Report of the Track 1.5 Process to Review and Update the CPTPP Chapter 14 on Electronic Commerce

25 June 2025

This report is the result of a Track 1.5 process co-organised by the Pacific Economic Cooperation Council (PECC) member committees of Canada and Australia. It provides actionable recommendations to the CPTPP Commission for the General Review of Chapter 14 on Electronic Commerce (e-commerce) aimed at ensuring that the CPTPP remains of the highest possible standard, and that its disciplines continue to be relevant to trade and investment in the region. The report's recommendations reflect the input of a working group of experts from a number of PECC member committees including Australia, Canada, Chile, Japan, New Zealand, Peru, People's Republic of China, Chinese Taipei, and the United States as well as independent experts from Mexico and Singapore.[1]

[1] The Canadian National Committee for Pacific Economic Cooperation and the Australian Pacific Economic Cooperation Council would like to express our deepest gratitude to participating experts who have provided their invaluable guidance and insights which have greatly shaped the recommendations for the Track 1.5. We would also like to extend our sincere appreciation to Dan Ciuriak for his leadership in authoring this report and for his substantial contributions throughout the writing process.

Updating the CPTPP Digital Economy Measures

Executive Summary

The CPTPP Chapter 14 on Electronic Commerce was cutting-edge at its inception in 2017 when the agreement first came into force. However, since this time there has been sustained growth and evolution of the digital economy, major advances in digital technologies and artificial intelligence (AI) and dramatic changes in the geopolitical trade landscape. The urgent development of new regulatory frameworks and international conventions to address the risks and opportunities in these new technological and economic conditions necessitate a comprehensive review of the CPTPP's digital provisions to maintain the Agreement's relevance.

This review takes place against the background of seismic shifts in the geopolitical context, in good measure driven by the digital transformation and the rivalry it has unleashed to dominate critical technologies. This has been combined with novel national security risks that have emerged in the digital sphere, and an escalating polycrisis in the social and environmental spheres.

The challenges facing CPTPP economies are profound and complex. The new digital technologies are critical to addressing the societal challenges, yet guardrails must be maintained against downside risks and a compelling business case must be sustained for the continued development of the digital economy. Crucially, the frameworks must support the participation of middle-sized and smaller economies in the development of digital economy. These economies constitute the CPTPP's membership in the context of technologies that scale at the global level and are the bone of contention among the great powers using all the tools of geoeconomic force at their disposal.

This report makes the case for a major upgrade to the CPTPP's e-commerce chapter to maintain its "gold standard" by levelling up to the trade policy frontier established by work within intergovernmental organizations and in negotiated texts in trade agreements concluded since the CPTPP text was finalized; and by tackling myriad new issues to push that frontier out. These proposed upgrades are summarized in the following 13 **actionable recommendations**:

1. **Adopting WTO E-Commerce Framework as Baseline**: Incorporate the recently finalized **WTO Joint Statement Initiative (JSI) on E-Commerce** text as a foundation, recognising that in many areas there are regional models that would point to adding CPTPP-specific WTO-plus elements, to ensure alignment and minimise regulatory fragmentation at the baseline level.

2. **Expanding Scope to a Digital Economy Chapter:** Shift from a narrow focus on e-commerce to **a comprehensive digital economy framework** covering cloud computing, data-sharing, AI governance, and cross-border digital services.

3. **Enhancing Digital Trade Facilitation**: Strengthen provisions on **electronic invoicing, e-payments, paperless trading, and single window systems** to streamline cross-border transactions.

4. **Strengthening Cross-Border Data Flow Rules**: Introduce clearer **data localization and privacy provisions** to improve consistent implementation, ensuring a balance between enabling seamless digital trade and safeguarding cybersecurity and national security.

5. **Leveling Up Commitments to the Digital Economy Frontier:** Raise ambition on commitments or introduce new provisions drawing on constructive developments pioneered in more recent digital trade agreements, including **interoperability of digital IDs, digital inclusion, consumer protection, cybersecurity, and fintech regulation**.

6. **Expanding commitments on digitally-deliverable services and digital talent flows**: Raise ambition on market access commitments for digitally-deliverable services and for the movement of natural persons, recognising the importance of both digitally-delivered services for productivity, employment, global value chains and economic growth, and of access to a skilled digital workforce for innovation and scale in the digital economy.

7. **Enhancing Implementation, Consistency and Interoperability:** Address **inconsistent rule application** among CPTPP members, particularly in **data localization policies and privacy frameworks**, and integrate mechanisms to drive practical **interoperability** in those areas; ensure **new entrants meet high standards**.

8. **Establishing a dedicated monitoring body to provide secretariat services for the digital economy chapter,** including to oversee implementation, publish regular progress reports, and facilitate industry engagement; and **introduce a new transparency mechanism for regulations, standards and technical measures** affecting the digital economy.

9. **Utilizing Flexible Approaches to Digital Trade Progress** such as **MOUs, Pathfinder Initiatives** and **Regulatory Sandboxes** to allow members (or a subset of members) to pilot and scale up approaches in areas such as **trusted data-sharing frameworks, AI transparency measures, and digital trade documentation interoperability**.

10. **Future-Proofing Through Stakeholder Engagement**: Implement a **structured consultation process** with industry leaders and MSMEs, technology experts, and policymakers to ensure **continuous adaptation** to emerging technologies and digital trade developments.

11. **Adapting the CPTPP to the New Security Context**: consider developing the new language required to take account of the fundamental differences in essential security that emerge from connected devices in non-emergency contexts; and to address the rise in the use of economic coercion.

12. **Green Digitalization and Digitalization for Greening:** Encourage sustainable practices in digital trade by developing guidelines and sharing best practices in areas such as energy-efficient data centres and responsible electronic waste management, and also recognising the role that digital technologies and digitally-delivered services can play in achieving sustainability outcomes.

13. **Introducing AI Governance Principles**: Establish a **principles-based AI governance framework**, drawing on established international approaches and best practice, such as the OECD AI Principles, in setting standards in areas such as **algorithmic transparency, ethical AI, and risk-based regulations**, including considering how best to promote a**lignment with International AI Conventions** such as the Council of Europe's Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law, while also supporting AI use and innovation in trade and trade administration.

The proposed revisions, which are detailed and supported in the report, would position the CPTPP as a benchmark for inclusive, sustainable, and secure digital trade.

1 Introduction

The CPTPP Chapter 14 on Electronic Commerce was cutting-edge at its inception in 2017 when the agreement first came into force. However, the sustained growth and evolution of the digital economy, major advances in digital technologies, in particular in artificial intelligence (AI), and urgent development of new regulatory frameworks and international conventions to address the risks and opportunities in the new technological and economic conditions necessitate a comprehensive review of the CPTPP's digital provisions to maintain the Agreement's relevance.

This review takes place against the background of seismic shifts in the geopolitical context, in good measure driven by the digital transformation and the rivalry it has unleashed to dominate critical technologies together with the novel national security risks that have emerged in the digital sphere, and an escalating polycrisis in the social and environmental spheres.

The challenges facing CPTPP economies are profound and complex. The new digital technologies are critical to addressing the societal challenges, yet guardrails must be maintained against downside risks and a compelling business case must be sustained for the continued development of the digital economy. Crucially, the frameworks must support the participation in the development of the digital economy by the middle-sized and smaller economies that constitute the CPTPP's membership in the context of technologies that scale at the global level and are the bone of contention among the great powers using all the tools of geoeconomic force at their disposal.

The Governance of the Digital Economy has Advanced on Many Fronts

Since the conclusion of the CPTPP text, international institutions have intensified efforts to refine governance structures for the digital economy. As elaborated in Box 1 below, these initiatives cover data flows, platform regulation, and digital taxation; facilitation of customs procedures, including for low-value shipments; the refinement of legal text for electronic commercial documents and dispute resolution procedures; the development of the global digital infrastructure, addressing cybersecurity and interoperability; and the regulation of emerging areas such as AI. These institutional efforts collectively shape the evolving digital trade landscape, balancing support for innovation with regulatory oversight.

