Readiness Assessment for Cross-Border Paperless Trade:
Tonga

UNITED NATIONS ESCAP

Economic and Social Commission for Asia and the Pacific

Readiness Assessment for Cross-Border Paperless Trade: TONGA

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Acknowledgements

Executive Summary

This report provides an assessment of Tonga's readiness for cross-border paperless trade, i.e., the conducting of international trade on the basis of electronic data and documents. The report provides a brief overview of trade facilitation implementation in Tonga, followed by findings from the technical and legal readiness assessments for cross-border paperless trade. This report continues with recommendations on both technical and legal aspects of cross-border paperless trade, followed by an action plan as a way forward for Tonga.

Tonga has made some progress in terms of supporting and implementing several initiatives that will pave the way for Tonga to participate in cross-border paperless trade. However, most of the initiatives are at an early stage with much progress to be made in order to enable cross-border electronic data exchange for trade-related data and documents. According to the UN Global Survey on Digital and Sustainable Trade Facilitation, with regards to "paperless trade"; Tonga has partially introduced measures but it has implemented very few cross-border paperless trade measures. Tonga faces various bottlenecks that impede its movement towards cross-border paperless trade. These include the existing trade system that is heavily reliant on manual processes for digital formats, highly cash-based society norms, and delays in the customs clearance and handling process due to crime prevention measures and COVID-19 restrictions.

Figure 1: Cumulative implementation score of core groups of trade facilitation measures, 2021
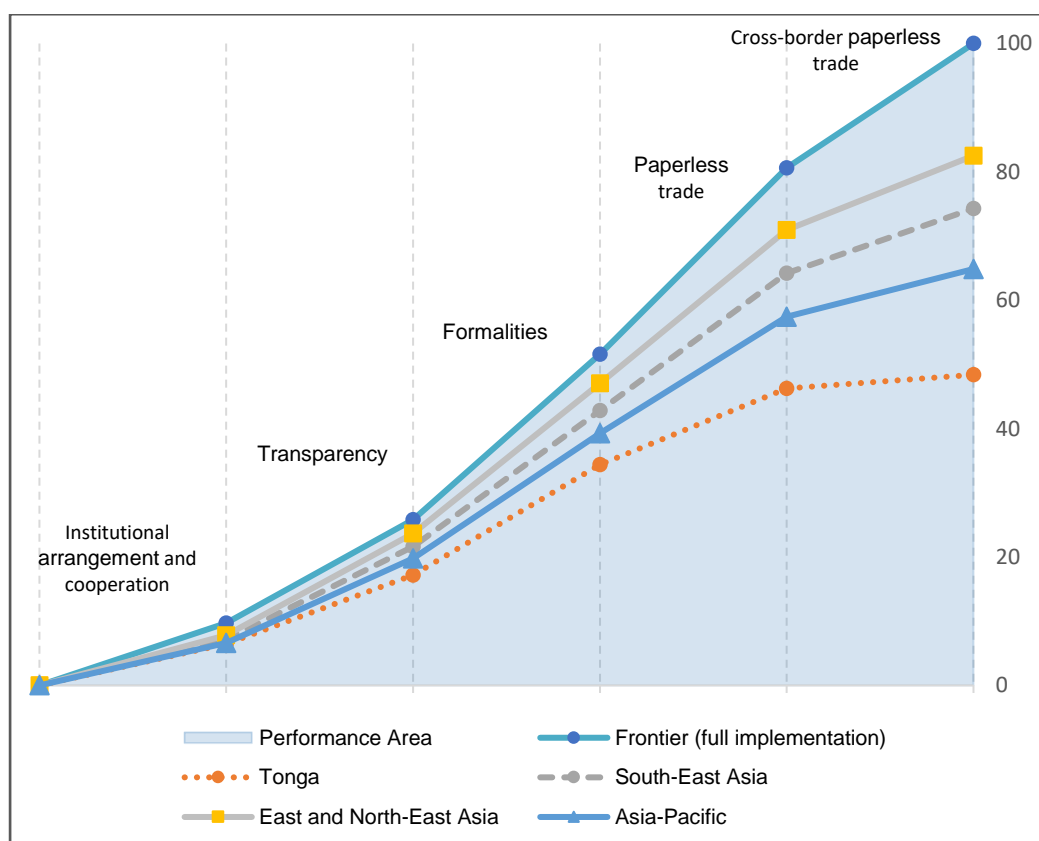
Note: Maximum possible implementation score is 100.
Source: United Nations Global Survey on Digital and Sustainable Trade Facilitation, untfsurvey.org, 2021

Readiness assessment for cross-border paperless trade conducted in Tonga found that the country is at an early stage of implementing paperless trade systems in technical areas. The governance structure is currently in the process of being fully established and Tonga continues to follow through a strong manual process. The ICT infrastructure, which is crucial for paperless trade systems, is still impeded with fragmented and limited network services. There has been continued progress in improving the ICT infrastructure, supported by the National ICT Project. However, the recent unfortunate tsunami is a reminder of Tonga's need to have a reliable Internet connectivity back-up service in the case of natural disasters. Tonga has not conducted business process re-engineering and is in the preliminary stages of data harmonization and standardization. It has only started limited capacity-building activities on ASYCUDA systems. It has very limited activities on cross-border data exchange, once again at the preliminary stage with ASYCUDA system, only being introduced recently.

On the legal side, Tonga also has much progress to make towards cross-border paperless trade. The existing frameworks in Tonga pertaining to the legal and institutional policies related to paperless trade are out-of-date. Tonga has an Evidence Act that recognizes electronic signatures in transactions. However, the main gap identified in e-transaction laws in Tonga is that there is no specific legislation to recognize electronic transmissions. In addition, as the primary legislation protecting consumers, the Consumer Protection Act does not provide specific protection for online transactions. To date, there are no laws in Tonga that expressly permit the admissibility of electronic evidence in the county's court system. There is also no law on electronic signatures, electronic transmissions, information exchange via online nor service level agreements among ministries for data sharing or exchange. Tonga also lacks adequate laws in the area of ownership of information, liability issues, dispute settlement, electronic payments and competitive law.

Over the years, the Government of Tonga has shown commitments to the development of upgraded paperless trade legal and institutional frameworks, with draft Bills on privacy and electronic transactions. However, due to competing government priorities, these Bills have not been processed through the government legislative process. There are also some engagements on cross-border aspects, specifically via its participation in the PACER+ Agreement and the WTO membership – although it has yet to ratify the Trade Facilitation Agreement.

A list of recommendations and an action plan is presented in this report, based on these findings. First, on the technical side, Tonga is recommended to undertake the development of government policies and direction to strengthen the components that will drive cross-border paperless trade, including both public and private stakeholders. Second, it is recommended that Tonga expedite the implementation of the ASYCUDA World System and enable the relevant ministries to be made ICT-enabled so that they can be connected to the ASYCUDA systems. Third, it is recommended that Tonga finalize a strategic plan and guidelines on business continuity of Information and communication technology (ICT) as well as establish partnership in the deployment of ICT networks. Fourth, it is recommended carrying out business process re-engineering, data harmonization as well as capacity-building activities.

On legal side, Tonga needs to establish and amend laws to support national and cross-border trade-related data exchange. Tonga needs to continue pushing to amend its Bills and pass the laws pertaining to electronic transaction as well as the Consumer Protection Act and Computer Crimes Bill. In addition, it should consider establishing electronic data protection and privacy laws and a National Single Window law. Also, the Government of Tonga should proactively review current and potential multilateral and bilateral trade agreements to align to a cross-border paperless trade system. Tonga should ensure that laws allow electronic payments for all purposes and give provision to all participants in international trade transactions.

For cross-border paperless trade to continue developing in Tonga, the crucial constraints highlighted in this report need to be addressed through a comprehensive and collaborative effort from both the public and private sectors.

To facilitate reforms, it is recommended that Tonga accede to the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific ("Framework Agreement") as soon as possible. By doing so, Tonga can more effectively plan and implement its trade digitalization strategy, and ensure the activities prioritized under the Framework Agreement are fully aligned with its needs. The Framework Agreement will assist Tonga to develop its national capacity, design a long-term plan, engage in pilot exchange of selected data and documents, and keep abreast of emerging legal standards and solutions in the area of cross-border paperless trade.

The readiness assessments, together with the action plan featured in this report, provide a foundation for elaborating more detailed activities at the national and agency levels in this area, with identifiable timelines and budget sources. It is hoped that this report will contribute to the Government of Tonga's quest to accelerate progress towards cross-border paperless trade, including through its accession to the Framework Agreement.

Contents

Table of Figures

Table of Boxes

Abbreviations

ADB	Asian Development Bank
AGO	Attorney General's Office
ANZ	Australia New Zealand Bank
ASYCUDA	UNCTAD Automated System for Customs Data
ATS	Airport Transport Services
BSP	Bank of South Pacific
DFAT	Department of Foreign Affairs and Trade
CERT	National Computer Emergency Response Team
GDP	gross domestic product
ICT	Information and Communications Technology
ISP	Internet service provider
IT	information technology
MDAs	ministries, departments and agencies
MEIDECC	Ministry of Meteorology, Environment, Information, Disaster Management, Energy, Climate Change and Communications
MET	Ministry of Education and Training
MIA	Ministry of Internal Affairs
MIC	Ministry of Information and Communications
MINOFA	Ministry of Foreign Affairs
MOF	Ministry of Finance
MOI	Ministry of Infrastructure
MOJ	Ministry of Justice
MPE	Ministry of Public Enterprises
MORC	Ministry of Revenue and Customs
MTED	Ministry of Trade and Economic Development
NEMO	Tonga National Emergency Management Office
NICT	National ICT Project
PACER+	Pacific Agreement on Closer Economic Relations Plus
PEs	public enterprises
PICs	Pacific Island Countries
PIFS	Pacific Islands Forum Secretariat
PMO	Prime Minister's Office
PPP	Public-Private Partnership
TCC	Tonga Communications Corporation
TCCI	Tonga Chamber of Commerce and Industry
TCL	Tonga Cable Limited
TDB	Tonga Development Bank
TOP	Tonga Pa'anga
TP	Tonga Post
TSDF	Tonga Strategic Development Framework (I= first; II = second)

UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNESCAP	United Nations Economic and Social Commission for Asia Pacific
UPU	Universal Postal Union
US	United States of America
US$	United States dollar
USP	University of the South Pacific
WB	World Bank
WCO	World Customs Organization
WTO	World Trade Organization

I. Introduction

This report provides an assessment of Tonga's readiness for cross-border paperless trade, i.e., the conducting of international trade transactions on the basis of electronic data and documents, as opposed to paper-based data and documents. There are huge economic benefits with the successful implementation of cross-border paperless trade, including the reduction of transaction costs by 25% across the Asia and the Pacific region as well as increasing regulatory compliance, reducing illicit financial flows and facilitating an increased digital global economy.[1] Tonga is the first Pacific country to conduct the readiness assessment for cross-border paperless trade.

The assessment was conducted by a team of experts following readiness checklists developed by the ESCAP Interim Intergovernmental Steering Group on Cross-Border Paperless Trade Facilitation, of which Tonga is a member.[2] The team started conducting the readiness assessment with a preparatory national consultation in August 2021.[3] Based on the collected checklists data and the research conducted on the technical and legal environments,[4] the experts drafted a readiness assessment report. A national consultation on facilitating cross-border paperless trade was co-organized with the Ministry of Trade and Economic Development on 10 March 2022, when the preliminary findings as well as recommendations and the draft action plan were further reviewed, consolidated and validated.[5] All inputs from these interviews and consultations are incorporated in this report.

It is envisioned that this report will contribute to the Government of Tonga's efforts to accelerate progress towards cross-border paperless trade, including its ratification of the related regional Framework Agreement (see box 1 for further details). It is also hoped that the report will contribute to supporting Tonga in utilizing trade for Tonga's overall economic growth and sustainable development.

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[1] ADB-ESCAP (2019). Asia-Pacific Trade Facilitation Report, 2019. Available at
https://www.unescap.org.resources/asia-pacific -trade-facilitation-report-2019-bridging-trade-finance-gaps-through-technology
[2] Interim Intergovernmental Steering Group on Cross-border Paperless Trade Facilitation. Available at
https://www.unescap.org/event-series/cross-border-paperless-trade-facilitation
[3] Preparatory National Consultation meeting for the readiness assessment on cross-border paperless trade: Tonga. Available at https://www.unescap.org/events/2021/preparatory-national-consultation-meeting-readiness-assessment-cross-border-paperless
[4] The list of stakeholders interviewed is given in Annex I.
[5] National Consultation on Facilitating Cross-border Paperless Trade: Tonga. Available at
https://www.unescap.org/events/2022/national-consultation-facilitating-cross-border-paperless-trade-tonga

Box 1: The Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific

The Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (CPTA), a United Nations treaty, aims to promote cross-border paperless trade by enabling the exchange and mutual recognition of trade-related data and documents in electronic form, and facilitating interoperability among national and subregional Single Windows and/or other paperless trade systems. It is designed as an inclusive and enabling platform that will benefit all participating economies, regardless of where they stand in terms of trade facilitation or Single Window/paperless trade implementation.

