ASIA-PACIFIC TRADE AND INVESTMENT REPORT

Unleashing Digital Trade and Investment for Sustainable Development

Highlights and Recommendations: 2025 Updates

ESCAP
Economic and Social Commission for Asia and the Pacific

UNITED NATIONS
UNCTAD

UNIDO

*The shaded areas of the map indicate ESCAP members and associate members.**

The Economic and Social Commission for Asia and the Pacific (ESCAP) is the most inclusive intergovernmental platform in the Asia-Pacific region. The Commission promotes cooperation among its 53 member States and 9 associate members in pursuit of solutions to sustainable development challenges. ESCAP is one of the five regional commissions of the United Nations. The ESCAP secretariat supports inclusive, resilient and sustainable development in the region by generating action-oriented knowledge, and by providing technical assistance and capacity-building services in support of national development objectives, regional agreements and the implementation of the 2030 Agenda for Sustainable Development.

The United Nations Conference on Trade and Development (UNCTAD) is the focal point, within the United Nations system, for the integrated treatment of trade and development and interrelated issues in the areas of finance, technology, investment, services and sustainable development. Globalization, including a phenomenal expansion of trade, has helped lift millions out of poverty. But not nearly enough people have benefited. And tremendous challenges remain. UNCTAD supports developing countries to access the benefits of a globalized economy more fairly and effectively. It provides analysis, facilitates consensus-building, and offers technical assistance. This helps them to use trade, investment, finance, and technology as vehicles for inclusive and sustainable development.

The United Nations Industrial Development Organization (UNIDO) is a specialized agency of the United Nations with a unique mandate to promote and accelerate industrial development. Its mandate is reflected in Sustainable Development Goal (SDG) 9: "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation". However, UNIDO's activities contribute to all the SDGs and draw on the synergistic effects of industrialization to maximize the impacts of development work. UNIDO's vision is that of a world without poverty and hunger. A world where industry drives low-emission economies. A world with improved living standards which preserves the environment and global public goods which are the common inheritance of the whole of humanity. UNIDO provides support to its 172 member States through four mandated functions: technical cooperation, research and policy-advisory services, normative standards-related activities, and fostering partnerships for knowledge and technology transfer. UNIDO's work is concentrated on three focus areas: ending hunger by helping businesses from farm to fork, climate action particularly using renewable energy and energy efficiency to reduce industrial greenhouse gas emissions, and supporting sustainable supply chains so that developing country producers receive a fair deal and scarce resources are preserved.

This publication presents the 2025 updates of highlights and policy recommendations from the Asia-Pacific Trade and Investment Report (APTIR): Unleashing Digital Trade and Investment for Sustainable Development, https://www.unescap.org/kp/APTIR2023.

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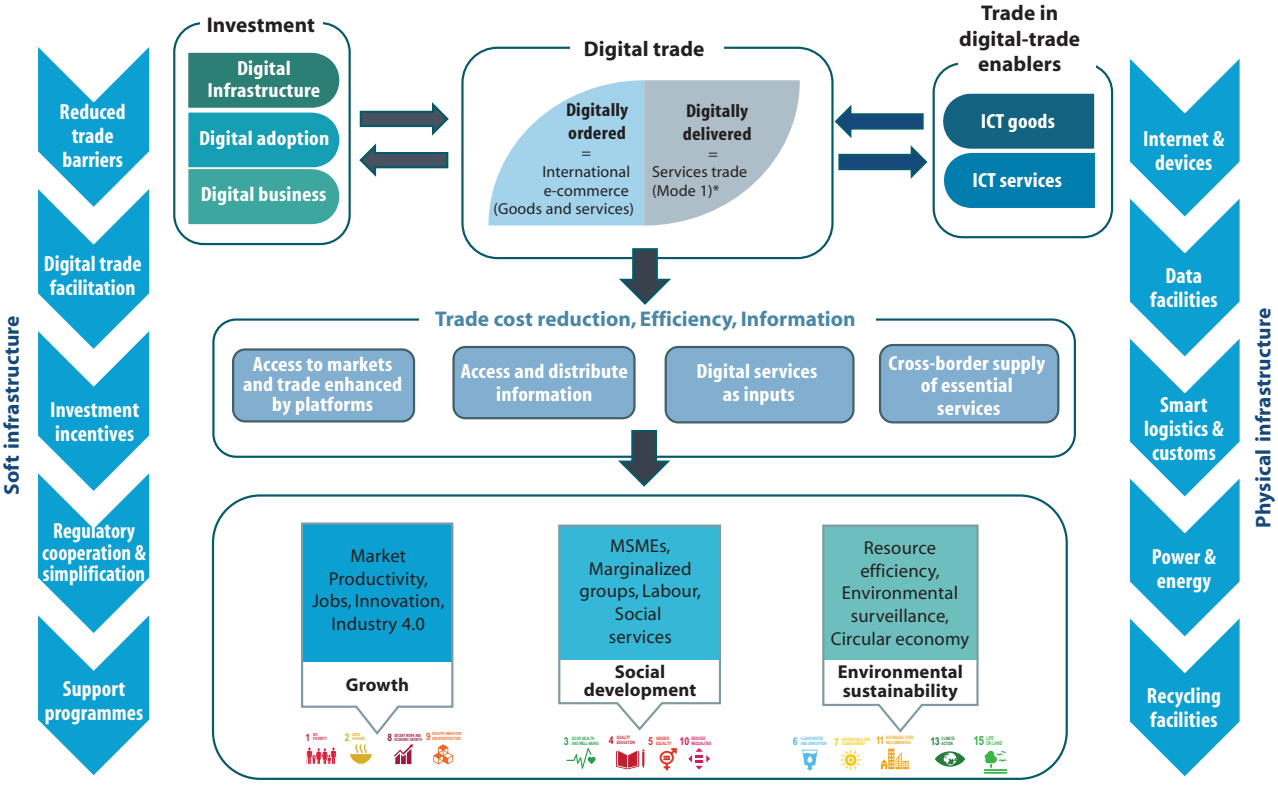
HIGHLIGHTS

I. The role of digital trade and investment in sustainable development

Digital transformation is fundamentally reshaping how trade is conducted, shifting from traditional practices to **digital trade**, which **involves cross-border flows of goods and services ordered or delivered online** (figure 1). Digital trade is increasingly replacing traditional trade models and driving demand for a wide range of digitally delivered business services, including those offered by digital platforms.

Figure 1. Digital trade and SDGs



Source: ESCAP

Note: * Only digitally deliverable services.

For developing economies, their ability to bridge digital divides, enhance technological capabilities, and participate meaningfully in digital trade relies heavily on digital foreign direct investment (FDI). **Digital FDI involves investments that establish new digital capabilities (digital infrastructure FDI), enable digital adoption (digital adoption FDI), or facilitate digital business operations (digital business FDI) in host economies.**

Moreover, **digital trade necessitates Information and Communication Technology (ICT) equipment and services.** These **'digital-trade enablers'** facilitate the process of ordering and delivering all digital trade transactions.

These elements collectively reduce trade costs, enhance efficiency, and facilitate the flow of information, positioning digital trade as a key driver of economic growth, inclusivity, and environmental sustainability—each closely linked to the Sustainable Development Goals (SDGs):

- **Economic growth**: Digital platforms enhance market access, reduce trade costs, and increase efficiency, fostering innovation and productivity. They enable firms to integrate into data-driven global value chains (GVCs) and drive industrial modernization, thereby supporting growth and strengthening regional connectivity.
- **Inclusivity**: By lowering entry barriers, improving access to finance, and facilitating cross-border payments, digital trade empowers micro, small, and medium enterprises (MSMEs), including those led by or employing women and marginalized groups, to participate in global markets. Furthermore, digital platforms expand access to essential services such as healthcare and education, helping to bridge gaps for underserved communities and reduce inequalities.
- **Environmental sustainability**: Digital trade supports resource efficiency, promotes circular economy models, paperless practices, and green supply chains. The adoption of green technologies and sustainable consumption patterns accelerates the transition to low-carbon economies.

The opportunities provided by digital trade can only be fully realized by addressing these challenges and investing in both soft and physical infrastructure to support the development of digital trade and the digital economy:

- **Soft infrastructure encompasses regulatory frameworks that facilitate seamless digital transactions.** From the perspective of trade and investment policies, this includes measures to reduce trade barriers, implement digital trade facilitation, offer investment incentives to attract digital FDI, harmonize and simplify regulations, and extend support to empower MSMEs and marginalized groups.
- **Physical infrastructure provides the tangible backbone of digital trade.** High-speed internet networks ensure reliable connectivity, while data centers offer secure storage and processing capabilities for digital transactions. Smart logistics and customs systems streamline cross-border e-commerce, enhancing efficiency and reducing delays. Renewable energy systems power these operations sustainably, and facilities for environmental management minimize the ecological impact of digital trade.

The benefits derived from digital trade are closely tied to Internet penetration. Unlocking the full potential of digital trade urgently calls for bridging the digital divide. Empirical studies conducted by United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the United Nations Industrial Development Organization (UNIDO) found a **positive relationship between increased digital trade and overall progress towards the SDGs.** This association was especially pronounced for SDG targets connected to social development. Furthermore, ESCAP research suggests that **a 1% increase in digital trade value is associated with a 0.8 percentage point rise in the growth rate of an economy's real Gross Domestic Product (GDP) per capita**. Additionally, the study finds that the positive outcomes of digital trade are often reliant on widespread internet access. The results confirm the importance of addressing the digital divide. This is especially urgent for Least Developed Countries (LDCs), the economies of South- and South-West Asia (SSWA), Pacific Islands Developing Economies (PIDEs) and Land-Locked Developing Countries (LLDCs).

