

Trade Facilitation and Paperless Trade Implementation

Global Report 2017



UNITED NATIONS

Copyright © United Nations 2017
All rights reserved

The report is available at: <https://unnex.unescap.org/content/un-global-survey-trade-facilitation-and-paperless-trade-implementation-2017>

Disclaimers:

The designation employed and the presentation of the material in the Report do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The United Nations bears no responsibility for the availability or functioning of URLs.

Opinions, figures and estimates set forth in this publication are the responsibility of the authors, and should not necessarily be considered as reflecting the views or carrying the endorsement of the United Nations. Any errors are the responsibility of the authors. Mention of firm names and commercial products does not imply the endorsement of the United Nations.

The report has been issued without formal editing.

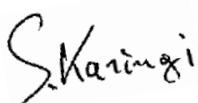
Foreword

The Second Global Survey on Trade Facilitation and Paperless Trade was jointly conducted by the five United Nations Regional Commissions (for Africa, Asia and the Pacific, Europe, Latin America and Caribbean, and West Asia). It aims to gather information from countries worldwide on implementation of trade facilitation and paperless trade measures. The results of the survey will enable countries and development partners to better understand and monitor progress on trade facilitation, support evidence-based public policies, share best practices and identify capacity building and technical assistance needs.

The First Global Survey was conducted in 2015 as a key initiative under the *Joint UNRC Approach to Trade Facilitation* agreed upon in Beirut, Lebanon in January 2010 by the Executive Secretaries of all five United Nations Regional Commissions. The joint approach was designed to enable the Regional Commissions to present a joint and global view on trade facilitation issues in the context of the negotiations of the Doha Round at the World Trade Organization (WTO). The Second Global Survey builds upon the first one. Its significance has increased in light of the entry into force of the World Trade Organization's Trade Facilitation Agreement (TFA) in February 2017.

The results of the Second Global Survey have benefitted from the input of many partners such as the Organization for Economic Cooperation and Development (OECD), the United Nations Conference on Trade and Development (UNCTAD), the International Trade Centre (ITC), Asian Development Bank (ADB), Oceania Customs Organization Secretariat (OCO) and Eurasian Economic Commission (EEC).

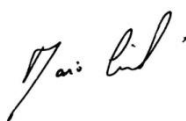
The Agenda 2030 for Sustainable Development recognizes international trade - along with science, technology and innovation - as one of the key means of implementation of the agreed Sustainable Development Goals. Against this background, we hope that the current report further supports the economies around the world to make trade simpler and cheaper through the use and application of technology and innovation in international trade procedures.



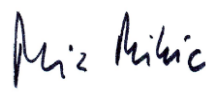
Mr. Stephen Karingi,
Officer-in-charge,
Regional Integration
and Trade Division,
ECA



Mr. Geoffrey
Hamilton, Acting
Director,
Economic
Cooperation and
Trade Division,
ECE



Mr. Mario Cimoli,
O.i.C.,
International
Trade and
Integration
Division,
ECLAC



Ms. Mia Mikic,
Director, Trade and
Investment
Division,
ESCAP



Mr. Mohamed El
Moctar El Hacene,
Director, Economic
Development and
Integration Division,
ESCWA

Acknowledgments

The second global survey was jointly conducted by five United Nations Regional Commissions for Africa (ECA), Europe (ECE), Asia and the Pacific (ESCAP), Latin America and the Caribbean (ECLAC) and Western Asia (ESCWA). The initiative was led and coordinated by ESCAP. Staff members from the Regional Commissions who directly contributed to the global report include: Heini Suominen and David Luke from ECA; Maria Rosaria Ceccarelli, Maria Teresa Pisani, Khan Salehin, Deepali Fernandes, Julian Fraga and Tatiana Rosu from ECE; Sebastian Herreros from ECLAC; Tengfei Wang, Yann Duval and Chorthip Utoktham from ESCAP; and Adel Alghaberi from ESCWA. Data analysis and preparation of the global report were led by Tengfei Wang, under the overall supervision of Yann Duval and Mia Mikic.

Support from the following organizations and individuals is gratefully acknowledged: Bismark Sitorus from UNCTAD, Mohammad Saeed from ITC; Evdokia Moise from OECD, Laisiana Tugaga from Oceania Customs Organization Secretariat (OCO), Dinara Sekerbaeva and Aleksei Bondarenko from Eurasian Economic Commission (EEC).

The United Nations Centre for Trade Facilitation and e-Business (UN/CEFACT), an intergovernmental body serviced by ECE, and the United Nations Network of Experts for Paperless Trade and Transport in Asia and the Pacific (UNNEXT),¹ a knowledge community supported by ESCAP and ECE, greatly facilitated data collection. Comments and suggestions received from participants at the United Nations Regional Commissions (UNRCs) side event to the 6th Global Review on Aid for Trade (Geneva, 12 July 2017),² where the preliminary findings from the global survey were presented, are gratefully acknowledged.

¹ <http://unnexnext.unescap.org>

² https://www.wto.org/english/tratop_e/devel_e/a4t_e/aid4trade_e.htm

Contents

Foreword.....	ii
Acknowledgments.....	iii
Executive Summary.....	vii
1. Introduction	2
1.1 Background and objective.....	2
1.2 Survey Instrument and Methodology.....	3
1.3 Utilization of report and the data	7
2. Trade facilitation implementation: Overview.....	8
2.1 Implementation in countries with special needs.....	9
2.2 Most and least implemented trade facilitation measures.....	10
2.3 Progress in implementation of trade facilitation measures since 2015	12
3. Implementation of trade facilitation measures: A closer look	15
3.1 Transparency measures	15
3.2 Formalities measures	16
3.3 Institutional arrangements and cooperation measures	18
3.4 Paperless trade measures.....	20
3.5 Cross-border paperless trade measures	21
3.6 Transit facilitation measures.....	23
3.7 Trade facilitation and inclusiveness	25
4. Conclusions and Way Forward.....	27
Annex 1: Definitions of the various stages of implementation	30
Annex 2: Groupings of countries with special needs.....	31
Annex 3: Explanatory notes	32
Annex 4: Trade Facilitation Implementation by countries in different groups (%)	33
Annex 5: Trade Facilitation Implementation: full dataset versus limited dataset.....	37
Annex 6: Implementation stages of selected WTO TFA-related measures globally.....	38

List of Tables

Table 1: Intra- and extra-regional comprehensive trade costs.....	2
Table 2: Trade facilitation measures covered by the survey questionnaire.....	4
Table 3: Most and least implemented measures (within each group of trade facilitation measures) by number of countries	12

List of Figures

Figure 1: Average implementation rates of trade facilitation measures around the world	8
Figure 2: Average trade facilitation implementation rates and GDP per capita.....	9
Figure 3: Average trade facilitation implementation rates by region and in countries with special needs.....	10
Figure 4: Average implementation rates of different groups of trade facilitation measures	11
Figure 5: Progress of implementation of trade facilitation measures by various regions, 2015 and 2017	13
Figure 6: Progress of global implementation trade facilitation measures, 2015 and 2017	13
Figure 7: Progress of implementation of specific group of trade facilitation measures in various regions, 2015 and 2017.....	14
Figure 8: Implementation of “transparency” measures in various regions globally	15
Figure 9: Implementation stages of “transparency” measures globally.....	16
Figure 10: Implementation of “formalities” measures in various regions globally	17
Figure 11: implementation stages of “formalities” measures globally	18
Figure 12: Implementation of “institutional arrangement and cooperation” measures in various regions globally	19
Figure 13: Implementation stages of “institutional arrangement and cooperation” measures globally	19
Figure 14: Implementation of “paperless trade” measures in various regions globally	20
Figure 15: Implementation stages of “paperless trade” measures globally.....	21
Figure 16: Implementation of “cross-border paperless trade” measures in various regions globally	22
Figure 17: Implementation stages of “cross-border paperless trade” measures globally	23
Figure 18: Implementation of “transit facilitation” measures in various regions globally.....	24
Figure 19: Implementation stages of “transit facilitation” measures globally (in %)	24
Figure 20: implementation of trade facilitation measures for SMEs, agricultural sector and women in countries globally (in %).....	26
Figure 21: Trade facilitation implementation and trade costs	27
Figure 22: Trade facilitation implementation and logistics performance	28
Figure 23: Moving up the trade facilitation ladder towards seamless international supply chains.....	29

Abbreviations

ADB	Asian Development Bank
AEO	Authorized economic operator
ASEAN	Association of Southeast Asian Nations
ECA	United Nations Economic Commission for Africa
ECE	United Nations Economic Commission for Europe
ECLAC	United Nations Economic Commission for Latin America and the Caribbean
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
ESCWA	United Nations Economic and Social Commission for Western Asia
GATT	General Agreement on Tariffs and Trade
ITC	International Trade Centre
LDC	Least developed country
LLDC	Landlocked developing country
NTFC	National trade facilitation committee
OCO	Oceania Customs Organization
OECD	Organization for Economic Co-operation and Development
PIDE	Pacific island developing economies
SIDS	Small island developing states
TFA	Trade Facilitation Agreement
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business
UNCTAD	United Nations Conference on Trade and Development
UNNExT	United Nations Network of Experts for Paperless Trade and Transport for Asia and the Pacific
UNRC	United Nations Regional Commission
WTO	World Trade Organization

Executive Summary

Reducing trade costs is essential for developing economies to participate in international production networks and to effectively use trade as an engine of growth and sustainable development. This can be accomplished by tackling non-tariff sources of trade costs and addressing cumbersome regulatory procedures and documentation requirements. Indeed, trade facilitation including paperless trade has taken increasing importance, as evidenced by the entry into force of the WTO Trade Facilitation Agreement (TFA) in February 2017 and the growing number of regional and subregional initiatives in this area.

This Report presents the main findings of the Second Global Survey on Trade Facilitation and Paperless Trade Implementation, jointly carried out in 2017 by the five United Nations Regional Commissions (UNRCs). The Survey covers 120 economies from 8 regions. It focuses on three main areas. The first area relates to the implementation of selected measures under the TFA. The second area is about the implementation of innovative, technology-driven measures aimed at enabling trade using electronic rather than paper-based data and documentation - otherwise referred to as “paperless trade”.³ The third area examines specific trade facilitation measures targeted at small and medium enterprises (SMEs), the agricultural sector and women. The key findings of the Survey are summarized as follows.

- The global average implementation rate of a set of 31 common trade facilitation measures considered in this Report stands at 59.6%. Developed economies have the highest implementation rate (78.5%), while Pacific Islands have the lowest (28.2%). Among the developing regions, Latin America and the Caribbean and South-East and East Asia achieve high implementation rates at 67.8% and 62.7%, respectively. In contrast, Sub-Saharan Africa - which includes some of the poorest countries in the world – and South and East Europe, Caucasus and Central Asia – a region largely made up of landlocked developing countries (LLDCs) – achieve implementation rates of 51.8% and 50.7%, respectively.
- The Netherlands (93.6%) stands out as the best overall performer. In developing regions, Singapore, the Republic of Korea, China, Malaysia and Thailand are the top performers in South-East and East Asia, all with implementation rates exceeding 80%. Qatar and United Arab Emirates lead the Middle East and North Africa region, both with implementation rates exceeding 90%. Benin (79.6%) is the top performer in Sub-Saharan Africa, while India (72.0%) leads the way in South Asia. The Former Yugoslav Republic of Macedonia (81.7%) leads the South and East Europe, Caucasus and Central Asia region⁴. Mexico, Colombia, Brazil, Chile and the Dominican Republic are the top performers in Latin America and the Caribbean, all with implementation rates exceeding 80%.
- Being a small or less developed country is not necessarily associated with a low implementation rate. For instance, more than 40 economies with GDP per capita of less than \$10,000 achieve implementation rates higher than 50%.
- LDCs, LLDCs, and SIDSs achieve average implementation rates between 40% and 50%, significantly below the global average implementation rate, indicating that these countries

³ A new UN treaty, the Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific, is expected to provide countries in that region with a new tool for the better “digital” implementation of the TFA.

⁴ This group excludes the developed economies in Europe.

may need further technical assistance and capacity building support to help them bridge the existing implementation gap.

- The global average implementation rate of “paperless trade” measures stands close to 50%. Measures such as *Electronic/automated customs systems*, *Internet connections fully available to Customs and other trade control agencies*, and *Electronic submission of Customs declarations* have been either fully or partially implemented in most countries surveyed. However, implementation of more advanced paperless trade measures remains at a relatively early stage. For example, while nearly 60% of the economies have engaged to some extent in creating an electronic single window for processing trade documents, very few have fully operational systems in place.
- The global average implementation level of “Cross-border paperless trade” (33%) is substantially lower than that of the other groups of measures considered. While the average implementation level of *Laws and regulations for electronic transactions* exceeds 60%, steps to enable the cross-border electronic exchange and recognition of regulatory documents, such as certificates of origin and sanitary and phytosanitary certificates, have been taken in less than 30% of the economies considered in this Report.

This Report also examines the progress in implementing trade facilitation measures made by the 99 countries covered in both the 2015 and 2017 Global Surveys.

- Considering all 99 countries, the overall implementation rate increased by approximately 9 percentage points between 2015 and 2017 (from 50.8% to 59.8%). Sub-Saharan Africa made the most progress, raising its average implementation rate by 17.2 percentage points (from 38.0% in 2015 to 55.2% in 2017). Noticeable progress was also observed in other regions including South Asia (7.4 percentage points), South-East and East Asia (4.8 percentage points) and the Pacific Islands (3.4 percentage points).
- Implementation of the “Transparency” measures increased from 66.8% in 2015 to 75.7% in 2017 while implementation of the “Formalities” measures improved from 60.1% to 69.4%. Substantial progress was observed in the implementation of “Institutional arrangements and cooperation” measures: the implementation rate rose from 50.5% in 2015 to 62.6% in 2017. Implementation of paperless and cross-border paperless measures improved by 7.8 percentage points (from 50.8% to 58.6%) and 9.3 percentage points (from 25.0% to 34.3%), respectively.

This Report concludes that across all surveyed countries there is strong momentum towards the implementation of trade facilitation and paperless trade measures, a result favored by the recent entry into force of the TFA. Moving forward, countries should continue to apply modern information and communication technologies and develop paperless trade to simplify trade procedures and enable electronic exchange of data and documents, not only between stakeholders domestically, but with all the actors along the international supply chain.

The Global Report should be read in conjunction with the Regional Reports, as well as the associated country notes, which can be found at: <https://unnex.unescap.org/content/un-global-survey-trade-facilitation-and-paperless-trade-implementation-2017>.

1. Introduction

1.1 Background and objective

Reducing trade costs is essential for developing economies to participate in international production networks and effectively use trade as an engine of growth and sustainable development. However, trade costs within and between most developing regions remain much higher than those that prevail between developed countries. For example, according to data from the ESCAP-World Bank Trade Cost database, average intra-EU-3 international trade costs amount to a 42% average tariff on the value of goods traded (see Table 1). In contrast, trade costs among the middle-income members of the Association of Southeast Asian Nations (ASEAN), who have actively pursued trade integration policies over the past 20 years and which will soon be part of the ASEAN Economic Community, still stand at 76%. Other developing regions face much higher trade costs, typically two or three times higher than those in developed countries.

**Table 1: Intra- and extra-regional comprehensive trade costs
(Excluding tariff costs)**

Region	ASEAN-4	East Asia-3	South Asia-4	Latin America-4	North Africa-3	Sub-Saharan Africa-3	West Asia-3	EU-3	North America
ASEAN-4	76% (6.7%)								
East Asia-3	76% (4.1%)	51% (-2.9%)							
South Asia-4	130% (3.5%)	123% (-2.1%)	119% (12.9%)						
Latin America-4	151% (-5.3%)	109% (-5.7%)	192% (-1.8%)	96% (-3.1%)					
North Africa-3	247% (1.6%)	177% (20.0%)	205% (9.5%)	271% (24.2%)	175% (-17.8%)				
Sub-Saharan Africa-3	200% (-6.7%)	159% (-13.2%)	194% (-8.3%)	276% (-4.6%)	283% (6.7%)	180% (-7.0%)			
West Asia-3	168% (-3.0%)	157% (-4.2%)	163% (-0.7%)	229% (-1.8%)	132% (4.8%)	201% (-0.2%)	81% (0.5%)		
EU-3	105% (-3.4%)	84% (-3.4%)	113% (0.3%)	111% (-6.0%)	137% (7.1%)	123% (-8.1%)	144% (0.2%)	42% (-8.1%)	76% (-4.3%)

Source: ESCAP-World Bank Trade Cost Database, updated June 2017 [online at] <http://www.unescap.org/resources/escap-world-bank-trade-cost-database>.

Notes: Trade costs shown are simple averages of trade costs over the period 2010-2015 and may be interpreted as tariff equivalents. Percentage changes in trade costs between 2004-2009 and 2010-2015 are in parentheses.

ASEAN-4: Indonesia, Malaysia, Philippines, Thailand; East Asia-3: China, Japan, Republic of Korea; South Asia-4: Bangladesh, India, Pakistan, Sri Lanka; Latin America-4: Brazil, Chile, Mexico, Uruguay; North Africa-3: Morocco, Egypt, Sudan; Sub-Saharan Africa-3: Nigeria, Kenya, Ghana; West Asia-3: Jordan, Lebanon, Saudi Arabia; North America: Canada, and the United States of America; EU-3: Germany, France, United Kingdom.