The treaty was adopted by the ESCAP members in 2016. On 20 February 2021, it entered into force, indicating ESCAP members' continued efforts to accelerate trade digitalization in the region. As stated in Article 19 of the Agreement, it entered into force 90 days after the date on which the Governments of at least five ESCAP member States had deposited their instruments of ratification or accession. Azerbaijan acceded in March 2018 and the Philippines acceded in December 2019. The Islamic Republic of Iran ratified in May 2020, Bangladesh ratified in October 2020 and China, as the fifth country, ratified in November 2020. Timor-Leste and Turkmenistan also acceded in April and May 2022, respectively. In addition, Armenia and Cambodia signed in 2017. Furthermore, several other ESCAP member States are in the process of completing their domestic processes for accession.

Paperless trade makes international trade more efficient and transparent while improving regulatory compliance, particularly if trade-related data and documents in electronic form are exchanged across borders. Paperless trade may therefore be the solution of choice to address Tonga's trade facilitation needs, in particular in the context of a rapidly digitalizing global economy. Benefits of acceding to the Framework Agreement include:

- Accelerated progress towards a digital and paperless trade environment at the national level, with the opportunity to integrate emerging cross-border paperless trade considerations and best practices early in the development of national Single Windows and other paperless trade systems;
- A reduction in overall investment costs and maximization of returns from investments in paperless trade systems, through concurrent development of national paperless trade systems and environment for cross-border trade data exchange;
- Increased opportunities for capacity-building through training, workshops and knowledge-sharing platforms as well as easier access to information, knowledge and resources to achieve full digital implementation of the World Trade Organization (WTO) Trade Facilitation Agreement;
- Direct participation in the development of pragmatic solutions for the cross-border exchange of trade documents. For more advanced countries with relevant experience and existing practices, this will enable them to ensure that new regional systems and solutions will be harmonized and interoperable with what they have already achieved on a bilateral and/or subregional basis;
- Compliance with commitments a Party may have made through in its bilateral and plurilateral trade agreements, such as regional trade agreements (RTAs) to collaborate on exchanging electronic of data and documents (typically featured in "Paperless Trading" Articles in RTAs, or related provisions or agreements).

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For additional information, please see http://bit.ly/ESCAP_FA

The report is structured as follows. Section II provides a brief background on the state of trade facilitation and paperless trade implementation in Tonga. In sections III and IV, the report looks at the findings from the technical and legal readiness assessment for cross-border paperless trade in Tonga. Section V provides recommendations both for the technical and legal aspects of cross-border paperless trade as a result of the assessment. This is followed in section VI by the introduction of an initial action plan. The report ends with a brief discussion of a way forward in section VII.

II. Trade facilitation and paperless trade implementation in Tonga

This section reviews the current state of Tonga in terms of trade facilitation and paperless trade implementation based on the UN Global Survey on Digital and Sustainable Trade Facilitation.

II.A. Tonga in the 2021 UN Global Survey on Digital and Sustainable Trade Facilitation

According to the results of the survey, Tonga has only implemented the trade facilitation measures in limited manners, with an overall trade facilitation implementation rate of 48%, which is far below the regional average at 65% (as per figure 1).

Figure 2: Overall implementation of trade facilitation measures in 46 Asia-Pacific countries, 2021
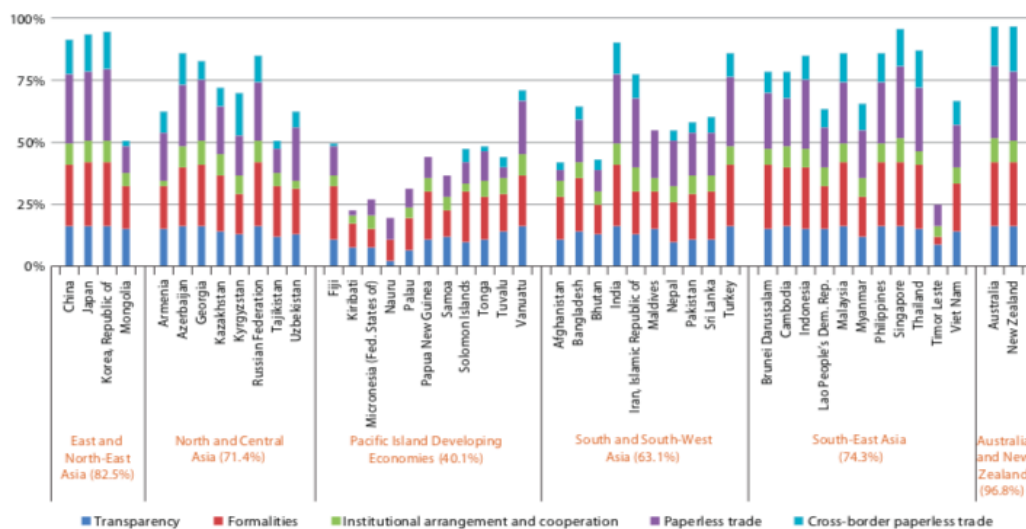
Source: UN Global Survey on Digital and Sustainable Trade Facilitation, 2021; Untfusurvey.org

Among the eight core groups of trade facilitation (figure 2), Tonga's implementation of "formalities", "institutional arrangement and co-operation" and "paperless trade" is slightly above the Pacific subregional average. On the other hand, Tonga still faces major challenges in terms of getting the eight core groups of trade facilitation to meet the regional average for the Asia-Pacific region.

Figure 3: Tonga implementation of trade facilitation measures, 2019 and 2021
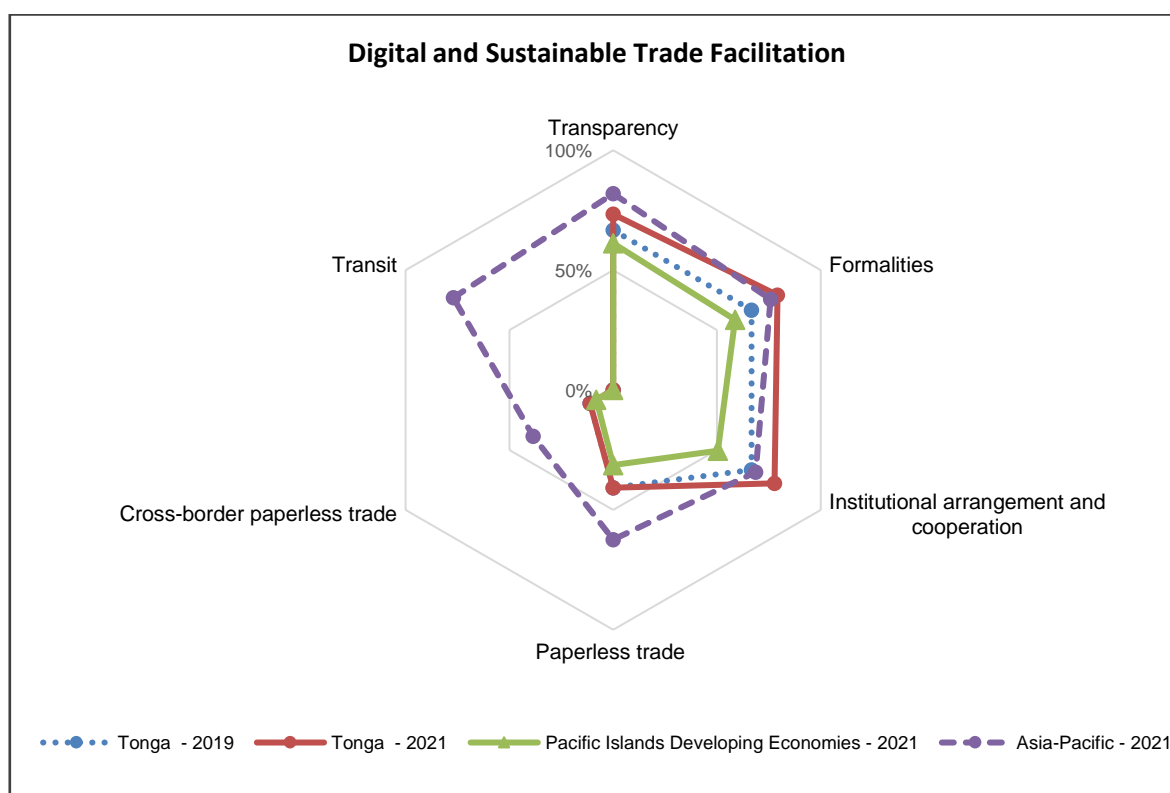
Digital and Sustainable Trade Facilitation

Legend: Tonga - 2019 · Tonga - 2021 · Pacific Islands Developing Economies - 2021 · Asia-Pacific - 2021

Source: United Nations (2021). Digital and Sustainable Trade Facilitation: Global Report 2021, United Nations, ESCAP, Bangkok. Available at https://untfsurvey.org

With regard to "paperless trade"; Tonga has partially introduced measures for an automated customs system, Internet connection available to customs and other trade related sectors, electronic submission of customs declarations, and application and issues of preferential certificate of origin (figure 3). The Single Window system, electronic application for customs refunds, electronic exchanges for certificates of origin, and sanitary and phytosanitary certificates have not been implemented at all. Payments of customs duties and fees, Internet connectivity for customs and other controlling agencies at border crossings, electronic submissions of customs declarations, and issuances of import and export permits are only partially implemented.

Hence, there is much potential for Tonga to improve its trade facilitation mechanisms. Once Tonga is able to fully implement the automated customs systems, further progress can be made in terms of the electronic Single Window system and digitizing customs logistics components such as the electronic application and issuance of import and export permits, in addition to the e-payment of customs duties and fees. The Ministry of Revenue and Customs (MORC) has made good progress in that the manifest component of the customs process is now fully digitized.
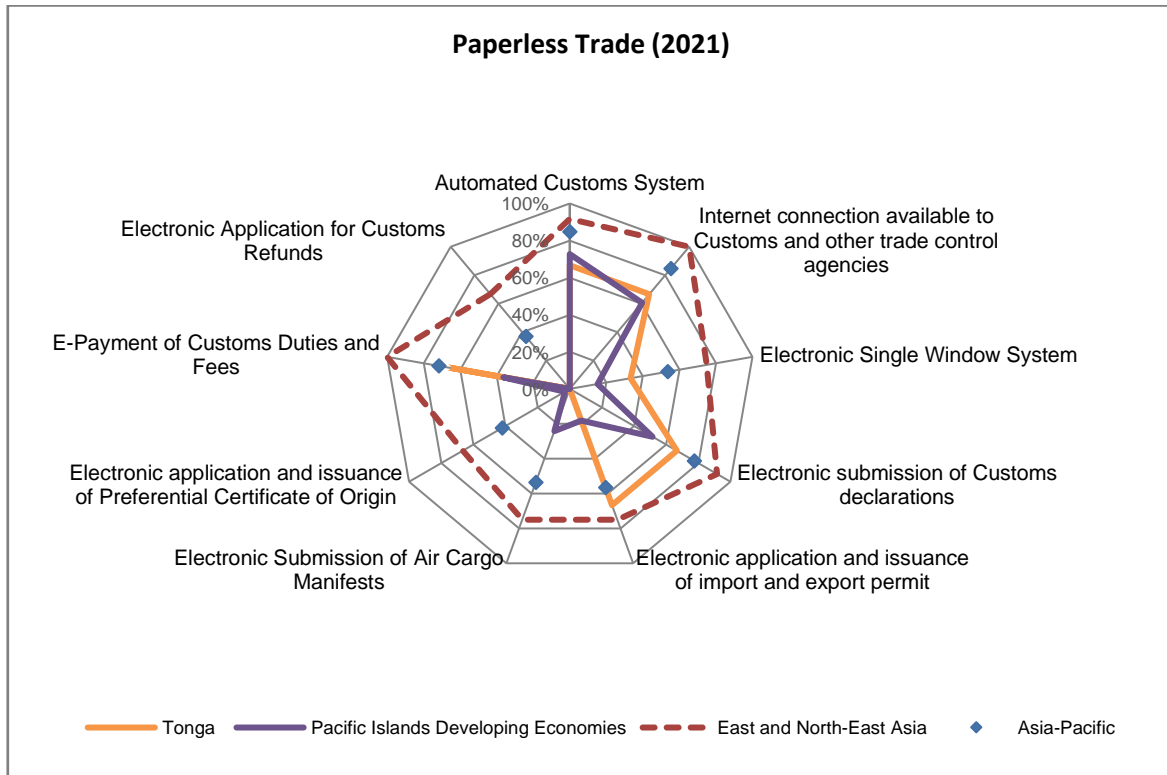
Paperless Trade (2021)

Source: United Nations (2021). Digital and Sustainable Trade Facilitation: Global Report 2021, United Nations, ESCAP, Bangkok. Available at https://untfsurvey.org

Tonga has implemented very few cross-border paperless trade measures (figure 4). Advancing towards implementation of cross-border paperless trade requires that the relevant authorities and regulations are in place, together with the legal and institutional framework that will drive the exchange of cross-border paperless trade data and documents in a fully integrated paperless transformation.