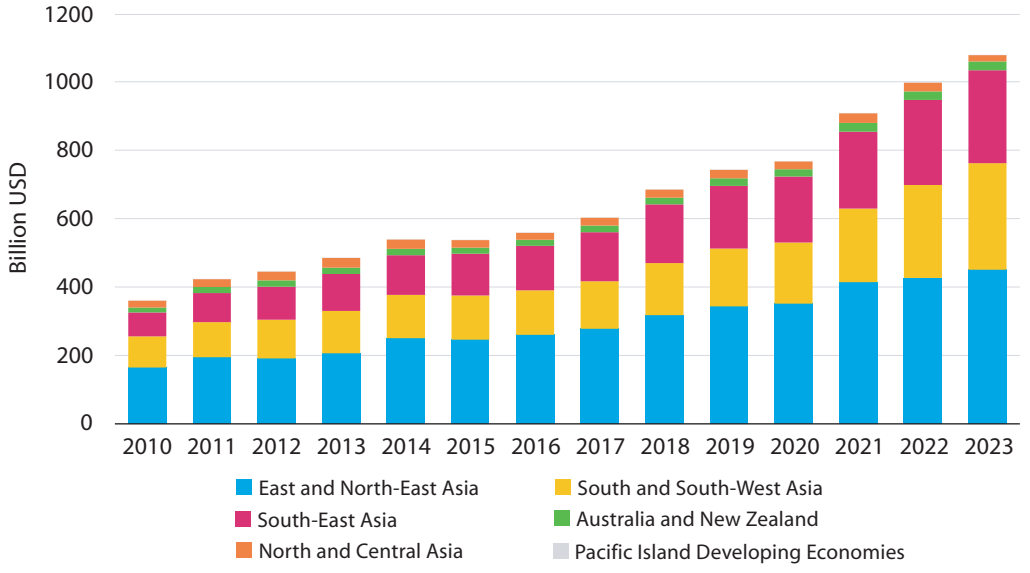
II. Trends in digital trade and investment in Asia and the Pacific

Digital trade is an important component of global trade. In 2023, global exports of digitally deliverable services reached US$ 4.3 trillion, constituting 55% of the total global services trade. The Asia-Pacific region contributed US$ 991 billion, representing 49% of the region's total services exports.

The Asia-Pacific region has emerged as a growth leader in digital trade. From 2015 to 2023, its exports of digitally deliverable services grew by 8.0% annually, higher than the global average of 7.6%. This growth was supported by rising demand within the region. Intra-regional exports increased from 35% to 37.4% during this period.

Despite this progress, digital trade opportunities are highly concentrated. Similar to traditional trade trends, economies in North and Central Asia (NCA), South Asia and the developing Pacific have accounted for insignificant shares in digital trade. The export landscape is highly concentrated, with just six economies accounting for 90% of the region's digitally deliverable exports. Of these six, all but one are in the East and North-East Asian (ENEA) subregion, which alone contributed nearly 42% of the region's digitally deliverable service exports in 2023 (figure 2).

Figure 2. Digitally deliverable service exports by Asia-Pacific subregion



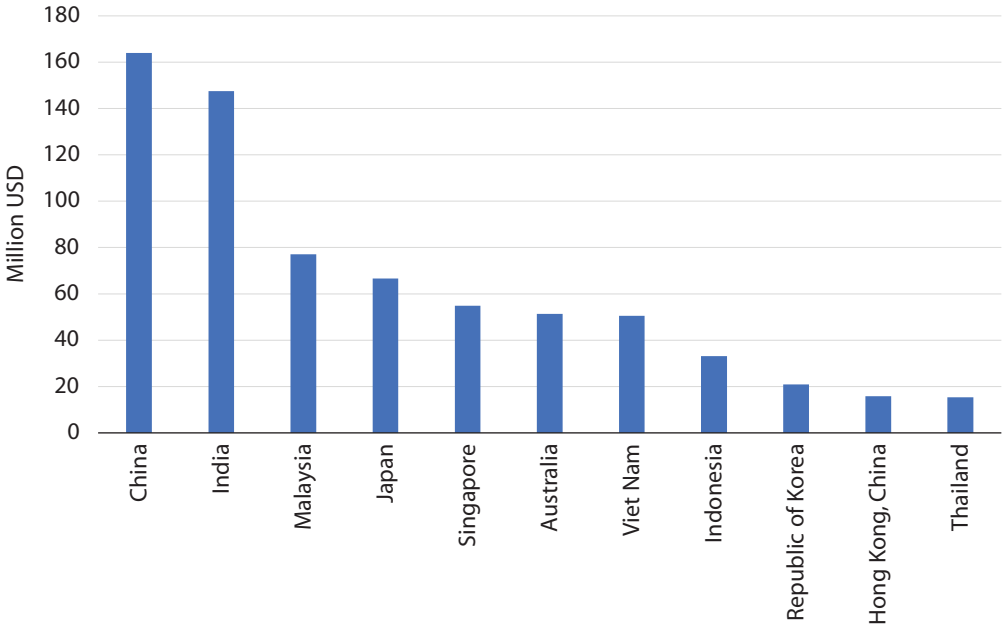
Source: UNCTAD, based on UNCTAD Digital Economy Database (https://unctadstat.unctad.org/wds/), accessed in October 2024.

Note: Trade value includes inter-regional trade.

Digital FDI inflows show a similar trend. From 2015 to 2023, the Asia-Pacific region achieved an average annual growth rate of 20% in digital FDI, outpacing the global average of 16%. A significant portion of this investment was directed toward China, India, and economies in ENEA and South-East Asia (SEA) (figure 3). The United States is the largest investor in the Asia-Pacific digital sector, while intraregional investments from countries such as the Republic of Korea, China, and Japan also play a significant role.

Asia-Pacific LDCs have seen rapid growth in digital trade, but further growth and engagement is constrained. Only 0.39% of the region's digital FDI inflows were channelled towards the Asia-Pacific LDCs in 2023. The insignificant FDI inflows to LDCs imply possible underinvestment in crucial infrastructure and digital businesses necessary for competitiveness. In addition, LDCs face a shortage of workers with digital skills, while education systems often fail to meet the demands of a digital economy. Weak regulatory frameworks, particularly in data protection and online consumer transactions, erode trust and deter investment. As a result of such obstacles, the Asia-Pacific LDCs accounted for less than 1% of the region's exports of digitally deliverable services in 2023.

Figure 3. Cumulative digital FDI inflows by major Asia-Pacific recipients (2011–2023)



Source: ESCAP, based on fDi Markets (2024), accessed in October 2024.

III. Trends and development in digital trade and investment policies in Asia and the Pacific

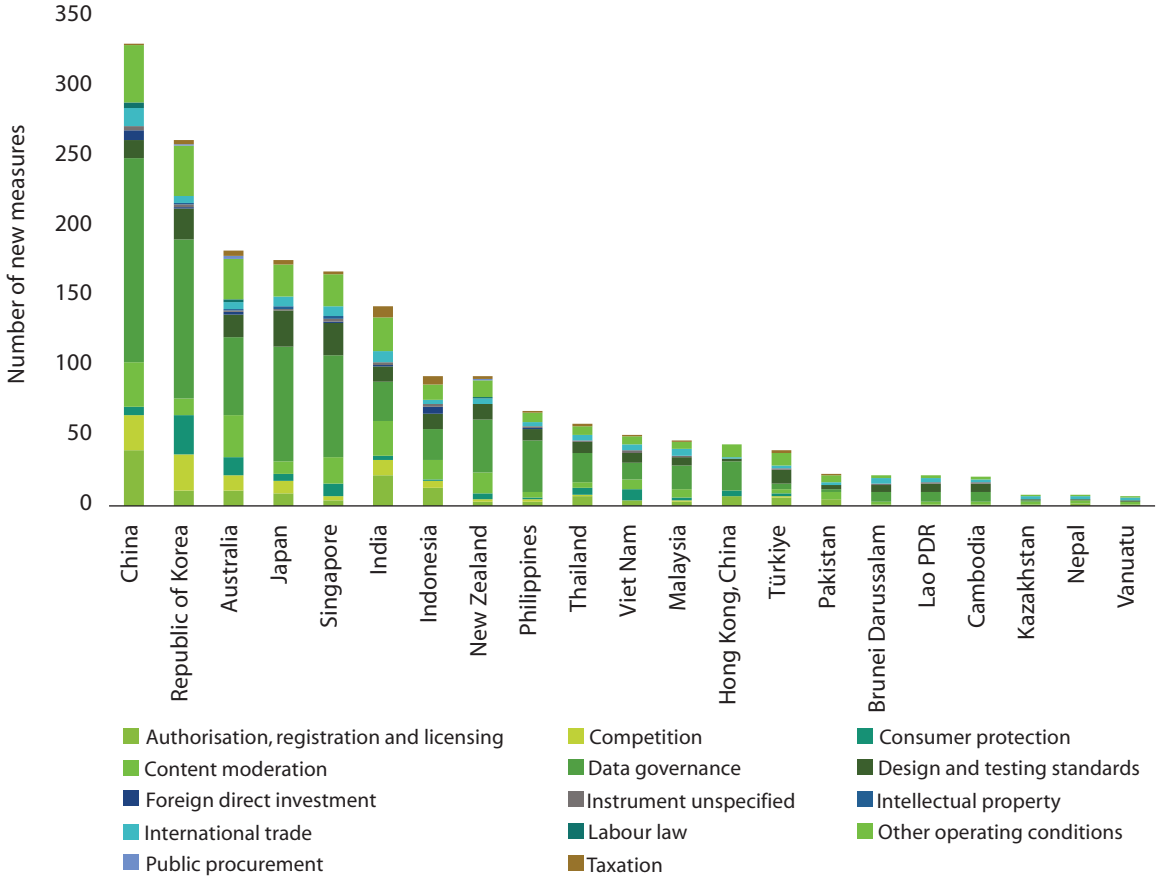
From a macro perspective, Asia-Pacific economies demonstrate a dualistic approach. On one hand, there is a move towards regulatory simplification in areas such as tariffs and intellectual property rights (IPRs), aimed at reducing compliance costs, enhancing digital trade, and fostering competition. On the other hand, policies related to digital services trade, investment, and emerging areas—such as data governance, digital platforms, and online transactions—are becoming increasingly complex. This observation is supported by a joint study conducted in 2024 by ESCAP, ECA, and ECLAC, based on the Regional Digital Trade Integration Index framework.[1]

The Asia-Pacific digital policy environment has grown increasingly complex, marked by a sharp rise in regulatory measures. According to the Digital Policy Alert database, between January 2020 and September 2024, the Asia-Pacific region introduced at least 695 measures related to digital governance, 255 measures addressing operating conditions, 197 measures on content moderation, and 197 measures

[1] For more information about the Regional Digital Trade Integration Index (RDTII), please visit https://www.unescap.org/projects/rcdtra The RDTII dataset used in this report are based on the version published in July 2024.

targeting design and testing standards for ICT goods (figure 4). These regulatory measures often reflect concerns over national security, data sovereignty and cybersecurity risks. However, in the absence of a comprehensive global or regional mechanism for digital trade policy coordination, varied regulatory approaches in the region heighten the risk of trade tensions and hinder seamless digital economy integration across the region.