The Treatment of Digital Economy Issues in Trade Agreements is Evolving Rapidly

Building on this growing *acquis*, numerous regional and bilateral trade agreements with digital trade provisions have been adopted since the finalization of the CPTPP. These have served as a "sandbox" for the reflection in trade agreements of the wide-ranging work on the governance of the digital economy reviewed above. They have served to explore what is usefully included in trade agreements, the level of ambition that can be achieved given the preparedness of individual economies for digital trade and the state of professional consensus on treatment of specific issues, and the areas where political preferences and economic interests of the individual parties converge or diverge. Accordingly, the new agreements forged since the CPTPP provide a rich menu of possible amendments for incorporation into the CPTPP to support the development of a seamless framework for digital trade and e-commerce in the region. Importantly, a stabilized text for a plurilateral agreement on e-commerce was achieved at the WTO in June 2024.

Box 1: The Elaboration of the Framework for the Governance of the Digital Economy

The **Organisation for Economic Co-operation and Development** (OECD), through its Going Digital project launched in 2017, has played a leading role in shaping global digital economy governance, developing comprehensive policy recommendations on data flows, platform regulation, AI, digital trade facilitation, interoperability of regulatory frameworks and digital taxation. The OECD's Base Erosion and Profit Shifting (BEPS) framework culminated in the OECD/G20 Two-Pillar Inclusive Framework (IF) on a global minimum corporate tax, which addresses the taxation of virtual cross-border operations.

The **World Customs Organization** (WCO) has worked to modernize customs procedures for e-commerce through initiatives such as the 2018 Framework of Standards on Cross-Border E-Commerce, which aims to enhance transparency, risk management, and trade facilitation for digital transactions, and its recent Smart Customs project on the use of emerging technologies. The WCO has also collaborated with the WTO and regional trade groups in aligning customs practices for digital trade, including low-value shipment thresholds and expedited clearance procedures.

The **World Trade Organization** (WTO), through its Trade Facilitation Agreement (TFA), which entered into force in 2017, and through its ongoing work pursuant to the 2017 Joint Statement Initiative (JSI) on E-Commerce, which achieved a stabilized text for a plurilateral agreement on e-commerce in June 2024, is consolidating global rules for digital trade. The WTO moratorium on customs duties for electronic transmissions, continuously extended since 1998, has underpinned the growth of digital trade.

The **International Telecommunication Union** (ITU) has worked on facilitating e-commerce and digital trade flows by promoting global connectivity, interoperability, and cybersecurity frameworks. Since the signing of the CPTPP, the ITU has worked on advancing broadband infrastructure, 5G deployment, and digital inclusion policies, which are essential for enabling cross-border digital transactions. The ITU has also contributed to setting global standards for digital identity verification, mobile payments, and data security, thereby supporting e-commerce ecosystems. Additionally, the ITU's Global Cybersecurity Index (GCI) has helped countries strengthen their cybersecurity frameworks, reducing risks associated with online commerce and digital trade.

The **United Nations** has also been active, including through its Commission on International Trade Law (UNCITRAL). Since 2016, UNCITRAL has worked on updating the Model Law on Electronic Transferable Records (MLETR), enabling digital versions of trade documents such as bills of lading and warehouse receipts. This initiative supports paperless trade, the digitalization of trade finance and enhances legal certainty for electronic transactions. UNCITRAL has also provided guidance on cross-border recognition of electronic signatures, online dispute resolution mechanisms and digital identities, helping to harmonize practice internationally. As well, the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) has compiled best practices as guides for UN Member States, while UNCTAD has been active on linking digital transformation to sustainable development strategies.

APEC has promulgated a number of frameworks in areas such as cybersecurity and e-commerce (APEC Framework for Securing the Digital Economy and APEC Cross-Border Privacy Rules, inter alia).

The rapid advancements in generative artificial intelligence (GenAI) in the early 2020s have galvanized regulatory efforts to ensure responsible AI development and deployment. **AI governance frameworks** have been developed addressing issues such as algorithmic bias, transparency, and ethical considerations. The European Union has taken the lead with the AI Act, the first comprehensive legal framework for AI, setting global standards for risk-based AI regulation. The OECD, UNESCO, and G7 have also introduced AI principles aimed at fostering trust and accountability in AI-driven digital trade. The WTO undertook a comprehensive review of the issues raised by AI for trade in its 2024 publication, *Trading with Intelligence*, underscoring both how AI could facilitate trade and also the plethora of issues encountered in integrating AI into the rules-based trading system, and the WCO is exploring AI in customs processes.

The Geopolitical and Trade Policy Context Has Been Transformed

The deepening geopolitical divide has particularly significant implications for the digital economy and the cross-border flow of data. In particular, the proliferation of connected devices raises novel cybersecurity and national security issues given the new vulnerabilities they create for economies, including cybersecurity risks to the nation's infrastructure and its logistics; an ever-expanding attack landscape of Internet of Things (IoT) connected devices, which has already triggered new trade restrictions (e.g., the US Connected Vehicle regulations); and new avenues for information warfare to which open democracies are particularly vulnerable.

The treatment of "essential security" measures as traditionally framed in trade agreements now needs to take into account that cyberspace has been militarized (e.g., the US Cyber Command and the North Atlantic Treaty Organization's Cooperative Cyber Defence Centre of Excellence; and China's new Information Support Force and Cyberspace Force); new agencies charged with digital security tasks have been established (e.g., the US Cybersecurity and Infrastructure Security Agency (CISA)); and commercial platforms have been enlisted to participate in defense against fake accounts, bots, and propaganda campaigns that seek to manipulate public discourse and influence elections. Ciuriak (2024) provides a starting point for this discussion.

These fundamental structural issues are amplified by the shockwaves flowing from the Trump Administration's pursuit of its populist trade policy agenda, which have both underscored for smaller, open economies the vital importance of predictable, rules-based and liberalising mutual trade arrangements, and the need to craft trade rules in a way that facilitates differentiation of trade within the agreement and trade across geopolitical divides without unduly constraining trade (e.g., by narrowing the scope of products and services that are deemed to be "sensitive").

At a time of significant and disruptive change in the global economy, regaining and maintaining the CPTPP's leadership as the global digital trade benchmark, along with sustaining the certainty that its enabling rules provide to the business community, take on added significance. Accordingly, the work to modernize the CPTPP Chapter on e-commerce and the broader development of the overall agreement to address the digital transformation is essential.

Organization of this Report

The next section reviews the deepening of traditional e-commerce globally and in the CPTPP region, and draws out the implications for the scope and content of the CPTPP e-commerce chapter of the rapid development and deployment of digital technologies across the waterfront of economic activity as well as associated regulatory challenges. Section 3 outlines the recommended principles to guide the CPTPP revision in levelling up to the digital trade policy frontier in terms of coverage of issues and matching or improving upon the level of ambition established in existing agreements. Annex 1 elaborates on these in detail. Section 4 reviews broader issues including administrative issues (implementation, secretariat services, and flexible ways to advance issues that are not consensus-ready) as well as the higher-order challenges of responding to the modern security landscape, responding to sustainability challenges, and alignment with international conventions.

2 Background

By the time of the signing of the TPP in 2016, e-commerce was already a mature part of national and international commerce, leading e-commerce firms like Amazon and Alibaba were dominant commercial players, and business-to-consumer (B2C) e-commerce had reached 8% of US retail sales of goods and services and 15.5% of China's (PwC 2023).

