

**Economic and Social Commission for Asia and the Pacific**

Committee on Trade and Investment

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Promoting trade facilitation, paperless trade and electronic commerce for achieving the Sustainable Development Goals**Promoting trade facilitation, paperless trade and electronic commerce for achieving the Sustainable Development Goals****Note by the secretariat***Summary*

The present document contains information on the latest developments in trade facilitation and paperless trade in the region. Most countries in the region have implemented the World Trade Organization Agreement on Trade Facilitation, with an overall average implementation rate of more than 50 per cent. Challenges, however, remain for implementing cross-border paperless trade measures, as the average implementation rate is 23 per cent in the region.

The present document also contains a review of the development of e-commerce in the region. While countries such as China, Japan and the Republic of Korea have been leading in this area, others lag behind. E-commerce can be an effective tool for inclusive development. However, many households, rural smallholders and micro or small enterprises in the region are not yet participating in e-commerce. A conducive environment needs to be created to enable them to better utilize e-commerce and make it inclusive.

The Committee on Trade and Investment is invited to review the issues set out in the present document and provide the secretariat with further guidance to advance the work.

I. Introduction

1. The entry into force of the Agreement on Trade Facilitation on 22 February 2017, the first multilateral deal concluded under the auspices of the World Trade Organization (WTO), underscores the global recognition of the importance of trade facilitation to lowering trade costs, reducing trade time and enhancing the efficiency of supply chains. These factors, in turn, enable producers and traders to increase trade and better integrate into global and regional value chains. Trade, together with foreign direct investment (FDI) and technology transfer, is regarded as an important means of implementation of the 2030 Agenda for Sustainable Development. Trade facilitation has been shown to have a larger impact on trade expansion than other policies traditionally used to boost trade. In that regard, it is the factor without which trade cannot play its role in achieving the Sustainable Development Goals.

* E/ESCAP/CTI(5)/L.1.

2. Compared to traditional trade facilitation measures which deal with increasing the efficiency of physical trade flows across the border, paperless or cross-border paperless trade measures provide a digital or electronic solution to streamline and simplify trade procedures. While paperless trade has been implemented within many countries in the region, as indicated by the wide adoption of customs automation systems, cross-border paperless trade remains a challenge for some developing countries, especially the least developed countries. For example, cross-border paperless trade requires reciprocal receipt of trade-related data and information, which means the trading partners must have the capacity to exchange that information electronically. One important step towards resolving this difficulty is the adoption of the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific by member States of the Economic and Social Commission for Asia and the Pacific (ESCAP) on 19 May 2016.

3. Electronic commerce (or e-commerce), both domestic and cross-border, given the advances in information and communications technologies (ICT), adds an important dimension: its development depends on trade, it transforms the way in which traditional trade is conducted, and it stimulates trade growth. The opportunities for micro and small enterprises, individuals and rural smallholders to access larger domestic and international markets, and therefore promote inclusive development and contribute to achieving the Sustainable Development Goals, are unprecedented. On the other hand, some developing countries, especially the least developed countries, individual households, farmers, rural smallholders, and micro and small enterprises in the region are not yet participating in or benefiting from e-commerce. Furthermore, the competition created by e-commerce may put substantial pressure on traditional bricks-and-mortar small-scale retailers and local suppliers (such as local producers and vendors), and in some cases may force them out of the market.

4. The present document contains a review of the latest developments in trade facilitation, paperless trade and e-commerce in the region. It also contains an overview of progress in regional trade facilitation implementation, the state of play of e-commerce in the region and a discussion on how to make e-commerce more inclusive. The secretariat's key activities to support the development of trade facilitation, paperless trade and e-commerce are also summarized.

II. Overview of trade facilitation and paperless trade implementation in the region

A. Trade facilitation

5. Trade facilitation – the simplification, modernization and harmonization of export and import processes – plays a key role in the global economy. The expansion of production networks and value chains across borders has become the norm. For example, car parts can be manufactured in different countries before they are shipped to another for assembly and afterwards to more countries to reach final consumers. This fragmented production, with tasks that are performed in different countries and products that cross multiple borders in various stages of processing, requires efficient border crossings and reliable delivery in order to control costs and competitiveness. Effective trade facilitation underpins such value chains.

6. Most discussion of trade facilitation today is focused on the WTO Agreement on Trade Facilitation, which is intended to streamline, harmonize and modernize customs procedures with an emphasis on the efficiency of Governments' administrative processes and regulatory requirements. It is expected that implementation of the Agreement will bring substantial benefits to WTO member States. For instance, full implementation of the Agreement is expected to slash WTO members' trade costs by an average of 14.3 per cent, with developing countries having the most to gain.¹

7. Developed countries that are members of the WTO have committed to applying the substantive portions of the Agreement on Trade Facilitation from the date it took effect, while developing countries and least developed countries can have varying time frames. The rationale is that countries are at different stages of development and some developing countries, especially the least developed countries, have limited financial resources and human capacity to implement trade facilitation measures, and in order to make implementation practicable, the Agreement provides for special and differential treatment for developing and least developed countries. In particular, the Agreement includes a category system, under which each developing and least developed country self-determines when it will implement the corresponding provisions and what it needs in terms of related capacity-building support. Category A contains the provisions that developing and least developed countries designate for implementation upon entry into force of the Agreement (or within one year in the case of least developed countries). Category B contains the provisions that developing and least developed countries will implement after a transition period following entry into force of the Agreement. Finally, Category C contains the provisions that developing and least developed countries will implement after a transition period with the additional requirement of the acquisition of implementation capacity through the provision of assistance and support for capacity-building.

8. By mid-August 2017, 121 of the 164 WTO members, including 35 ESCAP members and associate members, had ratified the Agreement on Trade Facilitation. Of the ESCAP members and associate members, 26 already submitted notifications of relevant provisions.² On average, based on those 26 countries, only 31 per cent of the provisions remain unnotified. Three economies in the region, namely those of Hong Kong, China, the Republic of Korea and Singapore, have fully given notification on all articles of the Agreement under Category A. On the other hand, six economies (Indonesia, Kyrgyzstan, the Lao People's Democratic Republic, Nepal, Papua New Guinea and Viet Nam) have only given notification on approximately 20 per cent of the provisions.³

9. While data on these notifications are useful for providing an overview of the readiness of countries to implement trade facilitation provisions in general, it is somewhat limited as an overview of the Asia-Pacific region, as only 35 ESCAP members and associate members have ratified the Agreement on Trade Facilitation so far. More data need to be collected to include countries

¹ WTO, *World Trade Statistical Review 2017* (Geneva, 2017). Available from www.wto.org/english/res_e/statis_e/wts2017_e/wts2017_e.pdf.