Figure 4. Number of new digital policy measures adopted in selected Asia-Pacific economies, 2020–2024



Source: Digital Policy Alert (DPA) (https://digitalpolicyalert.org/), accessed in September 2024.

Note: The DPA database tracks digital policy measures in G20 countries. While it also offers important information on selected non-G20 nations, the policy coverage for these countries is generally less comprehensive.

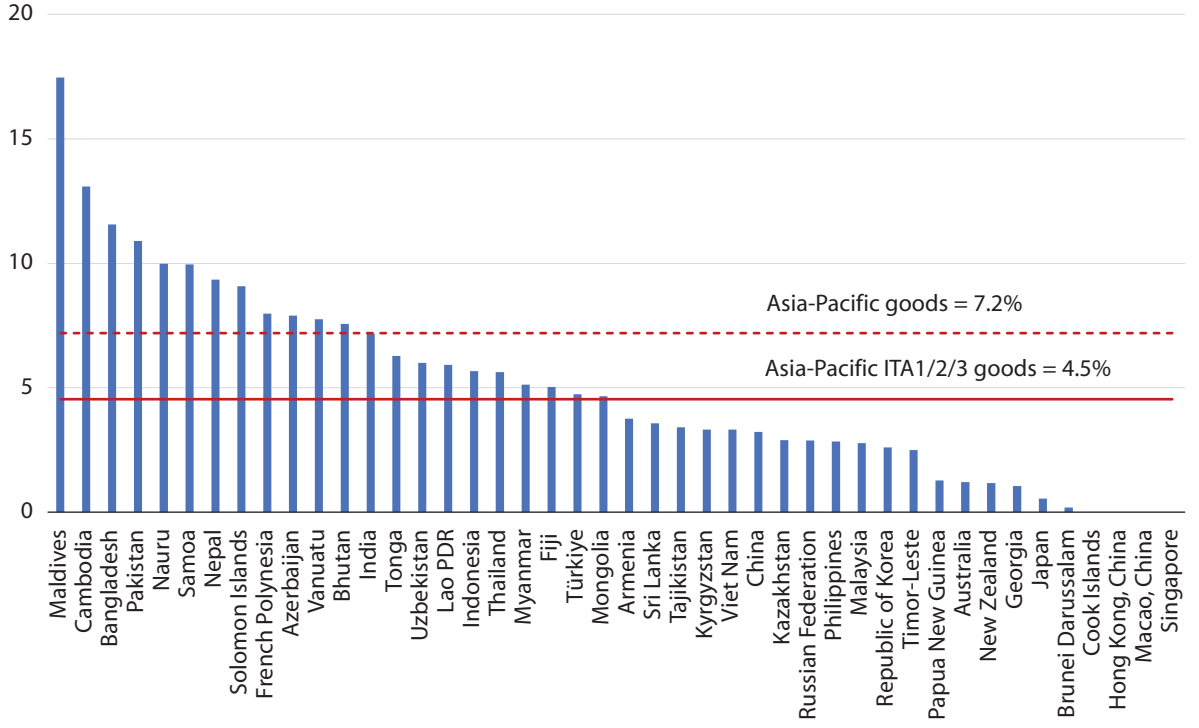
Policies affecting infrastructure and cost of access

Enhancing competition in the telecom sector is essential to improve coverage and reduce consumer costs. This requires prioritizing private investment and lowering trade and investment barriers for ICT goods and services.

State monopolies are quite common in telecommunications services in the Asia-Pacific region. Although the telecom regulatory landscape in the Asia-Pacific region improved significantly since 2007, many Asia-Pacific economies remain entrenched in state telecom monopolies. Of the Asia-Pacific economies covered in ESCAP RDTII, 90% have their telecommunications sectors predominantly governed by state entities. Furthermore, in several economies, particularly in NCA and SEA, licensing often carries nationality and residency requirements.

Policymakers should consider adopting international standards, streamline approval processes, and implement WTO agreements such as the Information Technology Agreement (ITA) and Trade-Related Investment Measures (TRIMs). While regional trade integration has kept ICT tariffs low, exceptions persist, especially in LDCs and SSWA. In 2023, average ICT import tariffs were 7.2%, ranging from zero in economies like Singapore and Hong Kong, China, to over 17% in Maldives (figure 5). Notably, 23% of economies in the RDTII database have not joined ITA I, and 50% abstain from ITA II. ICT goods and services are also frequent targets of trade defense measures and non-tariff measures (NTMs), such as Local Content Requirements (LCRs). Varying technical standards and complex certification processes further escalate compliance costs, hindering seamless market integration.

Figure 5. Effective tariffs on imports of ICT Goods by Asia-Pacific Economies



Sources: ESCAP, based on data from UNCTAD TRAINS database (https://trainsonline.unctad.org/home), accessed in September 2024.

Note: ICT goods refer to products covered under the WTO Information Technology Agreements (ITA I and ITA II), and the proposed ITA III list by the Information Technology and Innovation Foundation (ITIF), which includes next-generation ICT products. For more details about the proposed ITA III list, please see https://www2.itif.org/2023-ita3-impact.pdf

Policies affecting costs and trust in digital trade

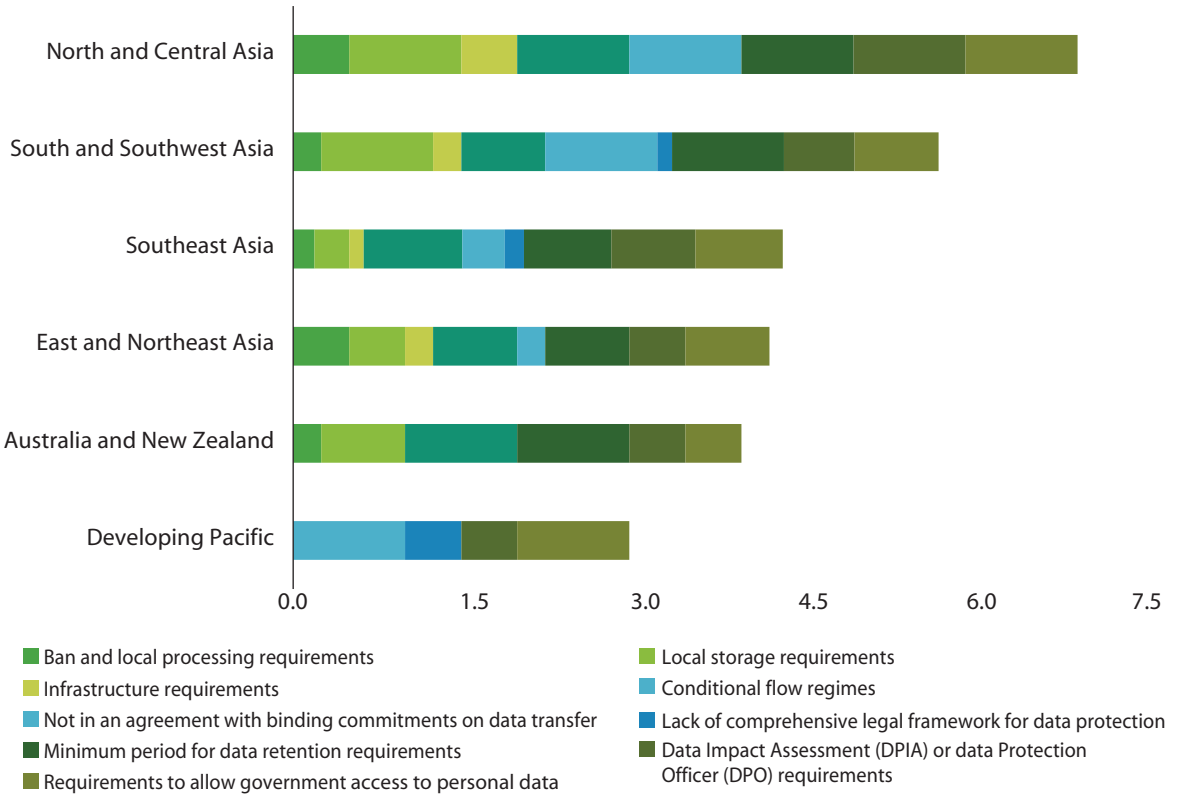
Varying legal requirements and differing levels of readiness for legalized digital transactions pose challenges to reducing costs and building trust in digital trade. While most of the Asia-Pacific economies in the RDTII database recognize e-contracts, OECD Digital Services Trade Restrictiveness Index (DSTRI) data show diverse legal approaches to e-signatures and digital authentication. Additionally, OECD data show that 57% of these economies impose cost-increasing measures on e-payments, such as local presence mandates, sanctioned intermediaries, or currency restrictions for international transactions.

Progress in online consumer protection frameworks remains uneven. Most economies in the ESCAP RDTII have established laws covering e-commerce transactions, but effective remedies for cross-border disputes are limited. Regional initiatives, such as frameworks developed by the Asia-Pacific Economic Cooperation (APEC) and the Association of Southeast Asian Nations (ASEAN) are emerging to address these gaps.

Addressing cross-border cybercrime requires stronger international cooperation. While many Asia-Pacific economies in the ESCAP RDTII have enacted cybersecurity laws, significant gaps persist, particularly in LDCs and PIDEs. Capacity-building is essential to strengthen cyber resilience. The recently finalized UN Cybercrime Convention (2024) offers a global framework, while regional initiatives such as the ASEAN Cybersecurity Cooperation Strategy 2021-2025 and the ASEAN Regional Computer Emergency Response Team (CERT) enhance coordination and incident response.

Stringent data regulations, particularly in NCA and SSWA, are designed to enhance security but may impede cross-border trade, especially for MSMEs, by increasing compliance costs and restricting data flows. In the ESCAP RDTII database, 59% of economies require local data storage, 36% mandate local data processing, and 18% impose infrastructure obligations (figure 6).

Figure 6. Overview of data governance landscape in Asia-Pacific



Source: ESCAP, based on data from the RDTII database (https://www.unescap.org/projects/rcdtra/databases-kp), published in July 2024.

Aligning data regulations with international standards, such as the ISO 27000 series, is essential to prevent regulatory fragmentation and facilitate seamless digital trade. ESCAP's RDTII database shows that 77% of economies impose conditions on cross-border data flows. The absence of a unified benchmark for data governance further exacerbates fragmentation in digital trade policies across the region.