But that was just the prelude as e-commerce doubled its share of sales in the ensuing years, partly aided by the pandemic lockdowns. By the end of 2024, the e-commerce shares of retail sales reached 16.4% in the United States[2] and 26.8% in China.[3] Globally, B2C e-commerce sales are estimated to have surpassed US$ 6 trillion in 2024.[4]

Table 1 provides a snapshot of the e-commerce share of retail sales and the share of cross-border imports in total e-commerce purchases for CPTPP economies in 2023. As regards the import share, larger economies (Japan and the UK) have smaller import shares, reflecting greater local supply potential. The same is true of more remote economies (e.g., Australia, which is relatively remote, has a smaller import share than Canada, which is next door to the United States).

In smaller economies, B2C e-commerce appears to have greatly facilitated cross-border shopping. This is brought out by the high import shares of e-commerce transactions in CPTPP Member States, including as high as 80% in Mexico. These high shares underscore the importance of e-commerce frameworks for overall trade facilitation in the CPTPP region.

Table 1: CPTPP Member States Estimated B2C E-commerce Activity. 2023

	E-commerce % of Retail Sales	Cross-border (Import) % of E-commerce Purchases
Australia	18.0	10.0
Brunei	9.7	-
Canada	11.7	34.0
Chile	14.0	56.0
Japan	15.3	3.4
Malaysia	27.1	57.0
Mexico	14.2	80.0
New Zealand	16.0	30.0
Peru	11.0	44.0
Singapore	13.0	52.0
Vietnam	7.5	37.0
United Kingdom	26.7	16.7

Source: Compiled from various sources

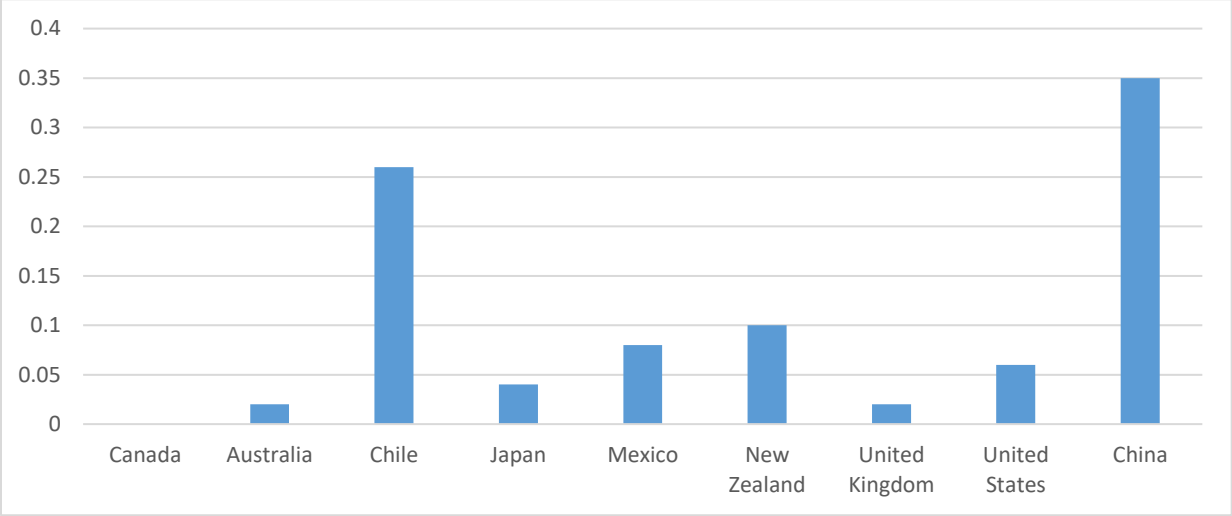
B2B e-commerce sales are much larger, accounting for about three-quarters of total e-commerce sales – perhaps US$ 18 trillion in 2024. Most B2B sales are made domestically with about 20% on average being export sales made abroad. The latter figure is based on a very few data points, however (UNCTAD 2024). The dominance of B2B transactions in total e-commerce is not surprising given that businesses used electronic data interchange (EDI) to transmit purchase orders,

[2] https://www.statista.com/.
[3] https://www.stats.gov.cn/.
[4] https://www.statista.com/.

invoices, and other essential business documents over private networks long before the Internet inspired the coining of the term e-commerce (e.g., the North American automotive industry was one of the first to use EDI in procurement in the 1960s). Thus, while the term "B2B e-commerce" itself only came into use during the 1990s, coinciding with the growth of the internet, there was, in fact, a very significant and highly sophisticated system of transactions which already fell under that category and that had already enabled the "made in the world" system of global value chains (GVCs) for which the 1995 WTO Agreement was tailored.

As regards the degree of openness of CPTPP Members's digital trade regimes, the OECD's digital services trade restrictiveness index has data for seven of the CPTPP Member states. These are provided in Figure 1 along with comparable data for the United States and China. Canada has the most open regime. The unevenness in the region may affect preparedness to sign onto provisions.

Figure 1: Digital STRIs 2024, CPTPP Members, US and China



Source: https://goingdigital.oecd.org/en/indicator/73

However, digital trade has evolved far beyond e-commerce, becoming a horizontal enabler across entire economies. Digital technologies such as cloud computing, payments infrastructure, and data-sharing platforms support productivity, innovation, and competitiveness across all sectors, from manufacturing and logistics to healthcare and agriculture.

Moreover, we are witnessing the rapid development and deployment of general-purpose digital technologies that are reshaping industry, including AI, extended reality (XR), quantum computing, blockchain and distributed ledgers, and the IoT. These advances are being supported by complementary technologies such as edge computing and next-generation telecommunications networks, which provide the ultra-fast, low-latency communication essential for autonomous systems and smart factories. Additive manufacturing is revolutionizing production processes, while synthetic biology and bioinformatics – leveraging AI for genetic editing, bio-manufacturing, and precision fermentation – are transforming industries from pharmaceuticals to agriculture. Collectively, these technologies are redefining the scale and scope of the digital economy, accelerating shifts in production models, reshaping global value chains, and altering national comparative advantages and trade interests. They not only extend the digital economy beyond the

foundational building blocks established by e-commerce but also introduce profound new governance challenges in the digital era.

By the same token, the digital transformation presents both significant sustainability challenges due to the rising energy consumption of digital technologies, the environmental risks of critical minerals mining and refining, and the growing problem of electronic waste and battery disposal; and unique opportunities and tools to advance climate-positive outcomes so as to ensure that digitalization is on balance climate-positive.

To summarize, in the short span since the conclusion of the CPTPP in 2016, traditional e-commerce has deepened substantially, digital technologies have flourished and penetrated across the waterfront of economic activity, and new technologies have broadened the range of governance issues in this area. These fundamental transformations of the economic and technological context warrant a thorough review of the scope and content of the CPTPP e-commerce chapter.

3 Levelling up to the Digital Economy Trade Policy Frontier

3.1 WTO Plus

The conclusion of the WTO e-commerce agreement establishes a new baseline for e-commerce chapters in regional trade agreements. The CPTPP update should consider adopting the WTO e-commerce framework and settled language as a starting point for the chapter and adding in updated CPTPP-specific measures that constitute WTO-plus treatment. This would usefully limit the proliferation of inconsistent texts that could raise questions as to whether there is a different intent. In the same vein, WTO-plus elements in the CPTPP would then be clearly identified.

3.2 Towards a Digital Economy Framing

The current framing of Chapter 14 as an "E-Commerce Chapter" limits its relevance to online transactions and trade facilitation. Modernising the chapter into a Digital Economy Chapter would reflect the broader reality of digital trade ("trade in the digital economy", as the DEPA Preamble puts it), while maintaining the traditional e-commerce trade facilitation provisions such as e-invoicing, e-contracts, and paperless trading, which enable and support the growth and resilience of broader trade flows.