² Brunei Darussalam; China; Fiji; Hong Kong, China; India; Indonesia; Kazakhstan; Kyrgyzstan; Lao People's Democratic Republic; Macao, China; Malaysia; Mongolia; Nepal; Pakistan; Papua New Guinea; Philippines; Republic of Korea; Samoa; Singapore; Solomon Islands; Sri Lanka; Tajikistan; Thailand; Tonga; Turkey; and Viet Nam.

³ WTO Trade Facilitation Agreement database. Available from www.tfadatabase.org/notifications/list (accessed 13 August 2017).

in the region that either did not ratify the Agreement or are not WTO members. The secretariat has been systematically collecting and analysing information on the implementation of trade facilitation measures in the region since 2012. In 2014, the other regional commissions joined the initiative, which led to the first Global Survey on Trade Facilitation and Paperless Trade Implementation, in 2015. Furthermore, the second Global Survey on Trade Facilitation and Paperless Trade Implementation was conducted from January to July 2017.

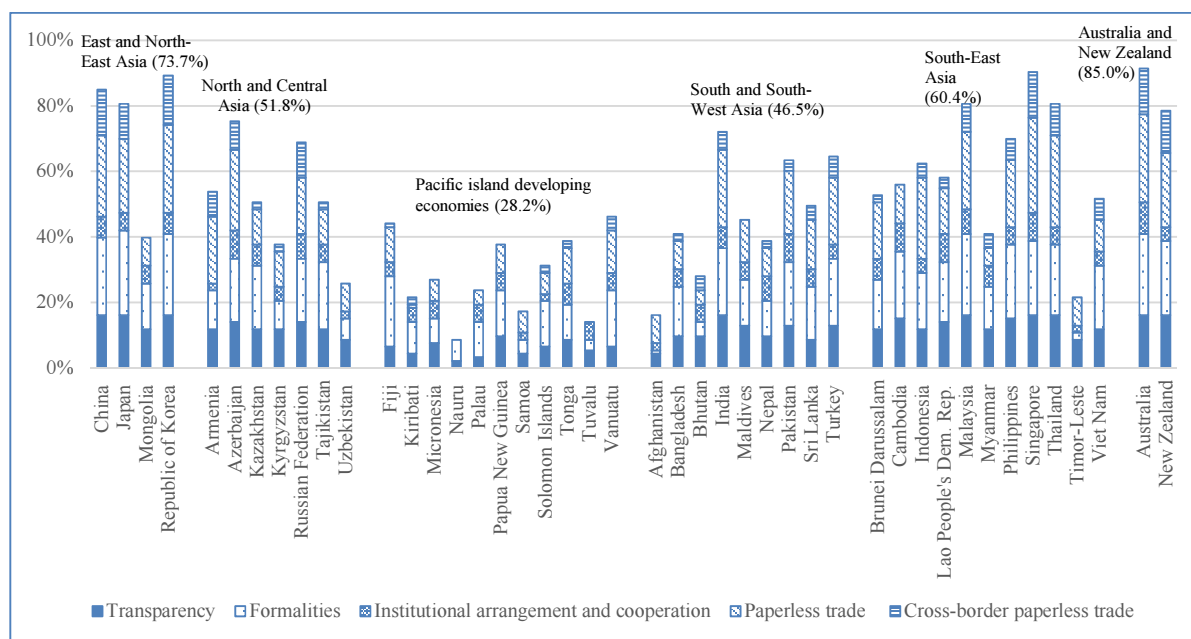
10. The second Global Survey covers 47 trade facilitation measures divided into seven groups: (a) general trade facilitation measures, (b) paperless trade, (c) cross-border paperless trade, (d) transit facilitation, (e) trade facilitation for small and medium-sized enterprises, (f) agricultural trade facilitation, and (g) women in trade facilitation.⁴ While the Agreement on Trade Facilitation addresses general trade facilitation measures and transit facilitation measures rather thoroughly, it does not include many cross-border paperless trade measures (although such measures support implementation in many of the general trade facilitation measures).

11. Based on the data for 31 common trade facilitation and paperless trade measures, which were collected in the second Global Survey of 44 countries in Asia and the Pacific, the secretariat calculated indices of implementation (figure I).⁵ The average regional implementation of this comprehensive set of trade facilitation measures was 50.4 per cent, though results vary widely across subregions. After Australia and New Zealand (85.0 per cent), the highest average rate was in East and North-East Asia (73.7 per cent), followed by South-East Asia (60.1 per cent), North and Central Asia (51.8 per cent) and South and South-West Asia (46.5 per cent). The Pacific (excluding Australia and New Zealand) lags behind at 28.2 per cent.

⁴ More information on the second Global Survey is available from <https://unnex.unescap.org/content/global-survey-trade-facilitation-and-paperless-trade-implementation-2017>.

⁵ While 47 trade facilitation measures were surveyed, some measures for calculating the overall score are excluded here as they are not relevant to all countries surveyed (such as transit measures) or the data sets are not complete (such as the groups of measures related to small and medium-sized enterprises, agricultural trade facilitation and women).

Figure I
Trade facilitation implementation in Asia and the Pacific, by group and subregion



Source: The Second Global Survey on Trade Facilitation and Paperless Trade Implementation (forthcoming).

12. The least developed, small island States and landlocked countries in the region face particular challenges in implementing trade facilitation measures, in particular those relating to paperless trade and cross-border paperless trade. Landlocked developing countries as a group have higher levels of trade facilitation on average (43.1 per cent) than least developed countries (34.4 per cent) or Pacific developing countries (28.9 per cent). The range of readiness to implement a full spectrum of trade facilitation policies can be further illustrated by examining the best performers in the region and those lagging behind. While countries such as Australia, Singapore, the Republic of Korea, China and Thailand have successfully implemented trade facilitation measures, four of the five worst performers are Pacific developing countries, including two with least developed country status; the fifth is Afghanistan, a landlocked least developed country (table 1).

Table 1
Trade facilitation implementation: the best and worst performers in the region

Top performers	Score (Percentage)	Bottom performers	Score (Percentage)
Australia	91.4	Kiribati	21.5
Singapore	90.3	Samoa	17.2
Republic of Korea	89.3	Afghanistan	16.1
China	85.0	Tuvalu	14.0
Thailand	80.7	Nauru	8.6

Source: The Second Global Survey on Trade Facilitation and Paperless Trade Implementation (forthcoming).