To attract digital FDI, economies are adopting fiscal incentives, Special Economic Zones (SEZs), and regulatory sandboxes. However, stringent ownership and licensing regulations undermine these efforts. For example, foreign ownership limits affect 55% of economies, and licensing requirements apply to 68%, particularly in NCA. While major economies are easing restrictions, progress remains fragmented and uneven.

Policies affecting innovation and Industry 4.0

Robust IPR policies are gaining traction across the Asia-Pacific region. The policies enhance investor confidence, support research and development (R&D), and drive innovation. Increased participation in the WTO Trade-Related Aspects of Intellectual Property Rights (TRIPs) Agreement and several treaties of the World Intellectual Property Organization (WIPO) reflects efforts to balance proprietary rights with public access. By September 2024, 67% of Asia-Pacific economies had joined the WTO TRIPS Agreement, 57% ratified the WIPO Patent Cooperation Treaty (PCT), and 53% adhered to the WIPO Copyright Treaty. ESCAP RDTII data indicate a greater scope for improvement in SSWA, NCA, and PIDEs. In particular, several Pacific developing economies are neither WTO members nor contracting parties to WIPO's treaties on Copyright and the Patent Cooperation Treaty, implying a missed opportunity to align with global intellectual property systems.

Foreign participation in public procurement can spur innovation through competition and knowledge transfer. However, ESCAP RDTII data reveal that many Asia-Pacific economies impose restrictions on foreign participation in public procurement for the digital sector. Additionally, several Asia-Pacific economies lack clear encryption guidelines and self-certification mechanisms for technical standards critical to Industry 4.0.

IV. Promoting sustainable development in digital trade: The role of trade and complementary policies

Digital trade for inclusivity

Policies must prioritize competitive equity for both large and small enterprises. MSMEs, which make up over 90% of businesses and 70% of jobs in many Asia-Pacific economies, serve as critical entry points for underserved groups, particularly women, to participate in digital trade.

With tax-free digital trade being phased out, streamlining trade processes is essential to offset rising costs. Reductions in de minimis thresholds, aimed at addressing tax revenue losses and ensuring fair competition between domestic and foreign sellers, are adding to cost pressures. Uncertainty around the Moratorium on Customs Duties on Electronic Transmissions further risks increasing e-commerce costs, particularly for MSMEs.

Policies must be holistic, focusing on broader development goals rather than narrow sectoral gains. For instance, cross-border delivery of essential services such as e-health and e-education faces challenges due to services trade barriers and restrictive data flow regulations. Additionally, platform-based regulations further complicate cross-border digital service delivery.

Challenges of taxation and informality among digital economy workers could potentially be addressed through labour-related provisions in trade agreements and participation in international treaties on labor and taxation. This is especially relevant for developing Asia-Pacific economies, where many digital freelance workers operate without tax registration or social protections. Policymakers may explore collaboration with online platforms to address these gaps. For example, platform-based digital accounts could facilitate worker registration, potentially improving access to essential social benefits and encouraging greater formalization in the digital economy.

Digital trade for environmental sustainability

An open digital trade and investment environment is necessary for advancing the a circular economy. Digitally delivered services, such as real-time tracking, data analytics, and cloud-based platforms, play a crucial role in monitoring and optimizing sustainable supply chains. Additionally, cross-border data flows are vital for tracing materials, products, and waste throughout the entire product lifecycle.

Complementary measures should include removing trade and investment barriers in environmental services, facilitating trade in waste, recycling, and recycled goods, and aligning with international eco-labelling standards. However, the expansion of digital trade and the digital economy increases demand for ICT goods, exacerbating e-waste and raising concerns about illicit transboundary movements. Addressing these risks requires international collaboration and proactive trade measures to manage e-waste effectively.

Digital trade for achieving sustainable development with emerging digital technologies

Emerging digital technologies play a pivotal role in enhancing trade competitiveness and facilitating integration into GVCs. Advanced digital technologies, such as AI and blockchain, are particularly transformative in trade-intensive and digital trade-enabling sectors. An OECD study reveals that 91% of AI-related patent filings are concentrated in five sectors driving global trade: computers, electronics, machinery, and transport equipment. This pattern highlights the critical role of emerging digital technologies in shaping the future of international trade.

The rapid advancement of emerging technologies has outpaced the development of cohesive regulatory frameworks, posing significant challenges for governance. While frameworks like WTO agreements offer foundational guidance for digital trade, the governance of technologies such as AI remains nascent and fragmented. Additionally, the substantial infrastructure and skill demands of emerging technologies risk deepening inequalities between advanced and underdeveloped economies. The energy-intensive nature of these technologies further complicates their adoption, underscoring the urgency of promoting renewable energy and environmentally responsible approaches.

Trade and investment policies are essential for unlocking the full potential of emerging technologies. Reducing trade barriers and facilitating data flows are essential for fostering innovation and adoption. Equally important is ensuring equitable access to hardware, the skills required to leverage high-performance computing equipment, and robust digital infrastructure, complemented by supportive service trade policies. These measures promote the seamless cross-border flow of technology, talent, and knowledge—key elements for countries and businesses seeking to integrate into global trade and participate effectively in the digital economy.

Many areas emphasized in digital trade policies are highly relevant and critical for regulating emerging technologies, including AI. Both fields face overlapping challenges in data governance, security, transparency, fairness, and standardization, all of which are essential for building a trusted and efficient digital ecosystem. Key areas of alignment include:

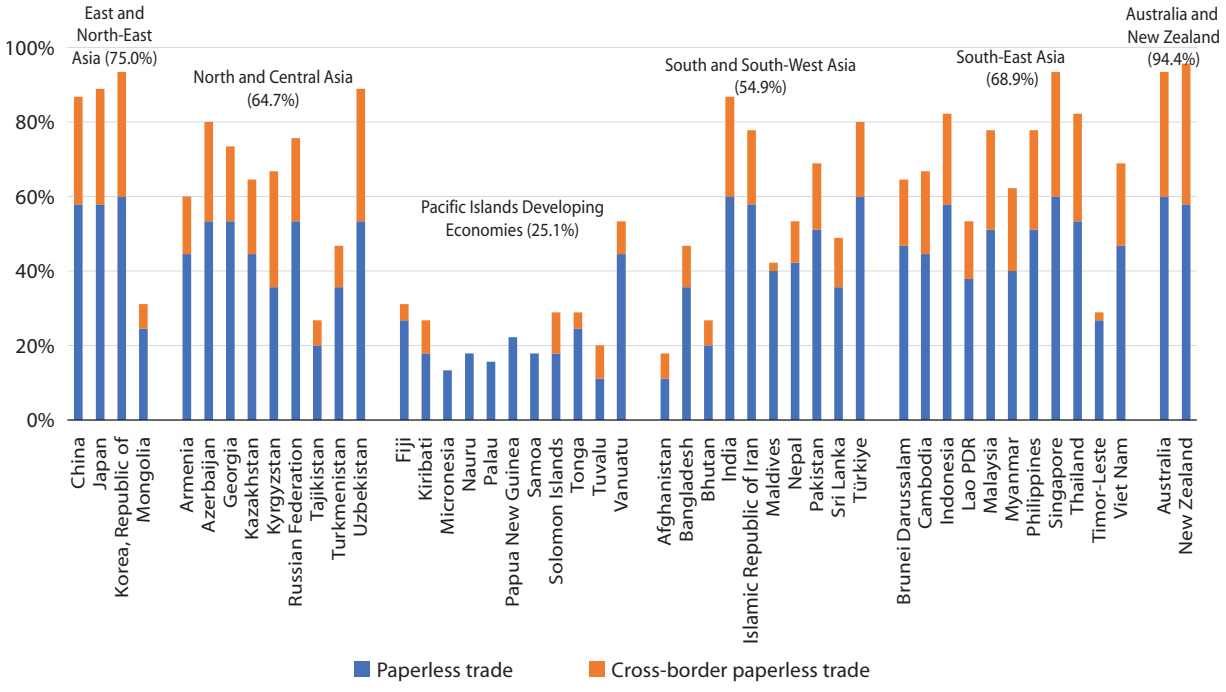
- **Data Governance**: Digital trade policies focus on secure cross-border data flows with privacy protections, while emerging technologies, particularly AI, rely on large, diverse datasets and robust data governance frameworks.
- **Cybersecurity**: Both fields require strong cybersecurity measures to protect infrastructure, ensure trust, and safeguard digital transactions.
- **Platform regulation**: Fairness, transparency, and accountability are crucial for ensuring fair digital markets in trade and for preventing bias, ensuring ethical AI practices, and safeguarding consumer rights in emerging technologies.

- **Standards development**: Global standards for interoperability, intellectual property, and transparency help reduce trade barriers in digital trade and enable ethical and responsible deployment of emerging technologies.
- **Consumer protection**: Safeguards against fraud, data misuse, and unfair practices in digital trade align with the need to prevent bias, misinformation, and potential harm from emerging technologies.
- **International collaboration**: Harmonized international frameworks support seamless digital trade while also ensuring ethical, transparent, and accountable governance of emerging technologies.

V. Promoting sustainable development through trade digitalization

Trade digitalization replaces paper-based processes with electronic, automated systems, enabling seamless data exchange and mutual recognition of trade documents. This improves trade efficiency and enhances supply chain transparency. While trade digitalization rate has grown significantly, the implementation of cross-border measures remains slow. In the Asia-Pacific region, the implementation of paperless trade measures rose from 56% in 2019 to 66% in 2023. However, the adoption of cross-border paperless trade facilitation is progressing at a slower pace, currently standing at 42%, up from the previous 31%. Developing economies in the Pacific and the SSWA subregion continue to lag behind (figure 7).

