

# 4

# TRENDS AND DEVELOPMENTS IN TRADE FACILITATION

Recent global events, such as the successful conclusions of the WTO Trade Facilitation Agreement (TFA) negotiations (December 2013),<sup>1</sup> the fifth Global Review of Aid for Trade on the theme of reducing trade costs, and the adoption of the Addis Ababa Action Agenda (both in July 2015), have brought trade facilitation into sharp focus. It is clear that the WTO TFA implementation will become the new baseline for trade facilitation as a means of reducing trade costs as well as maintaining trade and investment competitiveness. In this regard, data collected by ESCAP as part of the Global Survey of Trade Facilitation and Paperless Trade Implementation (hereinafter referred to as the Global Survey) show that although the situation varies widely from country to country, many Asia-Pacific developing countries have already made considerable progress vis-à-vis WTO TFA implementation. As such, new opportunities for progress exist within the region through the adoption of innovative “next generation” trade facilitation measures that complement the WTO TFA. The ongoing negotiations among ESCAP Members of an intergovernmental agreement for cross-border paperless trade facilitation present such an opportunity to cooperate in order to promote the seamless

exchange of information and documents along international supply chains.

Section A of this chapter presents updated data on trade costs for the Asia-Pacific region as well as an overview of regional and global trade facilitation implementation efforts. Section B looks at the ways in which regional cooperation is being fostered in the areas of trade facilitation and cross-border paperless trade in the Asia-Pacific region. While continuing to maximize efficiency in “soft infrastructure”, i.e. the procedures and processes involved in meeting the documentation and other regulatory requirements involved in international trade, it is also important for countries in the Asia-Pacific region to tackle infrastructure and services bottlenecks in order to enhance their overall connectivity. Taking measures on both of these fronts is necessary to ensure that countries in the region can move towards seamless supply chains. As such, section C of this chapter also presents data on how the international supply chain connectivity of countries in the Asia-Pacific region has evolved.

## A

## TAKING STOCK OF TRADE COST REDUCTION AND TRADE FACILITATION IMPLEMENTATION

Trade costs can be defined as “all costs incurred in getting a good to a final user, other than the cost of producing the good itself – transportation costs (both freight costs and time costs), policy barriers (tariffs and non-tariff barriers), information costs, contract enforcement costs, costs associated with the use of different currencies, legal and regulatory costs and local distribution costs (wholesale and retail)” (Anderson and van Wincoop, 2004). Trade costs play a significant role in shaping regional and global trade patterns, determining the locations and types of actors which can reap the greatest benefits from the trade. Trade costs also shape consumer welfare as a factor determining the price and the diversity of goods available.

*“Reducing trade costs is critical to furthering regional economic integration and connectivity for sustainable development.”*

The trade and development community recommitted to addressing trade costs, in particular to ensure that the benefits could be reaped by the least developed countries (WTO, 2015b). The Addis Ababa Action Agenda (United Nations, 2015) also highlighted the role that reducing trade barriers and trade facilitation measures could play in promoting regional economic integration and connectivity

for inclusive growth and sustainable development.<sup>2</sup> In order to effectively reduce trade costs, policy interventions must address the “soft infrastructure” related to the simplification of procedures and documents associated with trading of goods as well as the “hard infrastructure” related to the physical infrastructure for supporting the trade of goods.

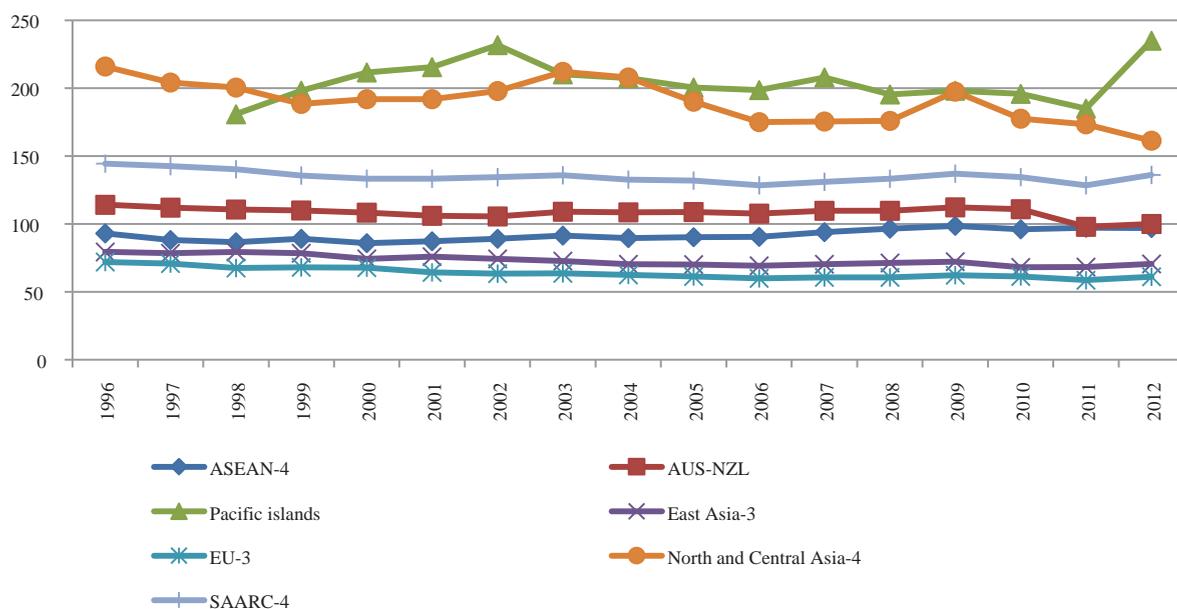
### 1. Trade costs in the Asia-Pacific region: an update

In relation to the intraregional and extraregional trade costs presented in the *Asia-Pacific Trade and Investment Report (APTIR) 2013*, it would appear that trade costs have remained at similar levels – over time – across the Asia-Pacific region.<sup>3</sup> Figure 4.1 shows the trade costs of Asia-Pacific subregions in trading with key developed country markets, and their evolution from 1996 to 2012. Trade costs vary widely across subregions. East Asia-3 has the lowest trade costs of the region, on a par with those of the European Union (EU)-3.

While trade costs of North and Central Asian economies remain nearly three times higher than those of East Asia-3, the former appears to have made significant progress in reducing trade costs since 1996. Trade costs of South Asian economies (SAARC-4) also appear to have decreased, as have those of East Asia and EU-3. In contrast, trade costs of ASEAN-4 with key developed country markets, while already relatively low, have not fallen during the reporting period. Trade costs remain the highest in the Pacific island developing economies and no clear trend towards lower trade costs is apparent in that subregion.

The latest data from the ESCAP-World Bank Trade Costs Database<sup>4</sup> also suggests that regional integration remains uneven, as some regional groupings face lower intraregional trade costs, while for other groupings the trade costs remain prohibitively high.

Figure 4.1. Trade costs of Asia-Pacific subregions with developed economies, 1996-2012



Source: ESCAP-World Bank Trade Costs Database (accessed September 2015).

Notes: ASEAN-4 – Indonesia, Malaysia, the Philippines and Thailand; AUS-NZL – Australia and New Zealand; East Asia-3 – China, Japan and the Republic of Korea; EU-3 – Germany, France and the United Kingdom; Pacific islands – Fiji and Papua New Guinea; North and Central Asia-4 – Georgia, Kazakhstan, Kyrgyzstan and the Russian Federation; and SAARC-4 – Bangladesh, India, Pakistan and Sri Lanka. Trade costs shown are tariff equivalents calculated as trade-weighted average trade costs of countries in each subregion with the three largest developed economies (Germany, Japan and the United States of America).