13. Indeed, an examination of data from the Aid for Trade initiative reveals that, for four of the five worst performers (except Afghanistan), each country receives no more than 1 per cent of aid compared with the largest recipient of the region (latest available data, 2015).⁶ These findings highlight the need to extend support, such as official development assistance, technical assistance and capacity-building, to these countries. Therefore, donors and development partners may need to review their policies and consider channelling more resources to support the least developed countries and Pacific island developing countries to develop trade facilitation and paperless trade.

14. Of the trade facilitation and paperless trade measures covered by the second Survey, transparency measures were the best implemented (regional average implementation 68.5 per cent), followed by formalities measures (implementation rate 60 per cent). Regional average implementation is more than 50 per cent for measures related to institutional arrangements, inter-agency cooperation and transit. The average regional level of implementation of paperless trade measures is close to 50 per cent. While many economies have developed legal frameworks to enable paperless trade, implementation of cross-border paperless trade has yet to begin in many developing countries, and the average rate of implementation is 23 per cent. Of the 17 Agreement on Trade Facilitation-related measures, 14 (more than 80 per cent) have been at least partially implemented in more than half of all 44 Asia-Pacific economies surveyed, indicating that implementation in the region is already significantly underway.

15. The survey results show that most countries in the region have accelerated implementation of trade facilitation measures since 2015, when the first Global Survey was conducted. The overall average implementation rate in the region increased from 46.5 per cent in 2015 to 50 per cent in 2017. North and Central Asian countries made the most progress; their implementation rate increased from 41.6 per cent in 2015 to 51.8 per cent in 2017. As most countries in this group are also landlocked developing countries, these countries enhanced the implementation rate by 7.9 per cent from 2015 to 2017. In contrast, the Pacific developing countries did not see substantial improvement: the implementation rate increased by 3.3 per cent from 24.9 per cent in 2015 to 28.2 per cent in 2017.

16. Given the importance of the Agreement on Trade Facilitation, it is probably not surprising that during the period 2015-2017 the countries in Asia and the Pacific made the most progress in implementing the trade facilitation measures it covers, in particular those relating to transparency, formalities, institutional arrangements and cooperation. Implementation rates for these groups of measures increased by approximately 7 per cent. In contrast, implementation of paperless trade and cross-border paperless measures increased by less than 4 per cent. This can be explained by the importance that countries attach to the Agreement on Trade Facilitation but also by the fact that it is often more challenging to implement these types of measures.

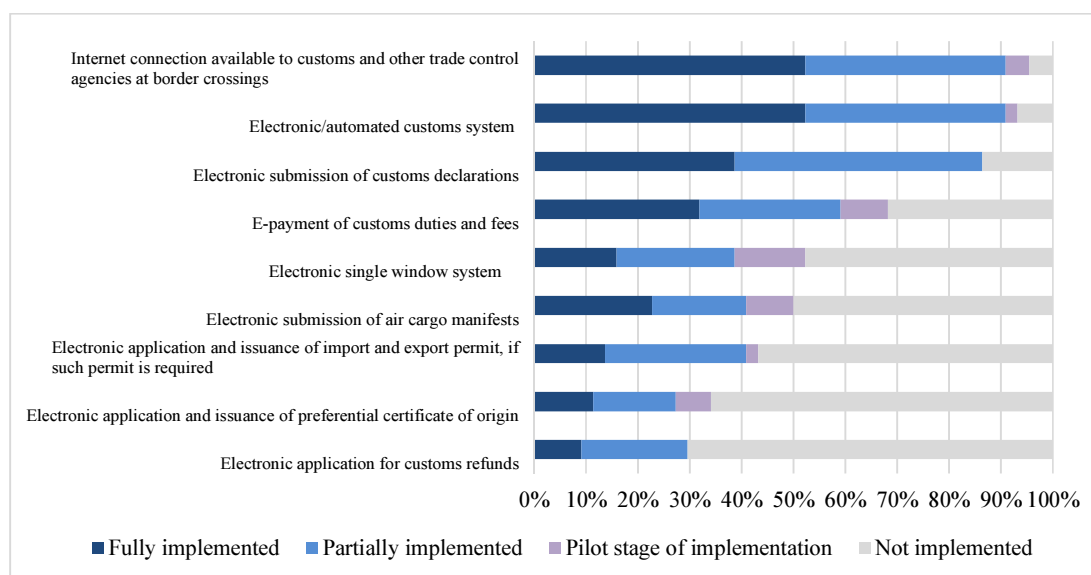
B. Paperless and cross-border paperless trade

17. Paperless trade generally comprises the implementation of innovative and technology-driven measures aimed at enabling trade using electronic rather than paper-based data and documentation. Customs automation systems and national single window systems are widely cited examples of paperless

⁶ Organization for Economic Cooperation and Development-Development Assistance Committee/Creditor Reporting System Aid Activity database. Available from www.stats.oecd.org/Index.aspx?datasetcode=CRS1 (accessed 22 August 2017).

trade. The survey results show that electronic/automated customs systems are available in most of the economies surveyed (41 of 44) and have been fully implemented in more than half. Challenges remain for implementing electronic single window systems, which have been implemented fully, partially or on a pilot basis by 23 countries, or more than 50 per cent of the Asia-Pacific economies surveyed (figure II).

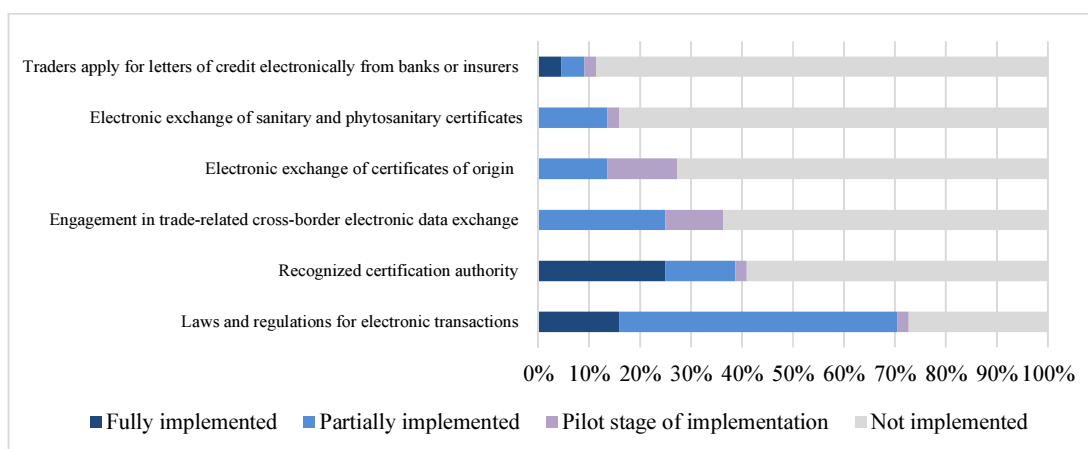
Figure II
Implementation of paperless trade facilitation measures in the region



Source: The Second Global Survey on Trade Facilitation and Paperless Trade Implementation (forthcoming).