Figure 7. Average trade digitalization rates in Asia-Pacific countries, 2023

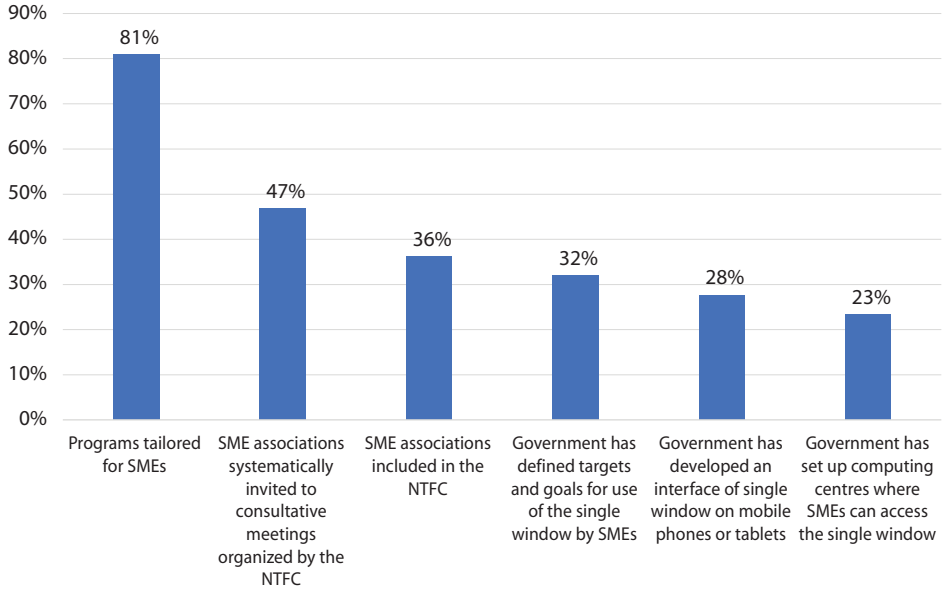


Source: Trade Digitalization Index,2023 (https://tdi.tiid.org/), accessed in October 2024.

Enhancing the implementation of trade digitalization is essential for promoting sustainable development. Digital trade facilitation particularly benefits SMEs through simplified trade procedures, with notable efficiency gains in smaller shipments and perishable goods. An ESCAP study reveals that streamlining of cross-border processes through digital solutions can increase trade value of SMEs by more than 4.5%.

To maximize the benefits of trade digitalization for SMEs, targeted support is needed in training, accessibility, and representation. In the Asia-Pacific region, over 80% of economies offer programs and training to help small businesses access trade-related information and understand digital procedures (figure 8). Nearly 95% of these initiatives were developed with input from SME associations. However, there are gaps in electronic single window systems; only 32% of countries have set SME-specific goals, and just 28% have mobile or tablet interfaces. Furthermore, SME representation in trade facilitation bodies is limited, with only 36% of National Trade Facilitation Committees including SME associations.

Figure 8. Share of Asia-Pacific economies with paperless measures targeted SMEs, 2023



Source: ESCAP, based on the United Nations Survey on Digital and Sustainable Trade Facilitation (untfsurvey.org)

Trade digitalization provides substantial environmental benefits by eliminating paper-based documentation in international trade processes. Digital trade facilitation removes the need for printing, transporting, exchanging, and ultimately disposing of vast amounts of paper. Most importantly, the use of electronic data and documents increases the efficiency of the trade process, reducing energy consumption and storage infrastructure demands. ESCAP study indicates that each fully digital trade transaction saves emissions equivalent to planting 1.5 trees. In the Asia-Pacific region, complete digitalization could save around 13 million tons of CO_2 each year, equivalent to the carbon absorption of 400 million trees. The on-going implementation of electronic single window systems in nearly 80% of the Asia-Pacific economies has measurable environmental benefits. For example, Timor-Leste's system reduced printed paper use by 85%, lowering CO_2 emissions by 14,492 kg.

Addressing trade digitalization challenges calls for strong regional cooperation. Achieving the sustainable benefits of trade digitalization requires robust institutional frameworks, harmonized international standards, and targeted capacity-building to bridge the digital divide. The Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (CPTA) offers an intergovernmental platform to advance this goal. This UN treaty complements the WTO Trade Facilitation Agreement and facilitates its full digital implementation by enabling the electronic exchange of trade data and documents across borders. Its focus on capacity building and technical assistance supports developing countries in transitioning to paperless trade systems. The agreement thus can serve as an enabler for achieving sustainable development through trade digitalization across the region.

VI. Achieving sustainable development through multilateral and regional cooperation in digital trade

While Multilateral agreements remain critical for reducing global trade and investment uncertainty and establishing consistent regulation of cross-border digital trade, their implementation faces significant challenges in the current WTO landscape. Despite the obstacles, the WTO Joint Statement Initiative (JSI) on E-Commerce achieved a major milestone on July 26, 2024, when approximately 80 WTO members finalized a stabilized text for the Agreement on Electronic Commerce after five years of negotiations.[2] The agreement, comprising 38 articles, addresses critical areas such as a ban on customs duties for electronic transmissions, the promotion of paperless trade, enhanced consumer protection, and transition periods tailored for developing countries and least-developed countries (LDCs). This step is expected to benefit consumers and MSMEs by enhancing predictability and reducing operational costs. However, the lack of full support from selected WTO members, including Brazil, India, Indonesia, South Africa, Türkiye, and the United States, highlights the challenges in reaching a universally accepted multilateral framework.

Regional agreements have emerged as pragmatic alternatives for advancing digital trade rules among Asia-Pacific economies. Economies in the ENEA and SEA subregions have been proactive in incorporating digital trade provisions (DTPs) into their preferential trade agreements (PTAs), while economies in the NCA and SSWA subregions lag behind (figure 9). Analysis of 513 active PTAs—256 involving Asia-Pacific economies—shows a steady increase in DTP adoption. Notably, the WTO JSI framework on E-commerce aligns with digital trade commitments found in major agreements, such as Chapter 12 of the Regional Comprehensive Economic Partnership (RCEP), reflecting consistency across trade frameworks.

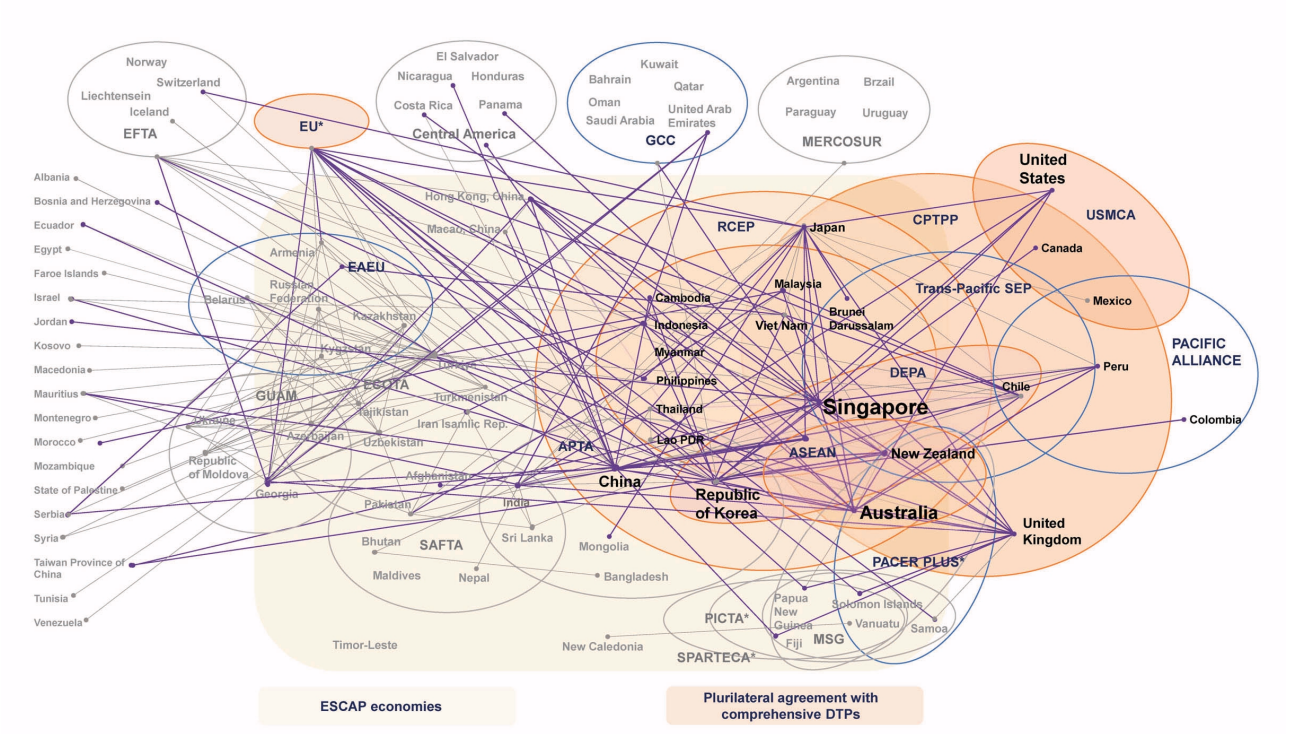
Since 2019, Digital Economy Agreements (DEAs), or "digital-only" agreements, have gained momentum. DEAs extend cooperation to include co-designing rules and standards for emerging technologies such as artificial intelligence, digital identities, fintech, regulatory technology (regtech), and data innovation. They also incorporate elements of sustainable development, such as special treatment and cooperative measures for MSMEs and regional capacity-building. **Effective implementation will require technical assistance and cooperation to ensure the interoperability of digital systems and standards among participating countries.**

Cooperation on digital trade rules through PTAs has potential to support sustainable development. Evidence shows that incorporating DTPs in trade agreements boosts digital trade, particularly in digitally deliverable services, and positively impacts broader development areas. ESCAP research estimates that adding 10 DTPs to a trade agreement correlates with a 0.08 percentage point increase in an economy's real GDP per capita growth rate.

PTAs have the potential to support a more inclusive digital economy by promoting competition in ICT goods and digital services, which can help improve access to affordable digital infrastructure. Additionally, PTAs often include commitments on duty-free electronic transmissions and non-discriminatory treatment. These align with WTO principles and help reduce uncertainty over the WTO Moratorium on Customs Duties on Electronic Transmissions. However, market access provisions remain largely cooperative, focusing on information exchange rather than binding, enforceable rules.

[2] The WTO JSI on E-Commerce that involves 91 WTO members representing over 90% of global trade, including 20 Asia-Pacific economies: Australia, Brunei Darussalam, China, Georgia, Indonesia, Japan, Kazakhstan, Kyrgyzstan, Lao PDR, Malaysia, Mongolia, Myanmar, New Zealand, Philippines, Republic of Korea, Russian Federation, Singapore, Thailand, Türkiye, and Hong Kong, China.