Figure 5: Tonga implementation of cross-border paperless trade, 2021
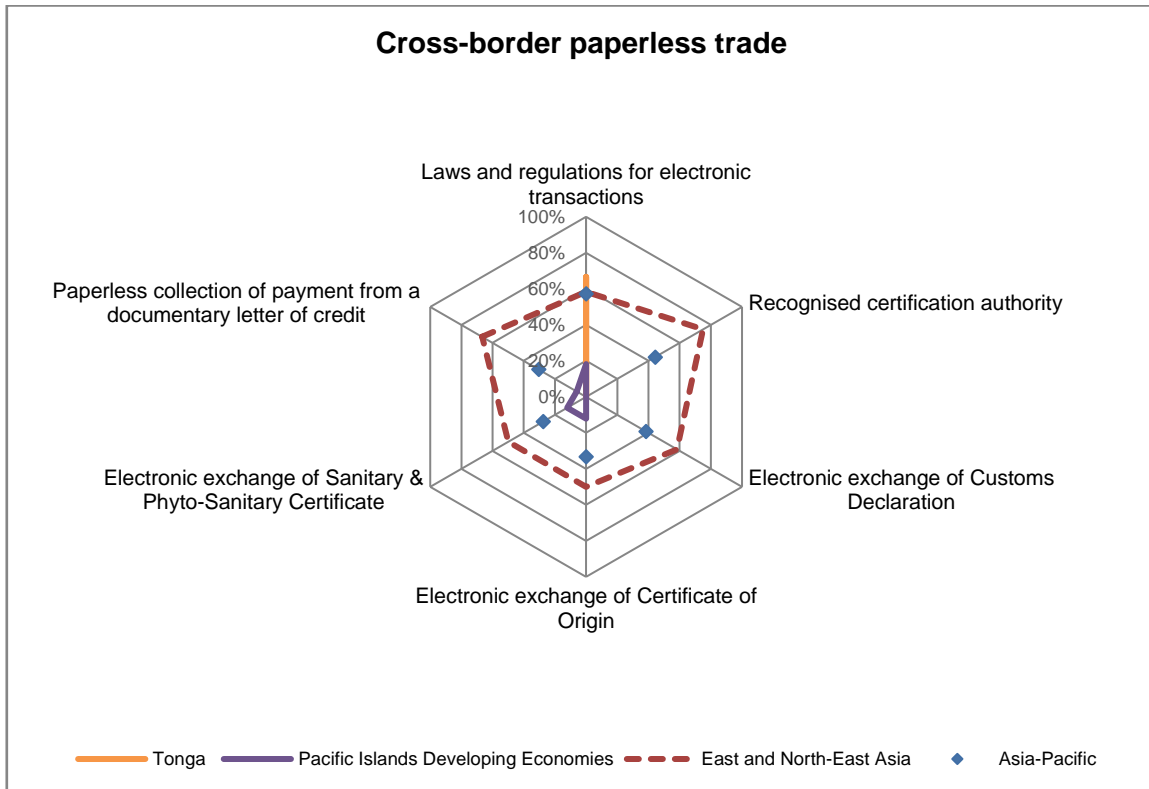
Cross-border paperless trade

Source: United Nations (2021). Digital and Sustainable Trade Facilitation: Global Report 2021, United Nations, ESCAP, Bangkok. Available at https://untfsurvey.org

Tonga faces various bottlenecks that impede its movement towards cross-border paperless trade. These include the need to migrate the trade system in Tonga from one that is heavily reliant on manual processes to digital formats, and often delays in the customs clearance and handling process due to crime prevention measures and covid-19 restrictions.

III. Technical readiness for cross-border paperless trade: Key findings

III.A. Paperless trade system at the national level

The vision of the Government in terms of the Tonga Strategic Development Framework (TSDF) is to promote "a more progressive Tonga supporting a higher quality of life for all". While the focus is not entirely on moving towards paperless trade, the Government of Tonga does focus on the importance of e-government and ICT in trade and development.

III.A.1 Governance bodies

Tonga is at an early stage of implementing paperless trade systems, as the governance structure is currently in the process of being fully established. The Government of Tonga at this stage is working with MTED to establish a trade specialized committee that will not only oversee trade matters but will take the lead in driving the cross-border paperless trade system for Tonga.

In addition, the Ministry of Revenue and Customs (MORC) is taking a leading role in terms of aligning key government Ministries and businesses to paperless trade as it is currently in the process of deploying the UNCTAD Automated System for Customs Data (ASYCUDA) system that will require all stakeholders in Tonga to utilize electronic transactions/electronic declarations for shipment of goods to and from Tonga.

III.A.2. Level of automation

As of today, Tonga continues to follow through a strong manual process in terms of trade. Tonga's MORC has only recently introduced the ASYCUDA world system. With the introduction of the ASYCUDA system, Tonga could gradually move to a paperless trade system in the next few years. Tonga has four domestic transit points to the outer islands of Vava'u, Ha'apai, Eua and Niua. There are three international transit points in Tonga with one at the Fua'amotu International Airport, another one at the Queen Salote wharf and the third at the Neiafu wharf in Vava'u. All transit points in Tonga have started migrating to the ASUCYDA system, with the manifest declaration component of the ASYCUDA system completed.

III.A.3. ICT infrastructure for paperless trade

Access to ICT has improved in Tonga since the submarine fibre-optic cable system between Tonga and Fiji (connecting to the Southern Cross Cable) went live in August 2013. In 2015, the Government set up the e-Government Unit; in 2017, this Unit was tasked with the implementation of the National ICT Project which has certain goals to be achieved. The National ICT (NICT) project between the Government and TCC to implement E-Government is well underway and civil servants have access to computers and email for the day-to-day operations in government. Businesses are beginning to use technology as an integral part of their operations, and there are already a few businesses that use technology in innovative ways to deliver products and services that would not be possible without ICT.

Network service is available at all border points in Tonga with the Government-owned TCC telecommunications company having the wider network coverage as it reaches out to the far-off Niuatoputapu islands. TCC has completed its 4G upgrade of all its sites throughout Tonga (Tongatapu, Vava'u Ha'apai and Eua). TCC is currently the only telecommunications company that provides service to the Niua islands with a 3G network capacity. The privately-owned Digicel Tonga Limited Company has coverage for all the islands in Tonga but not including the Niua islands. In August 2020, Digicel Tonga, successfully implemented a network-wide upgrade of all its cell sites so that Digicel was completely 4G in Tonga (Tongatapu, Vava'u, Ha'apai and Eua). Despite this, there are still issues with congestion problems with various tower sites both for Telco providers throughout Tonga; and the coverage of certain parts of Tonga (especially some village areas outside Central Business Districts and outer islands) is not very good. A third telecommunications company, Wantok, entered the market in 2021 and this development should assist in providing more competitive Internet and telecommunication packages for the Kingdom of Tonga.

However, the recent unfortunate tsunami that occurred in Tonga in January 2022 severed the undersea fibre-optic cable that connects Tonga to the world. This incident is a reminder of Tonga's need to have a reliable Internet connectivity back-up service in the case of natural disasters.

III.A.4. Security
Currently, there is no specific law in Tonga that provides security for documents, so this is an area that needs to be addressed. Nevertheless, addressing cybersecurity is a key area of concern for the Government of Tonga, therefore combating cybercrime will greatly assist in the development of paperless trade for Tonga.

III.A.5. Business process re-engineering
Even with the introduction of ASYCUDA, progress of moving the country's work system to an electronic one is slow; however, it will enable thorough communication online. MORC is in the process of training key stakeholders, both within and outside of Government, on the ASYCUDA system and the need for the manual processes to be replaced by an electronic system.

III.A.6. Data harmonization and standardization
Data harmonization and standardization is in the preliminary stages in Tonga as MORC works to integrate the government system with the ASYCUDA Single Window process. Data harmonization for Tonga is, to some extent, based on the WCO data model version 3.6.0.

III.A.7. Capacity building
As mentioned above, MORC is in the current stage of conducting awareness programmes and training on paperless trade with reference to the ASYCUDA system. During 2022 it will continue to conduct awareness programmes and capacity-building workshops on ASYCUDA with a strong relevance to paperless trade, as the goal is for key stakeholders to move away from the manual paper system to a paperless one.

III.B. National status towards cross-border data exchange

III.B.1. Electronic systems

Tonga's MORC has started the deployment of the ASYCUDA system for Tonga with the main port in Tongatapu and Vava'u. The Ha'apai and Eua ports are also operational in terms of connecting to the ASYCUDA system.

III.B.2. Single Window system

There are other electronic applications of the ASYCUDA system for Tonga; therefore, once these are functional, they will be able to facilitate cross-border data exchange to support paperless trade. The ASYCUDA system for Tonga has completed the manifest stage, so all manifest preparation for trade import and export for Tonga is carried out online. The ASYCUDA system for Tonga is now at the declaration implementation stage.

III.B.3. Business process re-engineering

The business process re-engineering (BPR) process has yet to be carried out for Tonga.

III.B.4. Data harmonization and standardization

Tonga has yet to reach this stage.

III.B.5. International transit

Tonga has no international transit.

III.B.6. Awareness programme

The MORC started to run workshops in early 2021 for key government and private sector stakeholders on the ASYCUDA system, but much work remains to be done to build the technical capacity around cross-border aspects.

III.B.7. Other matters

Tonga has an international port at the main wharf area in Tongatapu and at the international Fua'amotu airport. There are domestic shipping and airline services to all the outer islands of Tonga, which are Eua, Ha'apai, Vava'u and Niua. At the current stage, there are no paperless procedures for international and domestic trade in Tonga. Therefore, the starting point for paperless trade implementation for Tonga would be electronic trade declarations or electronic applications for airlines and shipping companies.

IV. Legal readiness for cross-border paperless trade: Key findings

The existing frameworks in Tonga pertaining to the legal and institutional policies related to paperless trade are out of date. In order for a country to enable and facilitate cross-border paperless trade internally and across its borders, a robust legislative and regulatory framework needs to be in place so that there is appropriate legal protection for both sellers and consumers.

Over the years, the Government of Tonga has shown commitment to the development of upgraded paperless trade legal and institutional frameworks. This commitment is reflected in the following Cabinet Directives:
- His Majesty's Cabinet Decision No. 1212 of 16 October 2015 to process a new Consumer Protection Bill;
- His Majesty's Cabinet Decision No. 550 of 27 July 2018 to process a new Electronic Transactions Bill and a Privacy Bill; and
- His Majesty's Cabinet Decision No. 352 of 24 April 2020 to process a new Computer Crimes Bill with consequential amendments.

However, due to competing government priorities, these Bills have not been processed through the government legislative process.

The primary legislation protecting consumers in the Kingdom of Tonga is the Consumer Protection Act, which protects consumers and establishes fair practices. The issue with this Act is that it does not provide protection for online transactions. The Government of Tonga approved a policy directive in 2016 to process a new Consumer Protection Act, which will include electronic transactions. To date, the Government has yet to re-introduce this policy. Given that Tonga recently elected a new Government, the revision of this Act is an important component of cross-border paperless trade that MTED will need to bring to the attention of Government.

As a result of the impacts of COVID-19 on consumers, Tonga now realizes the need to urgently develop robust paperless trade regulatory frameworks. This work can be completed by reviewing the existing Bills for enactment.

Another area of concern for Tonga in terms of ensuring a smooth process for digital payments is the poor state of the protection of cybersecurity and data privacy, which is existent at a very minimal level in Tonga.

IV.A. Electronic transactions and signature law

It must be noted that Tonga is generally a cash-basis economy, although this is gradually changing. The country is at a transitional stage whereby the banks and financial institutions are in the process of educating the key stakeholders as well as the general public on the available products and benefits of digital payment solutions. In fact, Tonga was the second country in the Pacific to launch the Digicel Mobile Money system in 2011.

Like most Pacific Island Countries (PICs), Tonga lacks the interoperable platforms that allow customers to transfer money from an account at one bank to another bank. This

is a huge challenge that hinders the uptake of digital payments. Tonga has prepared an e-Transactions Bill (based on UNCITRAL's Model Law on Electronic Commerce and Model Law on Electronic Signatures) but this has yet to be enacted.