Recent studies suggest that much of the trade cost reductions achieved over the past decade has been achieved through the elimination or lowering of tariffs.⁵ Further trade cost reduction, therefore, will be accomplished by tackling non-tariff sources of trade costs - such as inefficient transport and logistics infrastructure and services - and by addressing cumbersome regulatory procedures and documentation requirements. Indeed, trade facilitation (the simplification and harmonization of import, export and transit procedures), including paperless trade (the use and exchange of electronic data and documents to support the trade transaction process), has taken increasing importance, as evidenced by the entry into force of the WTO Trade Facilitation Agreement in February 2017 and regional initiatives such as the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific.⁶

To monitor implementation of trade facilitation, including single window and paperless trade, the United Nations Regional Commissions conducted a first Global Survey in 2015. The initiative was carried out under the Joint UNRCs Approach to Trade Facilitation, following discussion at the Global Trade Facilitation Forum 2013. It built upon the regional surveys carried out by ESCAP since 2012.

This report is the continuation of this global effort and features the results of the 2017 joint UNRCs Global Survey on Trade Facilitation and Paperless Trade Implementation. It provides an overview of the current state of trade facilitation implementation in 120 economies from 8 different regions worldwide. Following an introduction to the survey instrument and methodology in Section 1.2, a region-wide overview of implementation of trade facilitation measures across countries, sub-regions and in countries with special needs is provided in Section 2. This is followed by a closer look at the implementation levels of various groups of trade facilitation measures in Section 3. Finally, the report highlights key findings and proposes way forward for advancing trade facilitation in Section 4.

1.2 Survey Instrument and Methodology

The survey instrument was prepared according to the final list of commitments included in the WTO Trade Facilitation Agreement (TFA), as well as the content of the regional UN treaty on cross-border paperless trade facilitation negotiated under the auspices of ESCAP.⁷ The survey covers 47 main trade facilitation measures which are categorized into seven groups, namely: General trade facilitation measures, Paperless trade, Cross-border paperless trade, Transit facilitation, Trade facilitation and SMEs, Trade facilitation and agricultural trade and Women and trade facilitation (see table 2).⁸ The general trade facilitation measures – as well as the transit facilitation measures - are essentially measures featured in the TFA. In contrast, most paperless trade measures and, in particular, cross-border paperless trade measures are not specifically included in the TFA although their implementation in many cases would support the implementation of many of the general trade facilitation measures.⁹

⁵ For example, see ESCAP (2011), Asia-Pacific Trade and Investment Report 2011, United Nations. Available at: <http://www.unescap.org/resources/asia-pacific-trade-and-investment-report-2011-post-crisis-trade-and-investment>

⁶ For more details, see <http://www.unescap.org/resources/framework-agreement-facilitation-cross-border-paperless-trade-asia-and-pacific>.

⁷ Ibid.

⁸ The survey questionnaire is available in full at: <https://unnex.unescap.org/content/un-global-survey-trade-facilitation-and-paperless-trade-implementation-2017>

⁹ i.e., implementation beyond the minimum level needed for full compliance with the TFA.

Table 2: Trade facilitation measures covered by the survey questionnaire

		Trade facilitation measure (and question No.) in the questionnaire
General TF measures	Transparency	<ul style="list-style-type: none"> 2. Publication of existing import-export regulations on the Internet 3. Stakeholder consultation on new draft regulations (prior to their finalization) 4. Advance publication/notification of new regulation before their implementation (e.g., 30 days prior) 5. Advance ruling (on tariff classification) 9. Independent appeal mechanism (for traders to appeal Customs and other relevant trade control agencies' rulings)
	Formalities	<ul style="list-style-type: none"> 6. Risk management (as a basis for deciding whether a shipment will or will not be physically inspected) 7. Pre-arrival processing 8. Post-clearance audit 10. Separation of Release from final determination of customs duties, taxes, fees and charges 11. Establishment and publication of average release times 12. Trade facilitation measures for authorized operators 13. Expedited shipments 14. Acceptance of paper or electronic copies of supporting documents required for import, export or transit formalities.
	Institutional arrangement and cooperation	<ul style="list-style-type: none"> 1. Establishment of a national trade facilitation committee or similar body 31. Cooperation between agencies on the ground at the national level 32. Government agencies delegating controls to Customs authorities 33. Alignment of working days and hours with neighbouring countries at border crossings 34. Alignment of formalities and procedures with neighbouring countries at border crossings
Paperless trade		<ul style="list-style-type: none"> 15. Electronic/Automated Customs System established (e.g., ASYCUDA) 16. Internet connection available to Customs and other trade control agencies at border-crossings 17. Electronic Single Window System 18. Electronic submission of Customs declarations 19. Electronic Application and Issuance of Trade Licenses 20. Electronic Submission of Sea Cargo Manifests 21. Electronic Submission of Air Cargo Manifests 22. Electronic Application and Issuance of Preferential Certificate of Origin 23. E-Payment of Customs Duties and Fees 24. Electronic Application for Customs Refunds

Table 2. Continued

		Trade facilitation measure (and question No.) in the questionnaire
Cross-border paperless trade		25. Laws and regulations for electronic transactions are in place (e.g. e-commerce law, e-transaction law) 26. Recognized certification authority issuing digital certificates to traders to conduct electronic transactions 27. Engagement of the country in trade-related cross-border electronic data exchange with other countries 28. Certificate of Origin electronically exchanged between your country and other countries 29. Sanitary and Phytosanitary Certificate electronically exchanged between your country and other countries 30. Banks and insurers in your country retrieving letters of credit electronically without lodging paper-based documents
Transit facilitation		35. Transit facilitation agreement(s) with neighbouring country(ies) 36. Customs Authorities limit the physical inspections of transit goods and use risk assessment 37. Supporting pre-arrival processing for transit facilitation 38. Cooperation between agencies of countries involved in transit
Inclusiveness in trade facilitation	Trade facilitation and SMEs	39. Government has developed trade facilitation measures that ensure easy and affordable access for SMEs to trade related information 40. Government has developed specific measures that enable SMEs to more easily benefit from the AEO scheme 41. Government has taken actions to make the single windows more easily accessible to SMEs (e.g., by providing technical consultation and training services to SMEs on registering and using the facility.) 42. Government has taken actions to ensure that SMEs are well represented and made key members of National Trade Facilitation Committees (NTFCs)
	Trade facilitation and agriculture trade	43. Testing and laboratory facilities are equipped for compliance with sanitary and phytosanitary (SPS) standards in your country 44. National standards and accreditation bodies are established for the purpose of compliance with SPS standards in your country 45. Application, verification and issuance of SPS certificates is automated
	Women and trade facilitation	46. The existing trade facilitation policy/strategy incorporates special consideration of women involved in trade 47. Government has introduced trade facilitation measures to benefit women involved in trade

Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017

The UNRCs adopted slightly different approaches for data collection and validation. The three-step approach created by ESCAP was adopted or adapted by individual UNRCs to meet specific regional contexts (see Box 1). Data was collected between January and July 2017.

Each of the trade facilitation measures included in the Survey was rated as “fully implemented”, “partially implemented”, “on a pilot basis”, or “not implemented”. A score (weight) of 3, 2, 1 and 0, respectively, was assigned to each of the 4 implementation stages to calculate implementation scores for individual measures across countries, regions or categories (as shown in Annex 1).

Box 1. A three-step approach for data collection and validation

Step 1. Data submission by experts: The survey instrument was sent by the UN Regional Commissions (UNRCs) to selected trade facilitation experts (e.g., government, private sector and/or academia) to gather preliminary information. The questionnaire was also made publicly available online and disseminated with the support of OECD, ITC, UNCTAD as well as the United Nations Centre for Trade Facilitation and e-Business (UN/CEFACT) and the United Nations Network of Experts for Paperless Trade and Transport for Asia and the Pacific (UNNExT). In some cases, the questionnaire was sent to relevant national trade facilitation authorities or agencies and regional trade facilitation partners or organizations such as Eurasian Economic Commission (EEC), Association of Southeast Asian Nations (ASEAN), Oceania Customs Organisation (OCO).

Step 2. Data verification by the UNRCs Secretariats: The UNRCs cross-checked the data collected in Step 1. Desk research and data sharing among UNRCs and survey partners were carried out to further check the accuracy of data. In person or telephone interviews with key respondents were conducted to gather additional information when needed. The outcome of Step 2 was a consistent set of responses per country.

Step 3. Data validation by national governments (this step was applied by some RCs such as ECE and ESCAP): The UNRC Secretariats sent the completed questionnaire to each national government to ensure that the country had the opportunity to review the dataset and provide any additional information. The feedback from national governments was incorporated to finalize the dataset.

Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017

The Survey covers 120 countries, which are divided into the following eight groups:¹⁰

- *Developed Economies* (22 countries): Australia, Austria, Belgium, Bulgaria, Canada, Croatia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Malta, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom.
- *Sub-Saharan Africa* (17 countries): Benin, Burkina Faso, Burundi, Cameroon, Congo, Côte d'Ivoire, Democratic Republic of Congo (DRC), Gabon, Guinea, Lesotho, Madagascar, Mali, Sierra Leone, Sudan, Swaziland, Uganda, and Zimbabwe.
- *Middle East and North Africa* (10 countries): Bahrain, Djibouti, Egypt, Iraq, Jordan, Lebanon, Palestine, Qatar, United Arab Emirates, and Yemen.
- *Latin America and the Caribbean* (21 countries): Argentina, Antigua and Barbuda, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Vincent and Grenadines, Trinidad and Tobago, and Uruguay.
- *South and East Europe, Caucasus and Central Asia* (16 countries): Albania, Armenia, Azerbaijan, Belarus, Estonia, Kazakhstan, Kyrgyzstan, The Former Yugoslav Republic of

¹⁰ In this global report, developed countries are singled out as a group and the remaining countries are grouped according to World Bank's classification of the regions (<http://data.worldbank.org/about/country-and-lending-groups>), which may not be the same as the classification of the regions or subregions in the Regional reports prepared by each UNRC. It is important to note that the classification of the countries is evolving, in particular in terms of developing vs. developed countries. For instance, the World Bank decided to no longer make a distinction between developed and developing countries since 2016 (<https://openknowledge.worldbank.org/bitstream/handle/10986/23969/9781464806834.pdf>).

Macedonia, Moldova, Montenegro, Russian Federation, Serbia (Republic of), Tajikistan, Turkey, Ukraine, and Uzbekistan.

- *South Asia* (8 countries): Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.
- *Pacific Islands* (11 countries): Fiji, Kiribati, Micronesia, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.
- *Southeast and East Asia* (14 countries): Brunei Darussalam, Cambodia, China, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Korea (Republic of), Singapore, Thailand, Timor-Leste, and Viet Nam.

1.3 Utilization of report and the data

To make the Survey effort as transparent and useful as possible, regional and global datasets have been made freely accessible online on the dedicated Survey website.¹¹ The use of the data by researchers and policy analysts to advance our understanding of the impact of different trade facilitation measures and derive evidence-based policy advice is strongly encouraged. Stakeholders interested in submitting information which may help us further improve or expand the dataset may contact the UNRC focal points listed on the dedicated website. Subject to availability of resources, the UNRCs, together with other willing partners, will endeavor to conduct the Survey on a biennial basis.

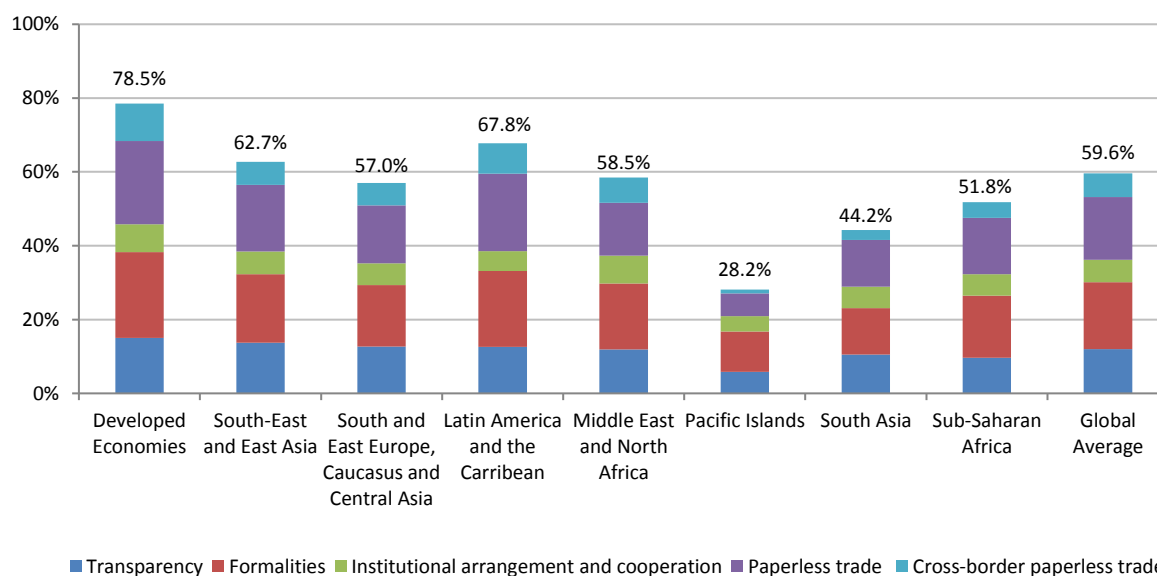
¹¹ <https://unnext.unescap.org/content/global-survey-trade-facilitation-and-paperless-trade-implementation-2017>.

2. Trade facilitation implementation: Overview

Figure 1 shows the average rates of implementation of trade facilitation in the seven developing regions defined earlier, as well as in developed economies. These implementation rates are based on a set of 31 trade facilitation measures relevant to all 120 economies included in the Survey and spanning all five categories of measures from transparency to cross-border paperless trade.¹²

The global average implementation rate stands at 59.6%. Developed economies have the highest implementation rate (78.5%), while Pacific Islands have the lowest (28.2%). Among the developing regions, Latin America and the Caribbean and South-East and East Asia achieve high implementation rates at 67.8% and 62.7%, respectively. Sub-Saharan Africa - which includes some of the poorest countries in the world – and South and East Europe, Caucasus and Central Asia – a region largely made up of landlocked developing countries (LLDCs) – have similar implementation rates. Notably, both regions achieved implementation rates above 50%, unlike South Asia.

Figure 1: Average implementation rates of trade facilitation measures around the world



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Trade facilitation implementation rates of individual economies are provided in Annex 4. Implementation varies greatly across economies, including across economies from a same region (see

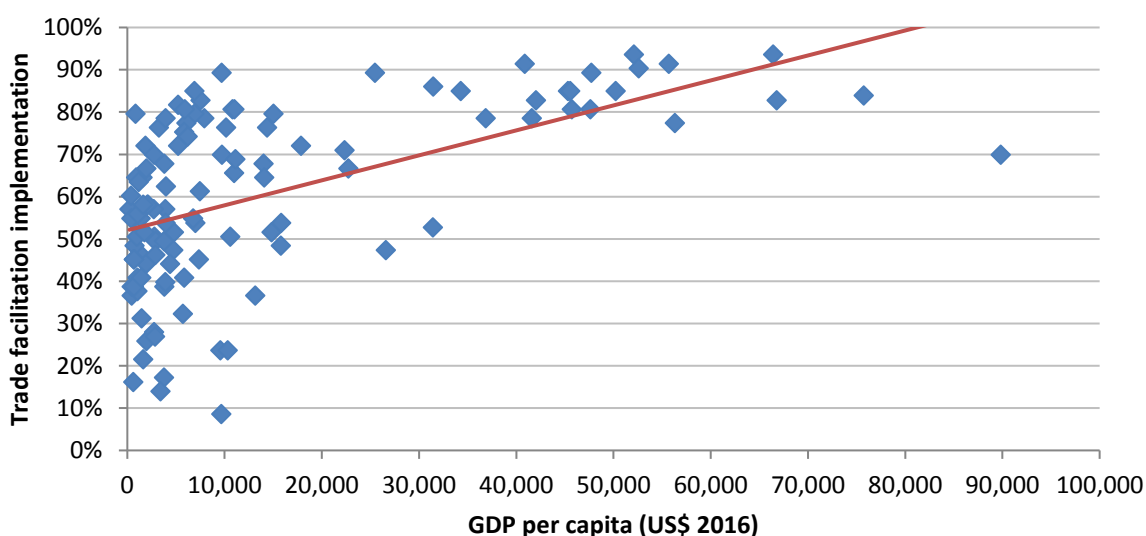
¹² Among the 47 trade facilitation measures surveyed, three measures including *Electronic Submission of Sea Cargo Manifests (No. 20)*, *Alignment of working days and hours with neighbouring countries at border crossings (No. 33)*, and *Alignment of formalities and procedures with neighbouring countries at border crossings (No. 34)* were excluded in calculating the overall score as they are not applicable to all countries surveyed. Similarly, four transit facilitation measures were also excluded. Three groups of trade facilitation measures related to SMEs, agricultural and women (measures 39-47) were excluded due to unavailability of data for some countries. Each country's implementation score of is simply a summation of implementation scores (3, 2, 1 or 0) assigned to each trade facilitation measure. The maximum possible (full) score of a country is 93 and the average score across all 120 countries is 55.4 (or 59.6% in percentage terms).

Figure 2). For example, implementation rates in South-East and East Asia range between 21.5% for Timor-Leste to 90.3% for Singapore. Similarly, in Latin America and the Caribbean, there is an ample range of implementation levels. Antigua and Barbuda (a sea-locked nation) exhibits the lowest average implementation level (36.6%) while Mexico has the highest (89.3%).

In terms of specific countries, the Netherlands (93.6%) stands out as the best overall performer. Among developing regions, Singapore, Republic of Korea, China, Malaysia and Thailand lead in South-East and East Asia, all with rates of implementation exceeding 80%. Qatar (93.6%) and United Arab Emirates (91.4%) lead the Middle East and North Africa region, and Benin (79.6%) leads the Sub-Saharan Africa region. India (72.0%) leads the way in South Asia while The Former Yugoslav Republic of Macedonia (81.7%) leads the South and East Europe, Caucasus and Central Asia region. Several leaders emerge in Latin America and the Caribbean including Mexico, Colombia, Brazil, Chile, and Dominican Republic, all with implementation rates exceeding 80%.