Figure 9. PTAs with and without Digital Trade Provisions (DTPs) signed by Asia-Pacific economies, 2024



Signed and enforced agreements with DTPs
Signed and enforced agreements without DTPs

Blue circle: plurilateral agreement with DTPs; Grey circle: plurilateral agreement without DTPs.
Economy that have signed larger number trade agreements with DTPs is presented in a bigger font.

Source: ESCAP, based on the Asia-Pacific Trade and Investment Agreement Database (APTIAD) (https://www.unescap.org/content/aptiad) and the ESCAP automated Regional Trade Agreement Text Analyzer (https://hdl.handle.net/20.500.12870/5429), accessed in December 2024.

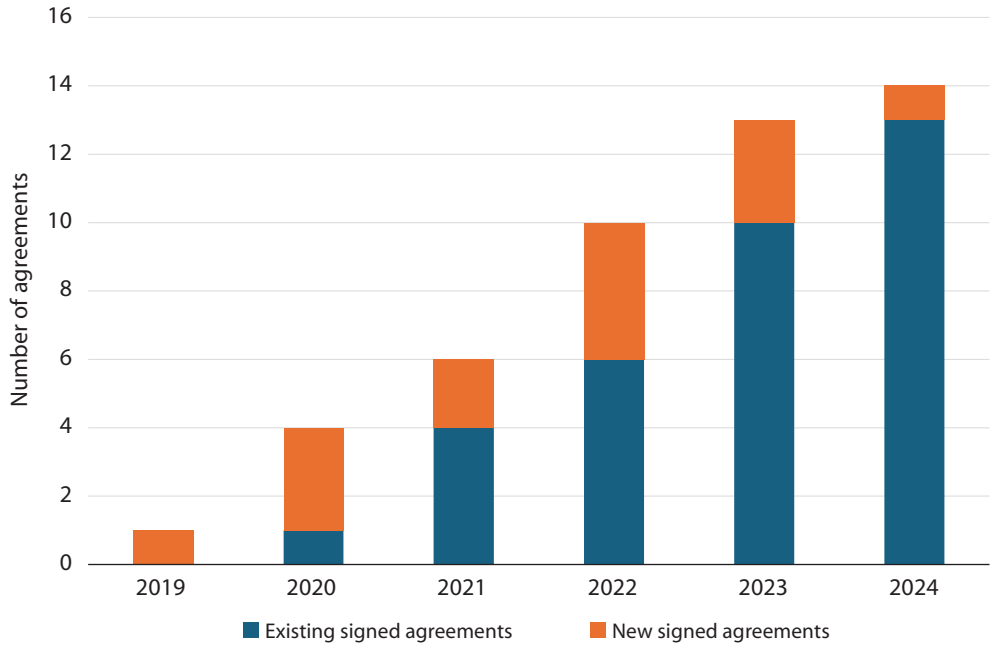
Note: * Not all members are shown. Plurilateral PTAs are not represented, i.e., Group of 8 Preferential Trade Agreement (D-8 PTA), Global System of Trade Preferences (GSTP), Protocol on Trade Negotiations (PTN) and Trade Preferential System among the Organization of the Islamic Conference (TPS/OIC).

Modern PTAs include DTPs on personal data protection, online consumer rights, and cybersecurity to foster a secure digital environment which is vital for sustainable digital trade. Effective implementation requires robust legal frameworks, alignment with international standards, and regulatory harmonization to ensure interoperability, facilitate cross-border business operations, and boost consumer confidence.

PTAs with commitments on cross-border data flows, data localization bans, and liberalized computer services support innovation. In Asia-Pacific PTAs, the growing data transfer provisions highlight a commitment to enabling data movement critical for emerging technologies. While many of these provisions are binding, they often preserve policy space for public objectives.

New bilateral agreements and Digital Economy Agreements (DEAs) increasingly include technology-specific provisions, particularly for AI. In the Asia-Pacific region, the number of PTAs with AI provisions has increased from one in 2019 to 13 of the 14 globally by 2024 (figure 10), underscoring the region's active role in this trend.

Figure 10. Number of agreements with AI provisions in Asia-Pacific, 2024



Sources: ESCAP Text Analysis Tool (https://tiid.shinyapps.io/text-analysis-tool/) and Universities of Lucerne and Bern, Trade Agreement Provisions on Electronic Commerce and Data (TAPED) (https://www.unilu.ch/en/faculties/faculty-of-law/professorships/managing-director-internationalisation/research/taped/), accessed in December 2024.

However, a digital policy capacity divide persists. PTAs involving low- and lower-middle-income economies feature fewer and less comprehensive DTPs. This reflects not only institutional and resource constraints but also a lack of opportunities to participate in mechanisms for unified regional digital trade rules and leverage them to ensure that digital trade fosters sustainable development.

Addressing this divide requires targeted capacity-building efforts. Strengthening mechanisms to ensure enforceability and compliance with commitments in digital trade agreements is essential but also requires technical assistance and cooperation to ensure the interoperability of digital systems, the capacity to strengthen legal frameworks, and the ability to adhere to accepted standards among participating economies.

VII. Sustainability impact of ICT goods trade and digital trade-related policies

Higher trade and economic growth can be achieved by addressing non-tariff barriers (NTBs) in imports of ICT products under the WTO ITA. ESCAP employed Computable General Equilibrium (CGE) modelling to examine the impact of various digital trade-related policies on GDP, trade, employment, and CO_2 emission. The analysis shows the effects of tariff cuts in ICT goods as part of implementation of the WTO ITA I and II are negligible to the region as a whole since most large trading economies have already implemented them. In contrast, addressing NTBs on ITA I and II products could significantly increase trade and economic growth, potentially increasing the region's exports by 0.17% and 0.23%, and GDP by 0.07% and 0.06%, respectively. These results suggest that discussions on NTBs on ICT goods should be a priority in Asia-Pacific trade negotiations. Additionally, countries could take unilateral steps to reduce such barriers.

Asia-Pacific economies could achieve significant economic gains by reducing policy restrictions on digital trade flows and fully implementing cross-border paperless trade. The rise in digital trade restrictions, as measured by the OECD's DSTRI, is estimated to reduce the Asia-Pacific region's real GDP by 0.4% annually. Across all subregions, the most pronounced effects are observed in the NCA subregion. The simulation results show that even partial reductions in digital trade restrictions could have a significant impact on economic and trade growth. For example, notable economic benefits are found from marginal reductions in restrictions on cross-border data flows. Additional economic benefits could be achieved through the full implementation of cross-border paperless trade measures, as outlined in the Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific (CPTA). ESCAP's study confirms that Asia and the Pacific could realize an increase of almost 1% in GDP from advancing the CPTA implementation, with the resulting economic benefits shared by every subregion, and with the SEA subregion reaping more benefits in relative terms.

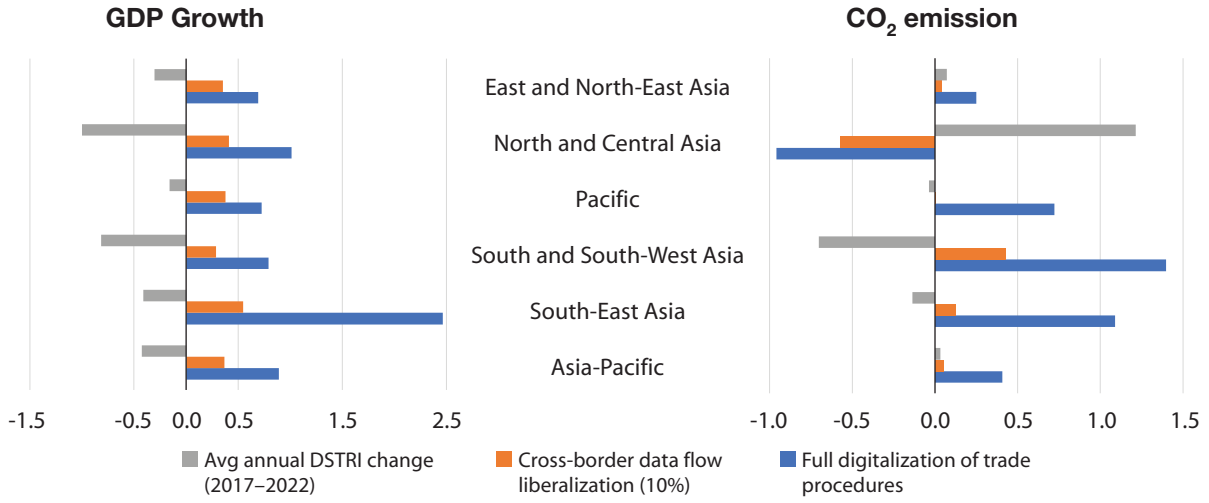
While the overall net economic effect of policy measures facilitating digital trade is positive, ESCAP's study suggests that policymakers should implement policies to support sectoral transitions of employment and business activity to mitigate potential short-term disruptions. The sectoral impacts of policy measures that facilitate digital trade flows and cross-border paperless trade are uneven, requiring governments to provide supplementary support, particularly for affected workers. The study shows that different policy measures impacting digital trade can have contrasting effects across sectors. For example, reductions in NTBs are projected to decrease manufacturing output by 0.33% while expanding the output of the services sector by more than 15% across the Asia-Pacific region. The sectoral effects of digital trade policies tend to be greater than those of tariffs on ITA-related products. Increases in digital trade restrictions lead to contractions in the services sector but benefit agriculture and, to a lesser extent, manufacturing. Conversely, reduced digital trade restrictions negatively impact manufacturing and agriculture but benefit the services sector. Changes in skilled and unskilled labour demand generally align with these sectoral output trends. However, employment shifts in the services sector tend to affect unskilled labor more significantly. These findings emphasize the need for targeted labor policies to facilitate workforce adjustments in response to digital trade policy changes.

Supplementary policies are needed to offset Carbon Dioxide (CO_2) emissions in expanding sectors. ESCAP's study suggests that removing traditional and digital trade barriers will stimulate economic expansion, leading to a rise in greenhouse gas emissions. Therefore, it is crucial to concurrently introduce additional policies aimed at neutralizing these emissions to ensure environmental sustainability. The most significant effect was observed in the full digitalization of trade procedures, which increased emissions by 0.41% while contributing 0.89% to regional GDP.

However, sectoral shifts induced by digital trade policies could have positive environmental implications. A transition away from manufacturing (which contracts under most digital trade policies) toward service sectors (which expand) is generally less carbon-intensive, reducing overall emissions in most cases examined.