The legal system for electronic transactions and signatures in Tonga is a work in progress in that the Government is in the process of passing the required laws pertaining to this system. However, Tonga has an Evidence Act that recognizes electronic signatures in transactions. The authentication of any electronic record in Tonga in any legal proceedings is by the person seeking to introduce the electronic records.

Nonetheless, the two major international commercial banks in Tonga, i.e., the BSP and ANZ banks, are helping to pave the way for using electronic means such as EFTPOS and ATM machines as well as online banking services. These initiatives by these banks allow Tongans to use their bank debit cards to shop and pay bills in-store or online.

IV.A.1. General principles

The primary legislation protecting consumers in the Kingdom of Tonga is the Consumer Protection Act, which provides protection for consumers and establishes fair trade practices. The Act sets the standards for any goods sold in Tonga, provides a complaints mechanism as well as allows for defective products to be recalled.

However, the Act does not provide specific protection for transactions or consumer products available online. Other related consumer protection laws are available in Tonga such as the Markets Act, Food Act and Consumer Protection (Product Safety and Labelling Standards).

Regulations exist to monitor and protect consumers as well as ensure the quality standards of the products that are being sold. However, none of these laws provide specifically for electronic transactions or electronic consumer products. In 2016 the Government of Tonga approved a policy directive to process a new Consumer Protection Act. However, to date the current Government has not reintroduced this policy to enact a new Consumer Protection Act that includes electronic transactions and consumer products.

IV.A.2. Electronic signatures and trust services

To date, there are no laws in Tonga that expressly permit the admissibility of electronic evidence in the county's court system. There is also no law on electronic signatures for Tonga. However, judicial practice allows for electronic evidence to be submitted in the same way and according to the same rules as are applied to other types of documentary evidence. Electronic signatures follow a similar practice in that they must be processed to be identified as evidence for use in the court of law. One of the shortcomings of this judicial practice is that there is no provision for the vulnerability of electronic data or records being hacked or manipulated. So, cases are decided on the facts and legal argument about the reliability of the documents on a case-by-case basis.

IV.A.3. Privacy and data protection

Tonga has a draft Privacy Bill that is designed to make provision for the collection, holding, security, use, correction and disclosure of personal information consistent with the right of an individual to privacy with regard to their personal information. There are different pieces of legislation that provide for privacy in Tonga but nothing is specifically available for the protection of consumer privacy. However, the existing legislation protects individuals, so there is a need to revise the existing law to factor in consumer privacy and e-transactions.

IV.A.4. Data sharing

Tonga does not have specific legislation to provide protection of data and privacy. There are Acts in Tonga, such as the Mental Health Act, Education Act, Tonga Police Act and Anti-Corruption Commissioner Act, which only deal with specific issues under those Acts but do not apply to consumers and their data protection.

IV.A.5. Data retention and electronic evidence

In 2018, the Government of Tonga approved a policy directive, submitted by the ministry responsible for information, to draft an Electronic Transaction Bill. However, to date the current Government has not re-introduced this policy to enact an Electronic Transaction Act in Tonga.

The Ministry of Justice (MoJ) has authoritative power in terms of obtaining data that are related to life-threatening matters. To date, the respective trade-related stakeholders (banks, telecommunication companies, government ministries etc.) keep their own data and company records.

The Evidence Act provides for the admissibility of an electronic signature in Tongan Courts; however, the admissibility of electronic transmissions as evidence is only applicable to criminal matters and not to civil matters, as the focus of this Act is on criminal proceedings and not electronic transactions.

IV.B. Laws regarding paperless trade systems

The main gap identified in e-transaction laws in Tonga is that there is no specific legislation to recognize electronic transmissions. However, specific legislation authorizes the electronic transmission of lodging applications, as shown in Regulation 23 of the Revenue Services Administration Regulations, and the transfer of documents in an electronic format as shown in Regulation 5 of the Customs and Excise Management Regulations. Hence, there is a need to review the existing Electronic Transactions Bill to set up the legal basis for recognizing electronic transactions.

IV.B.1. Establishment of a paperless trade system

The MoF and MEIDECC are the key government ministries driving E-Government and digital services for the Government. All other government ministries follow through on the direction of these two ministries, but they all vary in terms of their level of digitization pertaining to a paperless trade system. It must be noted here that the MORC plays a pivotal role in driving Tonga towards implementing a paperless trade system with the implementation of the ASYCUDA system.

IV.B.2. Quality of information exchanged with the paperless trade system

Given that Tonga has yet to fully implement a paperless trade system, there is no policy or law pertaining to information exchange via online. However, the passing of the Computer Crimes Act in 2003 was a step forward for Tonga in terms of combating cyber-crime. In 2016, a Computer Emergency Response Team (CERT) was established as a department of MEIDECC to co-ordinate a prompt response at the national level to cyber-related activities.

IV.B.3. Service level agreements (SLA) and memoranda of understanding (MoU)

To date, there are no service level agreements among the Government of Tonga's ministries in terms of data sharing or data exchange. The three telecommunications providers in Tonga are governed by the Government's Telecommunications Act, which is regulated by the Ministry of Meteorology, Environment, Information, Disaster Management, Energy, Climate Change and Communications (MEIDECC). Therefore, MEIDECC would be responsible for ensuring the implementation of service level agreements with the telecommunication providers to ensure that they adhere to the standards and requirements for a national Single Window.

IV.C. Cross-border aspects

IV.C.1. International agreements relevant for cross-border paperless trade facilitation

Tonga is one of more than five PICs that have ratified the PACER+ Agreement which will stimulate trade and investment between PICs and Australia and New Zealand. Prior to PACER+, Tonga was and is still part of the PICs Trade Agreement (PICTA) and South-Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA).

IV.C.2. International standards, guidelines and recommendations

Tonga has been a member of the World Trade Organization (WTO) since 2007 and this is of importance as the WTO uses electronic documents and communications for trade processes, hence Tonga will eventually have to adhere to this paperless trade model. Tonga has applied the WTO customs component but it has yet to ratify the WTO Trade Facilitation Agreement .

IV.D. Other considerations

IV.D.1. Ownership of information in the paperless trade system

At this stage, there is no clear law in Tonga that pertains to contractual agreements with regard to the ownership or treatment of the information exchanged under a paperless trade agreement. However, the Companies Act in Tonga allows for all manual contracts that a company has between another person or company to be effectual in law. What this means for paperless trade agreements is that as long as the agreement is printed and signed on paper, it is effectual in law.

IV.D.2. Liability issues related to a cross-border paperless trade system

Given that Tonga has yet to fully implement a paperless trade system, the specific details in terms of liability issues for paperless trade is yet to be finalized.

In future, when digital signatures are implemented, there will be a need for a security and authentication system in connection with the use of digital signatures as part of the trade system in Tonga. The legislation must ensure relevant parties to the use of digital signatures are held liable for breach of regulations.

IV.D.3. Dispute settlement and conflict of laws

The draft Consumer Protection Bill provides for the establishment of a Consumer Protection Tribunal to hear complaints. However, this Bill provides that only unconscionable conduct can be referred to mediation.

IV.D.4. Electronic payments and electronic transferable records

Traditionally, Tonga is a cash-basis economy that is slowly increasing the use of other payment means such as Electronic Funds Transfer at Point of Sale (EFTPOS). Therefore, financial institutions have a significant role to play in enabling and promoting e-commerce.

One of the critical challenges that the banks and financial institutions in Tonga are working to resolve is the provision of a holistic payment gateway system, so that local Tongan businesses can sell products online and receive their payment into their bank accounts in Tonga. What is happening in this space is most Tongan businesses that sell products to overseas markets either get their funds manually wired by the consumer via Western Union or a remittance service, or the local Tonga business sets up a bank account overseas so they can receive direct payment to that account.

IV.D.5. Competition laws

At this point in time, Tonga does not have a Competition Law nor has the Government of Tonga drafted a Competition Law.

V. Recommendations for moving towards cross-border paperless trade

***Based on the findings in sections III and IV of this report from the technical and legal readiness of Tonga for cross-border paperless trade, a series of technical and legal recommendations for Tonga to accelerate progress towards introducing cross-border paperless trade are presented in this section.

V.A. Recommendations emerging from the technical readiness assessment

V.A.1. Institutional and governance bodies

Recommendation No.0 (high priority): In order to improve its domestic paperless trade environment and its readiness to participate in cross-border paperless trade, it is recommended that Tonga ratifies the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific as soon as possible. The Framework Agreement can significantly help Tonga in narrowing legal and technical gaps in (cross-border) paperless trade as well as support its expansion in international trade and reduction of business costs. Acceding to the Framework Agreement is also one of the targets for the implementation of the Pacific Regional E-commerce Strategy and Roadmap.

Recommendation No.1 (medium priority): Tonga needs to develop government policies and direction to strengthen the components that will drive cross-border paperless trade, including both public and private stakeholders. Some of these components include getting trade-related sectors to digitize their processes, developing electronic transactions and providing Tongans with the capability to confidently use digital technology for trade. There is also a need for the Government, through the Ministry of Trade and Economic Development (Chair), to provide clear direction and policies that will support the overall development of paperless trade for the Kingdom. While the Trade Economic Development Working Group (TEDWG) under MTED was foreseen as taking up the role of the national trade facilitation committee, this has not been formally endorsed. Th-s needs to be reviewed by the Government in order to pave the way forward in terms of driving cross border paperless trade for Tonga.

V.A.2. Level of automation

Recommendation No. 2 (high priority): Tonga's MORC should expedite completing the implementation of the ASYCUDA World System for Tonga so that trade processes and procedures in Tonga can move entirely to a digital platform.

Recommendation No.3 (medium priority): The Government of Tonga needs to expedite making the relevant ministries ICT-enabled so that they are connected to the ASYCUDA system being implemented and are therefore able to participate in paperless trade. Most, if not all, ministries are still utilizing paper-based processes for components of paperless trade.

V.A.3. Information and communication technology infrastructure

Recommendation No.4 (medium priority): The Government of Tonga needs to finalize a strategic plan and guidelines on business continuity of Information and communication technology (ICT) systems, especially with regard to the paperless trade system, and ensure that there is a disaster recovery plan for sustainability of the ICT system.

Recommendation No.5 (medium priority): Government of Tonga should develop authentication mechanism and data security measure including digital signatures security measures.

Recommendation No.6 (medium priority): The public and private sectors need to find ways in which they can partner in the deployment of ICT networks, especially for "last-mile" connectivity and customer equipment. On the public sector side, implementation of the NICT project would comprise of s the rollout of a unified communications system, implementation of a digital government across all ministries, advancing digital inclusion for all , and promoting data-sharing and service-oriented information systems architecture. On the private sector side, TCC and Digicel Tonga could co-locate or share tower sites. This would help to improve the service quality in areas where there are coverage problems.

V.A.4. Business process re-engineering

Recommendation No.7 (medium priority): Tonga needs to carry out business process re-engineering for digitizing the manual systems of trade-related ministries, so that these ministries can participate in paperless trade by reducing processes, harmonizing of data and standardizing the process and procedures prior to digitalizing the manual. For example, there is a need for trade-related stakeholders to migrate their transaction processes from a manual one to a digital one so that people can make payments online rather than wait in long queues.

V.A.5. Data harmonization and standardization

Recommendation No.8 (medium priority): Tonga needs to carry out data harmonization for those ministries that work with trade-related matters and upgrade their systems to meet international standards for data harmonization. Some examples of data harmonization international standards include the World Customs Organization's most relevant data model for Tonga, the United Nations Layout Key and the United Nations Trade Data Element Directory.[6]

V.A.6. Capacity-building

Recommendation No.9 (medium priority): While the use of Facebook and social media is popular and growing in Tonga, based on discussions with various stakeholders there is a need for training to be provided for trade and logistics associations and the workforce on paperless trade. A nation-wide survey to evaluate the readiness of all Tongans in terms of digital skills with regard to paperless trade. This is necessary to ensure that a well-informed process is established to increase the awareness and

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[6] ESCAP, 2012. *Data Harmonization and Modelling Guide for Single Window Environment.* Thailand: United Nations

educate everyone about paperless trade and digital skills. This work can be carried out with co-ordination of the Ministry of Education and Training.

V.A.7. Other matters

Recommendation No.10 (high priority): Government through the MEIDECC office should put together a plan for obtaining and implementing ICT resources to have the system ready for cross-border paperless trade & Government should ease taxes for those agencies importing ICT infrastructure for cross-border paperless trade purposes.