18. Cross-border paperless trade refers to trade in goods, including their import, export and transit and related services, that takes place on the basis of electronic communications, including the exchange of trade-related data and documents in electronic form. The survey results show that, in part due to the lack of institutional and legal frameworks to support cross-border paperless trade, engagement in trade-related cross-border electronic data exchange has remained limited and is typically conducted on a limited basis with a few specific trade partners and often only on a pilot basis. Indeed, the electronic exchange of certificates of origin and of sanitary and phytosanitary certificates has been implemented on a limited basis by less than 20 per cent of the economies of the region. Similarly, in all but one of the Asia-Pacific economies included in the second Survey, it is not yet feasible for traders to apply to banks for letters of credit electronically without submitting paper-based documents (figure III).

Figure III
Implementation of cross-border paperless trade facilitation measures in the region



Source: The Second Global Survey on Trade Facilitation and Paperless Trade Implementation (forthcoming).

19. The implementation of trade facilitation and paperless trade measures will bring substantial benefits to the countries in Asia and the Pacific. The impact assessment carried out by the secretariat reveals that implementation of the Agreement on Trade Facilitation measures will reduce trade costs by 5 and 9 per cent if all the measures are “at least partially” and “fully” implemented, respectively. If all the Agreement, paperless and cross-border paperless trade measures are fully implemented by the countries surveyed, the average trade cost across countries will drop by more than 16 per cent. Similarly, an earlier study carried out by the secretariat shows that full implementation of cross-border paperless trade is expected to generate \$257 billion of additional export potential annually for the Asia-Pacific region.⁷

III. Electronic commerce for inclusive development in Asia and the Pacific

A. E-commerce has emerged as a driver of trade and economic development

20. E-commerce, in its simplest form, refers to the sale and purchase of goods and services through electronic networks and the Internet (box 1).

⁷ ESCAP, *Estimating the Benefits of Cross-Border Paperless Trade* (Bangkok, 2014). Available from www.unescap.org/resources/estimating-benefits-cross-border-paperless-trade.

Box 1

Definition and types of e-commerce^a

The definition by the Organization for Economic Cooperation and Development says that e-commerce is the sale or purchase of goods or services, conducted over computer networks specifically designed for the purpose of receiving or placing of order. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online.

There are four main types of e-commerce, namely business-to-business, business-to-consumer, consumer-to-consumer and, to a lesser extent, business-to-government.

Business-to-business: Accounts for the bulk of e-commerce and involves transactions between businesses, such as between a manufacturer and a wholesaler, or between a wholesaler and a retailer. From the perspective of a small enterprise, engaging in this type of e-commerce may be a requirement for participating in national or global value chains.

Business-to-consumer: Involves sales by pure play e-commerce enterprises to consumers and by traditional bricks-and-mortar retail or manufacturing firms that add an online sales channel. Selling directly to consumers via information and communications technologies networks can help micro and small businesses to reach new markets, both domestically and internationally.

Consumer-to-consumer: This can be seen as a modern version of using the classified advertising section in a local newspaper or going to an auction. It includes online auction platforms (such as eBay or Taobao) and sales within online communities. Consumer-to-consumer platforms offer possibilities for informal enterprises to engage in e-commerce.

Business-to-government: Similar to business-to-business, except that the buyer in this case is a government entity, such as in the case of public e-procurement.

^a *Asia-Pacific Trade and Investment Report 2016: Recent Trends and Developments* (United Nations publication, Sales No. E.16.II.F.23). Available from www.unescap.org/publications/asia-pacific-trade-and-investment-report-2016-recent-trends-and-developments.

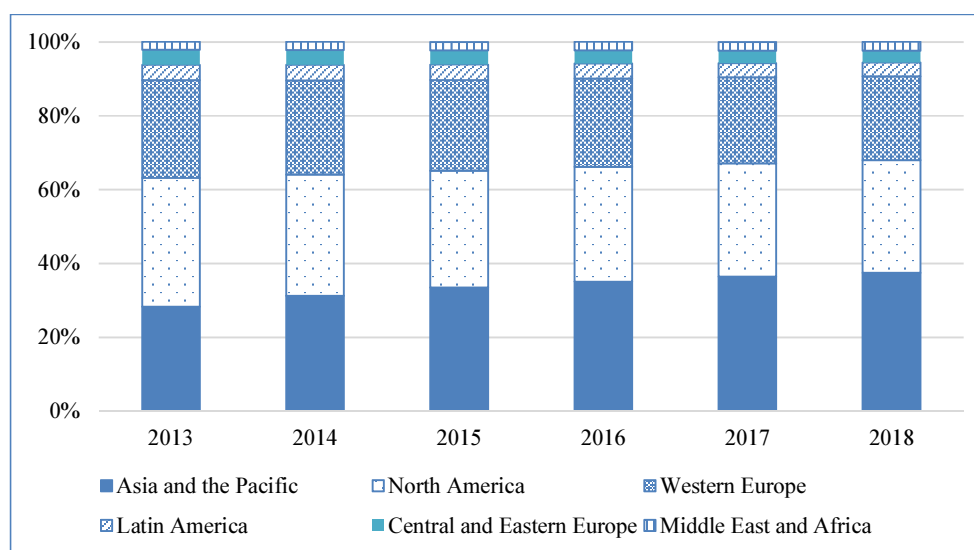
21. E-commerce is multisectoral by nature. It encompasses multiple sectors such as ICT infrastructure, logistics and trade facilitation, and touches on many other areas, including legal frameworks, e-payments, e-commerce platforms and e-procurement, as well as awareness-raising and skills development. The concept of an e-commerce ecosystem already exists, and it emphasizes that every sector of e-commerce needs to be developed to achieve a healthy ecosystem.