3.3 Ensuring the CPTPP is at the Frontier for E-commerce and the Digital Economy

The DEPA and other bilateral/regional agreements involving individual CPTPP member economies have gone beyond what was covered in the CPTPP. The new agreements establish a new "digital economy policy frontier" to which the CPTPP could level up. Levelling up to the frontier would involve a combination of the following:

- Introducing new measures that have been pioneered in other agreements.
- Raising the level of ambition where possible from acknowledging the importance and initiating cooperation to aspirational adoption and further to mandatory adoption.
- Deepening the content of existing measures.

Table 2 lists areas where the CPTPP digital economy framework could be enhanced by incorporation of new measures or by raising the level of ambition of the commitments. Annex 2 elaborates on these measures.

Table 2: Levelling up the CPTPP to the Digital Economy Trade Policy Frontier

Issue Area	Model Measure	Levelling up
Digital Frameworks		
Electronic transactions frameworks	KSDPA /UNCITRAL MLETR	Mandatory
Electronic contracts	WTO 6 and Aus-UK 14.5	Mandatory
Electronic invoicing	WTO 7.2 and UK-NZ 15.9/KSDPA 10	Mandatory
Electronic payments	ASDEA 11	Mandatory
Electronic authentication and e-signatures	Australia-UK FTA, UKSDEA	Mandatory
Digital Identities	DEPA	Aspirational
Digital Trade Facilitation		
Paperless Trading	DEPA 2.2,, KSDPA	Mandatory
Single Window	DEPA 2.2.4, KSDPA	Mandatory
International Standards	EUNZFTA and SADEA	Mandatory
SME participation	DEPA 10.2	Aspirational
Logistics	WTO 19.2(g)	Acknowledgement
Express shipments	KSDPA Art 14.3	Mandatory
Conformity Assessment for digital trade	ASDEA	Cooperation
Provisions on Data		
Location of computing for financial services	ASDEA 25	Mandatory
Open Government Data	WTO 12.5	Aspirational
Data innovation/sharing	DEPA 9.4	Aspirational
Consumer Concerns		
Online safety	ASDEA 18	Aspirational
Digital Inclusion	DEPA 11.1	Cooperation
Interoperability and portability	KSDPA Art 14.25	Cooperation
International mobile roaming	RCEP Telecoms 22	Acknowledgement
Business Trust Environment		
Cybersecurity	WTO 17	Aspirational
Encrypted products	CPTPP 18.79/DEPA 3.4	Reinstate?
Safe harbours	CPTPP 18.79	Reinstate?
Supporting Infrastructure		
Submarine cables	ASDEA 22	Mandatory
Regulatory and Governance Issues		
Competition Policy	DEPA 8.4	Cooperation
Fintech/Regtech	DEPA 8.1	Aspirational
Digitization of government procurement	DEPA 8.3	Cooperation
IP falling into the public domain	DEPA 9.3	Acknowledgement
E-government	EUNZFTA 12.14	Cooperation
Artificial Intelligence		
AI governance	DEPA 8.2, KSDPA Art 14.30	Aspirational

As regards **digital frameworks** and **digital trade facilitation**, provisions related to electronic transactions frameworks (to create an enabling legal environment), electronic contracts and invoicing, electronic signatures and authentication, digital identity frameworks, and payments infrastructure are particularly relevant for consideration in the revision of the chapter given the enabling role they play across digital trade. Extending the chapter's scope to cover these areas would facilitate seamless cross-border transactions and reduce operational friction for businesses of all sizes. Financial services and payments are essential enablers of digital trade and should be fully integrated into the chapter's modernised framework to maximize the chapter's future potential. Similarly, there are several areas of digital trade facilitation where the chapter's provisions now lag behind the state of the art and could be strengthened (single windows, paperless trading and use of international standards) and broadened (logistics and conformity assessment).

The regime for **cross-border data flows** requires attention in terms of clarifying and balancing data localisation and privacy provisions, strengthening cybersecurity, and ensuring that security-based exceptions remain transparent and proportionate. This is critical to enhancing business certainty and supporting data-driven trade across all modes – not just e-commerce. Data underpins essential services such as Software as a Service (SaaS) platforms and digital tools, drives efficiency in global supply chains, powers financial services and payments infrastructure, and supports innovation across sectors ranging from healthcare to agriculture and advanced manufacturing. Data sharing is also critical to AI development by smaller economies. A robust approach to cross-border data flows will ensure that the CPTPP continues to set the global standard for digital trade.

Developing the **trust environment both for consumers and businesses** is critical for the digital transformation to realize its potential. Data free flow with trust (DFFT) has been highlighted in G7, G20, and OECD discussions but there has been a lack of actionable measures. The CPTPP revision should consider taking a leadership role in advancing this concept. Data portability and interoperability have been identified as areas for cooperation in DEAs given network externalities in digital platforms, which raise the cost for consumers of switching between competing suppliers.

Governments have recognised the value of **inclusive participation** in the digital economy by small businesses, women-led businesses and Indigenous entrepreneurs to catalyse productivity, job creation and broad-based economic growth. DEPA has a cooperation-based, exhortatory module on inclusion. The 'stabilised text' of the WTO E-Commerce Agreement includes an Exception for Indigenous Peoples, which makes clear that the Parties retain the right to accord more favourable treatment to Indigenous Peoples in their territories in relation to digital trade issues.

Additionally, as governments increasingly adopt digital tools and processes, they create a virtuous cycle that accelerates digital transformation across industries. **Government-led digital initiatives**—such as digital ID systems, e-procurement platforms, and cross-border payments integration—enable businesses to operate more efficiently and expand globally. These efforts, when supported by the right enabling frameworks in CPTPP, including attention to competition policy issues which loom large in the digital area, can spur digital adoption across the region, reinforcing digital trade and economic development in member economies. Recognising this broader role of digital technologies and embedding scalable, principles-based rules will ensure the CPTPP remains a future-proof, global standard in digital trade agreements.

To ensure the CPTPP remains forward-looking, its rules must balance **guardrails that build trust and accountability with flexibility to support innovation**. This calls for principles-based provisions that promote transparency, fairness, and responsible AI use without restricting technological development or limiting future digital trade models that may emerge. Cooperation between governments in the development of new regulations in areas such as AI will also be key to avoid unnecessary inconsistency and fragmentation of regulatory requirements. The CPTPP could play a key convening role for such cooperation activities. Box 2 sets out a number of ways in which the CPTPP might address AI.

Box 2: Incorporating AI in the CPTPP Digital Economy Chapter

AI-driven innovation will underpin the competitiveness of trade-oriented businesses. An updated unified framework could foster growth while reducing frictions when addressing shared risks and position the CPTPP as a leader in shaping rules-based, inclusive AI trade governance.

Optimizing Trade Administration

AI is driving efficiencies and innovation across trade processes. The revised CPTPP could at a minimum acknowledge importance of or include cooperation measures in the following areas:

- Machine translation: Enhancing cross-border communication and improving effective market access.
- Smart logistics: Optimizing warehouse operations, supply chains, and shipping.
- Customs and tariff management: Streamlining clearance, rules of origin determinations, data management and overall business process re-engineering.
- Trade data monitoring: Leveraging digitized manifests for better trade monitoring.

Incorporating AI-enabled automation and optimization into the CPTPP administrative framework could strengthen its digital trade provisions, building on preliminary efforts in recent agreements.

Supporting AI Development within the CPTPP region

AI development thrives on access to key inputs: talent, compute, data, and chips. For smaller, open economies, the CPTPP can play a supporting role by providing:

- Frictionless data access: Secure and equitable sharing of training datasets.
- Scaling opportunities: Supporting startups in achieving international reach.
- Infrastructure support: Establishing regional secure data processing centres.
- Standards leadership: Engaging in global AI governance and setting benchmarks.
- Facilitated movement of key personnel.