**Table 4.1. Intra- and extraregional comprehensive trade costs in the Asia-Pacific region (excluding tariff costs)**

(Percentage)

Region	ASEAN-4	East Asia-3	North and Central Asia-4	Pacific islands	SAARC-4	AUS-NZL	EU-3
ASEAN-4	76						
East Asia-3	75	51					
North and Central Asia-4	351	177	121				
Pacific islands	175	174	368	133			
SAARC-4	128	125	282	317	114		
AUS-NZL	101	89	338	73	142	54	
EU-3	108	85	152	211	114	109	43
United States	85	63	180	163	109	100	67

Source: ESCAP-World Bank Trade Costs Database (accessed June 2015).

Note: Trade costs shown are average trade costs during 2008-2013 and may be interpreted as tariff equivalents. See figure 4.1 for the list of economies considered under each region.

Of the regional groupings in the Asia-Pacific region (table 4.1), East Asia-3 exhibits the lowest intraregional trade costs (51%) for 2008-2013 followed by AUZ-NZL (54%). In addition, intraregional trade costs of East Asia-3 show a 5% decrease during 2008-2013 when compared with 2002-2007 while that subregion's extraregional trade costs with all the regional groups also fell between 2008-2013 and 2002-2007. The Pacific islands have the highest intraregional trade costs (133%), which is more than double the intraregional trade costs of the regional benchmark, East Asia-3. The highest extraregional trade costs are between North and Central Asia-4 and the Pacific islands. This result is in line with expectations, given the high intraregional trade costs of both of those subregions and the geographical obstacles of being landlocked and seelocked, respectively. Furthermore, the volume of trade between the two subregions is low as there may be greater incentives to trade with countries that have higher connectivity and closer proximity.

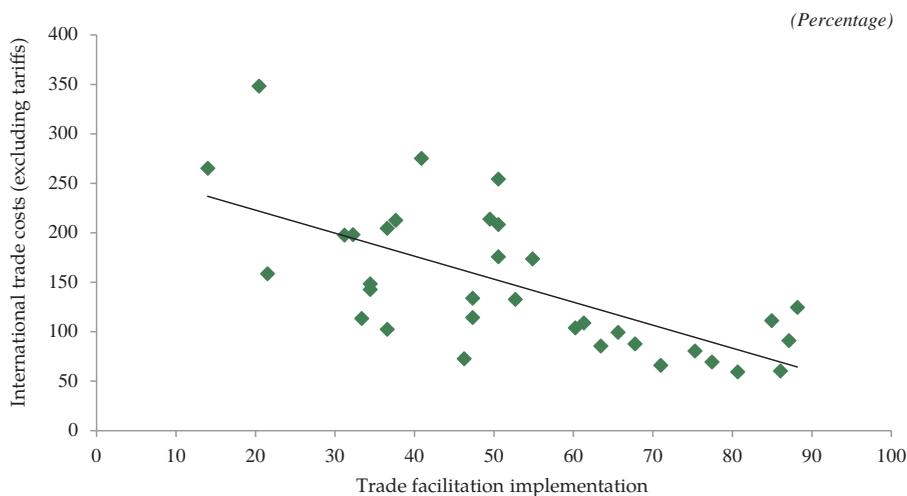
*“Regional integration remains uneven in the Asia-Pacific region as some subregions continue to exhibit high intraregional trade costs.”*

The intraregional trade costs for ASEAN-4 during the period under review are 76%, which is comparable with, and indeed marginally higher than the extraregional trade costs between ASEAN-4 and East Asia-3 (75%). The intraregional trade costs within SAARC-4 are 114%. While the sources and causes of the trade costs are likely to be different, 114% was also the recorded bilateral trade costs between SAARC-4 and EU-3. This may signify the need for enhanced trade facilitation efforts and improved connectivity within the SAARC-4 subregion. The findings from the ESCAP-World Bank Trade Costs Database indicate that it is often cheaper for developing countries in the Asia-Pacific region to trade with partners outside the region rather than within the region.

## 2. Trade facilitation implementation status in the Asia-Pacific region and beyond

Research by ESCAP has shown a strong correlation between the level of implementation of trade facilitation measures and the international trade costs of the Asia-Pacific countries (figure 4.2). This highlights the benefits of pursuing trade facilitation measures with a view to reducing trade costs.

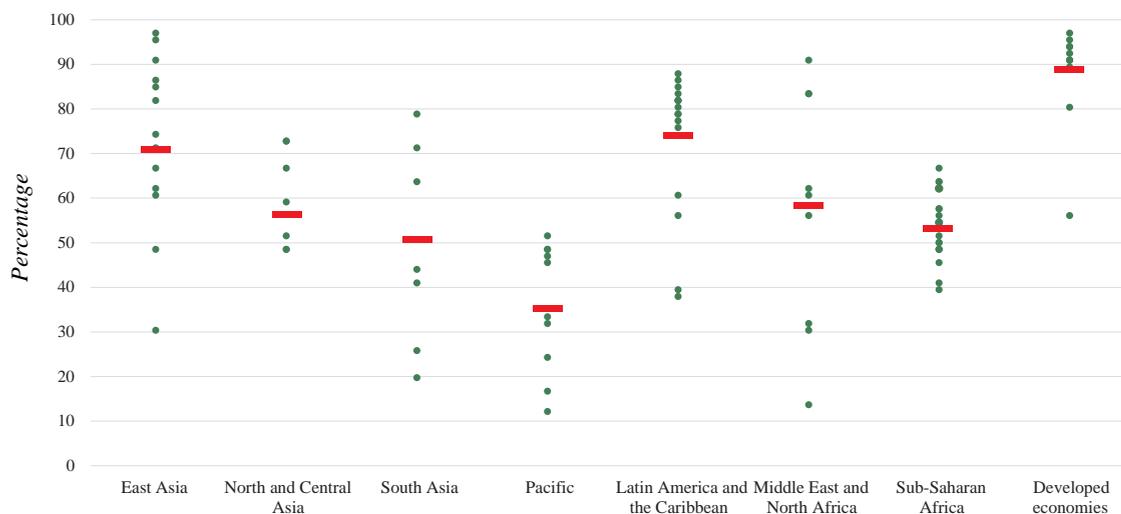
**Figure 4.2. Trade facilitation implementation and trade costs of Asia-Pacific economies<sup>a</sup>**



Source: ESCAP, 2015a.

<sup>a</sup> Country trade costs are based on average comprehensive bilateral trade costs with Germany, China and the United States (2008-2013) and expressed as ad valorem equivalents (percentage).

**Figure 4.3. Trade facilitation implementation around the world (excluding cross-border paperless trade measures), 2015<sup>a</sup>**



Source: UNRC Survey on Trade Facilitation and Paperless Trade Implementation (June, 2015).

Notes: This figure presents average trade facilitation implementation levels (in percentage) of each region (red bars) as well as implementation by individual economies within each regions (green dots).

<sup>a</sup>Based on a preliminary analysis of the Global Survey data presented at the fifth Global Aid for Trade Review. See <http://unnext.unescap.org/survey/GlobalSurveyPPT.pdf>

The United Nations Regional Commissions (UNRCs) initiated the Global Survey in October 2014 (ESCAP, 2015a) in order to (a) better understand and monitor progress on implementation of trade facilitation and paperless trade measures in the Asia-Pacific region, (b) support evidence-based policy-making, and (c) highlight capacity-building and technical assistance needs.<sup>5</sup> Led by ESCAP, the Global Survey collected data on 38 trade facilitation measures.<sup>6</sup> The Global Survey goes beyond the scope of the WTO TFA by including measures related to paperless trade<sup>7</sup> and cross-border paperless trade; thus, it reflects the prospective regional arrangement on cross-border paperless trade facilitation currently under negotiation by ESCAP member States (ESCAP, 2015b).