22. Available data show the importance of e-commerce to international trade. The United Nations Conference on Trade and Development (UNCTAD) estimates that the value of global e-commerce was \$25 trillion in 2015, compared to \$16.1 trillion in 2013. The United States of America is by far the largest market for e-commerce, with combined sales equalling more than \$7 trillion in 2015, while China has the largest business-to-consumer market in the world. E-commerce plays a vital role in economic development in Japan and the Republic of Korea, accounting for 60 and 84 per cent of gross domestic product (GDP), respectively. In China, e-commerce accounts for 18 per cent of its GDP.⁸

⁸ UNCTAD, “Ministers to discuss opportunities and challenges of e-commerce with Jack Ma, eBay, Jumia, Huawei, Etsy, PayPal, Vodafone and more”, 21 April 2017. Available from <http://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=1466>.

23. E-commerce is dominated by business-to-business transactions. For example, business-to-business transactions in the Republic of Korea and the Russian Federation accounted for 91 and 57 per cent of all e-commerce revenue, respectively, in 2013. However, the business-to-consumer sector has been expanding faster. For example, in the Russian Federation, the business-to-consumer sector grew almost three times faster than the business-to-business sector in 2013. Among the top 10 business-to-consumer markets globally, four countries, namely China, Japan, the Republic of Korea and the Russian Federation, are from the region.⁹ The combined share of Asia (and Oceania) in the world's business-to-consumer market is projected to further increase from 28 to 37 per cent between 2013 and 2018 (figure IV).

Figure IV
Business-to-consumer e-commerce sales share worldwide, by region



Source: eMarketer, "Worldwide e-commerce sales to increase nearly 20% in 2014", 23 July 2014. Available from www.emarketer.com/Article/Worldwide-Ecommerce-Sales-Increase-Nearly-20-2014/1011039.

B. E-commerce as a tool for promoting inclusive development: opportunities and challenges

24. E-commerce can promote inclusive development. Compared to traditional trade, e-commerce helps local businesses, especially micro and small enterprises, individuals and farmers, to reach a broader domestic or international market. For instance, a farmer may sell her product to another country through an e-commerce platform even though she has never been abroad. It offers consumers more options for and better information on buying goods and products. In this sense, e-commerce creates higher productivity owing to a more efficient use of technology and heightened competition.

⁹ UNCTAD, *Information Economy Report 2015: Unlocking the Potential of E-Commerce for Developing Countries* (United Nations publication, Sales No. E.15.II.D.1). Available from http://unctad.org/en/PublicationsLibrary/ier2015_en.pdf.

25. On the other hand, e-commerce, in particular cross-border e-commerce, may increase competition in local markets. A recent study pointed out that retail in general and e-commerce in particular were thin-margin businesses.¹⁰ Adaptation to e-commerce is not automatic. Traditional bricks-and-mortar retailers may struggle to cope with the fierce competition caused by e-commerce.

26. Data on the impacts of e-commerce on job creation are limited. The World Economic Forum reported that digitization had created 6 million jobs globally and provided a \$193 billion boost to world economic output in 2011.¹¹ By 2020, approximately 20 per cent of all jobs will be contracted online.¹² HSBC forecasted that e-commerce has the potential to create 12 million new jobs net across India, including rural areas, between 2016 and 2026.¹³ The McKinsey Global Institute found that Internet access has helped small and medium-sized enterprises in eight developing countries to create 3.2 jobs for every job lost.¹⁴

27. In the context of 2030 Agenda for Sustainable Development, the authors of *Aid for Trade at a Glance 2017*¹⁵ argued that e-commerce could be a useful tool for achieving the Sustainable Development Goals in the following ways:

(a) E-commerce can be leveraged to promote the empowerment of women as entrepreneurs and traders (target 5.b);

(b) E-commerce can support productive activities, decent job creation, entrepreneurship, creativity and innovation and encourage the formalization and growth of micro, small and medium-sized enterprises in developing countries, including through access to ICT-enabled financial services, such as online and mobile payments (Goal 8.3);

(c) E-commerce can promote the integration of micro, small and medium-sized enterprises into value chains and markets (for example, by leveraging virtual marketplaces) in support of Goal 9.3;

(d) E-commerce can help to increase the exports of developing countries (Goal 17.11), in particular with a view to doubling the share of global exports of least developed countries by 2020.

28. Data and information to support such arguments are limited. Therefore, case studies have been the main method used to create analyses of the impact of e-commerce on inclusive and sustainable development. In the Republic of Korea, the Government established e-commerce platforms for rural citizens to sell their products (for example, www.invil.org) and the results have been

¹⁰ Sunil Gupta and Tanya Bijlani, "E-Commerce in Asia: Challenges and Opportunities", Asia Business Insights (2012). Available from www.people.hbs.edu/sgupta/EcommerceinAsia.pdf.

¹¹ World Economic Forum, *The Global Information Technology Report 2013: Growth and Jobs in a Hyperconnected World* (Geneva, 2013).

¹² World Bank, *World Development Report 2013: Jobs* (Washington, D.C., 2012).

¹³ HSBC, "E-commerce jobs click in India", 26 July 2016. Available from www.gbm.hsbc.com/insights/economics/e-commerce-jobs-click-in-india.

¹⁴ McKinsey and Company, *Internet Matters: The Net's Sweeping Impact on Growth, Jobs, and Prosperity* (2011). Available from www.mckinsey.com/industries/high-tech/our-insights/internet-matters.

¹⁵ Organization for Economic Cooperation and Development and WTO, *Aid for Trade at a Glance 2017: Promoting Trade, Inclusiveness and Connectivity for Sustainable Development* (Paris, 2017). Available from www.wto.org/english/res_e/publications_e/aid4trade17_e.htm.

positive. Success factors include close collaboration between the Government, telecentre operators and rural citizens to market and sell goods and services. Supportive actions have involved training activities, helping sellers to create compelling advertisements and having the private sector develop a sophisticated e-commerce portal and links to other online platforms in the country.