V.A.8. National status towards cross-border data exchange

Recommendation No.11 (Medium priority): Tonga should take the steps forward to automate systems for relevant stakeholders participating in trade, both domestically and cross-border, so that stakeholders start using paperless systems. In this regard, Tonga should proactively work on establishing bilateral and multi-lateral cross-border data exchange, following the example of the web-based customs declaration system that Tonga Post uses for communication with MORC & and international postal designators

V.B. Recommendations emerging from the legal readiness assessment

Tonga's governance framework with regard to paperless trade needs to be strengthened to ensure the smooth functioning of the system for paperless trade to be fully implemented in Tonga. There is also a need for protection systems such as cybersecurity and data privacy to meet international standards. The telecom regulation and financial regulations are key areas that need to be firmly in place to support the paperless trade system.

V.B.1. Electronics transactions and signatures law

Recommendation No.1 (high priority): Tonga has a Consumer Protection Act, but it does not address specific online business; therefore, this Act needs to be upgraded to include online components. This Act provides for matters such as a guarantee as to the fitness for a particular purpose, and that the goods comply with description and sample and price; however, the Bill does not have any provision for the return, exchange and refund of goods. Therefore, the Consumer Protection Bill needs to include electronic transactions, and electronic consumers and sellers. The assessment team recommends that Tonga follows the approach of New Zealand in terms of the Fair-Trading Act to expressly provide that it is a requirement for traders to disclose their status on the Internet. This needs to be expressed in the revised Consumer Protection Bill.

Also, there is the need to educate the relevant stakeholders on the cross-border paperless trade legal framework and promote awareness of online consumer rights.

Recommendation No.2 (medium priority): Tonga needs to continue pushing to amend its Bills and pass the laws pertaining to electronic transactions. The current Electronic

Transactions Bill for Tonga needs to be upgraded and adopted. The assessment team recommends that the Electronic Transactions Bill needs to be based on the United Nations Commission on International Trade Law (UNCITRAL) Model Law requirements regarding electronic transactions. For example, Section 8 of the Bill sets up the legal basis for the recognition of electronic transactions in Tonga, but it needs to be upgraded to ensure that it recognizes electronic transactions. Hence, the proposed approach is for section 8 to read as (8) Validity of information.

To avoid doubt, information is not to be denied a legal effect solely because it is (a) in electronic form, or is in an electronic communication; or (b) referred to in an electronic communication that is intended to give rise to that legal effect.

Recommendation No.3 (Medium priority): Similarly, there is no law in Tonga which governs electronic data protection and privacy but there is a privacy bill. Therefore, the Privacy Bill needs to be upgraded to factor in data protection (protection of consumer personal data) and privacy. The Computer Crimes Bill is also to be updated and adopted based on the relevant clauses of the Budapest Convention.

V.B.2. Paperless trade and Single Window laws

Recommendation No. 4 (medium priority): Tonga should consider drafting a National Single Window Law with clear guidelines for (a) those ministries and stakeholders involved in trade activities, and (b) establishing a structure and function for the overarching MORC that will oversee the Single Window system. One of the key focus areas for this law would be electronic commerce laws making electronic records functionally equivalent to paper documents.

V.B.3. Cross-border aspects

Recommendation No.5 (medium priority): The Government of Tonga should proactively review current and potential multilateral and bilateral trade agreements to align to cross-border paperless trade system. It should also look into ways how it can incorporate relevant international legal standards, regulations and guidelines into its legal framework. For example, Tonga's Electronic Transactions Bill should be in line with the UNCITRAL Model. Another example is the existing Computer Crime Bill in Tonga in that the Government should ensure that computer-related fraud is covered as well as any other issue as provided in the Budapest Convention.

V.B.4. Other considerations

Recommendation No.6 (medium priority): Tonga should ensure that laws allow for electronic payments for all purposes and gives provision to all participants in international trade transactions.

VI. Tonga action plan for cross-border paperless trade

This section features indicative actions that could be undertaken by Tonga to implement the technical and legal recommendations presented in section V. The action plan includes priority level, timeline, capacity-building needs and potential key agencies related to each indicative action, based on discussions held during the national consultation workshop on facilitating cross-border paperless trade held on 10 March 2022. Indicative actions as well as other information included in this initial action plan may be further elaborated upon, e.g., activities may be further broken down into sub-activities and tasks. In addition, the type of capacity-building needs may be specified and incorporated into other relevant national development plans (e.g., national trade facilitation action plan, e-commerce development strategy, or e-government plan).

Part 1: Technical aspect

Priority level: High, medium, low

Institutional and governance bodies for electronic data exchange in paperless environment				
Indicative action	Priority level	Timeline	Capacity- building needs	Potential key agencies
0. Ratify the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific	High	By mid-2023		MTED, PMO, OAG
1-1. Government policies and direction to strengthen the components that will drive cross-border paperless trade (e.g., promoting digital trade services and e-commerce)	Medium	By end of 2023	Yes. Key stakeholders to meet periodically to discuss gaps that need to be filled in terms of implementing cross-border paperless trade.	MTED, MEIDECC, PMO Planning Division, MORC, MOF
1-2. MTED to continue leading the steering committee that focuses on capacity building and overseeing the implementation of policies pertaining to cross-border paperless trade including the formal endorsement of the national trade facilitation committee	Medium	Ongoing	Yes	MTED, MEIDECC, PMO Planning Division, MORC, MOF, MPE
Automation				
Indicative action	Priority level	Timeline	Capacity-building needs	Potential key agencies
2. Complete the implementation of the ASYCUDA single Single window Window data exchange for Tonga	High.	By the end of 2024	Yes	MORC, MEIDECC

Indicative action	Priority level	Timeline	Capacity-building needs	Potential key agencies
3. Strengthen ICT capacity of relevant stakeholders so they are on par with ICT needs for cross-border paperless trade	Medium	By mid-2024	Yes	MORC, MEIDECC, MOF, telecommunication companies, financial institutions, banks, shipping agencies, airlines

ICT Infrastructure

Indicative action	Priority level	Timeline	Capacity-building needs	Potential key agencies
4. Finalize the strategic plan and guidelines on business continuity of ICT systems with regards to paperless trade systems	Medium	By mid-2023	Yes	MEIDECC, telecommunications companies
5. Government of Tonga to develop authentication mechanism and data security measure including digital signatures security measures	Medium	By mid-2025		MORC, MEIDECC, MOJ, MOF, Banks, Financial Institutions
6-1. Government to push all telecommunication providers to ensure that good quality Internet and communication services are available nationwide	Medium	By the end of 2023		MORC, MEIDECC, telecommunications companies
6-2. Government to drive completion of NICT project and install components to ensure system is suitable for cross-border paperless trade systems.	Medium	End of 2024		All government ministries

Business process re-engineering

Indicative action	Priority level	Timeline	Capacity-building needs	Potential key agencies
7. Carry out business process reengineering in implementing ICT systems of relevant agencies that participate in trade	Medium	To be completed by end of 2026	Yes, donor assistance required.	MORC, MEIDECC, MOF, MTED, banks, financial institutions, airlines, shipping agencies

Data harmonization

Indicative action	Priority level	Timeline	Capacity-building needs	Potential key agencies
8. Carry out data harmonization meeting international standards for trade-related ministries	Medium	By mid-2024	Yes, technical assistance will be needed from relevant donor	MORC, MEIDECC, MOF, MTED, banks, financial institutions, airlines, shipping agencies

Awareness and capacity-building

Indicative action	Priority level	Timeline	Capacity-building needs	Potential key agencies
9. Create and increase awareness and capacity building for relevant	High	MORC has started this	Yes, seek technical	All government ministries as well as

agencies and trade facilitation related associations on cross-border paperless trade		in 2021, this is to commence in mid-2023 when Tonga has fully recovered from the tsunami of January 2022	assistance from ESCAP, MORC and UNCTAD	key private and public stakeholders

Other matters

Indicative action	Priority level	Timeline	Capacity-building needs	Potential key agencies
10. Government through the MEIDECC office to put together a plan for obtaining and implementing ICT resources to have the system ready for cross-border paperless trade & Government should ease taxes for those agencies importing ICT infrastructure for cross-border paperless trade purposes	High	End of 2024		MORC, MEIDECC, MOF

National status towards cross-border data exchange

Indicative action	Priority level	Timeline	Capacity-building needs	Potential key agencies
11. Take the steps forward to automate systems for relevant stakeholders participating in trade, both domestically and cross-border, so that stakeholders start using paperless systems	Medium	Mid-2024		MORC, MEIDECC, banks, financial institutions, airlines, shipping agencies
11-1 Tonga to proactively work on establishing bilateral and multi-lateral cross-border data exchange, following the example of the web-based customs declaration system that Tonga Post uses for communication with MORC and international postal designators	Medium	By the end of 2025	Yes	MORC, MINOFA, TP, MEIDECC

Part 2: Legal Aspect

Priority level: High, Medium, Low

Electronics transactions and signatures law

Indicative action	Priority level	Timeline	Capacity-building needs	Potential key agencies
1-1. Finalize bills on consumer protection and data protection, and get them passed as laws to strengthen the legal framework for cross-border paperless trade	High	By the end of 2023		MTED, OAG, MEIDECC
1-2. Educate the relevant stakeholders on the cross-border paperless trade legal framework, and promote awareness of online consumer rights	Low	By the end of 2024		MTED, UNCTAD
2. Government to pass regulations governing electronic transactions, online contract information and recognition of e-signatures	Medium	By mid-2024		MTED, OAG, MEIDECC
3. Enact laws on data protection, cybersecurity and privacy	High	By mid-2024		OAG, MORC, MEIDECC

Paperless trade and Single Window laws

Indicative action	Priority level	Timeline	Capacity-building needs	Potential key agencies
4. Establish legal structure to authorize and support functions and features of Single Window that are relevant to Tonga	Medium	By end of 2024		MORC, OAG

Cross-border aspects

Indicative action	Priority level	Timeline	Capacity-building needs	Potential key agencies
5-1. Review current and potential multilateral and bilateral trade agreements to align to cross-border paperless trade system	Medium	Continuous		MTED, MORC, OAG, MINOFA
5-2. Look into ways of incorporating relevant international legal standards, regulations and guidelines into Tonga's legal frameworks	Medium	Continuous		MORC, MTED, OAG, MINOFA

Other considerations

Indicative action	Priority level	Timeline	Capacity-building needs	Potential key agencies
6. Ensure that laws allow for electronic payments for all purposes and give provision to all participants in international trade transactions	Medium			OAG, MTED

VII. Conclusion and the way forward

Tonga has started to implement some measures for trade facilitation and paperless trade. However, there is much work to be done in order for Tonga to adopt digitalization of trade procedures. Despite the challenges by Covid-19 and the volcanic eruption in Tonga in January 2022, progress is being made with the Pacer Plus agreement and deployment of the customs ASYCUDA system for Tonga.

In this report, findings from the technical and legal assessments of the readiness of Tonga for cross-border paperless trade are presented, together with recommendations derived from these findings. An initial action plan was formulated based on the experts' recommendations and input gathered during the national consultation, which provides a useful basis for the preparation by Tonga of an Individual Action Plan under the Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific.

The report highlights the fact that there are no technical or legal obstacles in Tonga to acceding to the Framework Agreement, and that it should do so as soon as possible so it can start to more effectively plan and implement its trade digitalization strategy. The readiness assessments, together with the action plan, featured in this report can serve as a foundation for elaborating more detailed activities at the national and agency levels in this area, together with identifiable timeline and budget sources. Additional meetings and consultations among the stakeholders may be useful to further refine and specify actions and their sequencing, in order to achieve the long-term goal of cross-border paperless trade – and to identify specific pilot projects and capacity-building and technical assistance needs.

Pending its ratification and the entry into force of the Framework Agreement, Tonga may also continue to engage in regional dialogues, including through the national focal point mechanisms at ESCAP, in order to gather and exchange information on good practices that can help Tonga further enhance its readiness for cross-border paperless trade.