Harnessing clean energy for compute-intensive AI processes could also position CPTPP economies competitively in the global AI ecosystem leveraging trusted economies with cold climates (e.g., Canada).

Managing Risks

AI introduces novel risks across the product lifecycle, including:

- Bias from non-representative datasets.
- Privacy compromises and copyright challenges.
- Enhanced capabilities for deepfakes and disinformation.
- Environmental concerns from high energy use.

The CPTPP review could consider including proactive measures for AI governance, ensuring alignment on:

- Algorithmic transparency: Standards for explainability and accountability.
- Risk mitigation: Coordinated frameworks for measuring and addressing risks.
- Consumer protection: Real-time monitoring and safeguards.
- MRAs on AI standards to align certification processes and post-market surveillance, taking into account AI systems that learn and evolve and therefore pose unique challenges since traditional frameworks for certifying products for market access against fixed standards do not work. AI systems that learn can change for the better or worse as they learn, requiring dynamic regulatory approaches rather than fixed treaty-based rules.

Flexible mechanisms may be necessary to address AI's rapid advancements, as traditional trade agreement update cycles are too slow to keep pace. Perhaps a ratchet provision could be included to trigger discussion and possible adoption on a CPTPP-wide basis of amendments introduced by individual member economies.

Possible Areas for Cooperation

- Streamlining Rules for SMEs: Simplify AI-related provisions to ensure small and medium-sized enterprises (SMEs) can compete, avoiding dominance by large tech firms.
- Data Commons: Consider creating cross-border data commons to enable collaborative AI applications and equitable access.
- Best Practices: Identify and promote shared governance practices, drawing on examples like Singapore's allowance for personal identifiable information (PII) in datasets and Japan's copyright guidelines for generative AI.
- International Standards: Engage with global efforts (e.g., OECD frameworks) to establish cohesive AI norms across jurisdictions.
- Measurement and Evaluation: Support scientific underpinnings for scalable AI governance tools, ensuring robust risk assessments across AI lifecycles.
- Notification of draft measures on AI and other digital trade issues (following the example of the WTO TBT agreement)

4 Advancing the Frontier

4.1 Implementation, Mechanics, and Operationalisation

4.1.1 Prioritising Effective and Consistent Implementation

The CPTPP Committee on Electronic Commerce has discussed best practices in implementation of e-commerce commitments. The APEC Business Advisory Council (ABAC) has also emphasized the importance of the effective implementation of existing commitments. However, some CPTPP members have not yet fully implemented existing commitments. In particular, Vietnam, whose five-year exemption from the e-commerce chapter commitments expired on January 1, 2024, should be encouraged to implement the existing commitments expeditiously, since allowing such extensions to continue indefinitely could hinder progress on other proposed changes to the chapter.

4.1.2 Supporting interoperability as part of effective implementation

Achieving rule consistency remains one of the biggest operational challenges within the CPTPP; inconsistent or unclear interpretation and application persists, and this works against the creation of a seamless, interoperable digital regulatory environment in the region. For example:

- Data Localisation Policies: Certain members continue to impose restrictive data localisation measures, creating operational uncertainty for businesses reliant on cross-border data flows.
- Privacy and Data Protection Frameworks: Member economies have adopted diverging privacy standards even if these may be consistent with CPTPP high-level obligations, complicating compliance for businesses operating across multiple jurisdictions.

To address these issues, members must acknowledge and commit to strengthening interpretation frameworks for core provisions, ensuring clear and consistent implementation. This would reduce ambiguity, enhance legal certainty, and prevent uneven application of critical digital trade rules. There is also value in prioritising work to support the practical interoperability of regimes in these important areas. In that regard, a number of the DEAs have useful models on which CPTPP Parties could draw. For example, in DEPA, the provisions on the protection of personal information protection recognise that the Parties may have different legal frameworks, but direct them to support interoperability as far as possible, including through an agreed set of principles to underpin legal frameworks for personal information protection, as well as through the development of mechanisms to "promote compatibility and interoperability", such as autonomous or mutual recognition of regulatory outcomes, the development of international frameworks, recognition of trust marks or certification frameworks, and other avenues for the transfer of personal information. . Other ways to address inconsistencies in rule application include expanding the definitions in the agreement to include e-contracts, e-invoicing, and e-payments.

Additionally, as new economies seek to join the CPTPP, accession candidates must be held to the same high standards as current members. This includes adopting transparent, enforceable commitments on privacy, cybersecurity, cross-border data flows, and emerging digital technologies. Ensuring uniform rule adoption across all members is essential to preserving the CPTPP's position as the global benchmark for digital trade governance.

At the same time, CPTPP Members face a particular challenge of being major trading partners of both China and the United States. Structuring digital provisions to facilitate digital trade may require a risk-based approach. Some ideas that could be explored include the use of negative lists for data outbound flow and risk-based approaches to AI safety and cybersecurity.

4.1.3 Recognising the importance of continued growth in trade in digitally-deliverable services, and "digital talent" flows

While growth in merchandise trade has slowed in recent years, trade in "digitally-deliverable services" has shown remarkable dynamism, growing at nearly twice the rate of goods trade over the past decade. The share of services that are digitally delivered has expanded dramatically. In 2023, digitally-delivered services were worth USD$4.25 trillion globally, with strong performance from CPTPP economies. These services contribute significantly to productivity, job creation, the functioning of global value chains and overall economic growth. Parties should seek to create a more enabling environment for continued growth in these services by raising the ambition on their market access commitments for digitally-deliverable services.

In addition, the growth in the digital economy and digital trade depends significantly on access to a skilled digital workforce, to support both innovation (including in artificial intelligence) and the scaling up of businesses and business models. CPTPP Parties could seek to create a more seamless regional talent pool through raising ambition on commitments in relation to the movement of natural persons in this sector.

4.1.4 Secretariat Services and Monitoring Mechanisms

The establishment of a dedicated body to provide secretariat services would help ensure focused attention, effective and consistent implementation of the digital economy provisions and provide strengthened operational oversight. The secretariat's functions should include:

- **Monitoring and Reporting**: Regularly publishing implementation reports that track progress, identify compliance gaps, and highlight emerging challenges.
- **Centralising Information**: Developing a public-facing online platform to house official documents, working group updates, implementation guidelines, and case decisions, improving access to critical information.
- **A transparency mechanism**: Drawing on the model of the WTO TBT Agreement, a forum should be established (perhaps as part of a working group process) to give visibility on the development of regulations, standards and other technical measures relevant to the E-Commerce Chapter, including providing an opportunity for other Parties to comment in advance of the finalisation of particular measures.
- **Facilitating Industry Engagement**: Conducting consultations with a broad range of stakeholders, including SaaS providers, fintech companies, MSMEs, startups, and cross-sector digital economy businesses—not just traditional e-commerce players. Enabling direct engagement by industry and other stakeholders will be key to ensuring the ongoing relevance and effective implementation of the rules, both by informing policy directions and fostering industry "buy-in", ownership and education on the policy settings. The Indo-Pacific Economic Framework (IPEF) provides models for enhanced engagement with industry that could help drive AI development at the regional level.

By improving accountability and visibility, these mechanisms would ensure that digital trade commitments are uniformly applied, while enabling member economies to collaborate more effectively and businesses to navigate CPTPP markets with greater certainty.

4.1.5 Flexible Approaches to Progress on Digital Trade

A promising avenue for ensuring practical and flexible implementation is the use of Memorandums of Understanding (MOUs), which have been successfully employed in other Digital Economy Agreements (DEAs). MOUs enable targeted cooperation on specific provisions such as privacy standards, data-sharing frameworks, and cross-border payments without requiring full treaty amendments. This approach could help bridge differences in member readiness while enabling progress on critical digital trade enablers, particularly in areas like privacy reform, cybersecurity cooperation, and AI governance. The Australia-Singapore Green Economy Agreement also provides a useful precedent for how an overarching non-binding legal instrument can enable on-going work programs between a range of regulators and agencies.