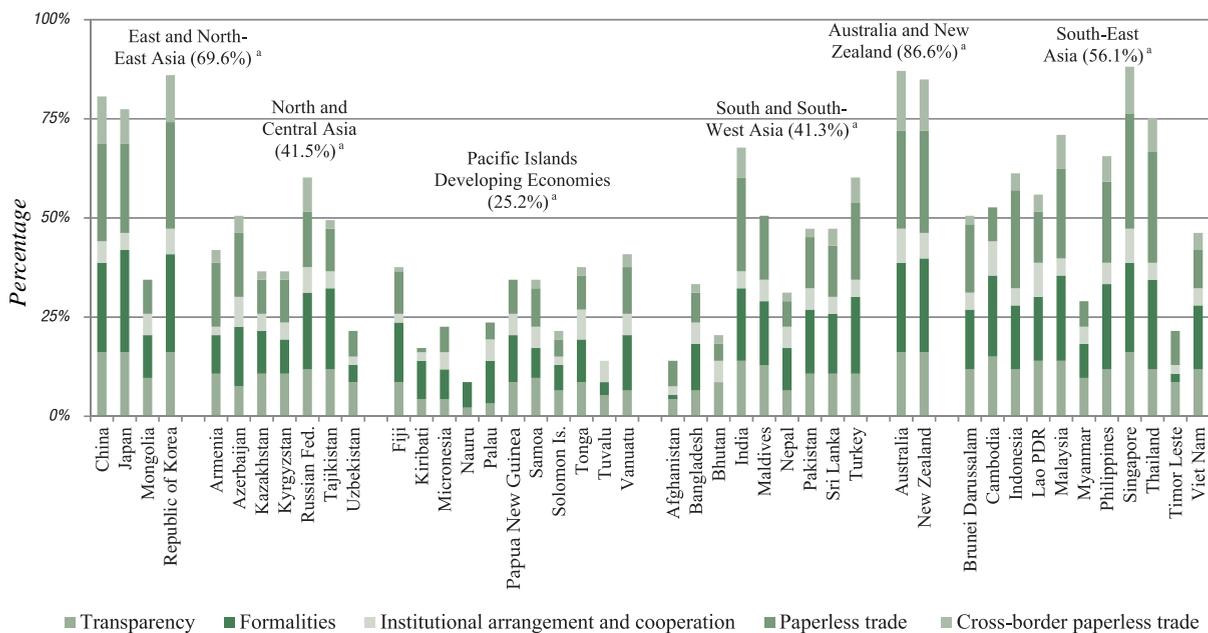
As shown in figure 4.3,<sup>8</sup> the results reveal wide disparities between regions in trade facilitation implementation levels. The highest average levels of trade facilitation implementation in the regions were recorded in developing countries in Latin America and the Caribbean, and in East Asia.<sup>9</sup> The Pacific region is lagging significantly behind most other regions in this area. The results also show that the three least globally implemented WTO TFA-related measures are: (a) the establishment and publication of average release times;

(b) trade facilitation measures for authorized operators; and (c) the electronic Single Window system.

*“Trade facilitation implementation rates vary greatly across economies of the Asia-Pacific region, and Pacific islands are lagging behind.”*

In the Asia-Pacific region, data were compiled for 44 economies (figure 4.4). Overall, the average level of trade facilitation implementation by the 44 Asia-Pacific economies, based on an ambitious set of 31 trade facilitation and paperless trade measures, is 46.5%. Within the Asia-Pacific region there is great variation in trade facilitation implementation rates. Australia, the Republic of Korea and Singapore have obtained scores in excess of 85%, while other countries have yet to achieve 15% implementation levels. While the larger and developed economies tend to achieve higher levels of trade facilitation implementation, there are some notable exceptions to this trend. For example, Cambodia and the Lao People’s Democratic Republic (both least developed countries) have achieved trade facilitation implementation scores well in excess of the regional average.

**Figure 4.4. Overall implementation of trade facilitation measures in 44 Asia-Pacific economies, 2015**



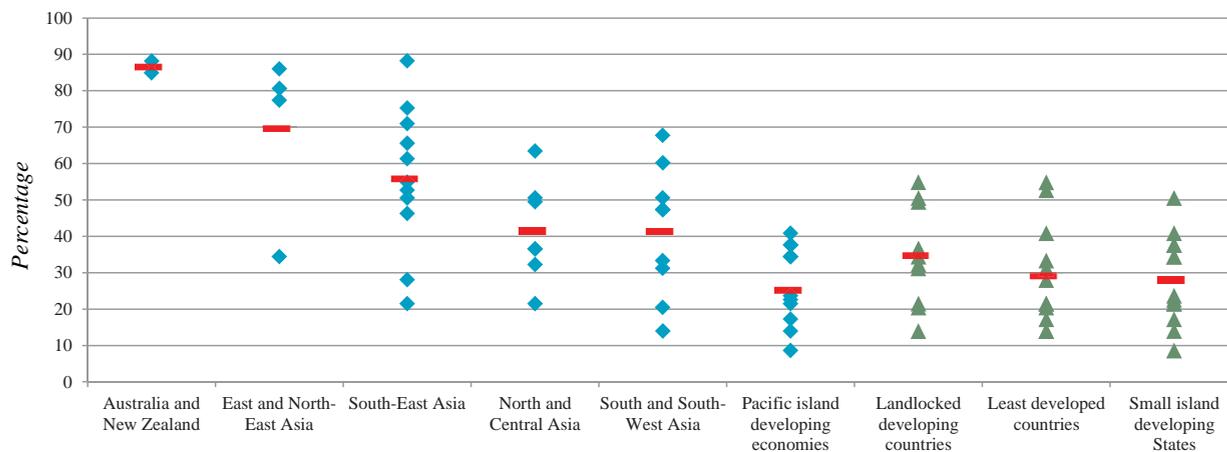
Source: Duval and others (2015).

<sup>a</sup> Subregional average implementation rate.

Figure 4.5 provides a more detailed look at trade facilitation implementation within the Asia-Pacific region and

disaggregates the findings by the categories of (a) least developed countries (b) landlocked developing countries, and (c) small island developing States.

**Figure 4.5. Trade facilitation implementation by individual economies in Asia-Pacific subregions and in countries with special needs, 2015**



Source: ESCAP (2015a).

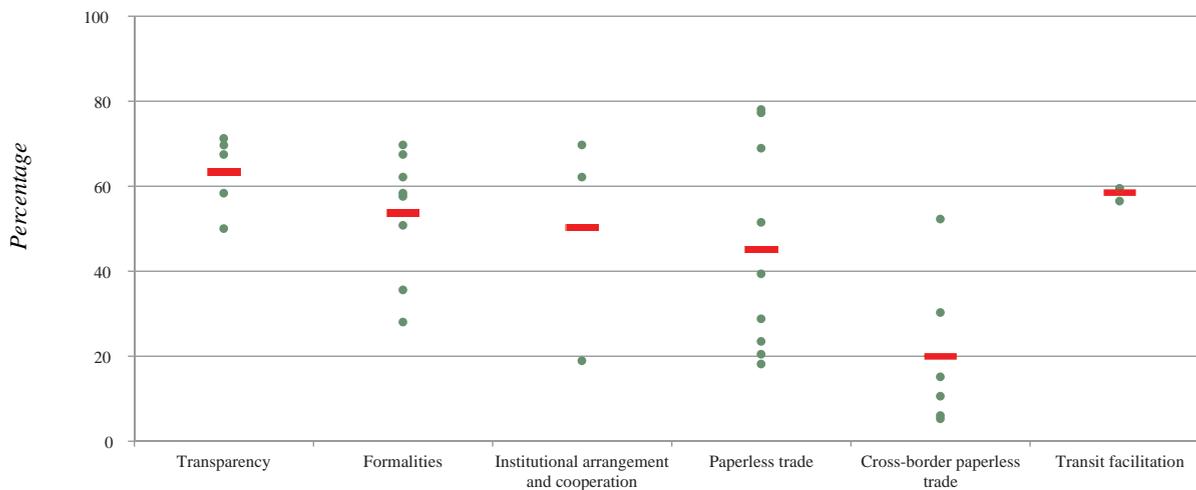
Notes: Trade facilitation implementation levels (in percentage) of individual economies within each subregion (blue diamonds) as well as within groups of economies with special needs (green triangles).