Annexes

Annex I. List of stakeholders interviewed

Organization	Name	Job Position
Ministry of Public Enterprises	Ms. Evaloni Havea	Acting Head of ICT Unit
	Mr. Sione Ika	Deputy CEO, Corporate Division
Tonga Telecommunications Corporation	Mr Sione Veikoso	Acting Chief Executive Officer
Pacer Plus Implementation Unit	Mr Alipate Tavo	Trade Advisor
Tonga Post Ltd	Ms Selu Kavakava	Acting Chief Executive Officer
Ministry of Internal Affairs	Ms Eleni Poese	Head of Women's Division
Ministry of Finance and National Planning	Ms Heneli Palu	Chief System Analyst
	Mr Viliami Tupou	ICT Section
Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications	Mr Andrew Toimoana	Director ICT
	Mr Stan Ahio	Principal ICT Officer
Ministry of Agriculture, Food and Forestry	Mr Toosavili Havea	Agriculture Officer
Ministry of Revenue & Customs	Mr Michael Cokanasiga	Deputy CEO
Server Works Ltd, NZ	Mr Kraig Winters	Managing Director
Tonga Power Limited	Mr Nikolasi Fonua	Acting Chief Executive Officer
Ministry of Fisheries	Ms Elaine Havealeta	ICT Department
Tonga Water Board	Mr Sione Finau	Chief Executive Officer
Tonga Development Bank	Mr Havili Movete	ICT Manager
Tonga Airport Ltd	Ms Siena Taumoepeau	Deputy CEO
Tonga Cable Ltd	Mr James Panuve	Chief Executive Officer
Tropicana Vava'u	Mr Greg Just	Managing Director
Digicel Tonga Ltd	Ms Lineti Fifita	Distribution and Mobile Money Manager
Ministry of Trade and Economic Development	Ms Fololenitinaa Asau	Principal Trade Officer

Wantok Telecommunications Company	Mr Dennis Fuapau	Managing Director
Tonga Ports Authority Ltd	Mr Alo Maileseini	Chief Executive Officer
Computer Emergency Response Team Tonga	Mr Siosaia Vaipuna	Director
BSP Bank	Mr Fa Finau	EFTPOS Manager
Tonga Chamber of Commerce	Mr Paula Taumoepeau	President

Annex II. List of participants at the national consultation workshop

Organization	Name	Job Position
Ministry of Tourism	Mr Sione Moala	Chief Executive Officer
	Ms Melaea Taufatofua	Corporate Service Division
Tonga Tourism Authority	Mr Viliami Takau	Director
Ministry of Fisheries	Ms Mele Latu	Corporate Service Division
	Mr Tolu Fa'aui	Enforcement Division
DHL	Mr Sam Vea	Chief Executive Officer
Nishi Trading Ltd	Ms Telumi Nishi	Director
Ministry of Trade & Economic Development	Ms Lorraine Kauhenga	Deputy CEO Trade Division
	Ms Esterlina Alipate	Trade Officer
	Ms Losana Timani	IT Division
Attorney General's Office	Ms Akanesi Katoa	ESCAP Consultant
Tonga Post Ltd	Ms Selu Kavakava	Acting Chief Executive Officer
Ministry of Finance	Ms Folau Fonua	Planning Division
National Reserve Bank of Tonga	Mr Semisi Lokotui	IT Manager
Ministry of Public Enterprises	Mr Sione Ika	Deputy CEO, Corporate Service Division
Tonga Chamber of Commerce	Mr Paula Taumoepeau	Deputy Chair
Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications	Mr Andrew Toimoana	Director ICT
Digicel Tonga Ltd	Mr Anthony Seuseu	Chief Executive Officer
Pacific Forum Line Shipping Agency	Mr Meto Vaka	Chief Executive Officer
Pacer Plus Implementation Unit	Mr Alipate Tavo	PPIU Advisor
ESCAP	Mr Alvin Mah	International Consultant
ESCAP	Mr John Gregory	International Consultant
Tonga Airport Ltd	Mr Siutoni Tonga	Corporate Division
Tonga Cable Limited	Mr Semisi Panuve	Chief Executive Officer
Tonga Development Bank	Mr Havili Movete	ICT Manager
Quarantine Division, Ministry of Agriculture, Food and Forestry	Ms Siutoni Tupou	Acting Head of Quarantine
EZ Tonga E-commerce Company	Mr Laitia Talanatu	Manager

Ministry of Agriculture, Food and Forestry	Mr Isilelei Aholelei	Head of Food Division
	Ms Feao Lasalo	Head of Corporate Service Division
Ministry of Revenue and Customs	Mr Michael Cokanasiga	Deputy CEO
	Mr Paulo Latu	ASYCUDA Implementation Unit

Annex III. Cross-border paperless trade: a technical readiness checklist: Tonga

Scope and structure of the checklist

The Checklist is to assess technical gaps in implementing cross-border paperless trade systems. The Checklist takes into considerations of national issues such as implementation of electronic and paperless transactions at national level and Single Window system, pre-requisites for cross-border paperless trade data exchange.

The Checklist is structured in two sections as below:

Section A - Paperless trade system at the national level

This section focuses on technical issues related to implementation of electronic trade systems in paperless environment at the national level. Technical issues are grouped into the following categories.

1. Institutional and governance bodies
   a. Strong political commitment
   b. Coordination
   c. Inter-agencies governance structure
2. Level of automation
   a. Electronic systems
   b. Single Window System
3. Information and communication technology (ICT) infrastructure
   a. Network service availability
   b. Common/single network (E-Systems)
   c. Single Window System
   d. Strategic plan for ICT infrastructure issues
   e. Disaster recovery
   f. Business continuity plan
4. Security
   a. IT security policy
   b. Security measures (E-Systems)
   c. Authentication mechanism

d. Communication protocol
5. Business process re-engineering
    a. BPR For paperless trade
    b. Implementation of paperless trade transactions
6. Data harmonization and standardization
7. Capacity building
8. Other matters
    a. Computer literacy
    b. Budget constraints

Section B – National status towards cross-border data exchange

This section is aimed at assessing the status of a country or an organization to embark on cross-border paperless trade data exchange projects.

1. Electronic systems
2. Single Window System
3. Business process re-engineering
4. Data harmonization and standardization
5. International transit
6. Awareness program
7. Other matters
    a. Authorized Economic Operator
    b. Stakeholders and trade community
    c. Government budget
    d. Documents being considered for cross-border data exchange & prioritization
    e. Further information

A. Paperless trade system at the national level

No.	Questions	Elaboration on status/issues/future plan	Timeline (if relevant) for future plan
A1.	**Governance bodies[7]** One of the critical success factors for implementation of paperless trade systems is strongcommitment from the Head of Government, without which many projects of this magnitude tend to stall. When top management is committed to spearhead a project, issues of financial support and access to other resources may be addressed more readily. Coordination amonggovernment agencies and between the government and the private sectors is not an easy task but it can be carried out more efficiently and effectively with the establishment of aninstitutional body equipped with a strong governance structure. The institutional set-up provides a venue for relevant officials to come together to discuss functionalities and othertechnical as well as legal matters. By establishing the role and responsibilities of each unit/group as well as reporting mechanisms, the governance structure expedites the implementation of paperless trade systems.		
A1.1	[Governance structure] Is there a governance structure established for paperless trade, (e.g., national trade facilitation council)?	Yes. The Trade Economic Development Working Group (TEDWG) under the Ministry of Trade and Economic Development (MTED) was foreseen to take up the role of the national trade facilitation committee but this has not been formally endorsed. The Government of Tonga at this stage is working with MTED to establish a trade specialized committee that will not only oversee trade-related matters, but will take the lead in driving the cross-border paperless trade systems for Tonga. The Ministry of Revenue and Customs (MORC) is also taking a leading role in terms of aligning key Government Ministries and businesses to paperless trade as it is currently in the process of deploying the customs UNCTAD Automated System for Customs Data (ASYCUDA) system that will require all stakeholders in Tonga to utilize electronic transactions/electronic declarations for shipment of goods to and from Tonga. The Government of Tonga at this stage has a broad development strategy to make improvements to the ICT infrastructure and connectivity for Tonga, so in hindsight this will be of great assistance to the development of paperless trade.	

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[7] This is an issue of policy nature.

A1.2	[Community partners] Does it include all the community partners/stakeholders (government and private sector)?	Yes, this is under the direction of MTED. (Government, private sector, NGOs, Grassroots communities and academia). The Ministry of Revenue and Customs (MORC) is taking a leading role in terms of aligning key Government Ministries and businesses to paperless trade as it is currently in the process of deploying the customs UNCTAD Automated System for Customs Data (ASYCUDA) system that will require all stakeholders in Tonga to utilize electronic transactions/electronic declarations for shipment of goods to and from Tonga.	
A1.3	[Chair of governance structure] Who chairs this governance structure?	CEO MTED but the CEO for Customs also plays a leading role.	
A2.	**Level of automation** It is not feasible for an organization or agency to consider implementing paperless trade systems without the ability to process electronic documents, information or data, let alone the subsequent cross-border data exchange.		
A2.1	Electronic systems		
A2.1.1	[Electronic Customs] Has your country implemented electronic customs (and other services that facilitate customs declarations in an electronic format)? *If yes, please answer A2.1.1-A2.1.1.6.*	No, this has only been done partially. Tonga's MORC has only recently introduced the ASYCUDA world system at the main Queen Salote wharf port and it will take a few years to have this system fully implemented for Tonga. Nevertheless, MORC have completed the full implementation of the "manifest" component of the ASYCUDA customs process. Hence, all manifest details such as cargo arrival; transit documents etc. are conducted online. This has already proven to assist in streamlining the trade process for Tonga with a faster turnaround time on release of cargo for customers. Once completed, the ASYCUDA system will be fully operational at the Tongatapu, Eua, Ha'apai, Vava'u and Niua islands ports, as well as the Fua'amotu and Lupepau'u international airports. The implementation of ASYCUDA world system for Tonga will allow for both importers and exporters to transit their procedures through the ASYCUDA system. Two of the major challenges at this stage is getting Government Ministries to fully integrate their systems to the ASYCUDA platform and getting Government to reduce and eventually eliminate paper-based transactions for trade related declarations, permits, licenses and payments.	

A2.1.1.1	Does it have the capability to receive, process and issue documents electronically?	Tonga Customs is currently in the process of streamlining its existing manual processes so that they are aligned to international and cross border paperless trade standards. As of to date, Tonga Customs has automated the E-manifest module of the ASYCUDA system. It is now in the process of automating the declaration module. Hence, the MORC is only partially able to process and issue documents electronically.	
A2.1.1.2	Is it integrated with an electronic payment system?	No. However, there are discussions with the National Reserve Bank of Tonga.	
A2.1.1.3	Does it have the ability to authenticate users electronically?	NA	
A2.1.1.4	Does it ensure data/document security?	NA	
A2.1.1.5	What is the percentage of trade covered under this system?	NA	
A2.1.1.6	Are community partners/stakeholders connected to it electronically?	NA	
A2.1.2	[Electronic port] Has your country implemented electronic port (including air, sea, road, rail, and inland ports)? *If yes, please answer A2.1.2.1-A2.1.2.6.*	Partial. This is currently in process as Customs is working with a New Zealand company to set this up. This is expected to be completed by mid-2025.	

A2.1.2.1	Does it have the ability to receive, process and issue documents electronically?	Partial. Not completely but as explained above, the documents are processed up to 80% online.	
A2.1.2.2	Is it integrated with an electronic payment system?	No. However there are ongoing discussions with the banks and Reserve Bank.	
A2.1.2.3	Does it have the ability to authenticate users electronically?	No but for this to be actioned is still a work in progress.	
A2.1.2.4	Does it ensure data/document security?	Work in progress.	
A2.1.2.5	What is the percentage of trade covered under these systems?	This is still a work in progress.	
A2.1.2.6	Are community partners/stakeholders connected to it electronically?	Partial. At the moment, only the ports are connected electronically (Tongatapu, Vava'u, Ha'apai and Eua).	
A2.1.3	[Electronic license, permit & certificate] Has your country implemented electronic licence, electronic permit and electronic certificate? (Please fill out the appendix for this question.)	No. There is a need to enact the regulation on electronic transactions.	

A2.1.4	[Other cross-border trade systems] Has your country implemented any systems of cross-border trade other than above specified? *If yes, please answer A2.1.4.1-A2.1.4.5.*	No.	
A2.1.4.1	Does it have the ability to receive, process and issue documents electronically?	NA	
A2.1.4.2	Is it integrated with an electronic payment system?	NA	
A2.1.4.3	Does it have the capability to authenticate users electronically?	NA	
A2.1.4.4	Does it ensure data/document security?	NA	
A2.1.4.5	What is the percentage of trade covered under these systems?	NA	
A2.1.5	[Targeted timeline] What is your country's targeted timeline to cover all trade transactions through these systems (i.e., e-Customs, e-Port, e-Certificates, e-Licences, e-Permits and etc.?	2-3 years is the anticipated timeline for ASYCUDA to be fully implemented for the whole of Tonga. Hence, we can expect full implementation by end of 2024. However, the timeline may change if complexities occur as a result of Covid-19 (e.g., shipment delays, lockdown)	

A2.2	[Single Window System] Has a Single Window system been implemented in your country to expedite cargo movement/clearance and to facilitate the international trade supply chain? *If yes, please answer A2.2.1-A2.2.4. If no, please answer A2.2.5.*	No. But this will be implemented once we have ASYCUDA fully implemented.	
A2.2.1	[Electronic data reception] How does it receive data electronically, i.e., what kind of user interface and communication channel is used (Internet-based network or dedicated/secured private network)?	NA	
A2.2.2	[Support of paperless environment] Does it support a paperless environment?	NA	
A2.2.3	[Connection to Single Window] How many agencies are connected to the Single Window? Please list them.	NA	
A2.2.4	[System operation] Who operates this system?	NA	
A2.2.5	[Future plan] What is your country's future plan and the targeted timeline to implement a Single Window system?	The Single Window system is to be implemented by mid-2025.	