In general, more advanced economies achieve higher implementation rates than smaller or less developed countries. However, this is not always the case. For example, more than 40 countries that have a GDP per capita lower than \$10,000 (i.e. from Burundi (US\$218) to Costa Rica (US\$9714) achieve implementation rates higher than 50% (see Figure 2).

Figure 2: Average trade facilitation implementation rates and GDP per capita



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017; World Bank, World Development Indicators, accessed 30 June 2017.

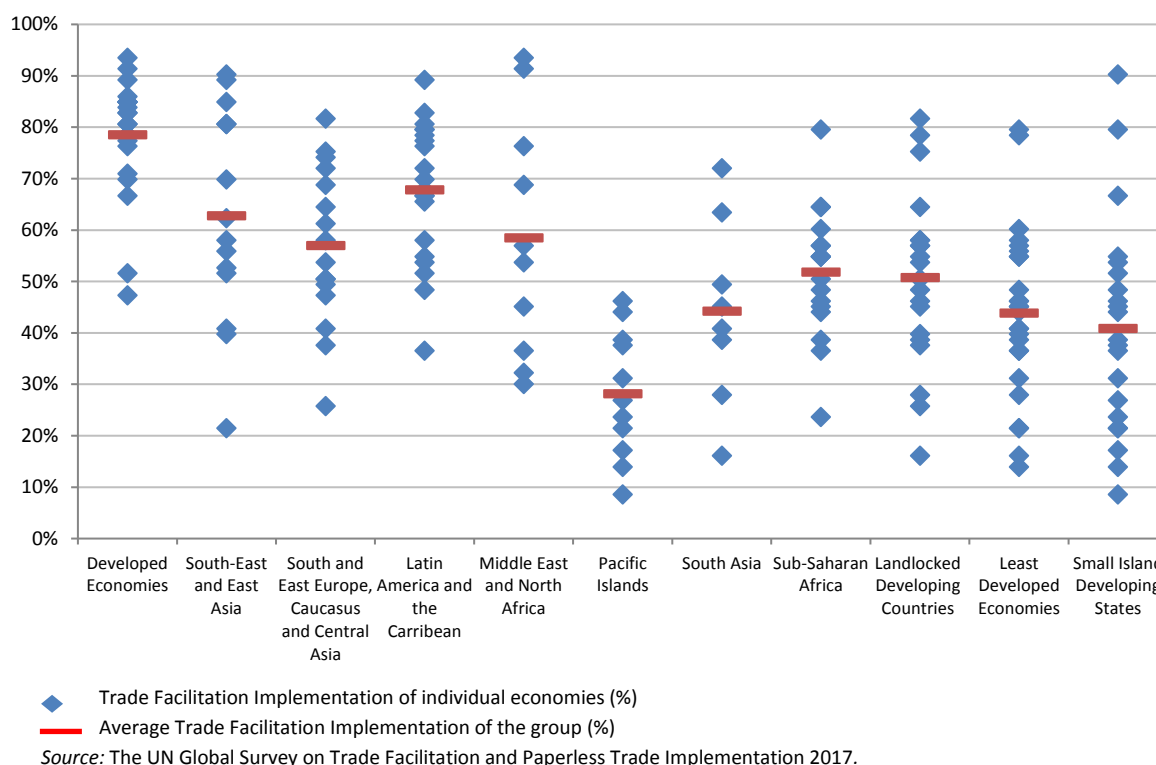
2.1 Implementation in countries with special needs

Figure 3 presents an overview of trade facilitation implementation in three groups of countries with special needs - namely, Landlocked Developing Countries (LLDCs), Least Developed Countries (LDCs) and Small Island Developing States (SIDS) - compared with developed economies and the different developing regions. The red bars indicate the average level of implementation for each group

of countries while the diamonds show implementation rates of individual economies within each group.

All three groups of countries with special needs achieve similar implementation rates, ranging between 40% and 50%. This is significantly below the global average implementation rate (60%). This result confirms the need for providing LDCs, LLDCs, and SIDSs with special technical assistance and capacity building support to help them bridge their existing implementation gaps.

Figure 3: Average trade facilitation implementation rates by region and in countries with special needs



2.2 Most and least implemented trade facilitation measures

All countries are engaged in implementation of various measures aimed at enhancing the transparency of trade procedures as well as reducing the formalities associated with them. While implementation levels vary greatly across countries for all categories of trade facilitation measures, differences in implementation scores are particularly wide for paperless trade measures and even more so for cross-border paperless trade measures.

Overall, as shown in Figure 4 and Table 3, transparency measures, including measures such as *Publication of existing import-export regulations on the Internet* and *Independent Appeal Mechanism*, have the highest implementation rates (average 74.3%) followed by transit facilitation measures (72.0%). Similarly, measures aimed at improving formalities have been widely implemented, with the global average implementation rate standing at 70.2%. *Acceptance of paper or electronic copies of supporting documents required for import, export or transit formalities* and *Separation of Release from*

final determination of customs duties, taxes, fees and charges (approximately 79%) are the most highly implemented measures within this group while there is room for improvement in implementing measures such as *Establishment and publication of average release times* and *Trade facilitation measures for authorized operators*.

The implementation rate for “institutional arrangement and cooperation” reached 63.2%. Approximately 92.5% of the countries have implemented measures on *National legislative framework and institutional arrangement are available to ensure border agencies to cooperate with each other* and approximately 85.8% of countries surveyed have *established national trade facilitation committees*.

The global average level of implementation of “paperless trade” measures is nearly 60%. However, implementation varies greatly depending on the individual measure considered. For example, while *Internet connections available to Customs and other trade control agencies at border-crossings* and *Electronic/automated Customs System* are partially or fully implemented in nearly all countries, *Electronic Application for Customs Refunds* and *Electronic Application and Issuance of Preferential Certificate of Origin* have been implemented in only 30.8% and 41.7% of the countries surveyed, respectively.

The average implementation level for “Cross-border paperless trade” (33.0%) is substantially lower than that of the other groups of measures considered. While the existence of *Laws and regulations for electronic transactions* achieves an average implementation level of 62.5%, more efforts should be made to permit *Electronic exchange of sanitary and phytosanitary certificates* (whose implementation rate amounts to 14.7%). Similarly, the *Electronic exchange of Certificate of Origin* has only been scarcely implemented (its implementation rate amounts to 20.6%).

Figure 4: Average implementation rates of different groups of trade facilitation measures

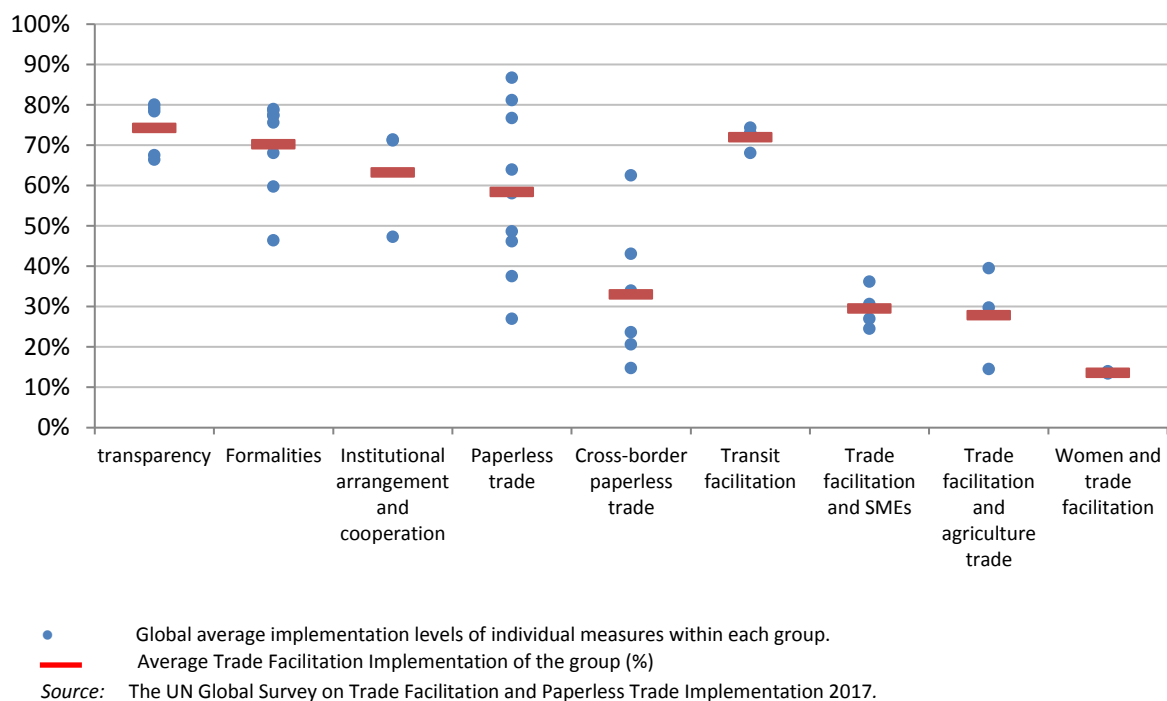


Table 3: Most and least implemented measures (within each group of trade facilitation measures) by number of countries

Category of trade facilitation measures	Most implemented (% of countries)		Least implemented (% of countries)	
	Measure	Implemented fully, partially and on a pilot basis (%) / Full implementation (%)	Measure	Implemented fully, partially and on a pilot basis (%) / Full implementation (%)
Transparency	Stakeholders' consultation on new draft regulations (prior to their finalization)	95.0 / 48.3	Advance ruling (on tariff classification)	76.7 / 46.7
Formalities	Risk management	94.2 / 47.5	Establishment and publication of average release times	62.5 / 21.7
Institutional arrangement and cooperation	National legislative framework and institutional arrangement are available to ensure border agencies to cooperate with each other	92.5 / 33.3	Government agencies delegating controls to Customs authorities	56.7 / 29.2
Paperless trade	Electronic/automated Customs System	94.2 / 73.3	Electronic Application for Customs Refunds	35.8 / 14.2
Cross-border paperless trade	Laws and regulations for electronic transactions	76.7 / 38.3	Electronic exchange of Sanitary & Phyto-Sanitary Certificate	25.0 / 0.0
Transit facilitation	Cooperation between agencies of countries involved in transit	70.8 / 40.0	Supporting pre-arrival processing for transit facilitation	62.5 / 38.3
Trade facilitation and SMEs	Government has taken actions to ensure that SMEs are well represented and made key members of National Trade Facilitation Committees (NTFCs)	45.8 / 20.0	Government has taken actions to make the single windows more easily accessible to SMEs (e.g., by providing technical consultation and training services to SMEs on registering and using the facility.)	33.3 / 12.5
Trade facilitation and agricultural trade	Testing and laboratory facilities are equipped for compliance with sanitary and phytosanitary (SPS) standards in your country	47.5 / 26.7	Application, verification and issuance of SPS certificates is automated	20.8 / 6.7
Women in trade facilitation	The existing trade facilitation policy/strategy incorporates special consideration of women involved in trade	20.8 / 4.2	Government has introduced trade facilitation measures to benefit women involved in trade	20.0 / 3.3

Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

2.3 Progress in implementation of trade facilitation measures since 2015

Among the 120 countries covered by the Second Global Survey, 99 participated in the First Global Survey.¹³ To make samples comparable, only these countries are analysed to assess progress in the implementation of trade facilitation between 2015 and 2017.

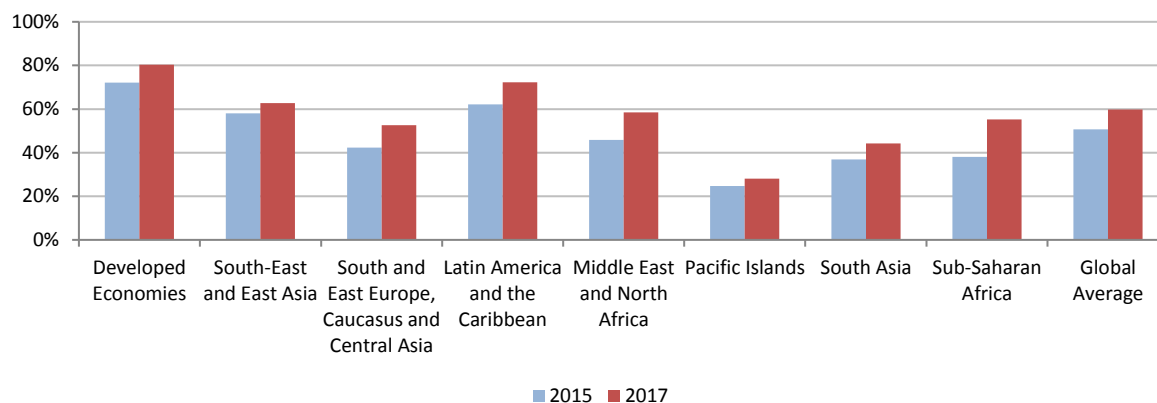
When considering this subset of data, the most progress was observed in Sub-Saharan Africa, where the reported implementation rate increased by 17 percentage points (from 38.0% in 2015 to 55.2%) between 2015 and 2017.¹⁴ Substantial improvement was observed in Middle East and North Africa (by 12.6 percentage points), South and East Europe, Caucasus and Central Asia (by 10.3 percentage points) and Latin America and the Caribbean (by 10.1 percentage points). Progress was

¹³ See Annex 5 for details, including country list and comparison of average implementation rates by region using the full (120 countries) and limited (99 countries) datasets. The overall results are similar.

¹⁴ It should be noted that in the case of Sub-Saharan Africa, the sample available for the comparison was limited to 11 countries. The observed increase in implementation should therefore be interpreted with caution, as it is not representative of the region as a whole.

also made in countries in Asia and the Pacific: South Asia by 7.4 percentage points, South-East and East Asia by 4.8 percentage points and Pacific Islands by 3.4 percentage points (see Figure 5).

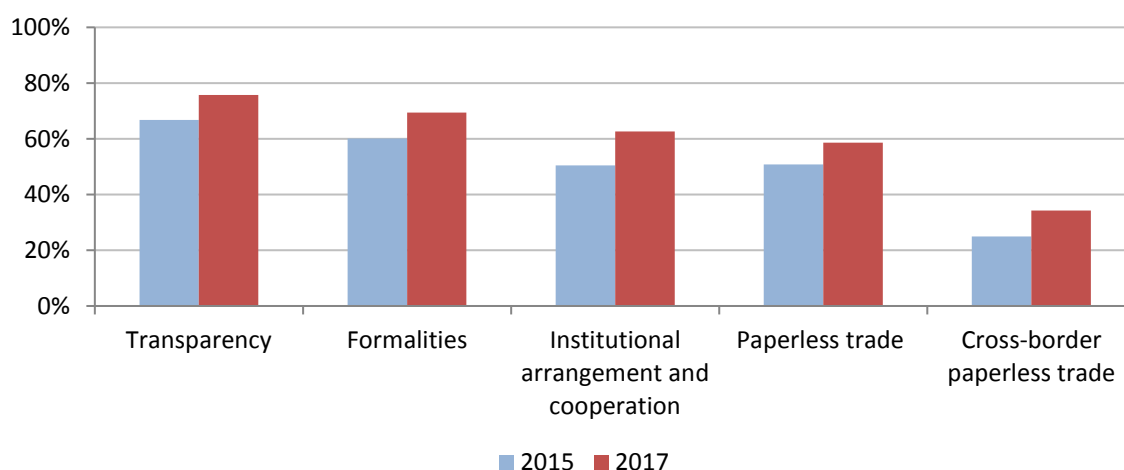
Figure 5: Progress of implementation of trade facilitation measures by various regions, 2015 and 2017



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

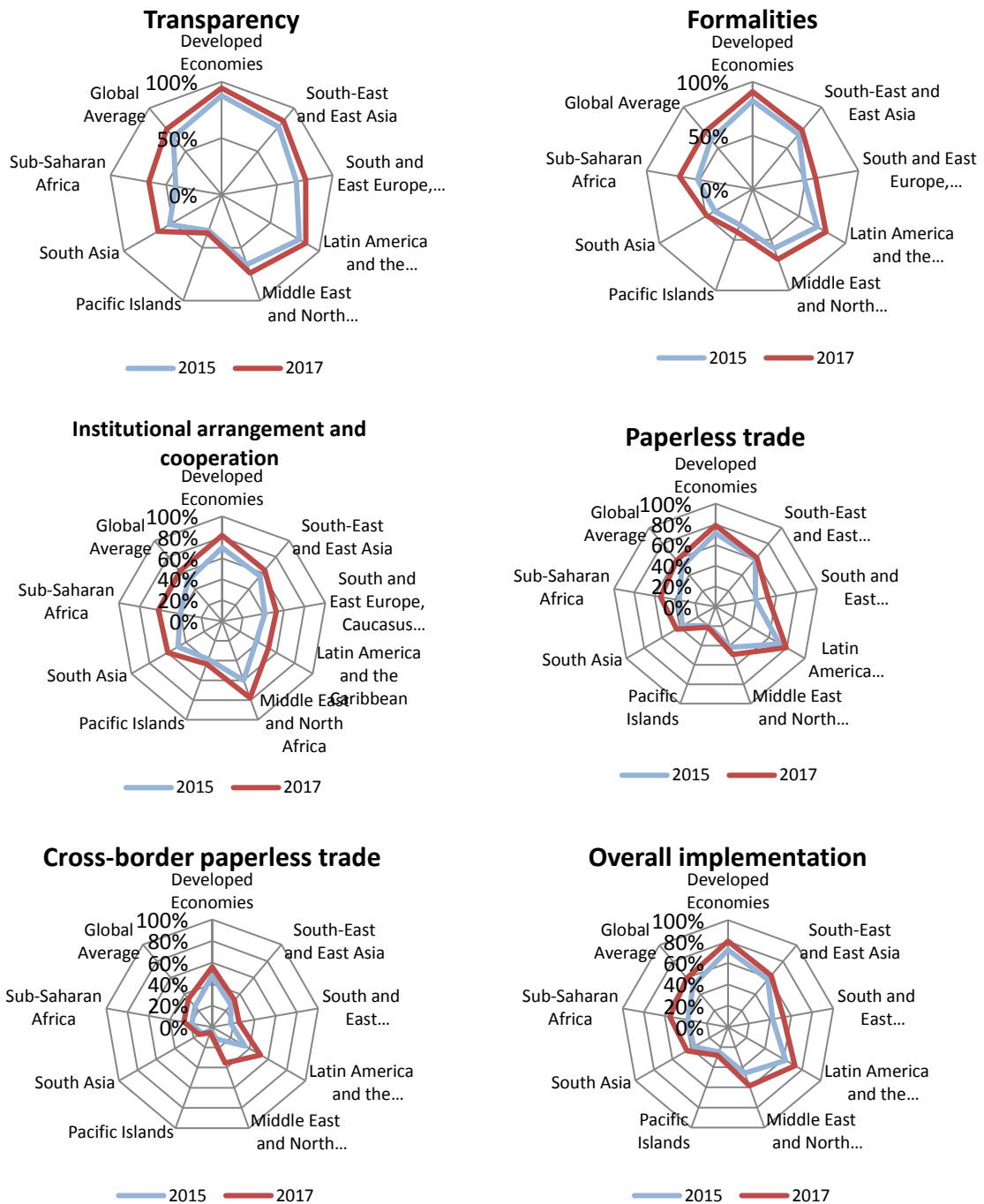
Across 99 countries, the average implementation rate of “Transparency” measures increased from 66.8% in 2015 to 75.7% in 2017, while implementation of the “Formalities” measures improved from 60.1% in 2015 to 69.4% in 2017. Most progress was made in implementing the “Institutional arrangements and cooperation” measures: the average implementation rate increased by 12 percentage points, from 50.5% in 2015 to 62.6% in 2017 (see Figures 6 and 7).