— Average trade facilitation implementation of the group (%).

Countries with special needs face particular challenges in trade facilitation implementation. This is reflected in the average implementation levels of such countries, which vary between 25% and 35% depending on the group of countries considered (figure 4.5). Interestingly, least developed countries as a group appear to have achieved higher trade

*“Nearly all economies in the Asia-Pacific region have taken steps towards the implementation of paperless trade.”*

**Figure 4.6. Implementation of different groups of trade facilitation measures: Asia-Pacific average, 2015**



Source: ESCAP, 2015a.

Notes: Green dots show the regional average implementation levels of individual measures within each group.

— Average trade facilitation implementation of the group (%).

facilitation implementation levels, on average, than landlocked developing countries or small island developing States.

The progress of countries in relation to specific trade facilitation measures is also mixed. The trade facilitation measures related to enhancing transparency and reducing formalities recorded the highest levels of implementation as all countries in the Asia-Pacific region are engaged in the implementation of such measures (figure 4.6). Implementation disparities are greatest among paperless trade measures. Overall, the least implemented measures in the region are those in the cross-border paperless trade category. While essentially all economies in the Asia-Pacific region have taken steps towards the implementation of paperless trade, nearly one quarter of the economies in the region have not implemented – even the pilot stage – any measure related to cross-border paperless trade, i.e. the exchange and legal recognition of electronic trade data and documents across borders with trade partners. Yet, for countries that have

already implemented the majority of the WTO TFA-related measures, the implementation of cross-border paperless trade remains an important opportunity to cut down trade costs.

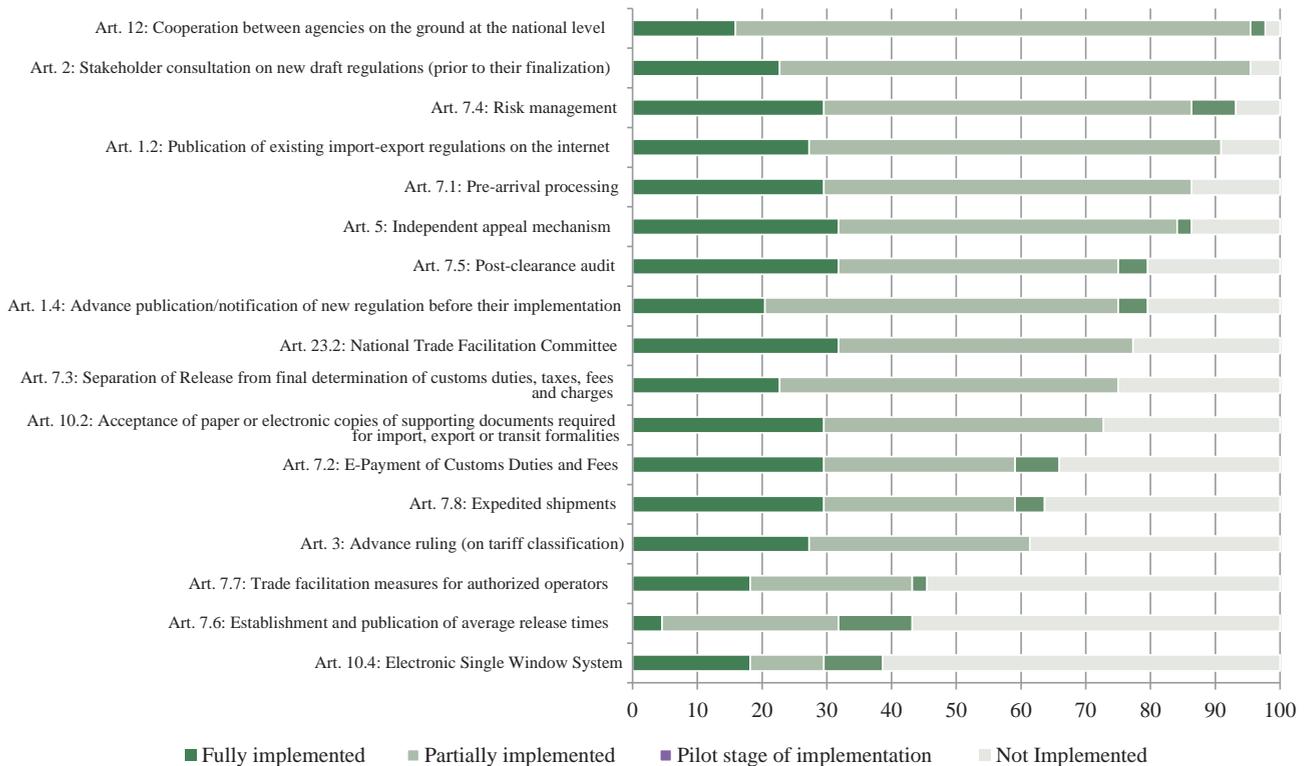
*“Full implementation of the WTO TFA could reduce trade costs by up to 17% in the Asia-Pacific developing economies.”*

### 3. WTO TFA – the new baseline for trade facilitation implementation

The WTO TFA will enter into force once two-thirds of the WTO members have formally ratified the Agreement.<sup>10</sup> Once this occurs, developing WTO members will endeavour to implement the trade facilitation measures contained within the Agreement. Based on the Global Survey data, it has been estimated that full implementation of the WTO TFA

**Figure 4.7. Implementation of WTO TFA-related measures in the Asia-Pacific region, 2015**

(Percentage of countries)



Source: Duval and others, 2015.

measures could bring down trade costs by up to 17% on average in the Asia-Pacific developing economies (Duval and others, 2015).

Figure 4.7 shows the extent to which the 17 WTO TFA-related measures included in the Global Survey have been implemented. Of these 17 measures, 14 (more than 80%) have been at least partially implemented in more than half of all 44 Asia-Pacific countries surveyed, indicating that the WTO TFA implementation in the region is already significantly underway.<sup>11</sup> The four most implemented (fully, partially or on a pilot basis) WTO TFA-related measures in Asia-Pacific countries are: (a) cooperation between agencies (Art.12 of the WTO TFA); (b) stakeholder consultation on new draft regulations (Art. 2); (c) risk management (Art.7.4); and (d) publication of existing import-export regulations (Art.1.2), with the implementation ongoing in 90% of the Asia-Pacific countries. However, cooperation between agencies is among the least “fully implemented” measures considered in the Global Survey.

*“Cooperation among agencies is one of the least fully implemented WTO TFA-related measures in the Asia-Pacific region.”*

In contrast, the three least implemented measures are: (a) trade facilitation measures for authorized operators (Art. 7.7 of the WTO TFA); (b) establishment and publication of average release times (Art.7.6); and (c) the electronic Single Window system (Art.10.4), all of which have been initiated in less than 50% of the economies considered in the Global Survey. Electronic payment of customs duties and expedited shipments (Art. 7.2) has also been partially or fully implemented in only 60% of the Asia-Pacific economies.