Shifting trade from mining and commodity production to digital trade can help reduce CO_2 emissions. Specifically, in the NCA subregion, full trade digitalization and enhanced data flows could reduce CO_2 emissions. Similarly, reducing digital trade restrictions can encourage shifts from carbon-intensive industries to less carbon-intensive services, particularly benefiting the SSWA subregion (figure 11).

Figure 11. Economic and environmental impacts of digital trade policies, by subregion



Sources: ESCAP's CGE analysis

VIII. Attracting digital FDI to cultivate sustainable development

When strategically facilitated and properly regulated, digital FDI can serve as a powerful catalyst for achieving SDGs. It brings not only technological advancement and economic growth, but also promotes environmental sustainability through efficient resource use and creates development opportunities across society.

Digital infrastructure FDI provides essential capital, technology, and expertise for developing connectivity networks, with particularly strong competition for data center projects. Through greenfield investments in new facilities or brownfield investment to upgrade existing ones, foreign investors contribute to building telecommunications networks, data centers, and connectivity infrastructure. These investments create diverse employment opportunities—from planning and construction to maintenance and services—while enabling new digitally-driven jobs that support economic development. To attract Digital infrastructure FDI, countries must devise coherent strategies that align digital infrastructure targets with their development level.

Digital adoption FDI transforms local firms through four key technological pathways: cloud technologies, Industry 4.0, Big Data analytics, and digital platforms/apps. Industry 4.0 technologies—incorporating robotics, IoT, and AI—enable remote automation and production optimization, allowing firms to invest in smaller, distributed production units managed by centralized quality control. This integration reduces waste, improves environmental sustainability, drives innovation, enhances competitiveness, and fosters valuable knowledge transfer between foreign investors and local firms.

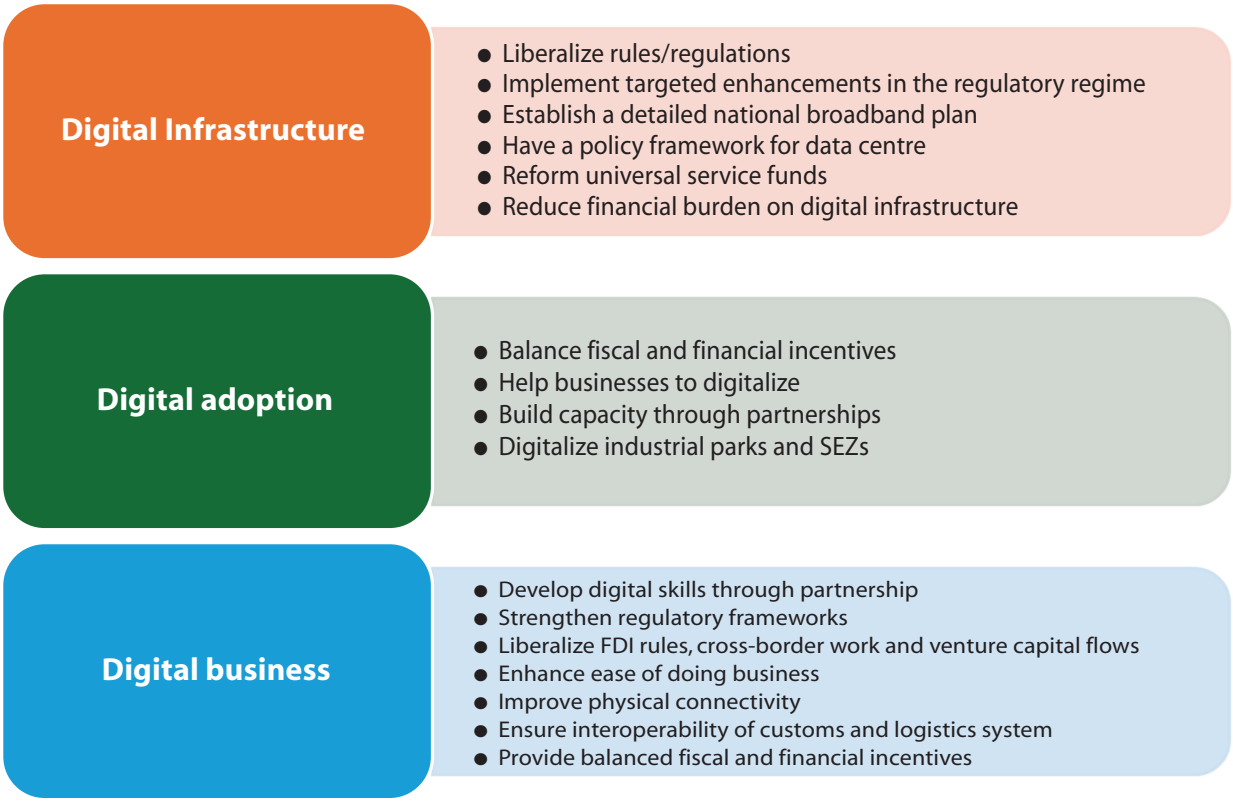
Digital business FDI brings innovative business models that address traditional market challenges. These digital enterprises use the Internet to create, market, and deliver products globally, relying on digital production/delivery, asset-light operations, platform-based models, and rapid cross-sector scalability. By partnering strategically with local firms, they open opportunities for non-equity investment and promote critical digital skills development in host economies.

To successfully attract and retain digital FDI, policymakers should establish enabling frameworks aligned with investor priorities across multiple dimensions:

- For digital infrastructure: implement comprehensive national broadband plans alongside policies governing converged licensing, spectrum allocation, infrastructure sharing, universal service funds, number portability and frameworks for data centers. These policies should maintain flexibility to accommodate rapidly evolving technologies while ensuring stable returns for investors.
- For digital adoption and digital business: ensure reliable high-quality digital connectivity, develop robust digital skills programs, nurture vibrant tech/startup ecosystems, and establish clear regulatory frameworks covering data flows, digital payments, and consumer protection. Special attention should be paid to fostering innovation while maintaining appropriate safeguards.

The key to maximizing these benefits lies in fostering strong coordination between government agencies, maintaining policy consistency, and ensuring that investment attraction activities align with both national development priorities and the evolving needs of digital investors. A coordinated approach fosters an ecosystem where all categories of digital FDI can thrive, contributing to sustainable development (figure 12).

Figure 12. Policies to attract digital FDI



RECOMMENDATIONS AND CONCLUSION

This report provides actionable recommendations for trade and investment policies, focusing on collaboration at multilateral and regional levels. It addresses three pillars of sustainable development: Growth, Inclusion, and Environmental Sustainability, highlighting the importance of aligning domestic regulations with international cooperation. Below is a summary of the main recommendations (table 1).

1. Overarching policy recommendations: Leveraging multilateral and regional cooperation mechanisms to align digital trade and investment policies with WTO Principles

- **Align domestic regulations with the principles of transparency and non-discrimination,** ensuring compliance with the minimum requirements stipulated by existing WTO guidelines. It is essential to consistently uphold WTO principles across unilateral, regional, and multilateral policy interventions.
- **Leverage existing agreements and initiatives to accelerate regional digital trade cooperation.** The Asia-Pacific region can benefit from leveraging international and regional agreements to construct adaptable regulatory frameworks. This approach should be incremental, minimizing the risks of regulatory fragmentation and protectionism. Regional regulatory cooperation should be a high priority to enhance transparency, including through regulatory dialogues to establish cooperation in areas where universal standards are lacking, and the establishment of digital trade and investment information portals to facilitate business compliance. Capacity building should be integrated into the design and implementation of trade agreements.
- **Expedite implementation of trade facilitation, digitalization agreements, and adoption of international standards.** It is recommended to fully implement the WTO TFA, accelerate accession to and implementation of the CPTA, and adopt or align with the United Nations Commission on International Trade Law (UNCITRAL) model laws when formulating digital trade policies. Leveraging these global and regional frameworks can enhance cross-border interoperability for e-commerce facilitation, offering substantial benefits for MSMEs. Moreover, fully digitalizing trade regulatory processes in the Asia-Pacific region will reduce the adverse environmental impact of trade.

2. Digital trade and investment policies for growth: Building efficient, safe, and trusted digital trade

Increase coherence between trade, investment, and ICT policies to bridge the digital infrastructure divide. Public-private partnerships and investments are vital, especially in areas where private ventures are less viable. Policies need to be tailored to attract investors by establishing streamlined licensing systems, efficient spectrum distribution, independent regulatory bodies, compliance with international standards, and an open FDI regime to enhance private sector involvement in digital infrastructure. It is important to align telecommunications regulations with the General Agreement on Trade in Services (GATS), including its telecommunications annex, and the Telecom Reference Paper, to maintain a competitive and transparent telecom sector. Furthermore, lowering import duties on ICT equipment in line with ITA should be actively considered, while also simplifying the processes for approvals and permits for ICT trade and investment. Adopting ICT technical standards consistent with those of the International Telecommunication Union (ITU) and engaging in international ICT dialogues are also important steps to consider.

- **Strengthen online consumer protection to address the full spectrum of the online transaction process.** This includes from pre-purchase activities such as advertising and information dissemination to purchase protocols including contract terms and payment security and extending to post-purchase support like dispute resolution. In data privacy, recognizing "equivalency" or "adequacy" among different jurisdictions can facilitate international data flows, supported by increased collaboration between privacy authorities and the integration of privacy measures into trade agreements to harmonize data protection standards. Cybersecurity is also critical, necessitating that organizations adhere to international standards such as the ISO 27000 series.
- **Align national regulations with international guidelines** on intellectual property (IP) and Technical Barriers to Trade (TBT) to spur innovation and propel Industry 4.0 forward. In addition, promoting an open FDI regime and coordinating with IPAs to simplify processes for foreign investors are essential for creating an inviting investment climate for the growth of the digital economy.