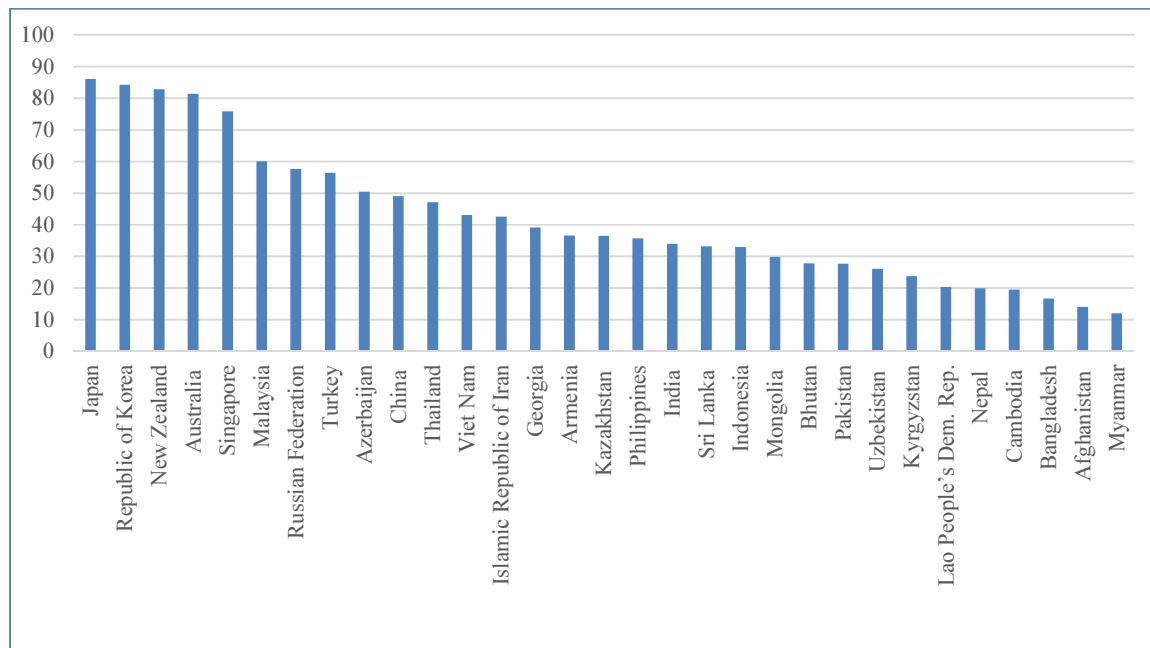
29. In China, rural e-commerce development could be more grass-roots driven, but it is supported indirectly by local governments. The strategy is for individuals or rural smallholders to utilize existing popular e-commerce platforms to sell products online. One example is “Taobao villages” which are seen as a useful instrument for poverty reduction.¹⁶

30. However, the obstacles listed below limit the extent to which the growth of e-commerce in the region contribute to inclusive development.

1. Many economies in the region are still at a nascent stage of e-commerce development

31. The B2C E-commerce Index developed by UNCTAD highlights strong disparities among economies in the region. Among developing countries, the Republic of Korea, Singapore and Malaysia are at the top of the ranking. The least developed countries in the region, including the Lao People’s Democratic Republic, Nepal, Cambodia, Bangladesh, Afghanistan and Myanmar, lag behind (figure V).

Figure V
United Nations Conference on Trade and Development B2C E-commerce Index 2016



Source: UNCTAD, “UNCTAD B2C E-commerce Index 2016”, UNCTAD technical notes on ICT for development No. 7 (2016). Available from http://unctad.org/en/PublicationsLibrary/tn_unctad_ict4d07_en.pdf.

¹⁶ World Bank, “The Taobao villages as an instrument for poverty reduction and shared prosperity”, 29 October 2016. Available from www.worldbank.org/en/news/speech/2016/10/29/the-taobao-villages-as-an-instrument-for-poverty-reduction-and-shared-prosperity.

32. However, some least developed countries have immense potential to rapidly grow their digital trade and e-commerce. For example, a recent study shows that Bangladesh is moving forward and is poised to become a more advanced digital economy.¹⁷

2. A large number of individual households have not utilized e-commerce

33. Available data on household surveys and online shoppers, although very limited, provided information on business-to-consumer e-commerce from the purchasing side. The percentage of individuals who had made an online purchase in 2013 was less than 10 per cent in Thailand and Turkey, approximately 20 per cent in China and Hong Kong, China, and close to 40 per cent in the Republic of Korea and Singapore.¹⁸

34. A large number of factors may explain this. First and foremost, some households do not have access to the Internet or ICT equipment. A study by the secretariat reveals that in 2015, less than 2 per cent of the population in as many as 20 countries in Asia and the Pacific had adopted fixed broadband, widening the digital divide between high-income and low-income countries at an alarming speed.¹⁹ Other factors such as unavailability or lack of trust in online payment mechanisms prevent many households from using e-commerce.²⁰

3. Farmers and rural smallholders face challenges to participation in e-commerce

35. Despite the success stories of rural smallholder farmers utilizing e-commerce in China and the Republic of Korea, most farmers and rural enterprises may face difficulties in selling products online. In many developing countries in the region, rural transport connection is still a challenge, which in turn increases logistics costs and delivery time. In some cases, farmers and rural enterprises have only a little knowledge of the Internet and e-commerce or few skills to identify their e-commerce needs, its potential benefits and how to engage in it.

36. There is probably no one-size-fits-all solution to make e-commerce more inclusive for rural smallholders. Nevertheless, Governments could consider the following options recommended by UNCTAD.⁹ First, the creation of an enabling environment, with roads, broadband access, logistics and appropriate legislation for carrying out e-commerce and facilitating online payments is crucial. Second, rather than developing government-owned websites, a more effective approach may be to work in partnership with popular existing e-commerce platforms and to create links to rural products. Third, Governments could endorse rural e-commerce portals to enhance trust

¹⁷ Bhaskar Chakravorti, Ajay Bhalla and Ravi Shankar Chaturvedi, “60 countries’ digital competitiveness, indexed”, 12 July 2017. Available from www.hbr.org/2017/07/60-countries-digital-competitiveness-indexed.

¹⁸ International Telecommunication Union, *Manual for Measuring ICT Access and Use by Households and Individuals*, 2014 edition (Geneva, 2014). Available from www.itu.int/dms_pub/itu-d/opb/ind/D-IND-ITCMEAS-2014-PDF-E.pdf.

¹⁹ ESCAP, “State of ICT in Asia and the Pacific 2016: uncovering the widening broadband divide” (Bangkok, 2016). Available from www.unescap.org/resources/state-ict-asia-and-pacific-2016-uncovering-widening-broadband-divide.

²⁰ ADB, *Aid for Trade in Asia and the Pacific: Thinking Forward about Trade Costs and the Digital Economy* (Manila, 2015). Available from www.adb.org/sites/default/files/publication/167344/aft-report-2015.pdf.

among potential buyers and create economies of scale by uniting rural products under a widely advertised government campaign. Finally, Governments could engage in training activities for villages on how to leverage e-commerce tools.

