions that is consistent with the principles of the UNCITRAL Model Law on Electronic Commerce (MLEC) and avoid undue regulatory burden on electronic transactions. It also requires parties to adopt or maintain a legal framework which takes into account the UNCITRAL Model Law on Electronic Transferable Records (MLETR) 2017. India is signatory to the UNCITRAL Model Law of 1996, and India's existing autonomous regime under the Information Technology (IT) Act, 2000, is based on the MLEC. Therefore, India technically would have no problem with this obligation. There is one area of concern that relates MLETR. The latter talks about technological neutrality, which may have implications for India's commitments under GATS Mode 1 and 3 services.

- 2. **Electronic authentication and electronic signatures:** The JSI text (July 26, 2024) proposes hard obligations to recognise the legal validity of and the use of electronic authentication of electronic signatures, including for judicial and regulatory proceedings. It also requires members to extend the privileges of legal validity and admissibility for judicial and regulatory proceedings to electronic seals, electronic time stamps and electronic registered delivery services, but only to the extent that national laws allow for it. There is a soft obligation for members to encourage the use of interoperable electronic authentication and enter mutual recognition arrangements for electronic signatures. India is largely in conformity with the requirements under JSI. India's autonomous regime as defined by the IT Act, 2000, Section 3 related to the authentication of electronic records and Section 5 related to legal recognition of e-signature. Further, Bharatiya Sakshya Adhiniyam (BSA), 2023 also recognises the admissibility of e-signature as evidence. While there is lesser clarity with regards electronic seals and timestamps, various notifications under customs regulations recognise e-seals.
- 3. **Electronic Contracts:** The JSI text (July 26, 2024) requires members to not deny the legal effect, legal validity, or enforceability of an electronic contract simply because it was created electronically, i.e., the original is electronic and not a paper document. India's autonomous regime is fully compliant with this obligation. Section 10A of the IT Act, 2000, recognises the legal validity of contracts formed through electronic means.
- 4. **Electronic Invoicing:** The JSI text (July 26, 2024) requires members to not deny the legal effect or admissibility as evidence in a legal proceeding of an electronic invoice simply because it was created electronically, i.e., the original invoice is an electronic and not a paper document. It also requires members to endeavour to support cross-border interoperability, including by considering international standards, guidelines or recommendations, where they exist in other words, a softer obligation towards cross-border inter-operability, use and application of e-invoices. India's autonomous regime does not have a 'hard law' dealing with the topic of e-invoices. While India's GST regime uses e-invoices and, in fact, makes e-invoices mandatory for larger entities above a certain turnover threshold, there is no specific legal regime or regulation on this issue. However, any invoice that satisfies the requirements of an 'electronic record' as per the BSA, 2023, will be admissible in legal and regulatory proceedings.
- 5. **Paperless Trading:** JSI text (July 26, 2024) encourages members to eliminate paper documents required for border clearances and shift towards using forms and documents in a data-based format. There is a hard obligation for customs authorities of members to have all declarations and other statutory documents in an electronic format, while a softer shall endeavour obligation applies for declaration and other statutory documents of agencies other than customs involved in the trade process. Similarly, members are obliged to recognise electronic declarations and other statutory documents issued by another member's customs authorities and have softer shall endeavour commitment to doing the same for agencies other than customs. These obligations do not apply where national or international laws and treaties require a paper document. These obligations largely mirror the WTO TFA objectives, and India is already compliant with these requirements. In fact, India has gone above and beyond its WTO TFA obligations in terms of digitisation of trade documents and processes. India will have no challenges in meeting these obligations in both regulatory and operational terms.
- 6. **Single-Window:** The JSI text (July 26, 2024) reaffirms Article 10.4.1 of the Agreement on Trade Facilitation, set out in Annex 1A of the WTO Agreement, and requires members to implement this on a best endeavour basis. In addition, it requires members to endeavour to adhere to World Customs Organization Data Model or other international standards for data elements. It is significantly WTO plus as it requires members to ensure the protection and confidentiality of data exchanged with other single windows, whenever this exchange is permitted. In other words, it anticipates inter-operability between national single windows, which will be a major trade facilitation break-through, and provides for a hard obligation on data protection that is likely to provide confidence to national customs authorities to enter into such inter-operability agreements. India is largely compliant with these requirements and has been a major proponent of bilateral co-operation between customs organisations. To that extent, given that these obligations are largely best endeavour, India is unlikely to have any challenges meeting them.
- 7. **Trust and Electronic Commerce:** The JSI text (July 26, 2024) requires members to protect the legitimate rights of consumers of digital goods or digitally delivered goods and services and extend the same rights applicable to transactions in the non-digital economy. Such protection covers acts of

misrepresentation, false claims, or failure to meet the terms of sale or contractual obligations related to online performance or delivery of DDS. The Indian autonomous regime meets the requirements of these obligations with one caveat. Countries tend to have different product and service-related standards and liability regimes for not meeting standards or non-performance of sale or contractual obligations. It is also important to note that standards for DDS are a work in progress, as are its liability regimes in most countries. In other words, the regulatory architecture, especially in newer areas of DDS and digital goods is a work in progress in many countries including several JSI member states. Another key challenge is that in the case of cross-border digital trade of goods and services, the consumer and supplier are under two different jurisdictions. Any effective and immediate enforceability of the rights of the consumer, therefore, would require cross-border co-operation. The current text has soft language on such co-operation, which is wholly inadequate for the purpose. However, countries are unlikely to take hard obligations because it will pass on the costs of consumer rights enforcement of one country to the regulators of another. The rights of consumers of developing countries are always the most vulnerable as they are more unlikely to have the resources and means to hold digital firms accountable for any breach of their rights. The JSI text (July 26, 2024) states that JSI members can have recourse against suppliers of unsolicited commercial electronic messages (also known as spam) and maintain a legal framework for the protection of personal data, including the cross-border transfer and processing of personal data. India's Telecommunications Act, 2023, adequately addresses the obligations associated with spam, while India's Digital Personal Data Protection (DPDP) Act, 2023, meets the requirements of data protection obligations of with some exceptions.

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