Figure 6: Progress of global implementation trade facilitation measures, 2015 and 2017



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Figure 7: Progress of implementation of specific group of trade facilitation measures in various regions, 2015 and 2017



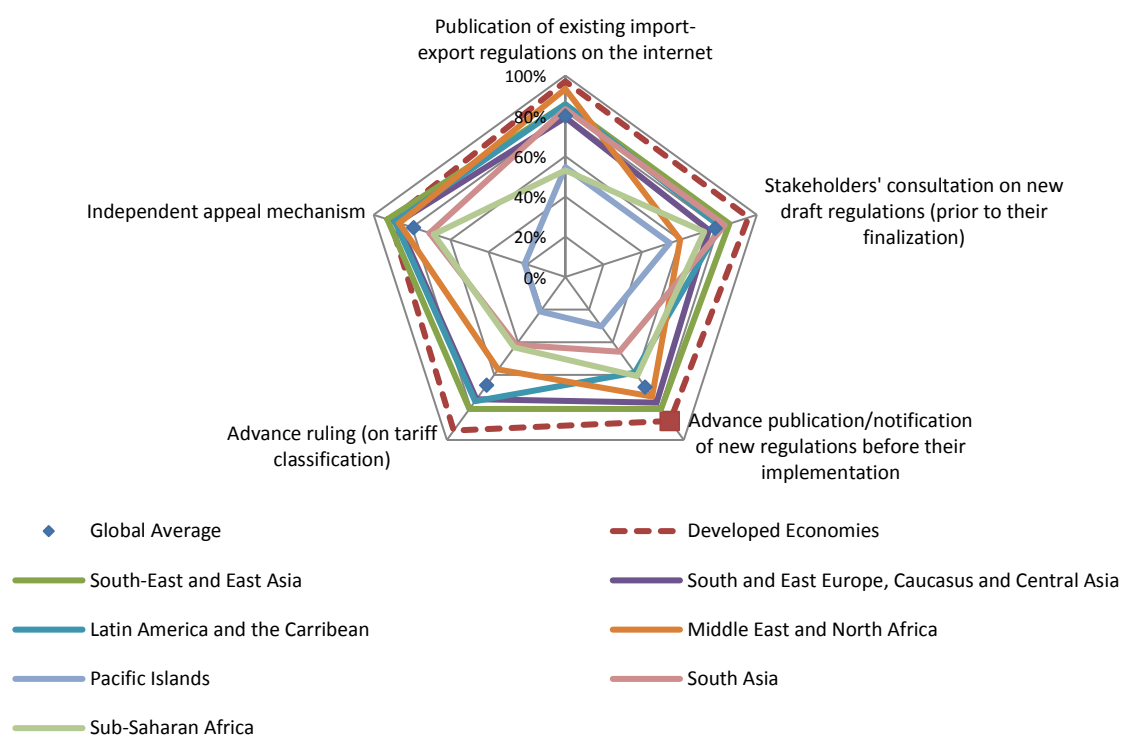
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

3. Implementation of trade facilitation measures: A closer look

3.1 Transparency measures

Five trade facilitation measures included in the survey are categorized as transparency measures based on Articles 1 through 4 of the WTO TFA as well as GATT Article X (“Publication and Administration of Trade Regulations”). The global average level of implementation of all five transparency measures exceeds 65% (see Figure 8). However, there is considerable variation in the implementation levels of these measures across regions.

Figure 8: Implementation of “transparency” measures in various regions globally



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

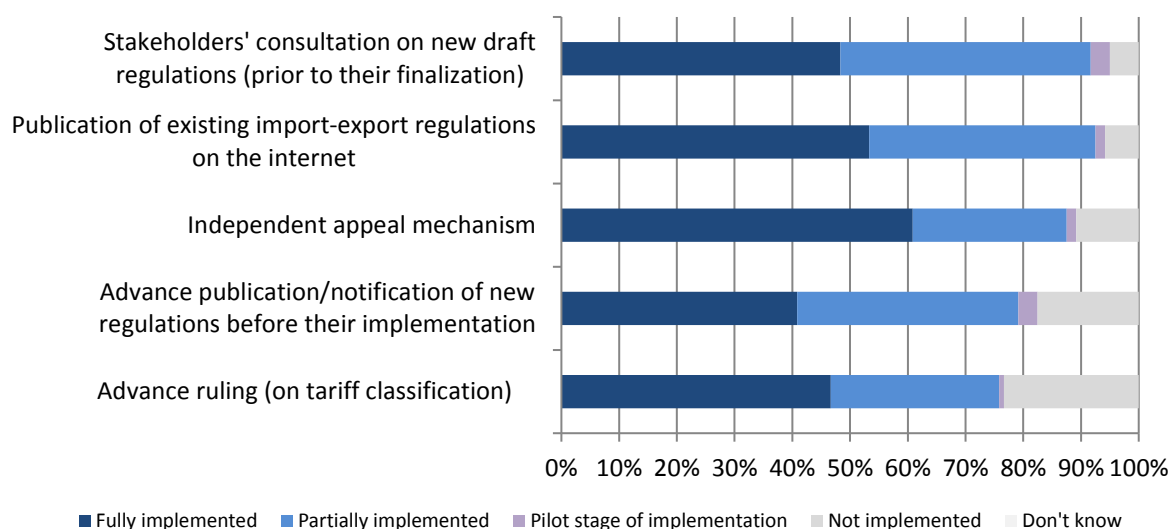
While developed economies, South-East and East Asia and Latin America and the Caribbean have nearly fully implemented these measures, Sub-Saharan Africa and the Pacific Islands lag well behind the global average. The level of implementation of advance rulings (on tariff classification) by the Pacific Islands is low in comparison to the levels of implementation of other transparency measures in the same region.

Figure 9 shows the percentage of countries globally that have fully implemented, partially implemented, or piloted the transparency measures included in the Survey. Stakeholder consultation on new draft regulations is the most implemented transparency measure and has been fully or partially implemented by more than 90% of the countries and is in the pilot stage in 3% of the

economies surveyed. Similarly, Publication of existing import-export regulations on the Internet and Independent Appeal Mechanisms have been implemented in more than 80% of the countries surveyed and are in the pilot stage in a small number of countries.

Advance publication/notification of new regulations before their implementation and advance rulings are the least implemented measures. Indeed, approximately 75% of the countries surveyed have fully or partially implemented such measures. This may be due either to legislative issues or the permanence of old trade practices. This is more evident in Portugal, a developed economy which has just undertaken the implementation to only pilot stage on such measures.

Figure 9: Implementation stages of “transparency” measures globally



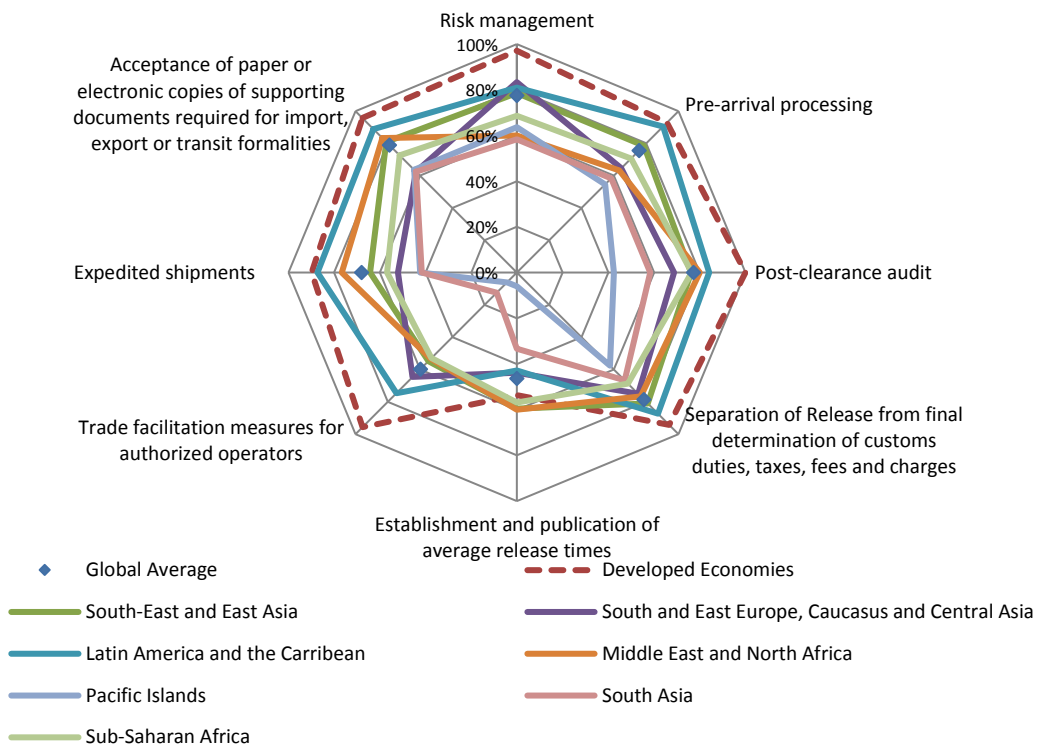
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

3.2 Formalities measures

Eight of the general trade facilitation measures included in the survey are categorized as formalities measures aimed at streamlining and/or expediting regulatory trade procedures. They relate to Articles 7 and 10 of the WTO TFA and GATT Article VIII entitled “Fees and Formalities connected with Importation and Exportation.”

The level of implementation at the regional level varies significantly across measures in this group (see Figure 10). Implementation of Acceptance of paper or electronic copies of supporting documents required for import, export or transit formalities, Separation of Release from final determination of customs duties, taxes, fees and charges, Risk management, Post-clearance audit, and pre-arrival processing measures is well underway in most regions. In contrast, implementation of measures such as Trade facilitation measures for authorized operators and Establishment and publication of average release times has remained marginal in several regions, in particular in the Pacific Islands and South Asia, is well below 10%.

Figure 10: Implementation of “formalities” measures in various regions globally

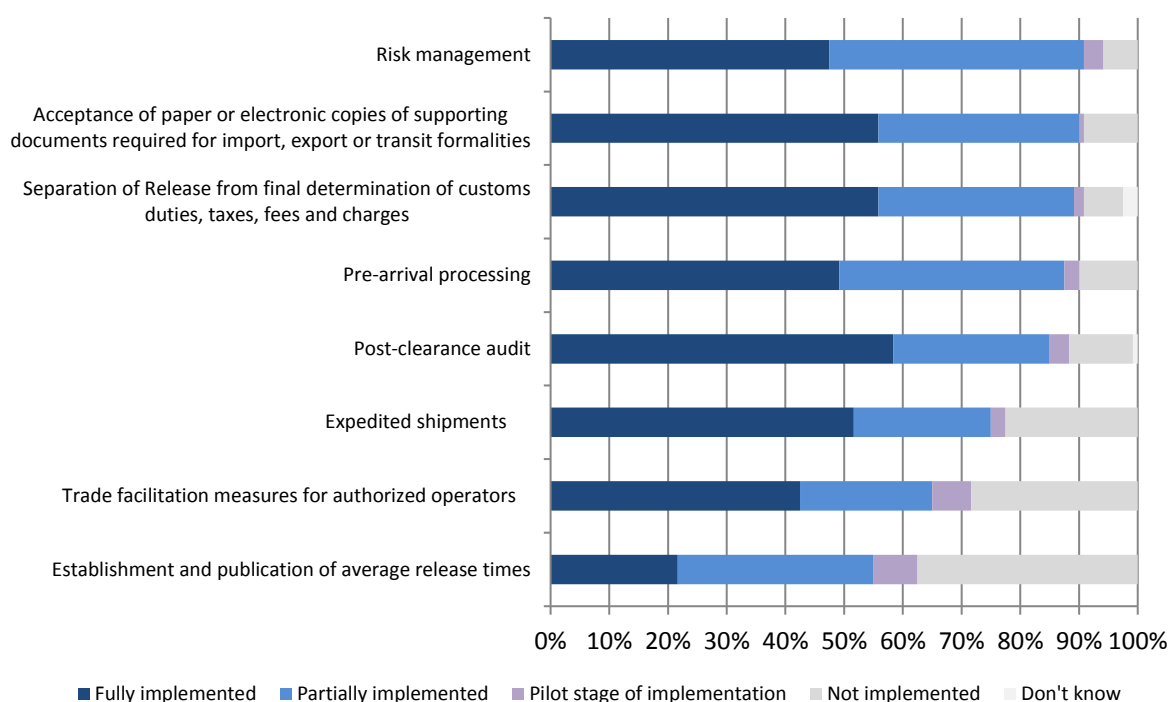


Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Figure 11 shows that the implementation of Risk management, Acceptance of copies, and Separation of release from clearance, Separation of Release from final determination of customs duties, taxes, fees and charges, Pre-arrival processing, and Post-clearance audit measures are on-going in most economies globally. The most progress has been made in the establishment of Risk management; the least progress has been made in post-clearance audit mechanisms. Approximately 80% of the countries have fully or partially implemented all five measures.

Other formalities measures are significantly less implemented. For example, less than 70% of countries have at least partially implemented trade facilitation measures for authorized operators. The Survey also reveals that establishment and publication of average release times has been fully implemented in less than 25% of the economies.

Figure 11: implementation stages of “formalities” measures globally



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

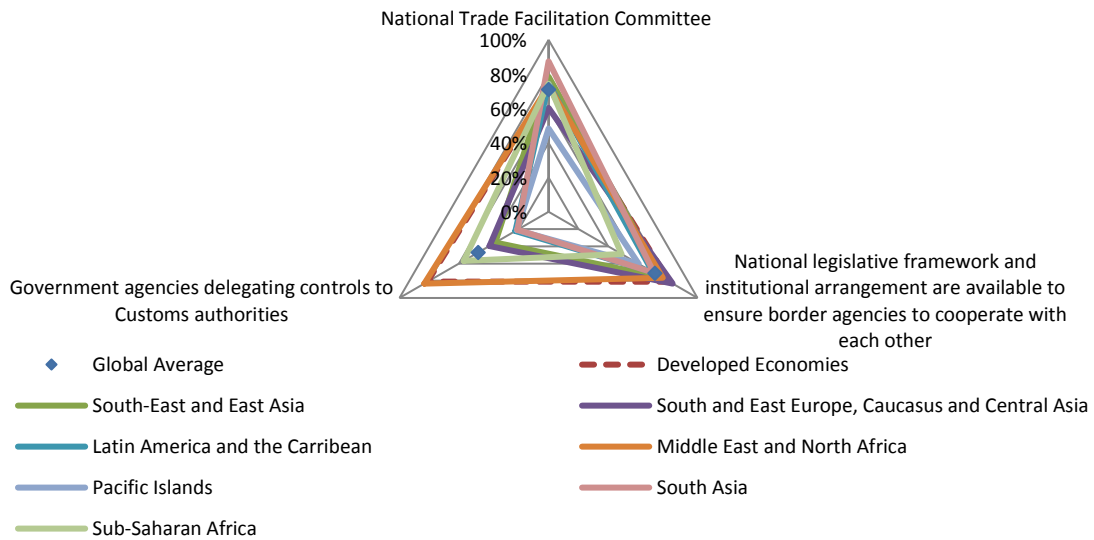
3.3 Institutional arrangements and cooperation measures

Three trade facilitation measures featured in the survey are grouped under Institutional and cooperation measures. These relate to long-standing recommendations that a national trade facilitation body and related measures be implemented to ensure coordination and cooperation among the various government agencies and other stakeholders involved in facilitating trade.¹⁵ These measures are based on Articles 8 and 23 of the WTO Trade Facilitation Agreement.