Pathfinder initiatives can also be considered to allow a subset of willing economies to move ahead with deeper cooperation on specific digital trade issues within the broader CPTPP framework. As noted above CPTPP Members differ in terms of their digital trade restrictiveness; pathfinder initiatives offer a flexible approach to make progress while accommodating differing levels of regulatory readiness and ultimately serving as pilot projects that, if successful, can later be

integrated into the CPTPP on Membership-wide basis. By their nature, pathfinder initiatives would be issue-specific. Potential areas include:

- Cross-border data flows – developing trusted data transfer mechanisms to advance DFFT within the region (e.g., bilateral MRAs that follow the EU's GDPR recognition approach could advance DFFT).
- Promoting interoperability of digital trade documentation.
- AI and algorithmic transparency – establishing guidelines for AI governance in trade.

In pursuing this path, it would be important to define clear benchmarks for success and periodic review mechanisms; and to encourage participating economies to share best practices.

Examples of such flexible approaches in the Asia Pacific region include:

- Digital Economy Partnership Agreement (DEPA) between Singapore, Chile, New Zealand and Korea (with a number of economies seeking to accede), which uses a modular structure to enable flexible participation.
- APEC Cross-Border Privacy Rules (CBPR) system, an opt-in framework for data governance.
- ASEAN Digital Integration Framework and the Digital Economy Framework Agreement currently under negotiation, which promotes digital economy harmonization among ASEAN states.

Finally, regulatory sandboxes can also be used to test new approaches with lower compliance risks.

4.1.6 Future-proofing the Agreement

Given the rapid pace of technological change, establishing a structured stakeholder engagement process is essential for future-proofing the CPTPP's digital economy measures. A well-designed engagement framework that incorporates regular consultations between industry leaders and small business representatives, technology experts, consumer groups, and policymakers can provide early insights into disruptive innovations, business impacts and regulatory gaps, enabling timely interventions to ensure that the digital trade framework remains adapted to emerging technologies and evolving market needs.

4.2 Adapting the CPTPP to the New Security Context

The CPTPP update should consider developing the new language required to take account of the fundamental differences in essential security that emerge from connected devices in non-emergency contexts. As well, given the growing resort to economic coercion involving extra-territorial trade restrictions in the geoeconomic/geopolitical rivalry, should consider adopting at a minimum notification and consultative mechanisms in response to such restrictions that would impact on intra-CPTPP trade. Mechanisms for collective anti-coercion responses should also be considered.

4.3 Green Digitalization and Digitalization for Greening

Taking into account both the risks that the digital transformation poses for sustainable development and the opportunities to harness digital technologies to make groundbreaking changes in support of climate-positive and sustainable-development-supportive change. Areas for cooperation through digital economy measures include:

- coupling the build-out of energy-intensive data centres with the adoption of renewable energy sources to power them, promoting trade in clean energy technologies (e.g., energy-efficient data centre equipment), streamlining cross-border grid connectivity and adoption of AI-driven tools for energy efficiency gains;
- encouraging best practices for sustainable mining practices and responsible supply chain management – including transparency measures, certification schemes, and incentives for ethical sourcing of critical minerals – to mitigate the environmental costs of upstream raw material extraction;
- promoting the adoption of circular economy principles in the digital sector including adoption of best practices in e-waste management to mitigate downstream environmental costs;
- promoting digitalization to improve monitoring of environmental standards (including in supply chains), optimize logistics, and boost operational efficiency to help reduce carbon emissions and energy consumption, and to support increased trade in digitally-delivered environmental services; and
- promoting sustainable development by action to narrow the digital divide.

4.4 Alignment with International Conventions

The Council of Europe has adopted a Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law (Council of Europe 2024) that, in effect, rolls up a number of international frameworks on AI – including the G7's Global Partnership on AI (GPAI), the OECD's AI Principles, UNESCO's Recommendation on the Ethics of Artificial Intelligence, and the United Kingdom's Bletchley Declaration for AI – into a legally binding treaty that could serve as part of a template for addressing AI in a revised CPTPP.

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Appendix 1: Horizontal Scan of Areas for CPTPP Treatment

Since there is no conventional organization for e-commerce chapters, the following preliminary review of areas where the CPTPP could be amended to bring it up to the trade policy frontier established by the existing set of agreements follows a side-by-side comparison developed in Ciuriak (2023) review of digital economy agreements (DEAs), including as updated to reflect the negotiated text of the WTO JSI on ecommerce of 24 June 2024. The surveyed agreements are as follows: the Digital Economy Partnership Agreement (DEPA); the Australia-Singapore Digital Economy Agreement (ASDEA), the Korea-Singapore Digital Partnership Agreement (KSDPA), the EU-New Zealand FTA (EUNZFTA), the UK-New Zealand FTA (UKNZFTA), the Trans-Pacific Partnership (TPP) as incorporated by reference in the Comprehensive and Progressive Agreement for Trans-Pacific Trade (CPTPP), the Regional Comprehensive Economic Partnership (RCEP), and the WTO Joint Statement Initiative on E-Commerce (WTO).

1. **Market access:** this includes now standard provision for non-discriminatory treatment of digital products and commitments regarding application of customs duties on electronic transmissions. Commitments are generally strong in leading DEAs. Notably, the RCEP provides only for complying with the current WTO moratorium on tariffs on electronic transmissions, but with non-binding language, thus allowing for future application of such tariffs, were the moratorium to be discontinued. **With the rise of AI systems that compete with material systems, there will be a need to classify digital products appropriately. The use of the term "electronic transmissions" to denote cross-border digital transactions in WTO contexts is archaic and does not provide a basis for rule-making in the age of digital twins of material products, data, and AI. For example, durable digital products could be classified as goods, non-durable digital products as services, and a separate classification could be created for the value of ancillary data. Such a classification system is essential to address the complexities of data flows and AI in trade and to ensure the ability to apply the principle of technological neutrality. Notably, the KSDPA touches on this issue without resolving it: "The definition of "digital product" should not be understood to reflect a Party's view on whether trade in digital products through electronic transmission should be categorised as trade in services or trade in goods." (at note 14-2).**

	DEPA	ASDEA	KSDPA	EUNZFTA	UKNZFTA	TPP	RCEP	WTO
Definition of digital product distinct from electronic transmission	3.1***	1***	14.1***			14.1***		
Non-discrimination of digital products	3.2***	6***	14.6***			14.4***		
Customs duties - non application to electronic transmissions or content (products) transmitted digitally	3.3***	5***	14.5***	12.6.1***	15.4(1)***	14.3***	12.11 (not bound)	11.3*** (review at 5 yrs)

Cell entries refer to the agreement article; the strength of the provision is denoted by: *** = mandatory; ** = aspirational; * = cooperation; no asterisk = acknowledgement/recognition.