4. Utilization of e-commerce by micro or small enterprises is low

37. Available data indicate that enterprise size is generally a strong determinant of the use of e-commerce. In Azerbaijan, only 2 per cent of small enterprises received orders over the Internet in 2012, compared to 11 per cent of large enterprises. In Kazakhstan, approximately 4 per cent of small enterprises and 8 per cent of large enterprises received orders over the Internet.⁹ In Viet Nam, only 2.2 per cent of all firms sold their goods or services online in 2011. In Turkey, 92 per cent of all firms with at least 10 employees had Internet access in 2012, but only 10 per cent made orders or reservations online.²¹

C. Cross-border e-commerce is gaining momentum

38. In terms of cross-border trade in goods, Universal Postal Union data on the volume of international postal traffic of small packets, parcels and packages offer important insights into recent trends. Between 2011 and 2014, global deliveries of such items expanded by approximately 48 per cent. This indicates an increasingly important role for developing countries, especially in Asia and the Pacific. The region's share of related exports rose from 25.5 to 32.9 per cent during the same period, while its share of imports surged from 15 to 23.9 per cent.⁹

39. Despite these changes, a range of factors constrain cross-border e-commerce, such as unreliable supply chains and complicated trade and border procedures. Furthermore, the compatibility of e-transaction laws, international trade rules and taxation concerns all have impacts on cross-border e-commerce.

40. With regard to the compatibility of e-transaction laws, a prerequisite for conducting commercial transactions online is the recognition of the legal equivalence between paper-based and electronic forms of exchange, which is the goal of e-transaction laws. More than 70 per cent of the countries surveyed in the Asia-Pacific region reported they had at least partially developed the legal and regulatory frameworks needed to support electronic transactions, but that those frameworks remained incomplete and might not readily support the legal recognition of electronic data or documents received from stakeholders in other countries. Another challenge is the establishment of certification authorities which issue recognized electronic signature certificates to traders. Less than 40 per cent of the countries surveyed had established such authorities.

41. Such results highlight the importance of the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific, which is in the process of being ratified by ESCAP member States. It will provide countries in the region with a unique opportunity and platform to identify solutions to overcoming barriers for cross-border e-commerce.

²¹ World Bank, *World Development Report 2016: Digital Dividends*. (Washington, D.C., 2016). Available from www.worldbank.org/en/publication/wdr2016.

IV. The Commission's activities in trade facilitation, paperless trade and e-commerce

42. The secretariat plans its work in an integrated and strategic way to support member States in their efforts to advance trade facilitation, paperless trade and e-commerce. Its analytical work aims to identify the key challenges faced by countries in the region. For instance, the Global Survey on Trade Facilitation and Paperless Trade Implementation identifies cross-border paperless trade as the most challenging task for the region, while more sophisticated data analysis shows that ESCAP members will benefit substantially from the implementation of cross-border paperless trade. Accordingly, its intergovernmental work, especially with regard to the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific, supports the region and member countries in their efforts to identify solutions to promote cross-border paperless trade. This, in turn, supports the development of cross-border e-commerce. Its technical assistance work provides members and associate members with solutions in accordance with the specific situation of each. Its capacity-building, through its regional forum, national workshops, online courses and training materials, enables policymakers, industry stakeholders and others to enhance their knowledge and skills. In this context, some of the secretariat's activities and initiatives are highlighted below.

A. The Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific: an update

43. In 2016, the Commission adopted resolution 72/4 on the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific. A signing ceremony was held during the regional High-level Dialogue on Enhancing Regional Trade through Effective Participation in the Digital Economy on 29 August 2017, at which time Bangladesh, Cambodia and China signed the Framework Agreement. It is open for signature by ESCAP member States until 30 September 2017 and will enter into force after five member States have ratified it.

44. The Framework Agreement will help all ESCAP members to overcome the challenges to developing cross-border paperless trade and to further growing intraregional trade. The Asia-Pacific region is home to world leaders in paperless trade, including China, Japan, the Republic of Korea and Singapore. Various bilateral and subregional arrangements for cross-border paperless trade form a basis for the Framework Agreement, which will act as an overarching regional platform to facilitate the interoperability of existing and emerging bilateral and subregional cross-border paperless trade initiatives and to provide solutions to related legal and technical issues in the region.

45. The least developed countries, landlocked developing countries and Pacific developing economies will benefit from capacity-building when they become parties to the Framework Agreement. Indeed, capacity-building, addressed in article 14 of the Agreement, is one of its prominent features. Methods of cooperation on capacity-building are detailed, and it is stated that special consideration should be given to requests from least developed and landlocked developing countries for technical assistance and cooperation arrangements.

B. Analytical work and capacity-building in trade facilitation and paperless trade

46. In 2012, to support member States in their efforts to further implement trade facilitation and paperless trade measures, to share good experiences, and to identify their needs for capacity-building and technical support, the secretariat conducted the first regional survey on the implementation of measures related to trade facilitation and paperless trade.²² In 2015, the secretariat led the efforts on the first Global Survey, in which all United Nations regional commissions participated. Additionally, from January to July 2017, the secretariat led the efforts for the second Global Survey. The preliminary results were presented at the sixth Global Review on Aid for Trade held in Geneva on 12 July 2017. A joint report of ESCAP and the Asian Development Bank, (ADB) which was partly based on the Survey, was launched at the eighth Asia-Pacific Trade Facilitation Forum, which was held in Yogyakarta, Indonesia from 5 to 8 September 2017.

47. The findings, in addition to those from a longstanding partnership with the World Bank to measure and monitor trade costs, have been used to formulate capacity-building programmes and advisory services for member States. Examples include the Asia-Pacific regional forum to share experiences and best practices on trade facilitation and to discuss the most pertinent issues in the region, national workshops customized to meet the specific needs of each country, and online training materials that can be used by any individual or organization with Internet access.²³

48. The secretariat plans and executes its capacity-building and technical assistance to support member States in their efforts to improve trade facilitation measures in the context of the Sustainable Development Goals and to overcome the challenges to developing cross-border paperless trade. The bulk of trade facilitation activities have been delivered through the United Nations Network of Experts for Paperless Trade and Transport in Asia and the Pacific. Considering the importance of the agricultural and small and medium-sized enterprise sectors to achieving many of the Goals, increased focus has been placed on building capacity to implement trade facilitation measures within both sectors. For example, the secretariat is implementing a project on strengthening the capacity of transitional and developing economies to participate in cross-border agricultural food supply chains. Additionally, the secretariat selected the theme for the eighth Asia-Pacific Trade Facilitation Forum “Trade facilitation innovations for sustainable development in Asia and the Pacific”.

49. While implementation of trade facilitation measures is important, it is essential to assess the effectiveness of those measures. In other words, it is necessary to assess whether the objectives which are set by each country are achieved. To support the countries in the region in their efforts to do so, the secretariat, together with ADB, has published guidelines on the establishment

²² See www.unescap.org/resources/asia-pacific-trade-facilitation-forum-aptff-survey-trade-facilitation-and-paperless-trade.