Figure 12 shows that measures related to National legislative framework and institutional arrangement are available to ensure border agencies cooperate with each other and National Trade Facilitation Committees have been extensively implemented globally, while government agencies delegating controls to customs authorities seems to be much more common in developed economies than in any of the developing regions. National Trade Facilitation Committees are most implemented in South Asia than in any other region considered in the Survey.

¹⁵ See, for example, UN/CEFACT Recommendation No. 4 on establishment of national trade facilitation bodies, first issued in 1974. Available at: http://www.unece.org/fileadmin/DAM/cefact/recommendations/rec04/rec04_ecetrd242e.pdf

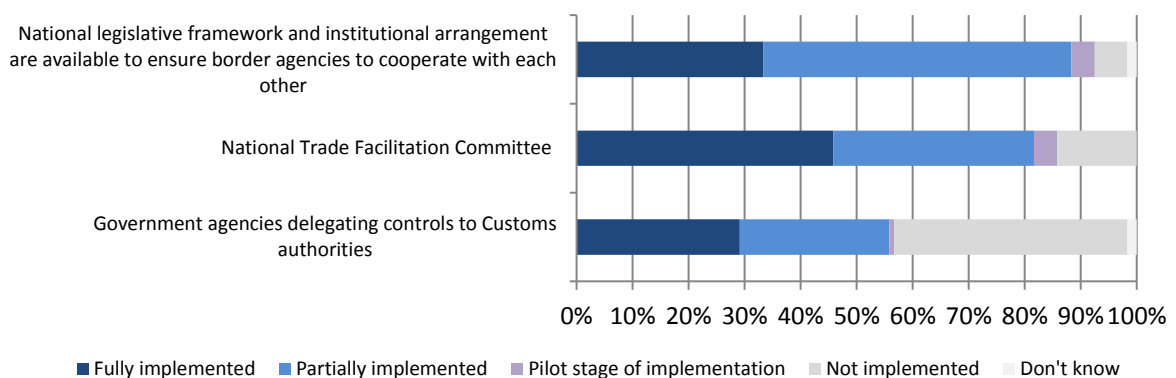
Figure 12: Implementation of “institutional arrangement and cooperation” measures in various regions globally



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Figure 13 reveals that, while most of the countries surveyed have, to some extent, implemented measures related to cooperation between agencies on the ground at the national level, full implementation has only been achieved in less than 40% of the economies. In a similar trend, National Trade Facilitation Committees are established and functional in less than 50% of the countries surveyed. Government agencies delegating controls to Customs authorities is the least implemented of the institutional arrangements and cooperation measures with less than 60% of economies having initiated implementation.

Figure 13: Implementation stages of “institutional arrangement and cooperation” measures globally



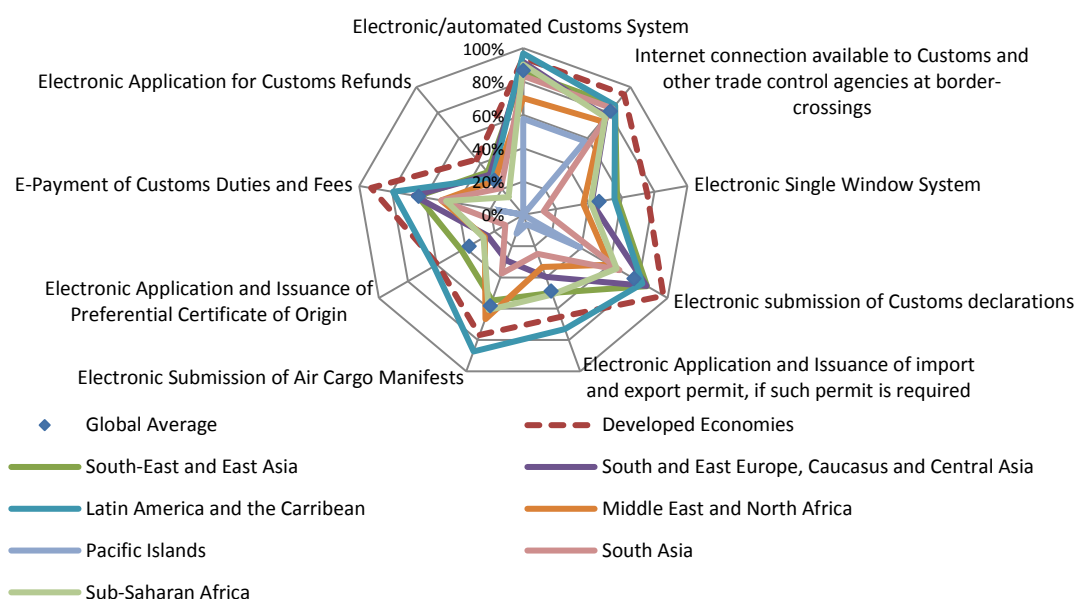
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

3.4 Paperless trade measures

The paperless trade measures examined in the survey relate to the use and application of modern information and communications technologies (ICT) to trade formalities ranging from availability of internet connections at border-crossings and customs automation to full-fledged electronic single window facilities. Many of the measures featured here are closely related to Articles 7 and 10 of the WTO TFA - as well as the text of the intergovernmental agreement on facilitation of cross-border paperless trade.

Implementation of paperless trade measures varies widely across measures and regions (see Figure 14). Electronic/automated customs systems and Internet connection available to Customs and other trade control agencies at border-crossings are widely implemented in all regions except in the Pacific Islands region, which also lags significantly behind in its implementation of other paperless trade measures. Implementation of more advanced measures such as Electronic Single Window Systems and e-payment of customs duties is particularly high in Latin America and South-East and East Asia relative to other developing regions.

Figure 14: Implementation of “paperless trade” measures in various regions globally



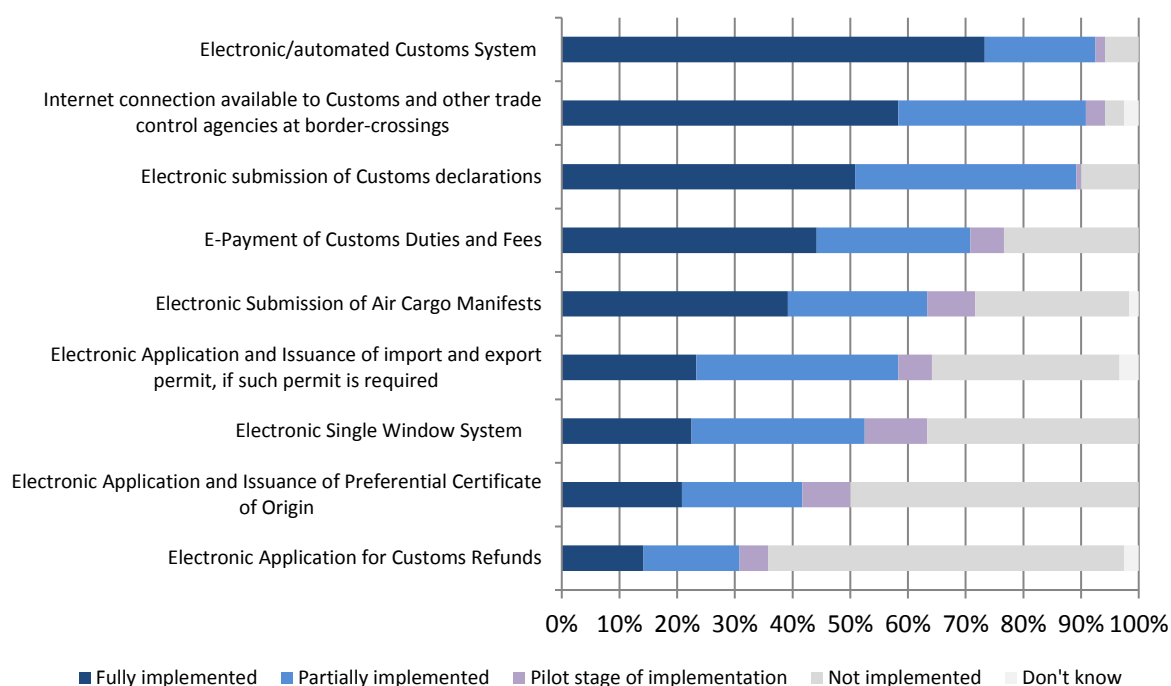
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Figure 15 highlights the gap between the most and least implemented paperless trade measures. Electronic/automated customs systems, Internet connections fully available to customs and other trade control agencies, and Electronic submission of Customs declarations are fully implemented in more than half of the economies surveyed and at least partially available in almost all of them. Similarly, E-Payment of Customs Duties and Fees has been implemented by more than 70% of the countries and fully implemented in more than 40%. Together, these results suggest that most

economies are actively working on developing the basic IT infrastructure and services needed for paperless trade.

Implementation of more advanced paperless trade measures remains at a relatively early stage. Nearly 60% of the economies have engaged to some extent in creating an electronic single window but very few have fully-operational systems in place. Electronic application and issuance of preferential certificates of origin has been fully or partially implemented by only approximately 50% of the economies. Electronic application for Customs refunds has been fully implemented by less than 20% of the countries surveyed.

Figure 15: Implementation stages of “paperless trade” measures globally



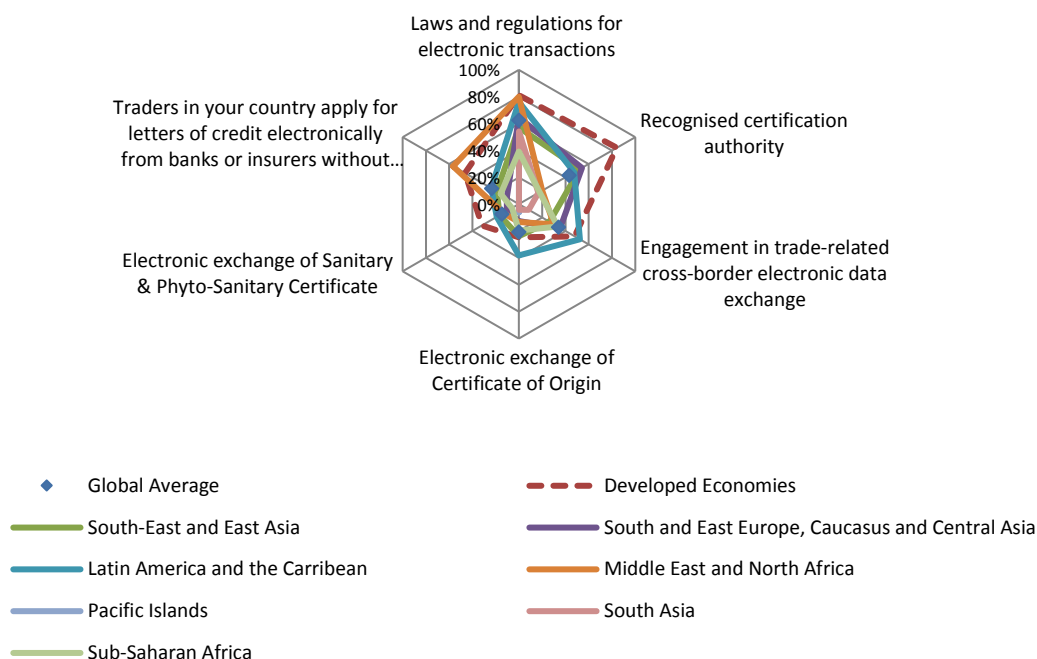
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

3.5 Cross-border paperless trade measures

Six trade facilitation measures included in the survey are categorized as cross-border paperless trade measures (see Figure 16).¹⁶ Two of the measures, laws and regulations for electronic transactions and recognized certification authority, are basic building blocks towards enabling the exchange and legal recognition of trade-related data and documents among stakeholders within a country and along the entire international supply chain. The other four measures relate to the implementation of systems enabling the actual exchange of electronic trade-related data and documents across borders to remove the need for sending paper documents.

¹⁶ As noted previously, these measures are different from other paperless trade measures as they focus on electronic exchange of data and documents across borders, i.e., between stakeholders located in different countries – as opposed to, e.g., national single window systems, where the focus is on exchange of information between domestic stakeholders.

Figure 16: Implementation of “cross-border paperless trade” measures in various regions globally

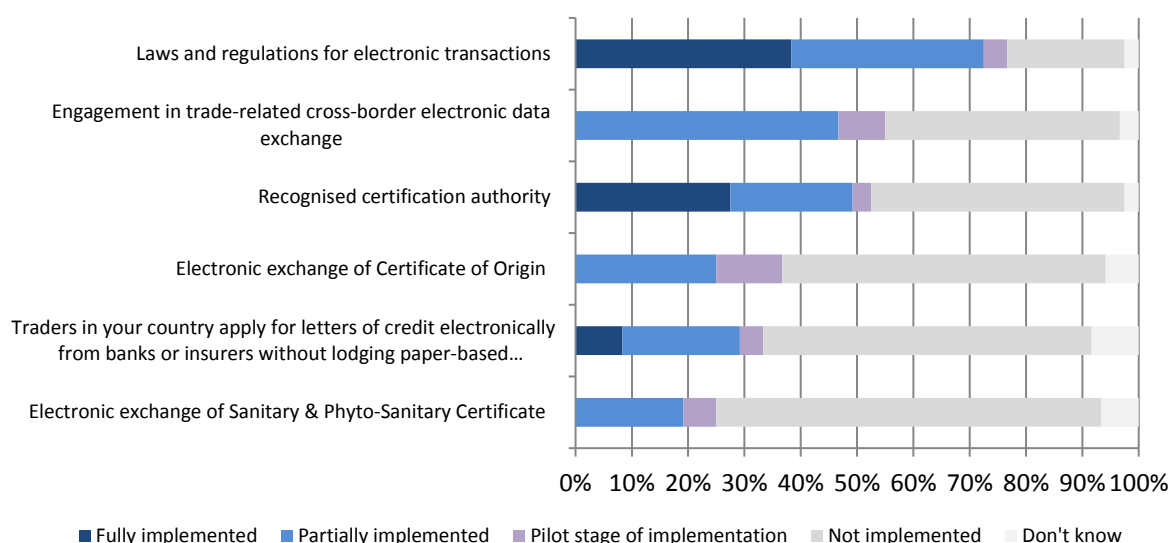


Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Figure 16 shows the average implementation scores for cross-border paperless trade measures across regions. The implementation gap between developing regions and developed economies is very wide for most measures in this category. Whilst progress has been made globally on establishing laws and regulations for electronic transactions, the average implementation of all other measures is very low in all developing regions. Latin America and the Caribbean appears to be ahead of other developing regions in overall engagement in trade-related cross-border electronic data exchange.

Figure 17 shows that more than 70% of the countries surveyed have taken steps to develop the legal and regulatory frameworks needed to support electronic transactions. However, such frameworks have not yet been fully developed in more than half of these economies and may therefore not be conducive to legal recognition of electronic data and documents across borders. In turn, recognized certification authorities, which are needed for issuing electronic signatures, have been fully or partially implemented in less than 50% of the economies. This partly explains why less than 50% of surveyed economies have only partially engaged in trade-related cross-border electronic data exchange and, when doing so, it is essentially on a limited basis with a few trade partners.

Figure 17: Implementation stages of “cross-border paperless trade” measures globally



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

The state of implementation of three advanced cross-border paperless trade measures – (electronic exchange of certificates of origin, applying for letters of credit electronically from banks or insurers without lodging paper-based documents, and electronic exchange of sanitary and phytosanitary certificates) is very low. These measures have been fully or partially implemented in less than 30% of economies surveyed

3.6 Transit facilitation measures

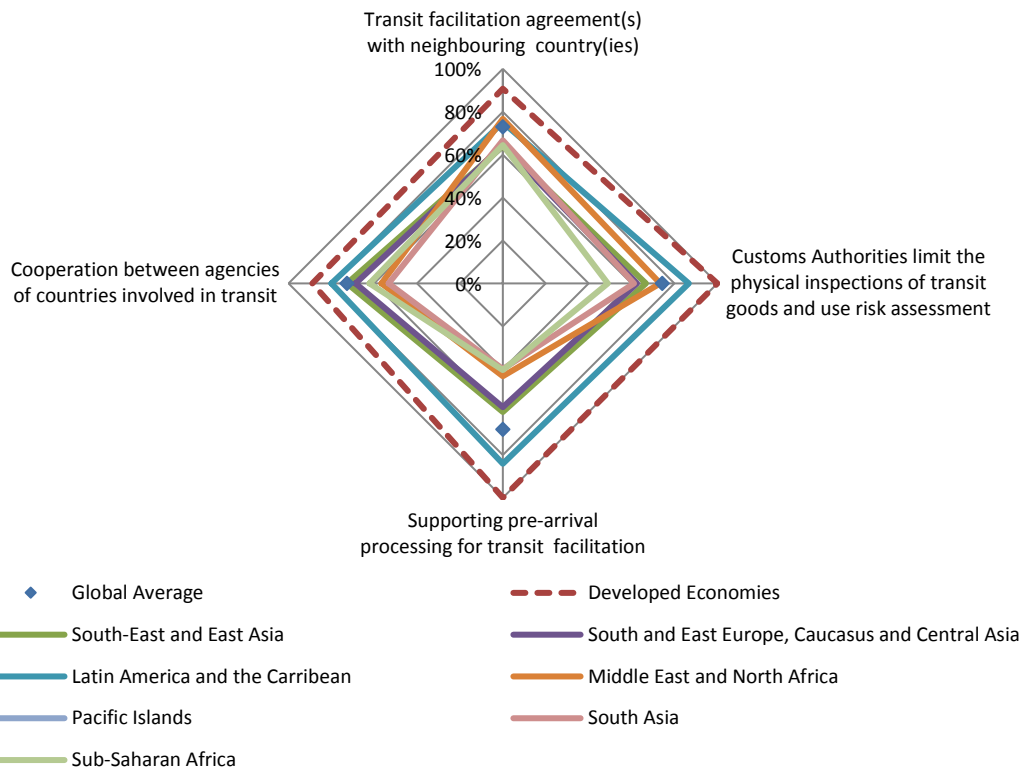
Three trade facilitation measures included in the survey relate specifically to transit facilitation and WTO TFA Article 10 and 11 on *Freedom of Transit*.¹⁷ The intent of these measures is to reduce as much as possible all the formalities associated with traffic in transit to allow goods from one country destined to another country to be seamlessly transported through one or more transit countries. These measures are particularly important to landlocked developing countries whose goods typically need to go through a neighboring country’s territory before reaching their destination.