A3.	**Information and communications technology infrastructure for paperless trade**	
	Good information and communications technology (ICT) infrastructure is an essential element of an efficient paperless trade system. The primary function of the network is to serve as a secure channel for information exchange between the participating parties. The lack of Internet service could be one of the obstacles to full implementation of a trade facilitation system when the business process is incomplete due to missing parties in network connectivity.	
	There are various options of network, such as multiprotocol label switching (MLPS), Internet protocol (IP), virtual private network (VPN) and secure hypertext transfer protocol (HTTP). Regardless of the choice of options, the network should allow connectivity and interoperability between heterogeneous platforms and support various protocols and exchange paradigms within a secure operating environment. It is not uncommon that different stakeholders have different levels of computerization and systems on different platforms. To ease integration, interfacing and interoperability between these systems, a Single Window system which connects them needs to support interface with heterogeneous systems. Putting in place a strategic plan to address ICT infrastructure issues and a disaster recovery plan should be part of a business continuity plan. It is essential to ensure the effects of operating disruptions are properly mitigated.	
A3.1	[Network service availability] Is network service available at all border posts, including ports, airports and cargo clearance houses, in your country? If not, what is your country's future plan and targeted timeline to connect the stakeholders of the logistic and supply chain, including controlling agencies?	Yes. There are currently 3 internet providers in Tonga (TCC, Digicel and Wantok) and TCC provides 4G network across all of Tonga with the exception of Niua whereby TCC currently provides 3G connectivity. Digicel provides 4G networks across Tonga with the exception of Niua whereby both Digicel and Wantok currently have not connectivity. The most recent internet provider Wantok, currently provides internet for select locations in Tongatapu only.	
A3.2	[Common/single network (e-system)] Are any of the systems mentioned in A2.1 "Electronic systems" connected via a common or single network? *If yes, please answer A3.2.1-A3.2.6.*	Yes, the Government NICT project runs on a secured high-speed government fibre optic network that covers all Ministries across Tonga.	
A3.2.1	Is it integrated and secure?	Yes	

A3.2.2	Is it able to provide a high availability rate of minimum 99.9 per cent in terms of service level agreement for trade data exchange in paperless environment?	Yes, for all sites in Tongatapu. For sites in the outer islands, there is still work to be done to get it to the 99.9% level. Both of the major telecommunication providers in Tonga provide 4G-network capability across the Tonga islands with the exception of Digicel, which currently does not provide connectivity to the Niua islands.	
A3.2.3	Is it able to support various communication protocols?	Yes, the telecommunication companies in Tonga provide fibre and microwave technology.	
A3.2.4	Is it able to provide secure information exchanges that ensure confidentiality and data integrity?	Yes, the MEIDECC Regulator's office sets international criteria for the telecommunications companies to meet in terms of data security and confidentiality regulations.	
A3.2.5	Is it designed to take into account future requirements such as device and technology upgrades?	Yes	
A3.2.6	If any of the above (A3.2.1-5 is lacking, what is your country's future plan to upgrade it and what is the targeted timeline?	Tonga's Government also has a mandatory community service obligation policy which both telecommunication providers in Tonga are working to fulfil to the highest level in terms of service provision across all islands and communities throughout Tonga.	
A3.3	[Single Window interoperability] Is a Single Window system, if implemented, interoperable with other systems?	Yes, however configuration will be required. The Government of Tonga ICT project is in the process of developing this Single Window system for Government. In terms of cross-border paperless trade, the ASYCUDA World system currently being implemented for Tonga provides a full customs business coverage which comprises of the pre-arrival stage, manifest, transit shed, declaration, accounting, transit shed and pre-departure stage. This Single Window system for Tonga enables all trade related documents to be carried out online in the system so there is no duplication and the trade transaction process is simplified.	

A3.3.1	Is it able to integrate, interface and/or interoperate with other existing heterogeneous systems (i.e., with systems on a different platform)?	Yes, with the full implementation of ASYCUDA, there will be a full integration web-based.	
A 3.3.2	If it does support (is interoperable with) heterogeneous systems, what is the method of integration/interfacing?	The method to be used for integration will be confirmed once the system rollout phase is completed.	
A3.4	[Strategic plan for ICT infrastructure] Strategic plan to address ICT infrastructure issues	Yes. This plan is part of the corporate plan that the Governments' Telecom provider TCC develops and executes from year to year. MEIDECC also through the NICT project is working to control and manage the Government ICT systems whilst providing cross agency information to provide effective decision-making and streamlining of customer services. The ICT network availability in Tonga is sufficient with regards to providing stakeholders with the ability to integrate their operation to the ASYCUDA system.	
A3.4.1	Does your country have a strategic plan to address ICT infrastructure issues (for paperless trade)?	Yes. This is managed by MEIDECC.	
A3.4.2	If not, what is your country's future plan and targeted timeline to establish a strategic plan?	NA	
A3.5	Disaster recovery		
A3.5.1	Is there a policy for the establishment of a disaster recovery plan at the agency level?	Yes, this is managed by NEMO. The Tonga Strategic Roadmap for Emergency and Disaster Risk Management ('the Roadmap') is a joint initiative of NEMO and First Responders. It has been developed with the input from NEMO, Tonga Police, Tonga Fire & Emergency Services, and His Majesty's Armed Forces and the Cluster Systems in Tonga. MEIDECC plays a primary role in this disaster recovery plan, which comprises of the provision of a redundancy ICT option to support the network in the case of a disaster.	

A3.5.1.1	If yes, please indicate level of implementation for the disaster recovery plan (please specify % of agencies).	Incorporates 99% of agencies.	
A3.5.2	Is there a policy for the establishment of a disaster recovery plan at the national level?	Yes, as alluded to in A3.5.1	
A3.5.2.1	If yes, please indicate whether the disaster recovery plan is implemented at the national level.	With the direction of cabinet, NEMO collaborates with an emergency committee and they work hand in hand with the district and village emergency committees, before, during and after a disaster. As of to date, the Tongan Government has a redundancy plan for the ICT sector that has TCC as the primary ICT provider and Digicel as the redundant connection. The challenge for Tonga at the moment is there is only 1 fibre optic cable that connects Tonga to the world, hence, there is a need for a secondary cable or a back-up option when this international cable is damaged.	
A3.5.3	If no policy for the establishment of a disaster recovery plan, what is your country's future plan and targeted timeline to set up a disaster recovery plan?	NA	
A3.6	[Business continuity plan] Does your country have a business continuity plan for paperless trade systems?	No. Once Government passes the law on electronic transaction, it is expected that a recovery plan will be in place to help protect ecommerce and paperless trade activity for Tonga.	
A3.6.1	If yes, is it regularly tested at defined frequency?		
A3.6.2	If not, what is your country's future plan and targeted timeline to develop a business continuity plan?	This will need to be further discussed bearing in mind that the new Government has just come into office, hence, we can aim to have this plan in place in the next 1-2 years.	

A4.	**Security**	
	The confidence of users to replace paper-based document with electronic information or data depends to an extent on the security of the information technology system that manages electronic data.	
A4.1	[IT security policy] Is there an information technology security policy for your country? If yes, please specify.	Yes, under the CERT for Tonga, Government has mandated this office to coordinate, collaborate amongst stakeholders to prevent, detect and manage cyber threats to the Kingdom. As of to date, there is no specific law in Tonga that provides security for documents so this is an area that needs to be addressed. Nevertheless, combating cybersecurity is a key area of concern for the Tonga Government, hence, addressing cybercrime will greatly assist in the development of paperless trade for Tonga. Once the ASYCUDA system for Tonga is fully implemented, the various components of the system utilize an internal system authentication process using ID and passwords so this will ensure the security of the system. Moreover, Tonga has passed a Computer Crimes Act in 2003 (revised in 2016) to combat computer crime and provide for the collection and use of electronic evidence.	
A4.2	[Security measures (e-Systems)] If any of the systems mentioned in A 2.1 "Electronic systems" have been implemented, what kind of security measures are in place to protect them from unauthorized access?	The systems have not yet been fully implemented.	
A4.3	[Authentication mechanism] What kind of authentication mechanism is used to ensure security of information transmitted electronically?	The websites used by Tongans for transmission of information electronically uses encryption and firewalls to prevent unauthorized access to and from the network.	
A4.4	[Communication protocol] What kind of communication protocol is used for electronic data exchange currently?	As per mentioned in previous section.	
A4.5	[Future Plan] What is your country's future plan and targeted timeline to enhance the security level in A4.1 and A4.2?	The Telecom regulator is in charge of providing the direction for enhancing security for ICT in Tonga. The CERT Tonga department with MEIDECC works closely with Tongan and international agencies to develop bilateral and multilateral agreements to protect Tonga from cyber security issues. Further security enhancement is currently a work in progress and is ongoing.	

A5.	**Business process re-engineering** Failure to review and re-engineer a manual procedure/process in the development of an electronic system will often lead to inefficiency of the system. It will jeopardize integration/interfacing with other systems if business processes across the board are not streamlined to ensure the seamless flow of information. Implementation of an electronic system often begins with parallel processing of paper documents, but the ultimate goal is to discontinue the usage of paper documents.		
A5.1	[BPR for paperless trade] Have the stakeholders in your country conducted re-engineering and streamlining of business processes to support paperless trade or a national Single Window:	Not completely, stakeholders are in the preliminary stages of BPR of their current business processes. Even with the introduction of ASYCUDA, there is slow progress of moving the country's work system to an electronic one, which will enable for thorough communication online. The MORC are in the process of training key stakeholders both within and outside of Government on the ASYCUDA system and the need for the manual processes to be replaced by an electronic system. It will take up to three years for Tonga to completely make this transition of moving to electronic forms of communication to support paperless trade. This move to the ASYCUDA system not only modernizes and simplifies the trade process and procedures for Tonga but it will also provide better transparency and effectiveness in the customs process, which ultimately leads to a more robust customs system.	
A5.1.1	At the agency level? (Please list them.)	NA	
A5.1.2	At the national level?	NA	
A5.2	[Implementation of paperless trade transactions] Has your country implemented any paperless trade transactions?	No.	

A5.2.1	If yes, what kind of transactions have been implemented, and what type of electronic documents are exchanged?	NA	
A5.2.2	If not, what is your country's future plan and targeted timeline to do away with paper-based documents?	Tonga is approximately 2-3 years away from being able to fully trade online as all the components needed for paperless trade are fully aligned.	
A6.	**Data harmonization and standardization** Data compatibility is one of the main issues that needs to be addressed in various connectivity projects in and around the region. Thus, if data harmonization and standardization can be carried out as early as possible, seamless data exchange will be achieved without compatibility issues especially if it is based on international standards.		
A6.1	[Data harmonization and standardization] Has the data harmonization and standardization been conducted on the data elements for paperless trade:	Data harmonization and standardization is in the preliminary stages for Tonga as the MORC works to integrate the Government system to the ASYCUDA Single Window process. Data harmonization for Tonga to some extent is based on the WCO data model version 3.6.0.	
A6.1.1	At the agency level?	NA	
A6.1.2	At the national level?	NA	
A6.1.3	If yes, has a data model been adopted and is it based on international standards/guidelines such as the United Nations rules for Electronic Data Interchange for Administration, Commerce and Transport, United Nations Code for Trade and Transport Locations, Core Component Technical Specification, core component library and/or the World Customs Organization Data Model?	This is a work in progress.	