²³ An example of online training materials developed by the secretariat is available at www.unescap.org/our-work/trade-investment-innovation/trade-facilitation/bpa-course.

of a trade and transport facilitation monitoring mechanism,²⁴ which has been recommended by the United Nations Centre for Trade Facilitation and Electronic Business.²⁵ Furthermore, since 2016, the secretariat and ADB have been supporting Bangladesh, Bhutan and Nepal in their efforts to conduct related baseline studies, which have now been completed.²⁶

C. Promoting the development of e-commerce in the region

50. The secretariat's work promoting e-commerce has mainly focused on trade facilitation and paperless trade measures and logistics. In particular, its work on paperless trade, including the Framework Agreement, aims to support member States in their efforts to recognize trade-related electronic data and information, which is essential for conducting cross-border e-commerce.

51. While these efforts are largely related to business-to-business e-commerce, the secretariat has promoted other types, especially business-to-consumer and consumer-to-consumer e-commerce. Partnerships are key to capitalize on the expertise and mandates of each organization. In that regard, ESCAP is an important partner in the eTrade for All global initiative, which aims to improve the ability of developing countries, and particularly least developed countries, to use and benefit from e-commerce.²⁷

52. The secretariat, in collaboration with the ADB Institute and UNCTAD, held a workshop on the digital economy and e-commerce in Bangkok on 28 and 29 November 2016.²⁸ A back-to-back workshop was held by the secretariat on 30 November to discuss how to use technology to support micro, small and medium-sized enterprises for better engagement in international trade, including e-commerce. Such work represents the initial efforts of the secretariat to review challenges to developing e-commerce and identifying the directions that member States and the secretariat should work towards. The participating organizations could potentially be important partners for the secretariat and member States in promoting and advancing e-commerce.

V. Conclusions

53. The secretariat's previous and ongoing analytical work shows that the implementation of trade facilitation and paperless trade measures would substantially lower trade costs, reduce trade time and enhance the efficiency of supply chains. These factors, in turn, enable the countries in the region, especially the least developed, landlocked, and Pacific developing countries, to be better integrated into regional and international markets.

54. Countries in Asia and the Pacific have generally implemented measures related to the WTO Agreement on Trade Facilitation, with an average implementation rate of more than 50 per cent. Challenges, however, remain for implementing cross-border paperless trade, with an average implementation rate of 23 per cent. Against this background, the Framework Agreement provides a

²⁴ ESCAP, *Towards a National Integrated and Sustainable Trade and Transport Facilitation Monitoring Mechanism: BPA+ (ST/ESCAP/2683)*. Available from www.unescap.org/resources/towards-national-integrated-and-sustainable-trade-and-transport-facilitation-monitoring.

²⁵ ECE/TRADE/C/CEFACT/2017/8/Rev.1.

²⁶ Study reports are available from www.unnext.unescap.org/content/business-process-analysis-simplify-trade-procedures-case-studies.

²⁷ Further information is available from www.etradeforall.org.

²⁸ See www.adb.org/news/events/trade-digital-economy.

unique opportunity for member States to accelerate the development of cross-border paperless trade and to support the growth of the digital economy.

55. E-commerce has developed rapidly in the region, and its impacts on trade and national economies are strongly felt in some countries. For example, e-commerce accounts for 84, 60 and 18 per cent of GDP in the Republic of Korea, Japan and China, respectively.⁸

56. In the context of the 2030 Agenda for Sustainable Development, e-commerce could potentially be a very useful tool for inclusive development. It can create opportunities for women, rural smallholders and micro, small and medium-sized enterprises to better reach national markets and even participate in international trade. Experiences from China and the Republic of Korea show that e-commerce enabled farmers in both countries to better sell their products online. However, challenges to fully utilizing e-commerce as tool for inclusive development remain, as many households, rural smallholders and micro and small enterprises are not able to participate in e-commerce.

57. The development of e-commerce in the region has been largely market- and demand-driven and will most likely remain so in the future. Governments, nevertheless, can play a key role in promoting and guiding its development by implementing relevant policies. A primary concern for Governments is to ensure that e-commerce can be utilized as an effective tool for promoting inclusive development. In some cases, Governments must balance short-term costs – such as the risk of losing tax revenue, losing jobs and widening divides – against potential long-term gains.²⁹

58. Cross-border e-commerce development has gained momentum but challenges remain. The incompatibility of e-transaction laws among the countries in the region is the main obstacle to the legal recognition of electronic data and documents across borders. Similarly, the lack of interoperability among different national operation systems makes it difficult to exchange data and information electronically in practice.

59. Countries in the region need to not only continue to implement the Agreement on Trade Facilitation but also to strengthen their efforts to advance cross-border paperless trade. Countries also need to establish a conducive environment in order to make e-commerce an effective tool for inclusive development. In this respect, sharing experiences, success stories and lessons learned among countries is a useful way to learn best practices.

VI. Issues for consideration by the Committee on Trade and Investment

60. To further advance trade facilitation, paperless trade and e-commerce in the region, the Committee on Trade and Investment may wish to consider making the following recommendations:

(a) Member States, if they have not done so, should ratify the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific as soon as possible to take advantage of the benefits of being a party to it;

²⁹ Aladdin D. Rillo and Valdimir dela Cruz, “The development dimension of e-commerce in Asia: opportunities and challenges”, ADBI Policy Brief No. 2016-2 (Tokyo, ADB Institute, 2016). Available from www.adb.org/sites/default/files/publication/185050/adbi-pb2016-2.pdf.

(b) Members and associate members are encouraged to share experiences of utilizing policy instruments and practical solutions to make e-commerce an effective means for inclusive development.

61. In addition, the Committee may wish to provide the secretariat with further guidance in the following areas:

(a) In collaboration with development partners, continued support to member countries, especially the least developed, landlocked and Pacific developing countries, with capacity-building and technical assistance associated with the implementation of the Framework Agreement;

(b) Wherever resources are available, support to interested member States in their efforts to conduct an analysis of the legal and technical constraints on conducting the cross-border electronic exchange of trade-related data and information and to identify viable solutions to overcome such constraints;

(c) Wherever resources are available, continued support to member countries in their efforts to advance e-commerce for inclusive development in the region. Key activities in this regard may include conducting research and analysis, organizing or participating in relevant meetings and forums, preparing policy guidance and tools and carrying out capacity-building activities.