As shown in Figure 18, the global implementation level of all transit measures exceeds 70%. The average implementation score of developed economies is very high relative to those of developing regions particularly with respect to cooperation between agencies of countries involved in transit.

¹⁷ These measures are not directly applicable to all countries as some countries are unlikely to see any traffic in transit through their territory. This is particularly the case of island countries as well as other countries that face certain geographical constraints. As such, in addition to all economies of the Pacific Islands region, the following economies are excluded from analysis of transit measures: Australia, Bhutan, Comoros, Japan, Madagascar, Maldives, Mauritius, Nepal, New Zealand, Philippines, Republic of Korea, Sri Lanka, and Timor Leste.

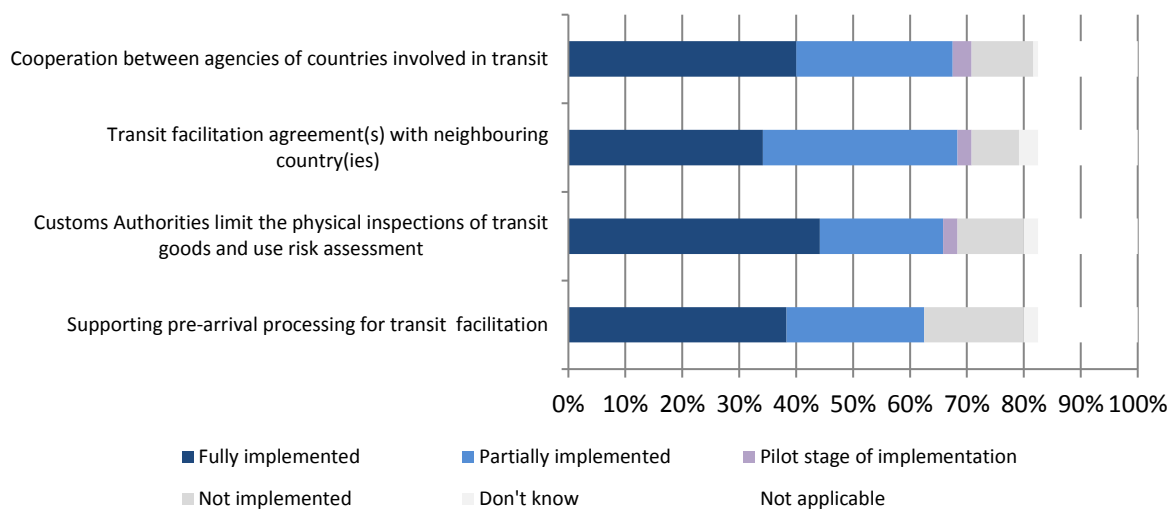
Sub-Saharan Africa is the region with the lowest scores -- most notably, regarding measures supporting pre-arrival processing for transit facilitation which only reach a 40% implementation rate.

Figure 18: Implementation of “transit facilitation” measures in various regions globally



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Figure 19: Implementation stages of “transit facilitation” measures globally (in %)



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Figure 19 reveals that, although all transit facilitation measures considered have been implemented by at least 70% of the economies, full implementation rates remain below 45% in all cases. For example, only 40% of economies have fully achieved cooperation between agencies of countries involved in transit and less than half of customs authorities have fully implemented limited physical inspections of transit goods and use of risk assessment.

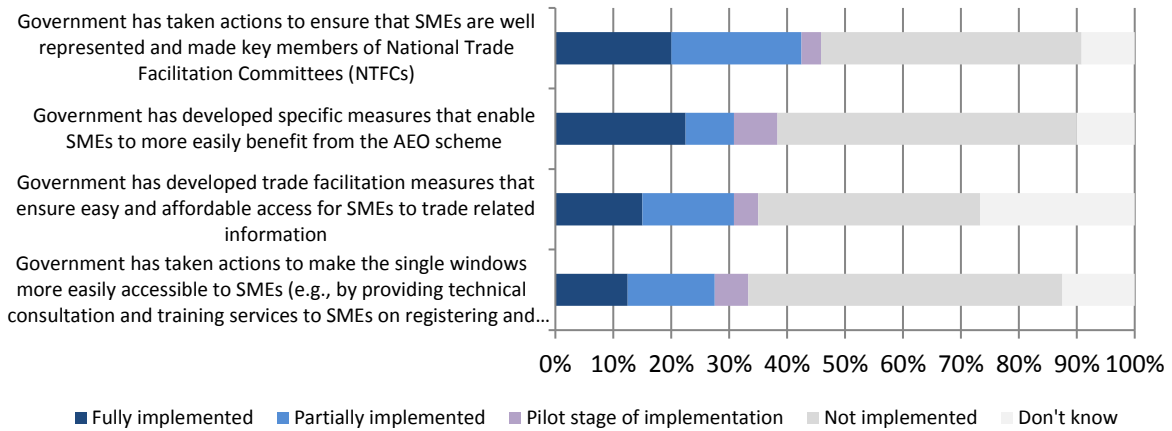
3.7 Trade facilitation and inclusiveness

Compared with the First Global Survey, nine additional trade facilitation measures were included in the Second Global Survey to assess what specific measures for SMEs, agricultural traders and women traders have been put in place by countries to facilitate their participation in trade.

Figure 20 shows that all trade facilitation measures for SMEs, agricultural traders included in the Survey have been implemented - fully, partially or on pilot basis - by more than 30% and 20% of countries, respectively. Trade facilitation measures for women have been the least implemented: implementation rates for the two measures included in the Survey were about 20%. The implementation rates of these measures are strikingly low in comparison with other groups of trade facilitation measures discussed earlier. Furthermore, in the process of data collection, respondents often were not aware of such measures and could not provide any detailed information, which explains data unavailability for some countries surveyed. Such findings show countries need to put efforts for improving these areas to make trade facilitation more inclusive.

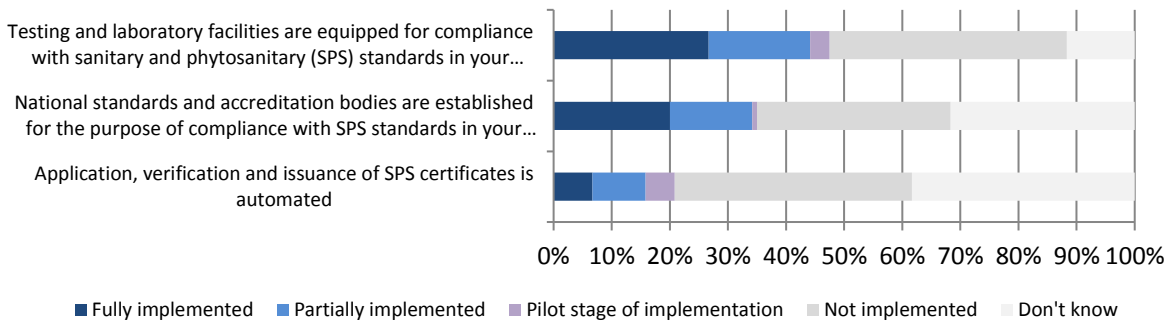
Figure 20: implementation of trade facilitation measures for SMEs, agricultural sector and women in countries globally (in %)

(a) “Trade facilitation and SMEs” measures



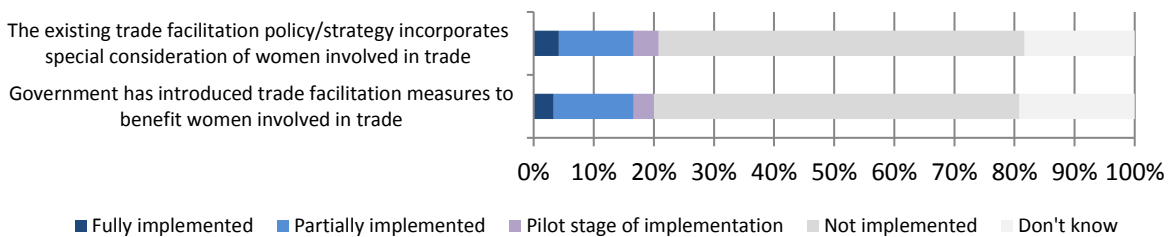
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

(b) “Trade facilitation and agriculture trade” measures



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

(c) “Women and trade facilitation” measures



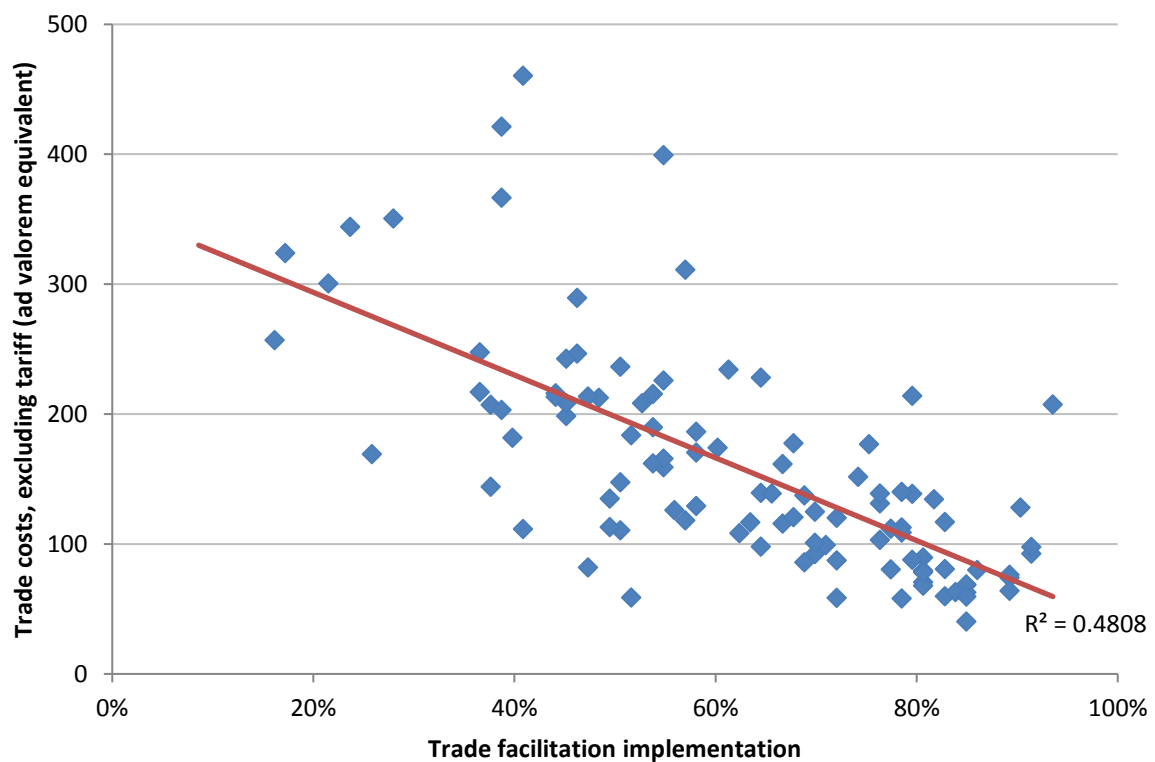
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

4. Conclusions and Way Forward

This report presented data on trade facilitation and paperless trade implementation in 120 countries. The Survey covered implementation of general trade facilitation measures, including many of those featured in the TFA, as well as more advanced ICT-based trade facilitation measures and specific measures tailored for SMEs, the agricultural sector and women involved in trade.

Survey results show a strong relationship between international trade costs and country levels of implementation of these measures¹⁸ and between logistics performance and implementation (see Figures 21 and 22).

Figure 21: Trade facilitation implementation and trade costs

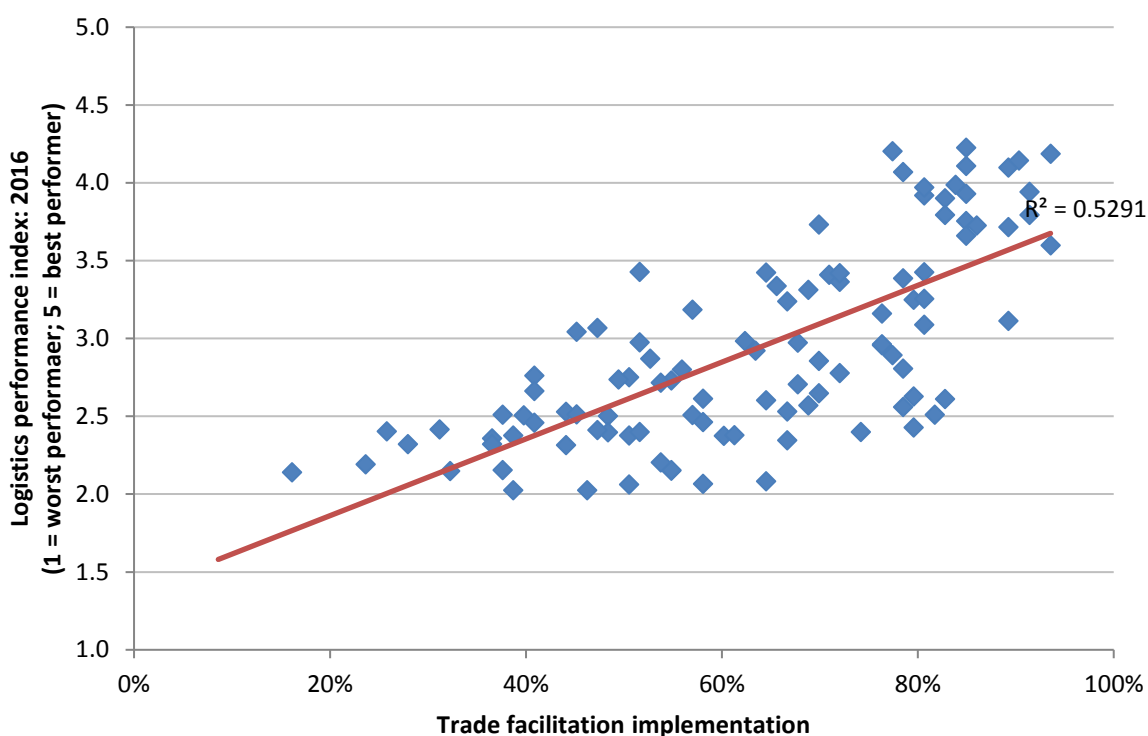


Notes: Countries' trade costs are based on simple average comprehensive bilateral trade costs, excluding tariff, with Germany, Japan and the USA (2010-2015) and expressed as ad valorem equivalents (%).

Source: ESCAP-World Bank Trade Cost Database and the UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

¹⁸ A simple linear regression of trade costs against trade facilitation implementation – estimated using Ordinary Least Squares (OLS) - shows that trade facilitation implementation levels explain about 48% of the variations in trade costs.

Figure 22: Trade facilitation implementation and logistics performance



Source: World Bank Logistics Performance Index 2016 and the UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

The global average trade facilitation implementation score stands at approximately 60%. Most countries worldwide have implemented general trade facilitation measures, which aim at improving transparency, expediting and streamlining formalities, and developing adequate institutional frameworks. This reflects country commitments to implement the Trade Facilitation Agreement.¹⁹

While the global average implementation of paperless trade measures stands close to 50%, the global average implementation level of Cross-border paperless trade (33%) is substantially lower than that of the other groups of measures considered. Indeed, implementation of cross-border (bilateral, subregional, or regional) paperless trade systems remains mostly at the pilot stage. This is because: (i) many developing countries are at an early stage of developing paperless systems, and (ii) more advanced countries have paperless systems not sufficiently harmonized with each other. Given the large potential benefits associated with implementing next generation trade facilitation measures, countries from all groups must work together to develop the legal and technical protocols needed for the seamless exchange of regulatory and commercial data and documents. Efforts in this respect include the ASEAN Single Window initiative,²⁰ the Framework Agreement of the Pacific Alliance initiative which covers trade facilitation and customs cooperation²¹ and the Framework Agreement on

¹⁹ For reference, 17 of the 31 measures discussed in this report can be directly related to TFA commitments (both binding and non-binding). This implies that the minimum implementation rate that an economy would need to achieve to be fully compliant with the TFA stands at about 55% (17/31 = 54.8%). See also Annex 6 – State of implementation of WTO TFA-related measures.