#### 4. Focus of trade facilitation efforts in 2014-2015

Data collected from experts in 30 economies in the Asia-Pacific region<sup>12</sup> reveal that the region has put the greatest emphasis during the past year on improving (existing) automated customs systems and related risk management systems. Many Asia-Pacific economies have also worked on implementing an electronic Single Window system and other paperless trade measures as well as on adopting new legislation and regulations for trade facilitation. Finally, implementation of post-clearance audits (a measure that is particularly complementary to risk management) and the establishment of National Trade Facilitation Committees (a measure required under the WTO TFA) also received particular attention during the past year across the Asia-Pacific region.

Looking ahead, the surveyed experts identified the lack of coordination between Government agencies and limited human resource capacity as the two most serious challenges facing the implementation of trade facilitation measures in 21 out of 30 economies. The lack of political will, no clearly designated lead agency and financial constraints were also mentioned in at least 16 economies.

#### 5. Moving towards cross-border paperless trade

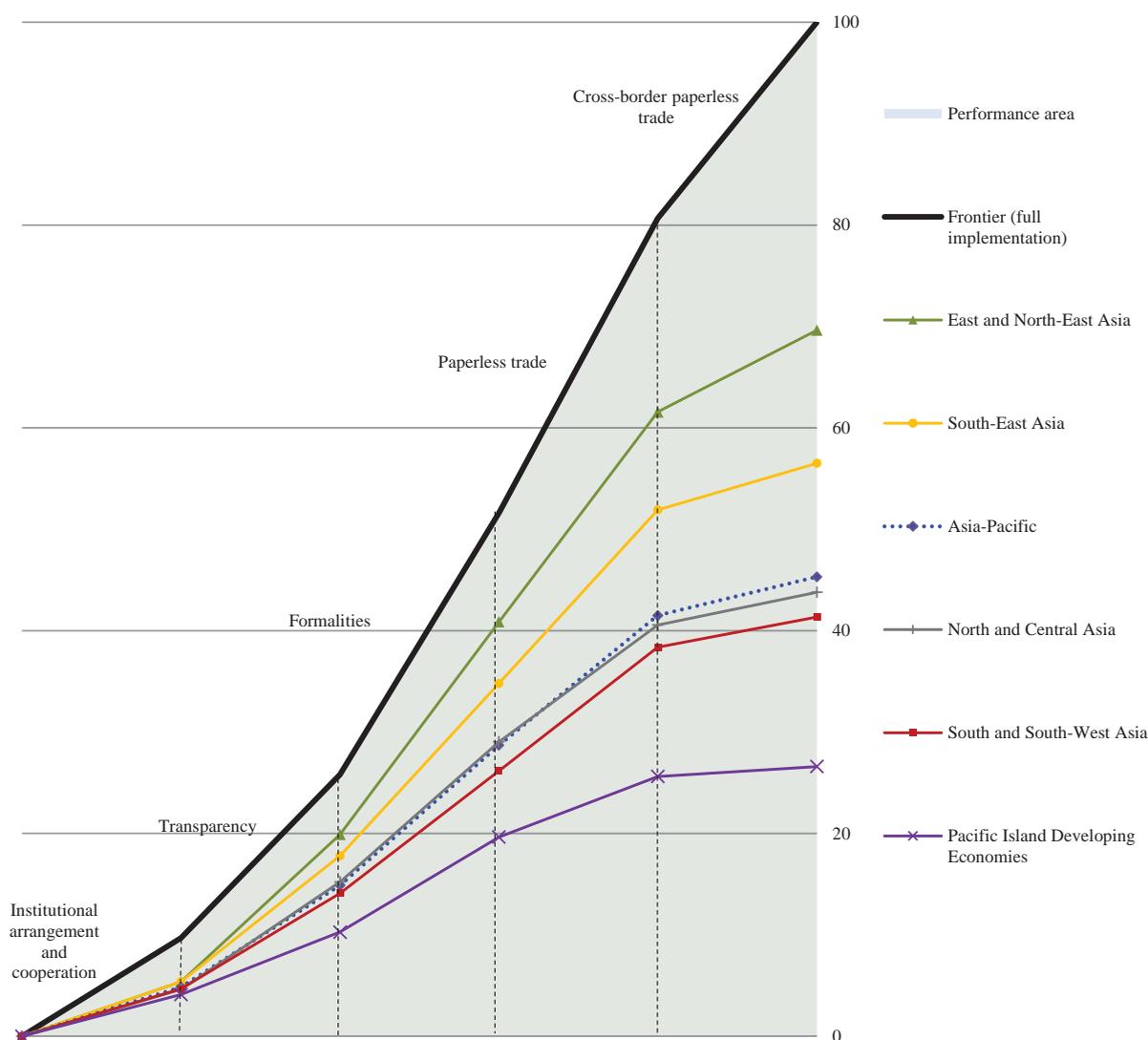
Figure 4.8 shows implementation of trade facilitation as a step-by step process, based on the groups of measures included in the Global Survey. Trade facilitation begins with the setting up of the institutional arrangement needed to prioritize and coordinate implementation of trade facilitation measures. The next step involves making the trade processes more transparent by sharing information on existing laws, regulations and procedures as widely as possible, and by consulting with stakeholders when developing new ones. Designing and implementing simpler and more efficient trade formalities is the third step. The re-engineered and streamlined processes may first be implemented based on paper documents, but can then be further improved through information and communications technology and the development of paperless trade systems. The ultimate step is to enable electronic trade data and documents exchange by traders, Governments and service providers within national (Single Window and other) systems to be used and re-used in order to provide stakeholders in partner countries with the information they need to speed up the movement of goods and reduce the overall costs of the supply chain.

The regional and subregional cumulative trade facilitation implementation levels shown in figure 4.8 demonstrate that, while East and South-East Asia are performing well above the Asia-Pacific average, together the subregions still have significant room for improvement in all areas of trade facilitation, whether it is institutional arrangements or the further enhancement of inter-agency cooperation.

However, the Global Survey results also highlight the need for economies in the Asia-Pacific region to go beyond the implementation of the general trade facilitation measures and towards paperless trade. Asia-Pacific economies may, in particular, endeavour to move towards cross-border paperless trade, which entails the implementation of innovative measures with the potential to significantly

*“Cross-border paperless trade implementation provides opportunities for Asia-Pacific economies to cut their trade costs further and maintain their competitive advantage.”*

**Figure 4.8 Moving up the trade facilitation ladder towards seamless international supply chains, 2015<sup>a</sup>**



Source: ESCAP, 2015a.

Notes: The figure shows the cumulative trade facilitation implementation scores of the Asia-Pacific subregions for five groups of trade facilitation measures included in the Global Survey. The scores are based on equally weighted implementation of 31 trade facilitation measures. The number of measures in each group varies. Full implementation of all measures equals 100.

<sup>a</sup> This step-by-step process is inspired by and generally consistent with the UN/CEFACT step-by-step approach to trade facilitation towards a Single Window environment.

reduce trade costs and promote greater regional integration in Asia and the Pacific.<sup>13</sup> Research by ESCAP indicates that full region-wide implementation of cross-border paperless trade can bring about export gains in the order of \$257 billion annually (ESCAP, 2014). The time required to export would fall by as much as 24% (i.e. to 44%), and the direct costs would decline by up to 17% (i.e. to 31%), depending on the implementation scenario considered. As a result, the total

direct cost savings across all trade in the Asia-Pacific region would be approximately \$1 billion annually in the case of partial reform, and \$7 billion annually in the case of full implementation. Taken together with the Global Survey results, this suggests that the Asia-Pacific region has yet to reap the significant benefits provided by cross-border paperless trade.