2. **Digital frameworks for electronic commerce:** DEAs conventionally establish a requirement to implement a domestic e-commerce framework, drawing on model laws developed by UNCITRAL and on UN conventions, which establish principles of non-discrimination for use of electronic formats, functional equivalence, and technological neutrality. **Note: the principle of technological neutrality needs to be unpacked as to what exactly it means (see, e.g., Koops 2006; Craig 2013), particularly when it is to be applied to AI systems. For example, it has been noted that: "Regulation should be technology neutral in its effects. The effects of the offline and on-line regulatory environments, including the criminal and civil law, should be as similar as possible. There may be occasions when different treatment is necessary to realise an equivalent result."** Trade agreements also address the main elements of the framework, including the recognition of contracts concluded by electronic means, e-signatures and authentication, e-invoices, and e-payments. However, there is some variation across agreements as regards which specific elements to single out for individual treatment. **The TPP is silent on e-invoicing and e-payments**. **The ASDEA and KSDPA stand out as the most comprehensive and strongest. the WTO text on electronic contracts and signatures has advanced beyond the TPP.**

	DEPA	ASDEA	KSDPA	EUNZFTA	UKNZFTA	TPP	RCEP	WTO
Electronic Transactions Framework	2.3***	8***	14.7***		15.6***	14.5***	12.10***	4.1**
Electronic contracts		33*	14.7***	12.8***	15.5***	14.15(e)**		6***
Electronic Signatures and Authentication		9***	14.8***	12.9***	15.7***	14.6***	12.6***	5.2***
Electronic invoicing	2.5***	10***	14.10**	12.10***	15.9			7.2***
Electronic payments	2.7**	11***	14.11***					10.2

Cell entries refer to the agreement article; the strength of the provision is denoted by: *** = mandatory; ** = aspirational; * = cooperation; no asterisk = acknowledgement/recognition.

3. **Digital trade facilitation:** A set of provisions have been included in DEA/RTA e-commerce chapters to facilitate cross-border e-commerce. These focus on automation of customs procedures through paperless trading (including acceptance of electronic copies of trade documents and advance processing of trade documents in electronic format), provision of a single window, and adoption of international standards to promote the interoperability of border systems. Notably, the WTO TFA already includes on an aspirational/hortatory basis commitments for acceptance of electronic copies of documents (Article 2.1), implementation of a single window (Article 4) and adoption of international standards (Article 3). Accordingly, there is room for DEAs/RTAs to improve upon WTO commitments. **While the TPP makes reference to international standards in many other chapters, it does not do so in the e-commerce provisions. As well, it does not promote the use of single windows. Notably, where RTAs or DEAs decline to specifically address these areas, the default is the TFA measure**. We include transparency requirements to publish information about trade regimes and cooperative measures to support participation of SMEs in this group of measures.

	DEPA	ASDEA	KSDPA	EUNZFTA	UKNZFTA	TPP	RCEP	WTO
Paperless Trading	2.2***	12***	14.12***	12.15**	15.10**	14.9**	12.5**	8** TFA**
Single Window	2.2.4***	12**	14.12***					9** TFA**
International standards to promote interoperability of systems	2.2.8**		14.31(2, 3, 4)**	4.3***	15.8* 15.9*** 15.10*** 15.13*** 15.19			5.6** 7.4** 9.3** 10.3** TFA*
Transparency	13.2***	14***	14.31(5)**	4.11***		26.2***	12.12***	20.15 (development assistance)
SME participation facilitation	10.2**	36*	14.32**	12.14d*	15.20	14.15	12.4*	

Cell entries refer to the agreement article; the strength of the provision is denoted by: *** = mandatory; ** = aspirational; * = cooperation; no asterisk = acknowledgement/recognition.

4. **Consumer access, protection and privacy:** Principles have been developed concerning access to the Internet for e-commerce, requirements to maintain a regime to protect personally identifiable information; measures to guard against fraudulent and deceptive activities online; and measures to address unsolicited marketing communications. These are routinely included in digital economy chapters and are under discussion in the WTO e-commerce negotiations. **The WTO text of 24 June 2024 goes beyond the TPP in cybersecurity. Where the TPP text only acknowledges utility of cooperation, the WTO has an aspirational commitment: "…each Party shall endeavour to use, and encourage enterprises within its jurisdiction to use, risk-based approaches that rely on risk management best practices and on standards developed in a consensus-based, transparent, and open manner."**

	DEPA	ASDEA	KSDPA	EUNZFTA	UKNZFTA	TPP	RCEP	WTO
Internet Access	6.4	20	14.24	12.16	15.16	14.10		13
Personal Information Protection	4.2***	17***	14.17***	12.5	15.13***	14.8***	12.8***	16*** 19.2(a) (cooperation)
Online Consumer Protection	6.3***	15***	14.21***	12.12***		14.7***	12.7***	14*** 19.2(b)
Unsolicited Commercial Electronic Messages	6.2***	19 ***	14.20***	12.13***	15.11***	14.14***	12.9***	15** 19.2(c)
On-line safety and security - cooperation	5.2	18**	14.23**	12.14c*		14.15		19.2(d)
Cybersecurity	5.1	34	14.22	12.14.4	15.18**	14.16	12.13	17**

Cell entries refer to the agreement article; the strength of the provision is denoted by: *** = mandatory; ** = aspirational; * = cooperation; no asterisk = acknowledgement/recognition.

5. **Business Trust Environment**: A number of business sector interests are touched on in e-commerce and digital economy agreements. While they are often grouped under a "business trust" rubric, practice has yet to coalesce on a template. These measures include protection of software source code and products that use cryptography, subject to carve-outs for legitimate policy purposes, including as regards software for critical infrastructure and law enforcement. The TPP's measures addressing the liability of online services providers, especially the platform firms, for the use made by users of those platforms, including intellectual property (IP) violations, are suspended in the CPTPP. Finally, the digital transformation has made trade secrets protection a much more important IP area; the TPP is already very strong in this area. **The heightened national security concerns around connected devices of all sorts reopens this issue for CPTPP members. While the CPTPP does not straddle a security divide, the agreement could usefully pioneer the development of approaches to minimize the impact of security concerns on commercial relations. For example, insofar as the concern over connected vehicles relates to the secure communications systems and their connections to the cloud, plug-and-play modular systems could be promoted that would allow trade in the vehicles without the coms.**

	DEPA	ASDEA	KSDPA	EUNZFTA	UKNZFTA	TPP	RCEP	WTO
Source Code - ban on forced access to source code with exception for critical infrastructure		28***	14.19***	11***		14.17***	12.16	
Encrypted Products - protection subject to law enforcement access	3.4***	7***	14.18***		15.12***	18.79*** (Suspended in CPTPP)		
Safe harbours - liability of intermediary services providers						18.82*** (suspended in CPTPP)		
Trade secrets protection			KSFTA 17.3 (TRIPS reference)		17.63*** (IP chapter)	18.78***	11.2 (TRIPS only)	TRIPS 39

Cell entries refer to the agreement article; the strength of the provision is denoted by: *** = mandatory; ** = aspirational; * = cooperation; no asterisk = acknowledgement/recognition.

6. **Commitments on data:** measures addressing cross-border data flows and localization of data storage or processing are central to e-commerce trade and are part of the WTO negotiations. Some trade agreements include a separate measure for location of computing facilities for financial services due to the need for access to the data by financial supervisory authorities. Because of rising concerns around privacy and national security in the digital domain, the carve-outs for legitimate policy purposes become all important in actually determining the extent of free flow of data. **The US withdrawal of its unqualified support for free flow of data across borders reflecting the change in geopolitical circumstances and the new heightened national security issues around connected devices reopens this question for CPTPP members.**

	DEPA	ASDEA	KSDPA	EUNZFTA	UKNZFTA	TPP	RCEP	WTO
Cross-Border Transfer of Information by Electronic Means - allowance for business of a covered person with carve-out for legitimate policy exceptions	4.3***	23***	14.14***	12.4.2***	15.14***	14.11***	12.15***	
Location of Computing Facilities - ban on data localization with carve-out for legitimate policy exceptions	4.4***	24***	14.15***	12.4.2***	15.15***	14.13***	12.14***	
Location of Computing Facilities for financial services		25***	14.16		Commitment to review		12.16	
Open government data	9.5	27	14.26*		15.17*			12.5**

Cell entries refer to the agreement article; the strength of the provision is denoted by: *** = mandatory; ** = aspirational; * = cooperation; no asterisk = acknowledgement/recognition.