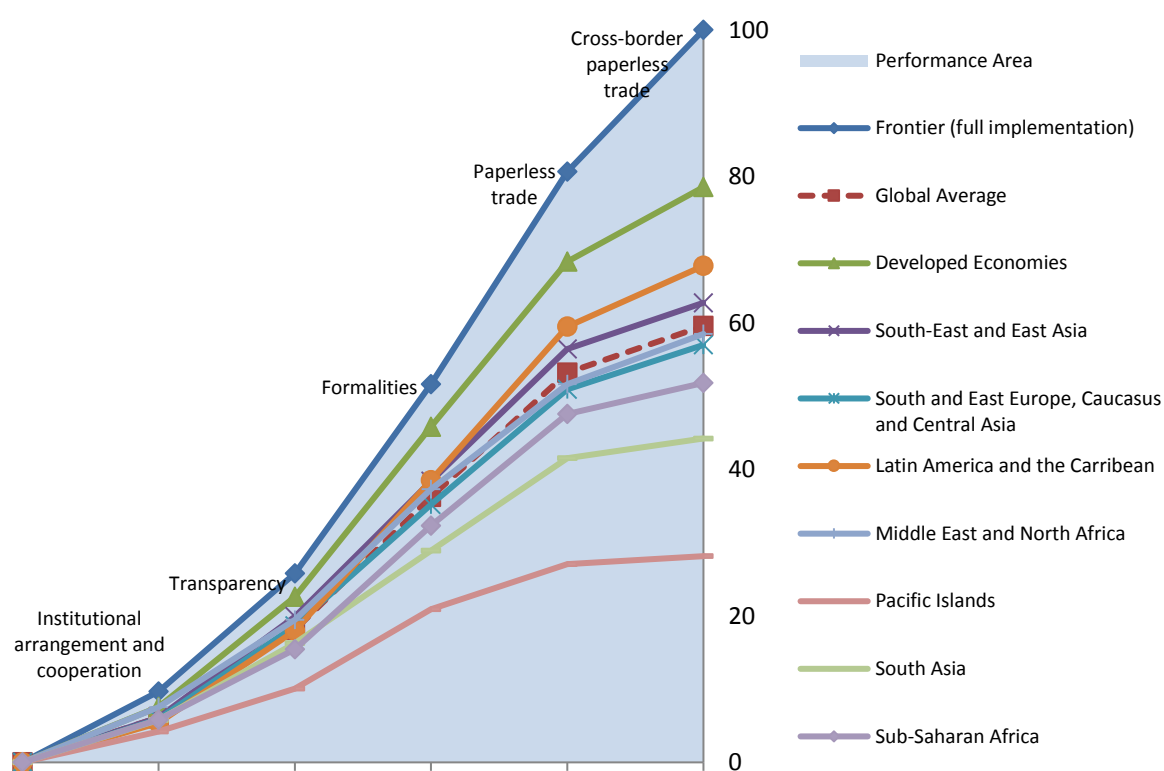
²⁰ <http://asw.asean.org/>

²¹ <http://www.iadb.org/en/topics/trade/trade-facilitation-as-an-engine-of-economic-growth,18206.html>.

Facilitation of Cross-border Paperless Trade in Asia and the Pacific.²² In Africa, the African Alliance for Electronic Commerce and the Pan African Chamber of Commerce and Industry, among others, are working to advocate for wider implementation of paperless trade measures.

Moving forward, digitalization offers immense potential to improve trade facilitation implementation and further reduce trade costs. Figure 23 shows implementation of trade facilitation as a step-by step process,²³ based on the groups of measures included in this survey. Trade facilitation begins with the setting up of the institutional arrangements needed to prioritize and coordinate implementation of trade facilitation measures. The next step is to make the trade processes more transparent by sharing information on existing laws, regulations, and procedures as widely as possible and consulting with stakeholders when developing new ones. Designing and implementing simpler and more efficient trade formalities is next. The reengineered 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.

Figure 23: Moving up the trade facilitation ladder towards seamless international supply chains



Note: Figure shows cumulative trade facilitation implementation scores of Asia-Pacific sub-regions for five groups of trade facilitation measures included in the survey. Scores are based on equally weighted implementation of 31 trade facilitation measures but the number of measures in each of the five groups varies. Full implementation of all measures = 100.

Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

²² <http://www.unescap.org/resources/framework-agreement-facilitation-cross-border-paperless-trade-asia-and-pacific>.

²³ This step-by-step process is based on, and generally consistent with, the UN/CEFACT step-by-step approach to trade facilitation towards a single window environment. In practice, however, trade facilitation measures are often very much interrelated across categories. It is not necessary to implement all measures in one category before moving to the next and, as explained in UNNExT Brief No.17 on *The State of Paperless Trade in Asia-Pacific 2015*, much time and cost can be saved by adopting a more integrated approach based on a long-term vision. See: <http://unnex.unescap.org/pub/brief.asp>.

Annex 1: Definitions of the various stages of implementation

Stages of implementation	Coding/ Scoring
<p>Full implementation: the trade facilitation measure implemented is in full compliance with commonly accepted international standards, recommendations and conventions (such as the Revised Kyoto Convention, UN/CEFACT Recommendations, or the WTO Trade Facilitation Agreement); it is implemented in law and in practice; it is available to essentially all relevant stakeholders nationwide, supported by adequate legal and institutional framework, as well as adequate infrastructure and financial and human resources.</p>	3
<p>Partial implementation: a measure is considered to be partially implemented if at least one of the following is true: (1) the trade facilitation measure is not in full compliance with commonly accepted international standards, recommendations and conventions; (2) the country is still in the process of rolling out the implementation of measure; (3) the measure is practiced on an unsustainable, short-term or ad-hoc basis; (4) the measure is not implemented in all targeted locations (such as key border crossing stations); or (5) not all targeted stakeholders are fully involved.</p>	2
<p>Pilot stage of implementation: a measure is considered to be at the pilot stage of implementation if, in addition to meeting the general attributes of partial implementation, it is available only to (or at) a very small portion of the intended stakeholder group (location) and/or is being implemented on a trial basis. When a new trade facilitation measure is under pilot stage of implementation, the old measure is often continuously used in parallel to ensure the service is provided in case of disruption of new measure. This stage of implementation also includes relevant rehearsals and preparation for the full-fledged implementation.</p>	1
<p>Not implemented: simply means a trade facilitation measure has not been implemented. However, this stage does not rule out initiatives or efforts towards implementation of the measure. For example, under this stage, (pre)feasibility or planning of implementation can be carried out; and consultation with stakeholders on the implementation may be arranged.</p>	0

Annex 2: Groupings of countries with special needs

The following countries are included in the three groups of countries with special needs considered in this survey report:²⁴

- *Least Developed Countries (LDCs)*: Afghanistan, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Djibouti, Democratic Republic of Congo (DRC), Guinea, Kiribati, Lao PDR, Lesotho, Madagascar, Mali, Mongolia, Myanmar, Nepal, Paraguay, Solomon Islands, Sudan, Timor-Leste, Tuvalu, Uganda, Vanuatu and Yemen.
- *Landlocked developing countries (LLDCs)*: Afghanistan, Armenia, Azerbaijan, Bhutan, Burkina Faso, Burundi, Kazakhstan, Kyrgyzstan, Lao PDR, Lesotho, The Former Yugoslav Republic of Macedonia, Mali, Moldova, Mongolia, Nepal, Paraguay, Swaziland, Tajikistan, Uganda, Uzbekistan, and Zimbabwe.
- *Small Island Developing States (SIDSs)*: Antigua and Barbuda, Cuba, Dominican Republic, Fiji, Jamaica, Kiribati, Maldives, Micronesia, Nauru, Palau, Papua New Guinea, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Samoa, Singapore, Solomon Islands, Timor-Leste, Tonga, Trinidad and Tobago, Tuvalu and Vanuatu.²⁵

²⁴ More details are available at http://unohrlls.org/UserFiles/1_countries_with_special_needs.pdf.

²⁵ It is important to note that Afghanistan, Bhutan Burkina Faso, Burundi, Lao PDR, Lesotho, Mali, Mongolia, Nepal, Paraguay and Uganda are both LDCs and LLDCs, while Kiribati, Solomon Islands, Timor-Leste, Tuvalu and Vanuatu are both LDCs and SIDSs.

Annex 3: Explanatory notes

1. In the process of validating the survey data in 2017, data collected in the first global survey in 2015 were also reviewed and any errors were corrected.
2. Any missing data element is treated as "don't know" (DK).
3. "Not applicable" (NA) was accepted as an answer for the following measures as geographical factors may not permit a country to implement such measures:

Measure 20: Electronic Submission of Sea Cargo Manifests

Measure 33: Alignment of working days and hours with neighbouring countries at border crossings

Measure 34: Alignment of formalities and procedures with neighbouring countries at border crossings

Measure 35: Transit facilitation agreement(s) with neighbouring country(ies)

Measure 36: Customs Authorities limit the physical inspections of transit goods and use risk assessment

Measure 37: Supporting pre-arrival processing for transit facilitation

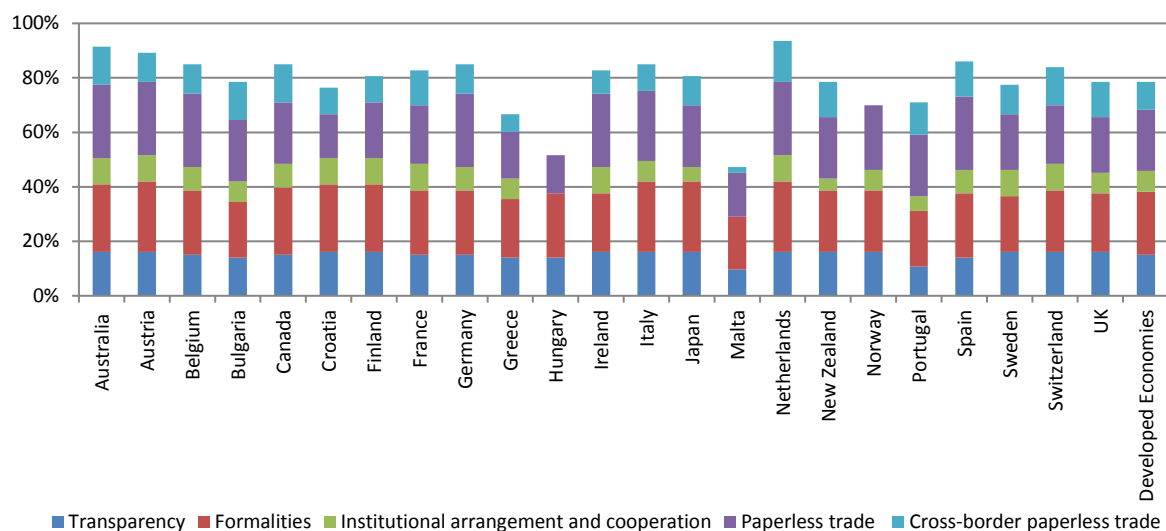
Measure 38: Cooperation between agencies of countries involved in transit

In calculating overall implementation rate of a country, these measures were excluded. Furthermore, Measures 39-47 were excluded for calculating the overall implementation rate of a country due to incompleteness of the dataset. Finally, the scores of cross-border paperless trade measures 27-29 were adjusted to no more than 2 considering the developing countries is largely paper-based in conducting international trade which decides the way when they trade with more paperless countries.

4. The Global dataset was finalized on 25 August 2017 after receiving data from the UNRCs on the following dates:
 - a. UNECA: 7 July 2017
 - b. UNECE: 24 August 2017
 - c. UNECLAC: 22 August 2017
 - d. UNESCAP: 12 August 2017
 - e. UNESCWA: 3 July 2017

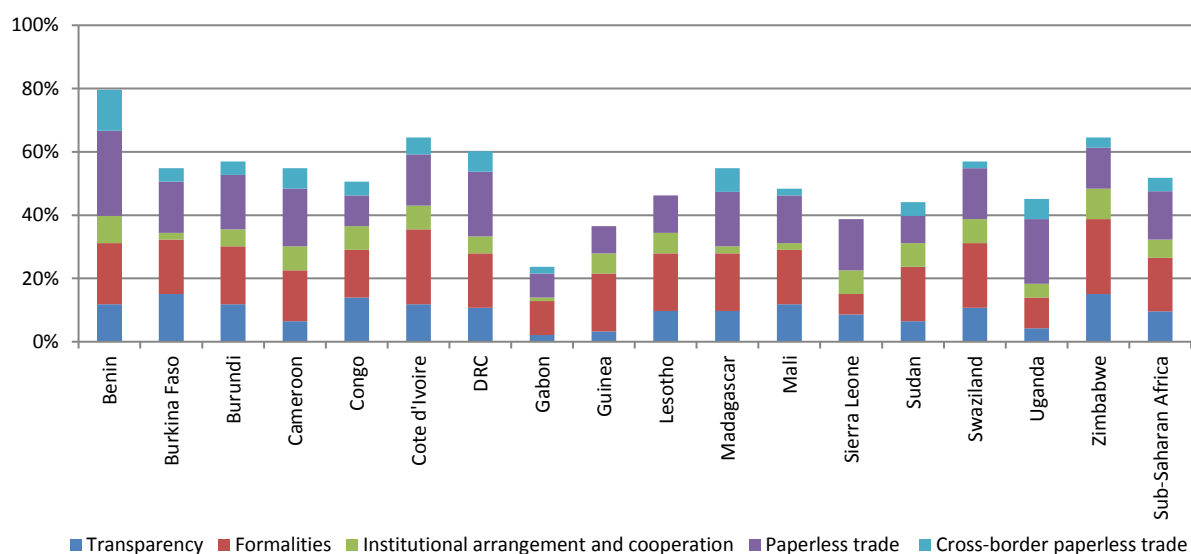
Annex 4: Trade Facilitation Implementation by countries in different groups (%)

Developed economies



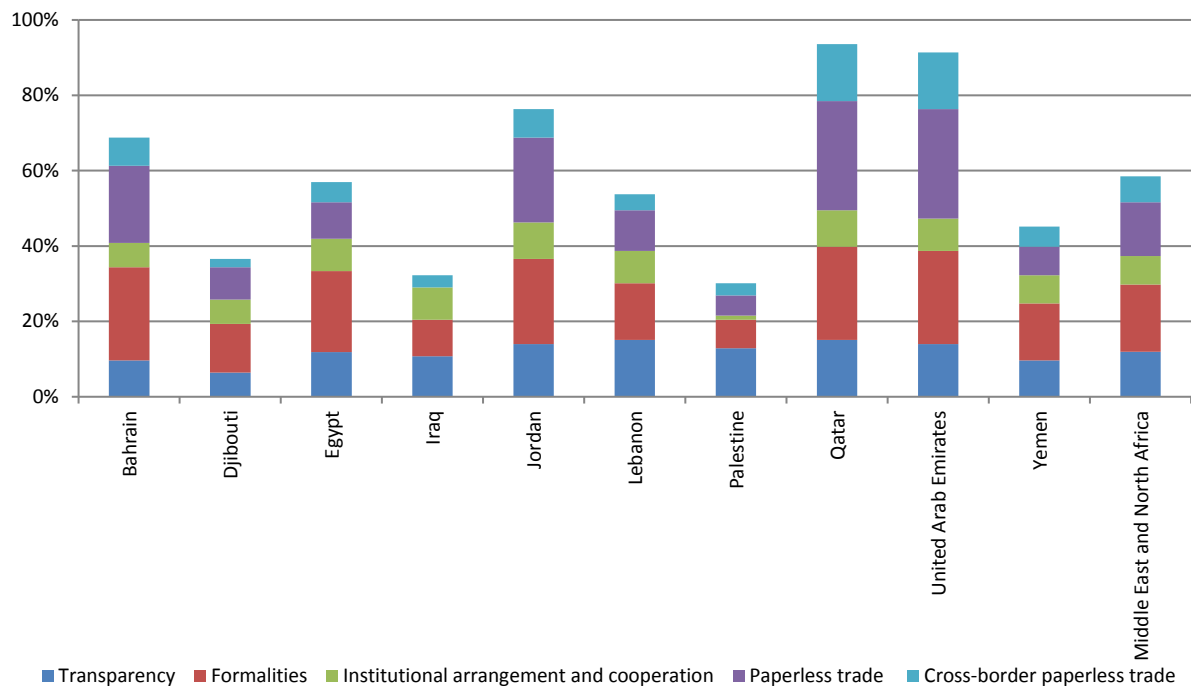
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Sub-Saharan Africa



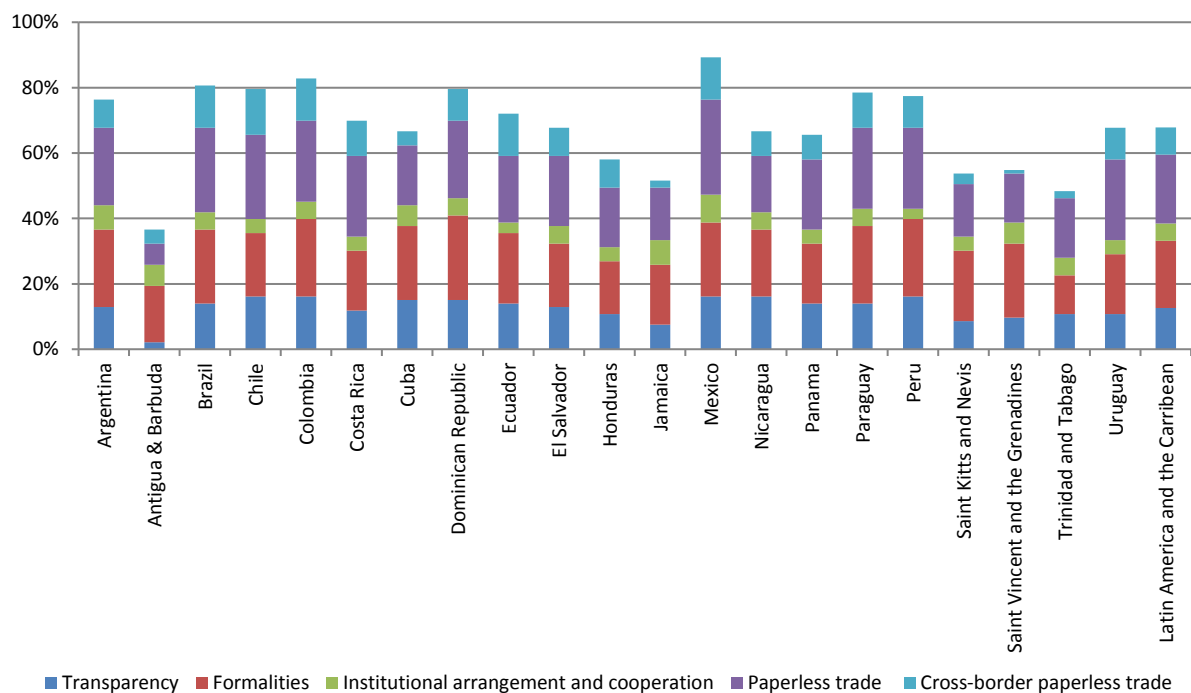
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Middle East and North Africa