# B

## FOSTERING REGIONAL COOPERATION ON CROSS-BORDER PAPERLESS TRADE

Cross-border paperless trade is an important mechanism for reducing trade costs, enhancing regional integration, and boosting intraregional and extraregional trade. It is necessary for countries to develop the legal and technical protocols needed for the seamless exchange of regulatory and commercial data and documents along the international supply chains. In order to achieve this, cooperation among countries across the region, regardless of their level of trade facilitation implementation, is required. A growing number of bilateral, subregional and regional initiatives indicate that the Asia-Pacific region has been moving in the direction of cross-border paperless trade in recent years. Work being done by ESCAP member States towards a regional arrangement on cross-border paperless trade seeks to build synergies with other ongoing initiatives (see Box 4.1).

The ESCAP secretariat also seeks to provide better support to member States in achieving these objectives.

At the regional level, negotiations are currently underway among ESCAP members on an intergovernmental agreement for cross-border paperless trade facilitation. The regional arrangement, which builds on the region's momentum towards cross-border paperless trade, seeks to set up a framework to promote such trade by (a) enabling exchange and mutual recognition of trade-related data and documents in electronic form, and (b) facilitating interoperability among

national and subregional Single Window and/or other paperless trade systems.

The first meeting of the Intergovernmental Steering Group on Cross-border Paperless Trade, which took place in April 2015 in Bangkok, established two working groups to continue improving the text of the prospective regional agreement (ESCAP, 2015c). The technical working group is charged with making technical revisions of the regional agreement as well as drafting a roadmap for the implementation of the agreement's substantive provisions. The legal working group will review the legal provisions and manage the overall revision of the draft regional agreement. While trade facilitation levels in the region are mixed and step-wise processes are in place for the effective implementation of trade facilitation reform, it is beneficial for Asia-Pacific economies to become involved in regional cooperation on cross-border paperless trade at an early stage and build their capacity in this area. In doing so, they will reduce the need for re-engineering processes at a later point and achieve overall implementation cost savings.

*“Regional cooperation on cross-border paperless trade can be beneficial for all Asia-Pacific economies, irrespective of their level of trade facilitation implementation.”*

### Box 4.1 Identifying synergies between regional, subregional and bilateral initiatives for cross-border paperless trade

The Asia-Pacific region is moving towards cooperation in cross-border paperless trade at multiple levels. The regional agreement on the facilitation of cross-border paperless trade, currently under negotiation at ESCAP, seeks to build synergies with such initiatives and provide a framework that can strengthen and reinforce ongoing work. A number of countries in the region are currently working together bilaterally in the area of cross-border paperless trade. For example, Tajikistan and Afghanistan initiated a bilateral project for cross-border data exchange among trade regulatory agencies. This project, which is aimed at improving the monitoring of trade and borders as well as ensuring trade facilitation and supply chain security, will be expanded to other economies in the region, such as Pakistan and the Islamic Republic of Iran, and assist in the future formation of transit corridors (ESCAP, 2015d). The prospective regional arrangement on cross-border paperless trade will serve to reduce the work and negotiations necessary for establishing such bilateral arrangements for cross-border paperless trade.

On the subregional level, the ASEAN Single Window (ASW) was established in order to enhance economic integration among ASEAN members. The objective of ASW is to expedite cargo clearance by providing infrastructure for electronic data exchange and communication among ASEAN members. As part of this initiative, ASEAN members have each committed to implement a National Single Window (NSW) that will serve as a single point of communication with the NSWs of other ASEAN members, thereby enabling direct data exchange in a closed secure network via the ASW Gateway (United Nations Network of Experts for Paperless Trade, 2015b). The regional arrangement on cross-border paperless trade under negotiation at ESCAP can provide a useful framework for ASEAN members to (a) learn from the experience of non-ASEAN members in exchanging data and information across borders for trade facilitation as well as (b) ensure that the electronic data exchange protocols eventually developed through this broader regional arrangement will be built upon the work done by the ASEAN members in the context of ASW (United Nations Network of Experts for Paperless Trade, 2015b).

## C

TOWARDS SEAMLESS SUPPLY CHAINS:  
INTERNATIONAL CONNECTIVITY

Moving towards seamless supply chains not only involves the seamless exchange of data and documents; it also requires efficient movement of physical goods themselves along the supply chain and across borders. Maritime connectivity has long been identified as a critical component of efficient and seamless supply chains. In terms of volume, approximately 80% of traded goods are transported through seaports (UNCTAD, 2014). In addition, research by ESCAP has found that maritime connectivity and services can account for 16%-18% of policy-related, non-tariff trade costs (ESCAP, 2012). Addressing logistics performance is also cited as an important policy measure for reducing trade costs (OECD, 2015). This section reviews the progress made by economies in the Asia-Pacific region in efficiently moving goods along international supply chains using the ESCAP International Supply Chain Connectivity Index (ISCCI). The index, constructed using trade across border (TAB) indicators<sup>14</sup> of the World Bank Doing Business Report and the UNCTAD Liner Shipping Connectivity Index (LSCI),<sup>15</sup> measures countries' performance along international supply chains. Equal weighting is given to import procedures, export procedures (from TAB indicators) and liner shipping performance (from LSCI) in ISCCI. Taken together, these indicators provide information about how well countries

are connected to international supply chains and, hence, shed light on potential barriers and obstacles to trade.

Data from ISCCI shows that the top global performers in terms of international supply chain connectivity remain continue to be in the Asia-Pacific region, i.e.: Singapore; Hong Kong, China; the Republic of Korea, Malaysia and China (table 4.2). The ISCCI 2015 top five performers remain largely unchanged compared with the ISCCI 2012 rankings (ESCAP, 2013). Singapore ranks first globally for international supply chain connectivity and for trading across borders (i.e. efficiency of import and export procedures). While China remains the global leader in liner shipping connectivity (first place ranking in LSCI), it has fallen from sixty-eighth in 2012 to ninety-eighth place in 2015 in the TAB indicators, placing it behind Malaysia in terms of overall supply chain connectivity. A comparison of China and Singapore suggests that port efficiency and connectivity is an essential component of overall international supply chain connectivity. However, it is also evident that improving the efficiency of import and export procedures can greatly benefit economies that may be lagging in liner shipping connectivity because of their size, inconvenient geographic location or lack of funds to upgrade port infrastructure.

**Table 4.2. Performance rankings according to ISCCI, TAB and LSCI, 2015**

Economy	ISCC rank 2015	TAB rank 2015	LSCI rank 2015	Economy	ISCC rank 2015	TAB rank 2015	LSCI rank 2015
Singapore	1	1	3	Pakistan	73	108	69
Hong Kong, China	2	2	4	Philippines	74	65	98
Republic of Korea	3	3	5	Myanmar	94	103	144
Malaysia	4	11	6	Azerbaijan	98	166	32
China	5	98	1	Lao People's Democratic Republic	100	156	45
United States	7	16	10	Russian Federation	104	155	46
Germany	10	18	7	Bhutan	114	165	40
Japan	20	20	20	Nepal	119	171	41
Thailand	31	36	44	Cambodia	130	124	141
Sri Lanka	34	69	28	Kyrgyzstan	138	183	47 <sup>a</sup>
Viet Nam	39	75	38	Kazakhstan	142	185	48 <sup>a</sup>
New Zealand		27	94	Bangladesh	147	140	124
Australia		49	72	Uzbekistan	148	189	49 <sup>a</sup>
Mongolia		173	2 <sup>a</sup>	Islamic Republic of Iran		148	108
India		126	39	Tajikistan		188	71 <sup>a</sup>

Notes: TAB rankings are based on the World Bank Doing Business Report 2015 and UNCTAD LSCI 2015.

<sup>a</sup>The LSCI ranking of landlocked countries is based on the ranking of the main transit country. ISCCI rankings are based on ESCAP calculations.