7. **Supporting commercial and physical infrastructure for e-commerce**: E-commerce includes both trade in intangibles that flow through telecommunications networks and digitally-facilitated trade that flows through logistics chains for material products. In RTAs, the e-commerce provisions are complemented by measures in various other chapters (namely, customs and trade facilitation, telecommunications, and the general services chapters) that address access to the enabling infrastructure for both digital transactions and digitally facilitated transactions. Digital connectivity is addressed through measure addressing internet interconnection, including submarine cable connections (submarine cables installation and service have also been introduced). Digitally facilitated business-to-consumer cross-border trade is addressed through commitments on courier services, express delivery services, and low-value shipments. Notably, the DEAs are incorporating these measures directly reflect their centrality to a digital economy operating environment. **Note that the concept of a "digital silk road" has been introduced by China as part of its Belt and Road Initiative.**

	DEPA	ASDEA	KSDPA	EUNZFTA	UKNZFTA	TPP	RCEP	WTO
Internet Interconnection - negotiation of interconnection on a commercial basis		21				14.12***	Telecoms 9***	Annex – Section II***
Submarine cables connections						13.11***	Telecoms 18***	
Submarine cables installation and service		22***						
Courier services - parcel delivery			KSFTA services annex		UK-NZ FTA Annex 9B	Annex 10-B***		
Express shipments	2.6***	13***	14.13(2)***		UK-NZ FTA Annex 9B	5.7***	Customs 4.15***	
Low value shipments	2.6.4***	13***	14.13(4)**			5.7.1f***	Customs 4.15**	

Cell entries refer to the agreement article; the strength of the provision is denoted by: *** = mandatory; ** = aspirational; * = cooperation; no asterisk = acknowledgement/recognition.

Future areas for development signalled by the cooperation agenda

A wide range of issues have been introduced into trade agreements in e-commerce and related chapters with commitments for cooperation and dialogue, which point to the future of DEA development. The largest coverage of these issues is in the DEPA, which highlights its ambition to provide a template for the future regulation of the digital economy. These issues can be grouped as: consumer-oriented issues, trade facilitation, regulatory issues in the digital economy, public sector management, and IP and data.

8. **Consumer-oriented issues**: three areas of relevance for consumers in recent agreements are digital inclusion, improved cooperation on mobile roaming charges, and digital identities. The inclusion agenda singled out in the DEPA seeks to broaden participation in e-commerce of women, rural populations, low socio-economic groups, and Indigenous Peoples. This is in line with broader sustainability agendas and will likely be of growing significance for trade agreements given the income-skewing that is characteristic of the digital economy. The UK-NZ FTA and RCEP feature a well-developed cooperation article on roaming that addresses transparency of rates for international mobile roaming services, minimizing impediments to consumers, and addressing access to regulated rates for suppliers. The digital identity cooperation programs included in the DEPA, ASDEA, KSDPA, and UKNZFTA focus on issues such as common standards and technical interoperability between the parties' digital identity regimes; achieving comparable levels of protection of digital identities; developing use cases for mutual recognition of digital identities; and encouraging broader cooperation in this area at the international level.

	DEPA	ASDEA	KSDPA	EUNZFTA	UKNZFTA	TPP	RCEP	WTO
Digital inclusion	11.1*				15.20*			
International Mobile Roaming					12.17**		Telecoms 22	
Digital identities	7.1**	29*	14.30*		15.8*			

Cell entries refer to the agreement article; the strength of the provision is denoted by: *** = mandatory; ** = aspirational; * = cooperation; no asterisk = acknowledgement/recognition.

9. **Trade Facilitation:** The DEPA introduces an important area for the coming era where rapid development of AI use cases and 5G-enabled automation will impact significantly on digitally-enabled trade by enabling remote-controlled/autonomous vehicles; on-demand and dynamic routing solutions; and use of federated or "smart" lockers for pickup of online retail purchases. The ASDEA meanwhile introduces a cooperation program on conformity assessment for digital trade. While trade in smart devices has grown rapidly, the growing role of increasingly sophisticated AI and the corresponding rise in attention to ethical AI systems portends future standards-related trade issues (see, e.g., Ciuriak and Rodionova 2021).

	DEPA	ASDEA	KSDPA	EUNZFTA	UKNZFTA	TPP	RCEP	WTO
Logistics	2.4		14.9*					19.2(g)
Standards and Conformity Assessment for digital trade		30*	14.31*					

Cell entries refer to the agreement article; the strength of the provision is denoted by: *** = mandatory; ** = aspirational; * = cooperation; no asterisk = acknowledgement/recognition.

10. **Regulatory issues in the digital economy:** Competition policy, which was deferred during the Uruguay Round negotiations for further work as one of so-called Singapore Issues, became increasingly important in the context of the digital economy given the global scale of platform firms and is thus receiving renewed attention in trade agreements. In particular, data portability and interoperability have been identified as areas for cooperation in DEAs given network externalities in digital platforms, which raise the cost for consumers of switching between competing suppliers and in turn entrench the position of leading suppliers. In theory, data portability and interoperability mechanisms could increase competition by reducing switching costs, with consequential benefits to innovation, development of comparison services in markets with complex pricing structures, and others (OECD, 2021). FinTech is an area where regulatory sandboxes are used to trial regulatory reforms in a controlled experimental environment to identify approaches conducive for financial innovation. A related area is RegTech where the growing complexity of compliance (e.g., with anti-money laundering laws, reporting requirements on currency transactions and suspicious activities etc.) has led financial institutions to seek technological solutions and contributed to the emergence of so-called RegTech start-ups. **The recent fine imposed on TD Bank by US regulatory authorities over weak compliance with anti-money laundering laws, in a context where TD Bank relied on algorithms to identify suspicious activity, highlights the significance of this area**. Cooperation fostered by trade agreements in sharing experience and developing compatible standards is a promising area for development under DEAs.

	DEPA	ASDEA	KSDPA	EUNZFTA	UKNZFTA	TPP	RCEP	WTO
Competition policy	8.4*	16*	14.27*				12.16	19.2(e)
Data regulation - portability/interoperability etc.			14.25(2)(b)**					
Financial Technologies (FinTech/RegTech)	8.1**	32	14.29*					

Cell entries refer to the agreement article; the strength of the provision is denoted by: *** = mandatory; ** = aspirational; * = cooperation; no asterisk = acknowledgement/recognition.

11. **Public sector management:** the DEPA identifies digitization of government procurement and promoting the construction of publicly accessible databases to identify IP that has fallen into the public domain as areas where improved government practices could boost the digital economy. These initiatives would promote the participation of SMEs in the digital economy by reducing search costs, including in establishing "freedom to operate" with new technology projects. As well, e-government has been flagged as an area for cooperation.

	DEPA	ASDEA	KSDPA	EUNZFTA	UKNZFTA	TPP	RCEP	WTO
Digitization of government procurement	8.3*							
IP falling into the public domain	9.3							
E-government				12.14e*				

Cell entries refer to the agreement article; the strength of the provision is denoted by: *** = mandatory; ** = aspirational; * = cooperation; no asterisk = acknowledgement/recognition.

12. **Innovation:** reflecting the acceleration in the pace of innovation, DEAs have included commitments to promote innovation through cooperation, with particular attention to data-related innovation and the development of governance frameworks for ethical AI applications and other emerging technologies.

	DEPA	ASDEA	KSDPA	EUNZFTA	UKNZFTA	TPP	RCEP	WTO
Cooperation on data innovation/sharing	9.4**	26**	14.25*		15.19*			
AI Governance Frameworks	8.2**	31**	14.28		15.19(3)(a)**			

Cell entries refer to the agreement article; the strength of the provision is denoted by: *** = mandatory; ** = aspirational; * = cooperation; no asterisk = acknowledgement/recognition.