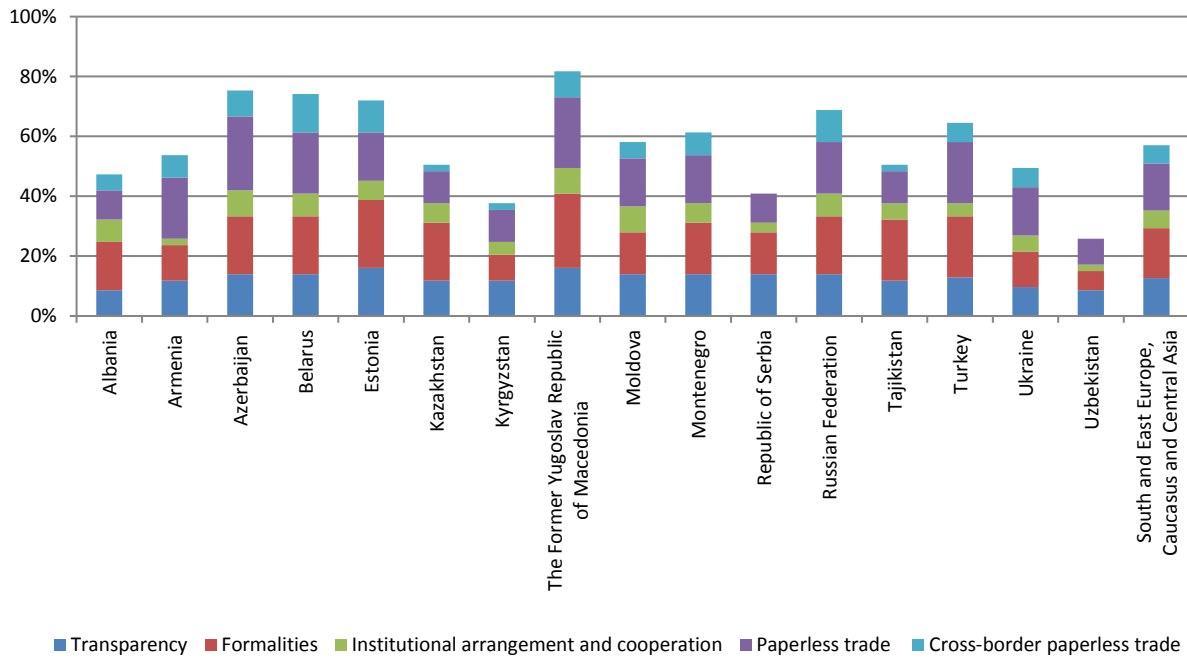
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Latin America and the Caribbean



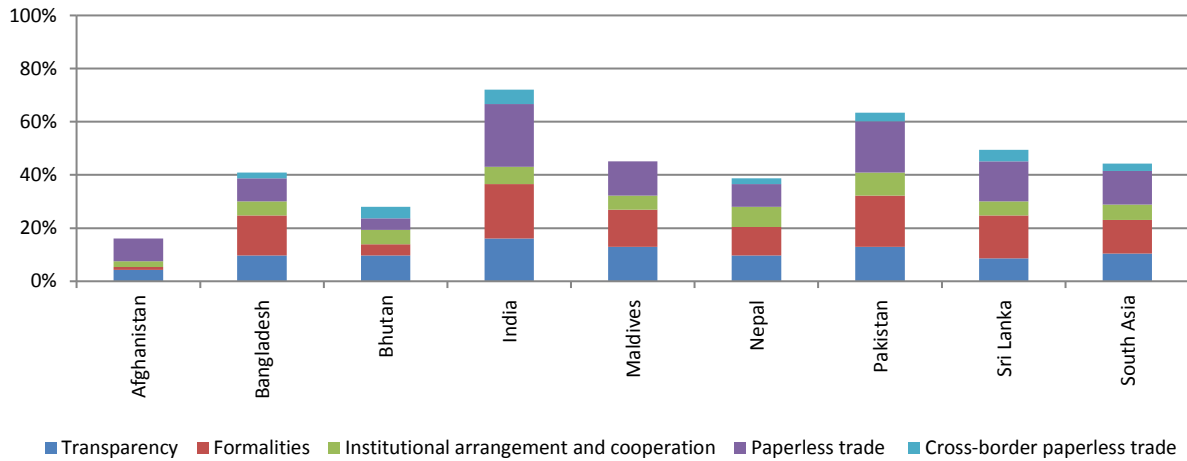
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

South and East Europe, Caucasus and Central Asia



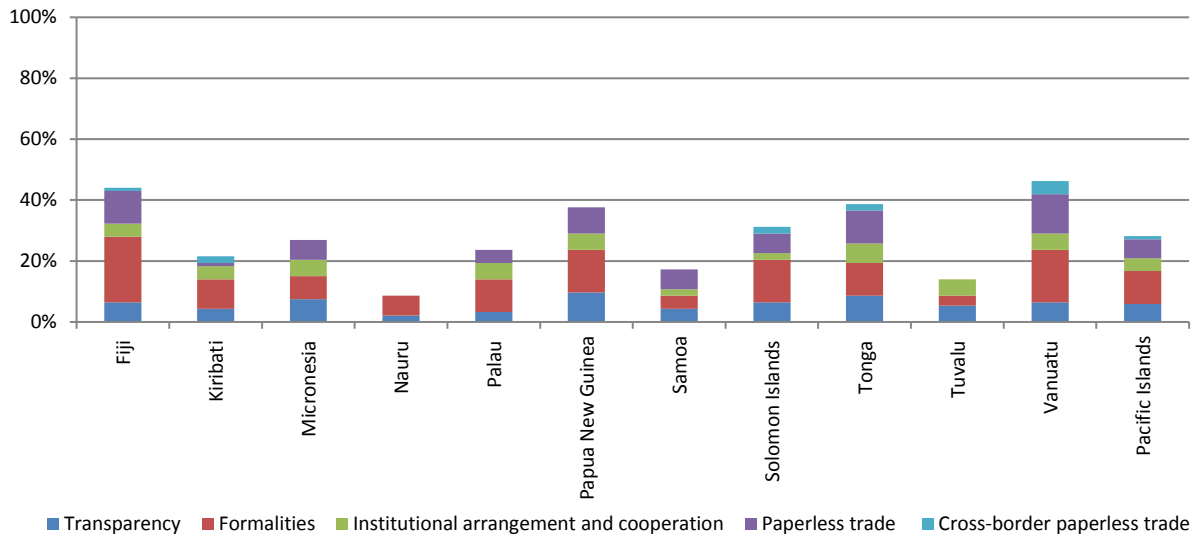
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

South Asia



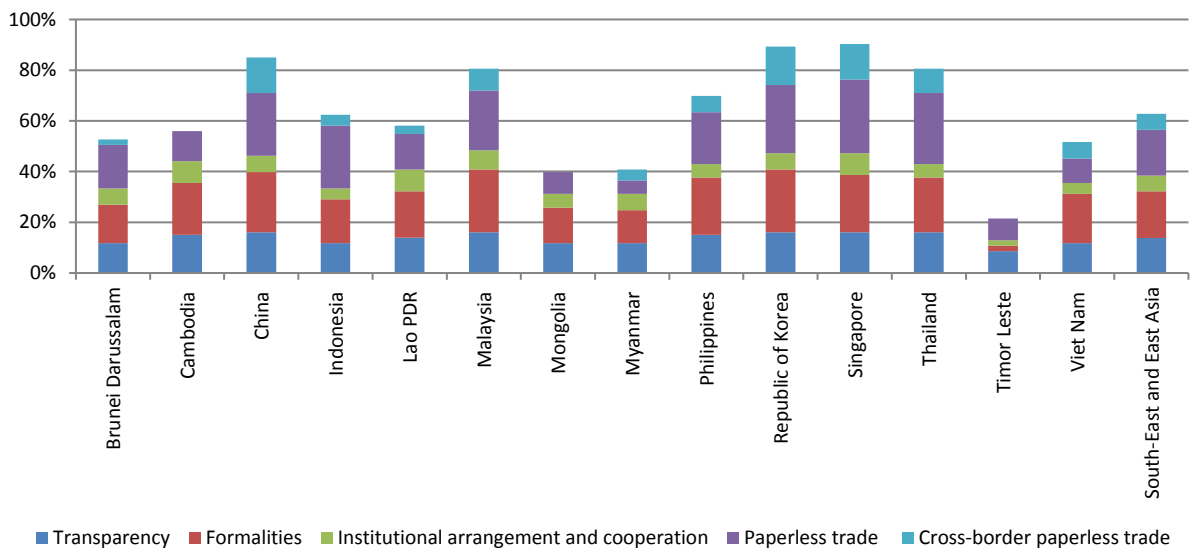
Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Pacific Islands



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

South-East and East Asia



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

Annex 5: Trade Facilitation Implementation: full dataset versus limited dataset

To track the progress made by countries in the implementation of trade facilitation measures since 2015, the analysis was limited to those 99 countries that participated in both the First and Second Global Surveys (as shown below)

(a) Country list

1	Afghanistan	26	Ecuador	51	Maldives	76	Samoa
2	Armenia	27	Egypt	52	Mali	77	Singapore
3	Australia	28	El Salvador	53	Mexico	78	Solomon Islands
4	Austria	29	Fiji	54	Micronesia	79	Spain
5	Azerbaijan	30	Finland	55	Mongolia	80	Sri Lanka
6	Bahrain	31	France	56	Montenegro	81	Sudan
7	Bangladesh	32	Germany	57	Myanmar	82	Sweden
8	Belgium	33	Greece	58	Nauru	83	Switzerland
9	Benin	34	Honduras	59	Nepal	84	Tajikistan
10	Bhutan	35	Hungary	60	Netherlands	85	Thailand
11	Brazil	36	India	61	New Zealand	86	Timor Leste
12	Brunei Darussalam	37	Indonesia	62	Nicaragua	87	Tonga
13	Bulgaria	38	Iraq	63	Pakistan	88	Trinidad and Tabago
14	Burkina Faso	39	Ireland	64	Palau	89	Turkey
15	Cambodia	40	Italy	65	Palestine	90	Tuvalu
16	Cameroon	41	Japan	66	Panama	91	Uganda
17	Chile	42	Jordan	67	Papua New Guinea	92	Ukraine
18	China	43	Kazakhstan	68	Paraguay	93	United Arab Emirates
19	Colombia	44	Kiribati	69	Peru	94	Uruguay
20	Congo	45	Kyrgyzstan	70	Philippines	95	Uzbekistan
21	Costa Rica	46	Lao PDR	71	Portugal	96	Vanuatu
22	Côte d'Ivoire	47	Lebanon	72	Qatar	97	Viet Nam
23	Croatia	48	Lesotho	73	Republic of Korea	98	Yemen
24	Djibouti	49	Madagascar	74	Republic of Serbia	99	Zimbabwe
25	Dominican Republic	50	Malaysia	75	Russian Federation		

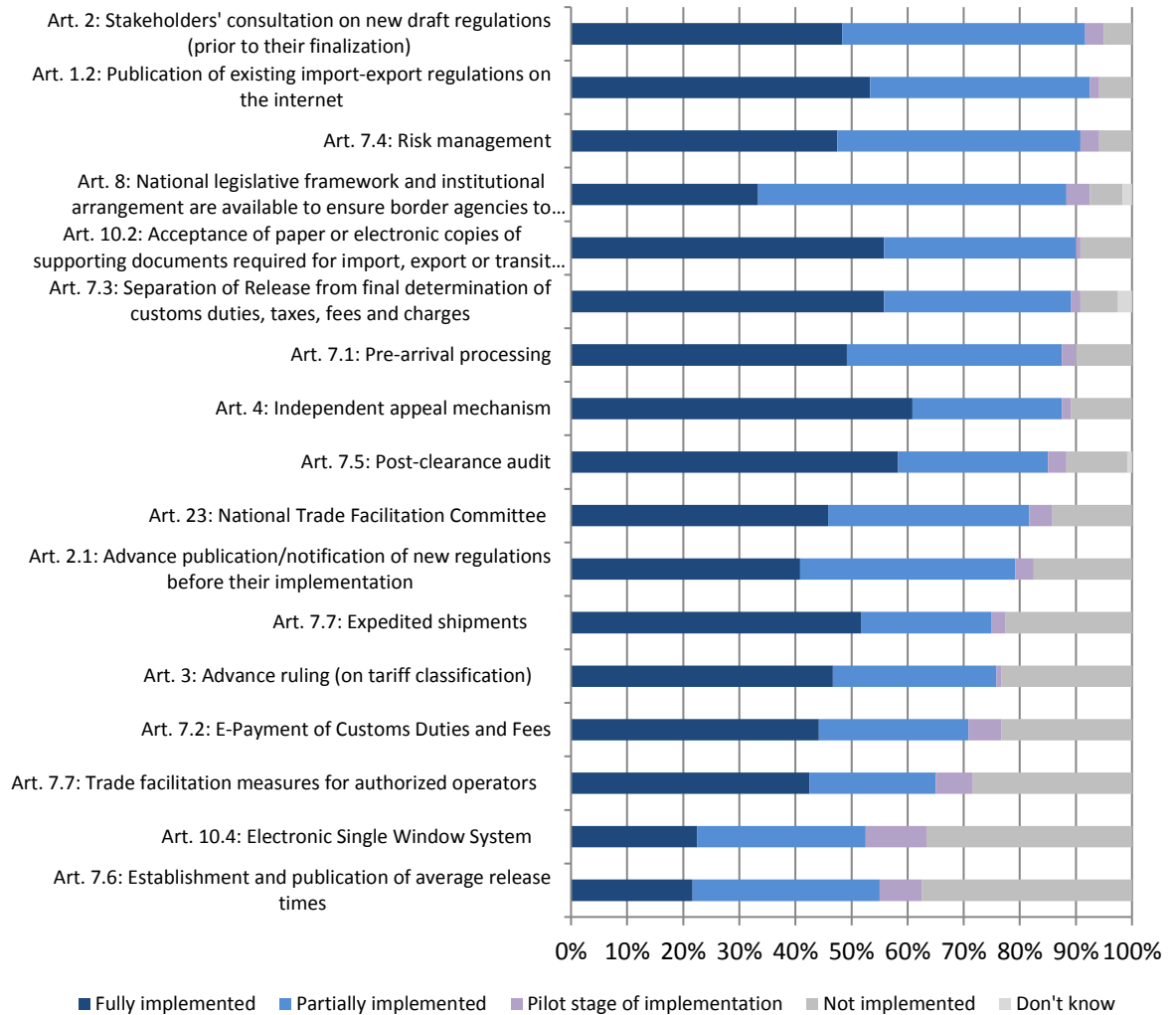
The study team also checked whether the implementation rate of these 99 countries and that of the full dataset (120 countries) were similar. The table below shows that the difference is minor, indicating that these 99 countries were good representatives of the survey results of 2017.

(b) Comparison of regional average: full versus limited dataset

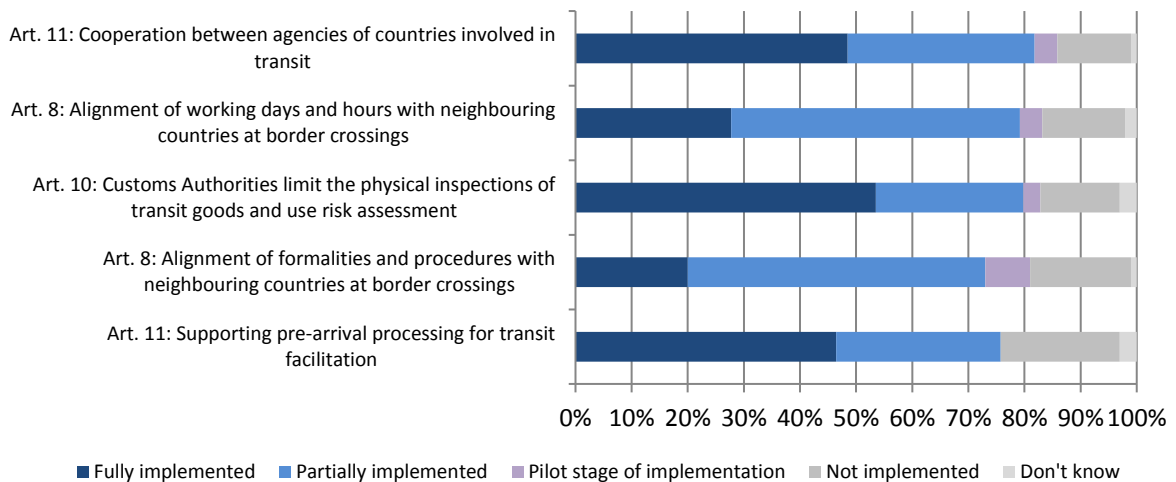
2017 data	Developed Economies	South-East and East Asia	South and East Europe, Caucasus and Central Asia	Latin America and the Caribbean	Middle East and North Africa	Pacific Islands	South Asia	Sub-Saharan Africa	Global Average
Limited dataset (99)	80.3%	62.7%	52.6%	72.3%	58.5%	28.2%	44.2%	55.2%	59.8%
Full dataset (120)	78.5%	62.7%	57.0%	67.8%	58.5%	28.2%	44.2%	51.8%	59.6%

Annex 6: Implementation stages of selected WTO TFA-related measures globally

(a) General trade facilitation and paperless trade



(b) Transit facilitation



Source: The UN Global Survey on Trade Facilitation and Paperless Trade Implementation 2017.