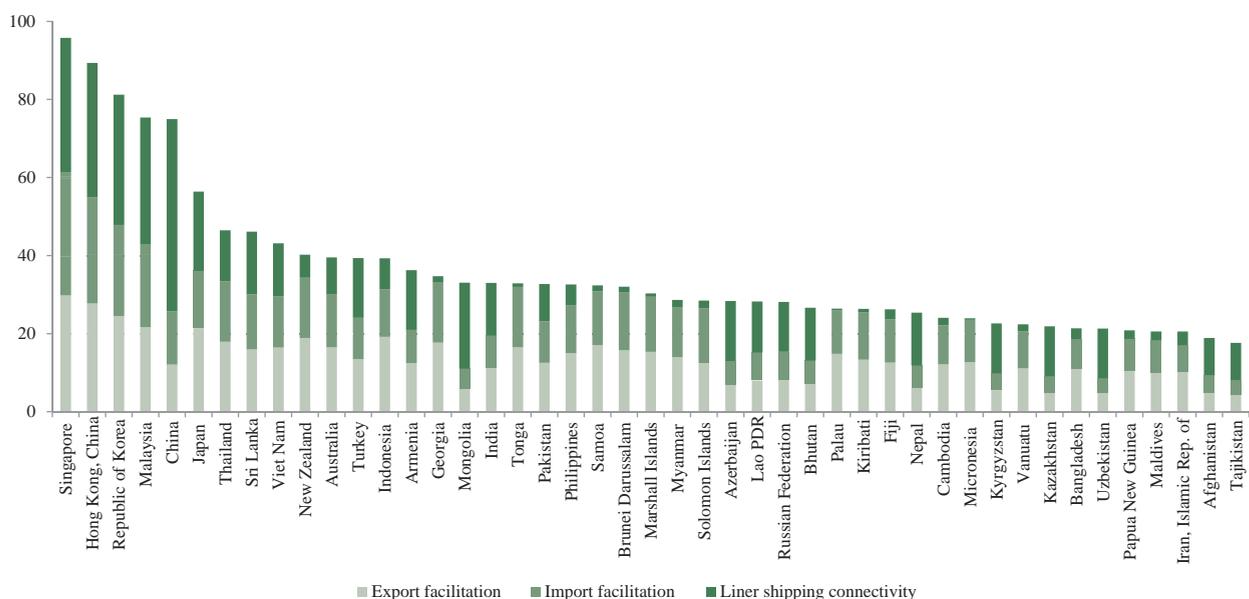
*“Enhancing port efficiency is essential to enhancing overall international supply chain connectivity.”*

Figure 4.9 shows the relative contribution of import procedures, export procedures and liner shipping connectivity performance to international supply chain connectivity performance. The generally observed trend in the Asia-Pacific region is consistent with the findings of the Global Survey and the ESCAP-World Bank Trade Costs Database – performance across the Asia-Pacific is heterogeneous, with the region being home to both some of the world’s best and worst performers. Countries of East and North-East Asia are among the global leaders in international supply chain connectivity, whereas the performance of land locked developing countries and small island developing States lags behind. It can be inferred that, for the top performing economies, the contributions of import and export facilitation procedures and shipping liner connectivity are relatively equal. The notable exception is China, whose liner shipping connectivity performance is the largest contribution to its overall international supply chain connectivity. In part, due to sheer scale of effects, maritime connectivity in China is maximal,<sup>16</sup> suggesting that increased attention is required for improving the efficiency of the import and export procedures as well as logistics performance (Bang, Greve and Westergaard-Kabelmann, 2014).

For small island developing States especially those in the Pacific, liner shipping connectivity remains a particularly marginal contribution to overall international supply chain connectivity. However, it is possible for small island countries to make progress in this area. For example, the Maldives has improved its position in relation to liner shipping connectivity in recent years, although from a relatively low base.

In the case of landlocked countries, especially as they do not have control over port operations in their transit countries, improvement of their international supply chain connectivity performance could be achieved through the simplification of trade procedures, documentation requirements and automation of procedures, where possible. Furthermore, since landlocked countries are dependent on the seaport of the transit countries, it is particularly important for them to connect to the most efficient and connected port. A case in point would be Mongolia, whose liner shipping connectivity performance and, hence, overall ISCCI score was boosted by utilizing the port connectivity of its main transit country, China. However, for other landlocked countries that must rely on the ports of transit countries with lower levels of liner shipping connectivity, improving trade procedures should be the focus of policymaking attention.

**Figure 4.9. Contribution of export, import and liner shipping connectivity performance to international supply chain connectivity, 2015**



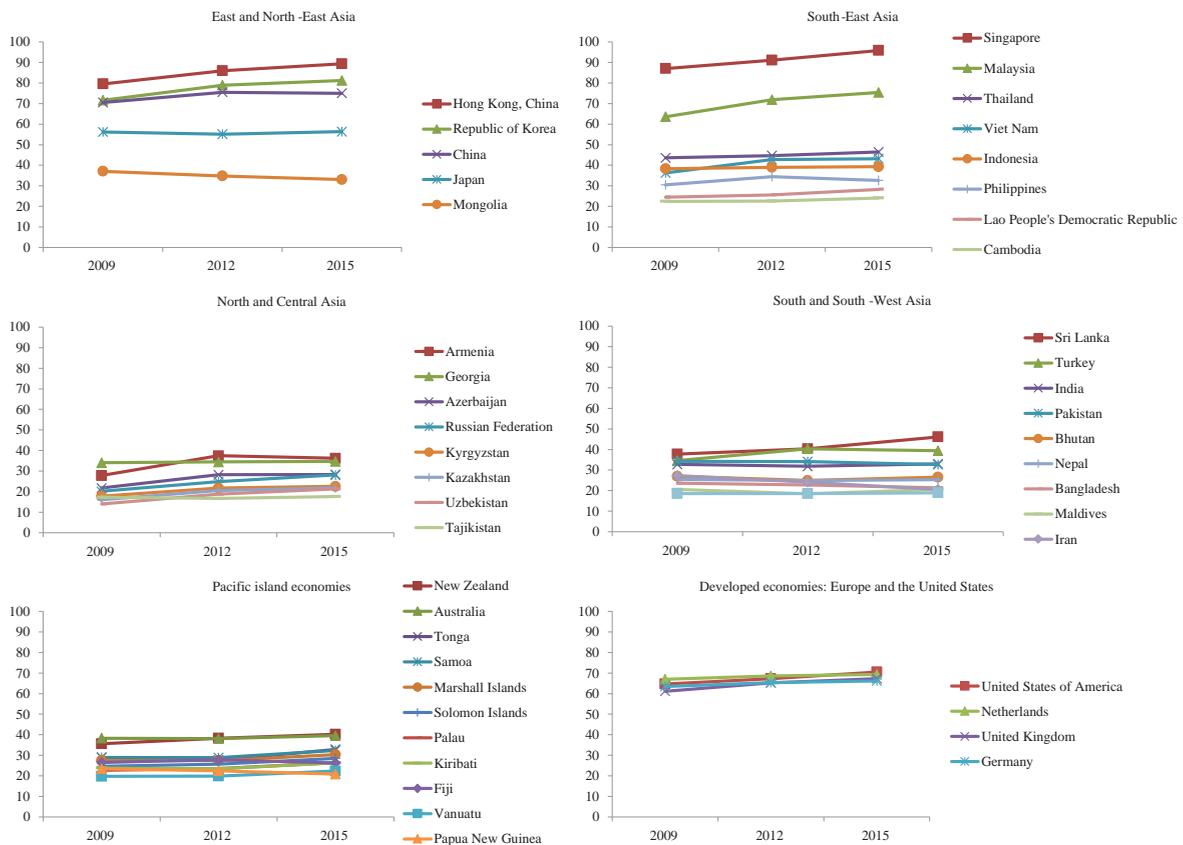
Source: ESCAP International Supply Chain Connectivity Index (accessed June 2015).