3. Digital trade and investment policies for inclusivity

- **Support cross-border e-commerce of MSMEs and marginalized groups.** Promoting cross-border e-commerce for MSMEs involves facilitating the movement of parcels and efficient handling of returns. It also includes maintaining a tariff-free environment for electronic transmissions and low-value consignments, complemented by a sales tax system to ensure fair competition. Moreover, crafting a specific, enforceable provision in PTAs that promotes non-discrimination and collaborative capacity building is crucial for enhancing the participation of marginalized groups, such as women, in digital trade. This provision should be clearly and definitively articulated and positioned in prominent sections of the agreements to emphasize its significance. The support extended should be targeted, drawing on comprehensive needs assessments that take into account the distinct needs and attributes of marginalized groups within their particular contexts.
- **Leverage digital trade and investment in the healthcare and education sectors.** Recognizing the significance of interoperable data privacy standards and the facilitation of data exchanges is important for unlocking the potential of trade in digital healthcare and online education services. It is also crucial to lower traditional trade and investment barriers in order to bolster both online and conventional delivery methods of these services. Developing and implementing international standards and an accreditation system is important for ensuring consistent quality across countries. Moreover, it is recommended to include provisions for remote delivery within these systems to ensure that services provided digitally meet the same quality standards as in-person services.
- **Address digital-economy worker challenges through international cooperation.** It is recommended to integrate an impact assessment of DEAs and PTAs on workers' conditions into trade agreement designs, negotiation, and implementation. Adopting international standards, such as the World Economic Forum's Charter of Principles for Good Platform Work and the International Labour Organization (ILO) Tripartite Declaration, is crucial for creating a globally consistent framework for digital-economy workers. Moreover, reinforcing collaboration between multinational platform companies and governmental bodies can be useful for establishing a standardized set of guidelines for the cross-border employment of digital-economy workers. This effort requires a detailed realignment of standards and protocols tailored for digital-economy workers operating across international borders. This should be complemented by agreements on taxation, digital identity, and data privacy. Additionally, developing clear tax guidelines for cross-border digital services is essential to avoid the risks of double taxation. The adoption of the UN's model tax treaty could be instrumental in providing a standardized approach to structure tax treaties that recognize revenues from digital engagements appropriately.

4. Digital trade and investment policies for environmental sustainability

- **Foster a circular economy through open digital trade and investment.** A circular economy depends on monitoring and traceability of materials throughout product lifecycle. It requires cross-border data exchange and online services supporting the monitoring process. Establishing robust digital infrastructure, effective data governance and standardized interoperability guidelines is fundamental. These efforts must be accompanied by streamlining regulations to facilitate trade and investment in environmental goods and services, such as waste treatment and recycling. This can be achieved by lowering licensing fees and clarifying legal frameworks. Technical regulations, including those for waste and packaging, must align with international standards and comply with the WTO TBT agreement as well as the Basel Convention. Collaborative efforts in trade agreements to standardize environmental regulations and define the scope of environmental goods and services are encouraged.
- **Establish a harmonized approach for traceability of goods throughout their lifecycles and for facilitating legal e-waste movement.** Adopting paperless procedures for the notification and consent of e-waste exports can increase the efficiency of tracking illegal e-waste activities. Embracing amendments such as the World Customs Organization's (WCO) Harmonized System (HS) 2022, which provides specific classifications for e-waste, and adhering to global standards for repair, reuse, remanufacturing, and recycling, is an important step towards this endeavour.

Conclusion

Throughout the report, a consistent theme emerges**—unleashing digital trade and investment for sustainable development requires careful consideration of regulatory impacts on consumers, small firms, workers, and the environment.** Central to these strategies is the need for a streamlined and simplified regulatory framework that avoids unnecessary compliance costs for businesses. A predictable and efficient regulatory environment is especially beneficial for small enterprises, which play a critical role in achieving sustainable development goals. A key component of this framework is the simplification of procedures related to business establishment, licensing, permits, along with reducing associated costs and processing times.

Moreover, establishing mechanisms that promote regulatory cooperation and interoperability is essential. Aligning technical requirements within regulations with international standards and mutual recognition arrangements ensures greater global consistency and interoperability of digital trade systems.

A holistic policy approach is essential for fostering a supportive environment for digital trade and investment. This requires inter-agency coordination, a strong commitment to transparency, and engaging in public consultations. Furthermore, as the digital trade and investment landscape evolves, preparing enforcement agencies for changes is crucial. Specialized training programmes can strengthen institutional capacity, enabling agencies to effectively implement and enforce new or revised regulations. ESCAP, UNCTAD, and UNIDO stand ready to assist in this endeavour.

Table 1. Policy recommendations matrix

Focus	Recommendations
Leveraging multilateral and regional cooperation mechanisms for digital trade and trade	**Align digital trade and investment policy with WTO principles** ● Refer to existing WTO agreements and provisions to guide digital trade and investment policies. ● Adhere to the principles of transparency and non-discrimination. ● Ensure that while addressing public policy goals, trade and investment is not unduly restricted.
	Leverage existing agreements, instruments and standards to accelerate regional digital trade cooperation ● Engage in regulatory dialogues and cooperation to ensure consistent standards with leading trade partners for interoperability. ● Establish mutual recognition of 'equivalence' in standards or procedures. ● Leverage PTAs to develop interoperable frameworks and steer clear of protectionism. ● Emphasize transparency in regional cooperation, and actively participate in regional dialogues to establish regulatory cooperation where international standards are absent. ● Establish regulatory information portals to facilitate compliance. ● Integrate capacity building into trade agreement design and implementation.
	Expedite implementation of trade facilitation and digitalization agreements and adoption of international standards ● Complete the implementation of the WTO TFA. ● Accelerate the accession and implementation of the CPTA. ● Adopt or align with UNCITRAL Model Laws when devising policies and laws on digital trade facilitation and electronic transactions.
Economic growth – Building efficient, safe, and trusted digital trade	**Address the digital infrastructure gap** ● Align telecom regulations with GATS and Telecom Reference Paper. ● Consider lowering import duties on ICT equipment. ● Simplify processes for ICT investments and trade. ● Adopt ITU-recognized technical standards. ● Participate in dialogues such as ITU and GSMA-led global ICT dialogues. ● Public-private co-invest in infrastructure for underserved areas. ● Improve a functioning licensing system, efficient spectrum use and global standards. ● Promote private sector contribution by implementing independent regulation and maintaining an open stance towards FDI.
	Online consumer protection ● Implement a comprehensive regulatory framework that covers from pre- to post-purchase issues.
	Data privacy standards ● Recognize equivalency/adequacy of privacy regimes. ● Enhance cooperation among authorities. ● Utilize PTA mechanisms and international dialogues.
	Cybersecurity ● Implement ISO 27000 series. ● Remove trade restrictions in computer professional services.

Table 1. *(continued)*

Focus	Recommendations
	Innovation and Industry 4.0 ● Align national regulations with international standards and TBT provisions. ● Implement laws protecting IPRs, including defined exceptions. ● Enhance the enforcement capabilities of national IP institutions. ● Invest in top-tier digital skills; involve companies in training and share skill data. ● Streamline cross-border capital flows and bolster start-up confidence with a robust policy environment.
	Investment regulations ● Establish a robust regulatory framework for digital investments with a liberal FDI approach, and adherence to global data and connectivity standards. ● Synchronize national and sub-national IPAs to ensure clear investment rules. ● Regularly review and adapt policies as needed.
Inclusivity	**E-commerce engagement of MSMEs** ● Streamline trade processes for cross-border parcels and returns. ● Collaborate internationally to address duty evasion. ● Maintain a tariff-free stance for electronic transmissions and offer de minimis duty exemptions, complemented by a sales tax system. ● Simplify regulations to reduce compliance costs. ● Boost MSME digital trade competitiveness via incentives, training and support. ● Set up a unified info-sharing system for MSMEs on regulatory changes. ● Create online networking portals to foster connections and visibility of MSMEs.
	Empower marginalized groups in digital trade ● Evidence-based targeted assistance programmes. ● Incorporate explicit, binding provisions in key sections of PTAs, emphasizing collaboration with development partners to champion non-discrimination, capacity-building and impact evaluation for marginalized groups. ● Boost visibility of marginalized groups in digital trade through networking events and media. Spotlight their pioneers and share best practices.
	Leverage digital trade and investment in health-care and education services ● Remove trade and investment barriers like strict licensing and establish collaboration for mutual recognitional of standards and accreditation. ● Adopt international data privacy standards and enable crucial data exchanges. ● Invest in digital infrastructure, prioritizing underserved areas, to ensure widespread digital health and online education access. ● Align education with market needs through co-ordination between educational entities, employers and partners. ● Provide incentives for life-long learning, including tax benefits, easy access for adults to formal education, and recognizing post-education training.
	Address digital-economy worker challenges ● Integrate an impact assessment of DEAs and PTAs on workers' conditions into trade agreement designs, and implementation. ● Adhere labour practices with international guidelines. ● Collaborate with the private sector and global platforms to formalize cross-border digital work, considering tax, digital identity, and data privacy. ● Set clear tax guidelines for cross-border digital services to avoid double taxation and align with the United Nations's model tax treaty. ● Adjust national education strategies to fit the digital workforce's evolving needs.

Table 1. *(continued)*

Focus	Recommendations
Environmental sustainability	**Foster a circular economy through open digital trade and investment** ● Recognize the intertwined nature of digital trade and the circular economy, anchored by secure digital infrastructure, robust data governance and smooth data transfer. ● Simplify regulations that obstruct trade in environmental goods/services, especially in waste treatment, and recycling. Additionally, work towards reducing licensing costs and clarifying legalities. ● Standardize e-product recycling and e-commerce packaging in line with the WTO TBT Agreement, and ensure alignment of policy measures and enforcement with global environmental agreements like the Basel Convention. ● Leverage trade agreement to establish harmonized environmental standards and foster collaboration related to waste trade.
	Establish a harmonized approach for traceability of goods throughout their lifecycles and legal e-waste movement ● Implement paperless trade processes for tracking goods across product lifecycles and simplifying the process of notifications and permit acquisitions for e-waste exports. ● Adopt the WCO's HS 2022 amendments, which outline specific e waste classification provisions.

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The full report can be downloaded from https://www.unescap.org/kp/APTIR2023

The Asia-Pacific Trade and Investment Report (APTIR) is a biennial publication prepared by the Trade, Investment and Innovation Division of the United Nations Economic and Social Commission for Asia and the Pacific to provide insights into the impact of recent emerging developments in trade and foreign direct investment on countries' abilities to meet the challenges of achieving sustainable development.

This publication presents the 2025 updates of highlights and policy recommendations from the Asia-Pacific Trade and Investment Report (APTIR): Unleashing Digital Trade and Investment for Sustainable Development, prepared by ESCAP in collaboration with UNCTAD and UNIDO.

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