Overall, economies in the Asia-Pacific region have been making progress in international supply chain connectivity in recent years (figure 4.10).<sup>17</sup> Most countries of East, North-East and South-East Asia continue to make steady progress, and remain the regional and global frontrunners. However, these subregional groupings also have the widest gap between the top and bottom performers. For example, in contrast to the rest of the East and North-East Asia subregional grouping, Mongolia is the lowest performing country and exhibits a downwards trend in terms of international supply chain connectivity while Hong Kong, China – the top performer in East and North-East Asia – shows an upwards trajectory and is one of best performers, globally. For the South and South-West Asia subregion, the Islamic Republic of Iran, Bangladesh and Pakistan have demonstrated stagnant or downwards trends in international supply chain connectivity performance between 2009 and 2015. Sri Lanka stands out as top performer in the South and South-West Asia subregion, with the subregion’s highest international supply chain connectivity scores as well as showing steady and significant progress in recent years.

*“Improving the efficiency of import and export procedures is particularly important for economies lagging in maritime connectivity.”*

The subregion that has shown the greatest progress in international supply chain connectivity between 2009 and 2015 is the North and Central Asia. In particular, Uzbekistan, the Russian Federation, Kazakhstan and Azerbaijan have each improved their connectivity level by more than 30%. The greatest momentum of this progress was between 2009 and 2012. While the progress has tapered off slightly between 2012 and 2015, the trend remains positive. This may be due, in part, to the improvements in liner shipping connectivity made by the Russian Federation, the main transit port for many of the Central Asian economies, in recent years; this demonstrates the fact that progress in transit countries can have knock-on benefits and result in improved international supply chain connectivity throughout a subregion.

**Figure 4.10. Evolution of performance by economies in the International Supply Chain Connectivity Index, 2009-2015**



Sources : ESCAP, ISCCI data for 2015.

While the performance of individual countries has been mixed in Asia and the Pacific, the region as a whole has been making steady progress towards improving its trade facilitation and connectivity levels. Ongoing regional and global developments provide further opportunities for the countries of the Asia-Pacific region to access technical assistance and capacity-building in order to advance their trade facilitation efforts. In particular, developing countries stand to benefit from the capacity-building support available in relation to WTO TFA implementation. As the data from the Global Survey prove, the economies in the Asia-Pacific region have already implemented, or are in the process of implementing significant portions of the WTO TFA. In order to strengthen the overall region's competitive advantage, Asia-Pacific economies should look towards implementing more advanced measures, including paperless trade and cross-border paperless trade measures. The Asia-Pacific region has yet to take full advantage of the potential gains associated with electronic exchange of data and documents between stakeholders along the international supply chain. The work being done by ESCAP members to facilitate such seamless and secure international flows of information holds promise for the whole region.

At the same time, in order to achieve trade cost reductions as quickly and as efficiently as possible, it will be important for countries to continue implementing comprehensive and pragmatic national trade facilitation reform programmes. Such programmes should not be limited to customs facilitation or simplification, or exchange of documents but should instead be aimed at identifying and addressing procedural bottlenecks along the entire international supply chain, including through improvements in transport, logistics, payment and other trade-related infrastructure and services.<sup>18</sup>

## ENDNOTES

<sup>1</sup> "The Trade Facilitation Agreement contains provisions for expediting the movement, release and clearance of goods, including goods in transit. It also sets out measures for effective cooperation between customs and other appropriate authorities on trade facilitation and customs compliance issues. It further contains provisions for technical assistance and capacity-building in this area" (WTO, 2015a).

<sup>2</sup> This was covered by Area D of the Addis Ababa Action Agenda Action (United Nations, 2015).

<sup>3</sup> APTIR 2013 considered trade cost data for 2006-2011.

<sup>4</sup> The ESCAP-World Bank Trade Cost Database is the first database of its kind to systematically measure bilateral trade costs. The international trade costs captured by the database are the broad aggregate form, including direct trade costs, indirect trade costs associated with regulatory import and export requirements as well as costs resulting from currencies, language, culture, geography and distance. The recently updated database, which now covers almost 180 developed and developing economies, provides trade costs data for the manufacturing and agricultural sectors. Domestic and international shipping and logistics costs associated with imports and exports are also included.

<sup>5</sup> This first Global Survey builds on an annual regional survey undertaken by ESCAP since 2012, and has been conducted in close collaboration with UNCTAD, OECD, International Trade Centre (ITC), Oceania Customs Organization (OCO) and Latin American and Caribbean Economic System (SELA). For details, visit <http://unnex.unescap.org/UNTFSurvey2015.asp>.

<sup>6</sup> The trade facilitation measures considered in the Global Survey have been grouped into 4 categories: (a) general trade facilitation measures (Institutional Arrangement and Cooperation, Transparency, Formalities); (b) paperless trade; (c) cross-border paperless trade; and (d) transit facilitation (ESCAP, 2015a).

<sup>7</sup> In the Survey, paperless trade measures refer to those that enable the electronic exchange of trade data and documents between traders, Government agencies and other stakeholders domestically. In contrast, cross-border paperless trade refers to electronic exchanges between stakeholders located in different countries. For details, visit <http://unnex.unescap.org/UNTFSurvey2015.asp>.

<sup>8</sup> This figure is based on data from 102 countries, covering 22 trade facilitation measures, which are all essentially directly related to WTO TFA provisions.

<sup>9</sup> East Asia: Brunei Darussalam, Cambodia, China, Indonesia, Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, Philippines, Republic of Korea, Singapore, Thailand, Timor-Leste and Viet Nam.

<sup>10</sup> As of 20 October 2015, 50 WTO members have ratified the Agreement.

<sup>11</sup> This is reinforced by ESCAP's previous analysis of WTO TFA Category A notifications in the region, which indicates that on average, 15 Asia-Pacific economies that have already

submitted their Category A notifications to WTO have fully notified nearly 70% of all substantive provisions in the WTO TFA. This indicates that they have either fully implemented – or have full intention to implement within a short time frame – these measures.

<sup>12</sup> Anecdotal data from trade facilitation experts in 30 countries: ESCAP (2015a).

<sup>13</sup> The methodology used for this analysis assesses the potential impacts of cross-border paperless trade using the current reality of cross-border paperless trade implementation compared with the outcomes under a series of possible reform scenarios. The two reform scenarios considered in the analysis are: (a) all countries in the region achieve at least partial implementation of cross-border paperless trade; and (b) all countries in the region achieve full implementation of cross-border paperless trade.

<sup>14</sup> The World Bank Doing Business Trading Across Borders Indicators measure “the time and cost (excluding tariffs) associated with exporting and importing a standardized cargo of goods by sea transport [as well as] the time and cost necessary to complete four predefined stages (document preparation; customs clearance and inspections; inland transport and handling; and port and terminal handling) for exporting and importing goods are recorded; however, the time and cost for sea transport are not included. All documents needed by the trader to export or import the goods across the border are also recorded.”

<sup>15</sup> LSCI comprises five components: fleet deployment – number of ships; container carrying-capacity; number of companies that deploy their container ships from a country’s ports; number of liner services; and maximum vessel size.

<sup>16</sup> China controls a fifth of the world’s container fleet, and many of the world’s largest container ports are in China (*Economist*, 2015).

<sup>17</sup> On average, between 2009 and 2015 the region saw a 10% increase in the international supply chain connectivity scores.

<sup>18</sup> This may be done by applying the Business Process Analysis methodology developed by the United Nations Network of Experts for Paperless Trade and Transport in Asia and the Pacific. Available from [unnex.unescap.org](http://unnex.unescap.org).

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