46

A7.	**Capacity-building** Capacity-building is an ongoing activity in most projects but is important particularly at the outset to ensure stakeholders have a common understanding of the project and their respective roles and responsibilities to make it a success.		
A7.1	[Awareness programme] Has the country conducted any awareness programme and/or workshop to ensure the stakeholders, including government agencies and traders, have a common understanding on paperless trade as well as their respective roles to help realize cross-border paperless trade data exchange?	Yes, the Ministry of Customs is rolling out training programs at the moment on the ASYCUDA system for Government, private stakeholders and key organizations. TradeWorthy Australia is currently developing a Digital roadmap for Tonga with a focus on e-commerce and there have been several consultations amongst key stakeholders with regards to e-commerce.	
A7.2	[Understanding of the Single Window approach] Do the stakeholders of cross-border trade in your country fully understand the Single Window approach?	Partially but this is mostly handled by the MORC.	
A7.3	[Awareness programme on Single Window] Has your country conducted any awareness programme or workshop on a Single Window?	Yes, the Tonga Customs Ministry is starting to provide awareness as they discuss the rollout of ASYCUDA with stakeholders.	
A7.4	[Future plan] What is your country's future plan and timeline to enhance capacity-building for cross-border paperless trade data exchange?	None that is clearly articulated at the moment apart from the work that Tonga Customs is doing.	
A8.	**Other matters**		
A8.1	Computer literacy		

A8.1.1	What is the level of computer literacy in the trading community in your country as a whole to support electronic transactions? (70-100%=high, 2069%=medium, 0-19%=low)	Low (0-19%)	
A8.1.2	Are they ready to accept changes arising from re-engineered business processes in implementing paperless trade systems?	Yes. Tonga is a country that has a relatively high per capita usage in terms of social media so with the added benefit of economic transaction, people in Tonga will certainly make it a point to learn the skills needed to implement paperless trade systems.	
A8.2	[Budget constraints] Does your country encounter budget constraints in implementing paperless trade systems?	Yes, there are budget and technical constraints as Tonga is a developing country with limited resources. Tonga's Government has pressing matters to prioritize such as health, drugs, economy and tourism so much resources are needed to implement paperless trade systems for Tonga	
A8.2.1	If yes, what is your country's future plan to overcome this financial constraint and what is the targeted timeline?	None at the moment as there are more pressing priorities for Government but there is some limited donor funding being provided to assist with the ICT infrastructure for paperless trade.	

B. National status towards cross-border data exchange

No.	Questions	Elaboration on status/issues/future plan	*Timeline (if relevant) for future plan*
	Ideally, all stakeholders of cross-border trade should be on board the cross-border data exchange project to bring forth full benefits. In this respect, it is important that their information technology systems support cross-border data exchange. A Single Window system is meant to connect systems of the stakeholders via a single point of connectivity providing more efficient integration/interfacing. Likewise, a national Single Window, which acts as the national single point of connectivity, will ease integration/interfacing for cross-border data exchange with dialogue partners.		
B1.	**Electronic systems**		
B1.1	If any of the systems mentioned in A 2.1 "Electronic systems" have been implemented, what percentage support cross-border data exchange?	At the moment, ASYCUDA has been launched for Tonga but the Single Window component has yet to be implemented. Once this is implemented, there will be a complete nationwide ability to exchange data for cross-border exchange.	
B2.	**Single Window system**	To be implemented by end of 2024.	
B2.1	If a Single Window mentioned in A 2.2 has been implemented, does it support cross-border data exchange?	Once implemented for Tonga, the Single Window will support cross-border exchange.	
B2.2	If yes, does it function as the national Single Window, which acts as the national single point of connectivity for any cross-border data exchange with other dialogue partners?	Single Window implementation is still in progress.	

	When business process re-engineering is done on domestic procedures/processes for paperless transactions at the national level, it has to take into consideration requirements for cross-border data exchange whereby paper documents will not be exchanged across borders.	
B3.	**Business process re-engineering**	
B3.1	If your country has implemented paperless transactions at the national level, as mentioned in A 5.2, has re-engineering and streamlining of business processes been conducted to support cross-border data exchange?	Tonga has not yet implemented paperless transactions.
B3.2	If not, what is your country's future plan and targeted timeline to develop a regional business process for cross-border data exchange?	The ASYCUDA system has been installed with governance of this system provided by the MORC, which is looking at end of 2024 to have the business process in place for cross-border data exchange.
	If data harmonization and standardization is done based on international standards which are adopted by most organizations or countries in the region, it will minimize changes in the national system process and database structure when implementing cross-border data exchange electronically.	
B4.	**Data harmonization and standardization**	
B4.1	Has data harmonization and standardization been conducted based on international standards/guidelines, such as the United Nations rules for Electronic Data Interchange for Administration, Commerce and Transport, United Nations Code for Trade and Transport Locations, Single Window recommendation of the United Nations Centre for Trade Facilitation and Electronic Business, to support cross-border paperless trade data exchange?	Work in progress. Please refer to MORC.

B4.2	If not, what is your country's future plan and targeted timeline to minimize changes in your system process and database structure for cross-border data exchange electronically?	Targeting to be ready for data harmonization by end of 2024.	

B5. **International transit**

The issues transit traders face under the current international transit procedure in many countries in the region include the following:

Repetitive submission of a customs transit declaration at entry to every country of transit;

A security document needs to be registered at every country of transit.

To address the above issues, the following could be considered:

A single customs transit declaration to be valid for the whole transit route: data and information of the customs transit declaration could be submitted and approved at the country of departure and shared across borders with the countries of transit and the country of destination.

A single guarantee to be valid for the whole transit route: relevant data/information of the guarantee could be registered at the country of departure and shared across borders with countries of transit and the country of destination.

If single stop inspection is done by all controlling agencies in the exporting country and data of the inspection results are shared with the importing country, it will definitely expedite cargo clearance.

B5.1	[National transit] Has the country implemented paperless customs declaration for national transit procedures (inbound transit, outbound transit, inland transit)?	In progress. At the moment, the paper-based system is being utilized.	
B5.2	[International transit] Has the country implemented paperless customs declaration for international transit?	Not yet, it is still based on the manual paper system but this is a work in progress with MORC.	

| B5.2.1 | If yes, is the customs regime in your country able to support the implementation of a single customs transit declaration and single guarantee valid for the international transit route taking into consideration the following:

To agree on a guarantee registered at the country of departure, covering the highest duty amount calculated based on the duty rate of each country in the transit route, to be valid and accepted throughout the transit route; and

To agree on a regional/subregional format and content of the single guarantee? | In progress. | |
|---|---|---|---|
| B5.2.2 | If not, what is your country's future plan and targeted timeline to address this issue? | 2-3 years, once the ASYCUDA system is fully implemented. | |
| B5.3 | Has your country implemented a one-stop inspection system by all controlling agencies at the borders at the time of exit/export? | Not yet but this is a work in progress being overseen by the MORC. | |
| B5.3.1 | If yes, are the inspection results shared with the importing country? | NA | |
| B5.4 | If not, is there any intention to implement a single-stop inspection and what is the timeline? | Yes, we intend to implement this in the next 2-3 years once ASYCUDA is fully implemented. | |

B6.	**Awareness programme**	
	Awareness programmes are important for stakeholders to understand how cross-border data exchange could be carried out to reduce their anxiety and prepare them to address any issues that may arise.	
	If a country lacks the expertise to carry out business process analysis, data harmonization and simplification, system development, project management, etc., it may look for technical assistance from external parties.	
B6.1	[Awareness Programme] Does your country have an awareness programme (capacity-building, training, workshops, etc.) for stakeholders to have a better understanding on the following issues?	Yes. The MORC have started to run workshops in early 2021 to key government and private sector stakeholders on the ASYCUDA system but much work needs to be done to build the technical capacity around cross-border aspects. This will require some resources and the possibility of outsourcing to an external trainer.	
B6.1.1	[Cross-border data exchange] How could cross-border data exchange be implemented?	With the ASYCUDA system, the MORC would connect to all the relevant stakeholders to do cross-border exchange online and in a paperless format.	
B6.1.2	[Potential business transactions and documents] Potential business transactions and documents for cross-border data exchange?	As per the answer to B6.1.1 above.	
B6.1.3	[Methods of identifying inhibitors] Methods of identifying inhibitors that need to be addressed?	NA	
B6.2	[Future plan] If the country has not conducted any awareness and capacity building programme related to B6.1.1B6.1.3, what is your country's future plan and targeted timeline to conduct an awareness programme?	Awareness and capacity building workshops is ongoing and conducted by the MORC.	

B6.3	[Capacity] Does your country have the capacity to carry out: (i)Business process analysis; (ii) Data harmonization and simplification; (iii) System development; and (iv) Project management?	Yes, with the implementation of ASYCUDA for Tonga, data harmonization will be realized gradually.	
B7.	**Other matters**		
	Some countries which are ready for cross-border data exchange may not be willing to participate in a pilot project. One of the reasons is a lack of trust in the economic operators of their dialogue partners. If your economic operators are able to comply with the authorized economic operator scheme and are mutually recognized by their dialogue partners, it will expedite cross-border data exchange.		
B7.1	Authorized Economic Operator (AEO)		
B7.1.1	In general, what is the level of compliance of traders in your country (high, medium or low)?	Medium	
B7.1.2	Has the authorized economic operator scheme been implemented in your country?	Not yet but once Tonga has a fully automated system for trade, this could be the next step.	
B7.1.3	Is your country ready to sign any mutual recognition agreement for AEOs with dialogue partners?	Yes, the MTED will have further advice on this.	
In the preparatory stage, it is useful to assess the readiness of stakeholders to accept changes arising from cross-border data exchange and the availability of funds for any potential cross-border paperless trade project.			
B7.2	[Change management] Are the stakeholders and the trade community ready to accept changes arising from the re-engineered processes towards cross-border data exchange?	It will require some timeframe and more work needs to be done to build capacity and awareness on cross-border paperless trade and data exchange.	

		• Regulatory agencies • Agents/customs brokers • Traders • Port community • Financial institutions • Others (please specify)		
B7.3	[Budget] Has your country's government budget provisioned for the transition to cross-border paperless trade data exchange?	Not yet. The Government is focused on rolling out the ASYCUDA system for the time being.	
B7.3.1	If not, what is your targeted timeline?	No clear timeline as of yet.	
Sharing information on a country's preferences on the prioritized documents for cross-border data exchange can help identify potential participants having the same or similar preferences to work together on pilot projects.				
B7.4	[Pilot project] Is your country considering cross-border data exchange for any of the documents and related processes? (Y=Yes, N=No. Please select the top five prioritized documents) (i) Seaway bill (ii) (Advance) Manifest (iii) Customs transit declaration (iv) Transit bond (v) Phytosanitary certificate (vi) Sanitary certificate (vii) Fumigation certificate	1. Seaway Bill – Yes 2. Manifest – Yes 3. Customs transit declaration – Yes 4. Fumigation certificate – Yes 5. Bill of lading – Yes	

		(viii) Convention on International Trade in Endangered Species of Wild Fauna and Flora certificate		
		(ix) Certificate of origin (preferential)		
		(x) Certificate of origin (non-preferential)		
		(xi) Pharmaceutical certificate		
		(xii) National standard and quality certificate		
		(xiii) International Organization for Standardization (ISO) and other		
	B7.5	[Priorities] For each of the five prioritized documents identified in 7.4, please provide/specify further information on the following: document name; implementing agency; and percentage of the paperless documents and related processes	1. Seaway bill – shipping agencies such as Pacific Forum Line, Polynesian Shipping Agency (25%) 2. Manifest – shipping agencies (25%) 3. Customs transit declaration – various brokers (10%) 4. Fumigation certificate – Importing company or organizations (20%) 5. Bill of lading – Shipping agencies (5%)	

Appendix: Form for implementation of paperless trade by the other government agencies

Name of ministry or agency	Quarantine Division, Ministry of Agriculture &Food, Forests and Fisheries			
Permit type IL = import licence EL = export licence C/O = certificate of origin SC = sanitary/health certificates PS = phytosanitary certificates OT = other types	IL, EL, C/O, SC			
1. Has business process reengineering been conducted and completed?	Completed [ ]	Ongoing [✓]	Not conducted [ ]	Don't know [ ]
1.1. If it is on-going, when is it going to be completed? [Year/Month 2023/December] 1.2. If it is not implemented, is there a plan to conduct it? [ ] Yes [ ] No [ ] Don't know 1.3. If 1.2 is yes, when is it going to commence? [Year/Month]	Please provide further information, such as website, date of implementation, etc. Ongoing as part of the ASYCUDA Single Window implementation for Tonga.			
2. Has e-application (capability to receive, process and issue document electronically) been implemented?	Fully implemented [ ]	Partially implemented [ ]	Not implemented [✓]	Don't know [ ]

2.1. If it is not implemented, is there a plan to implement it? [✓] Yes [ ] No [ ] Don't know 2.2. If 2.1 is yes, when is it going to be implemented? [Year/Month Implementation to begin March 2022] 2.3 If it is implemented, how the supporting documents are being submitted? [ ] MSD = Manual Supporting Documents [ ] EDHC = Electronic Declaration/Application but hard copy still required [ ] any other methods (Please specify_____)				Please provide further information, such as website, date of implementation, etc.
3. Has e-application been connected to the e-customs system and/or the Single Window?	e-Customs system [ ]	Single Window [ ]	Not connected [✓]	Don't know [ ]
3.1. What is the level of integration between e-application and a Single Window and/or an e-customs system, if connected? [ ] Partially connected [ ] Fully connected [ ] Don't know *Note*: Partially connected means electronic transfer of information is one-way, while fully connected means electronic transfer of information is reciprocal between an e-application and a Single Window and/or an e-customs system.				Please provide further information, such as website, date of implementation, etc. Not yet integrated but will be as implementation of ASYCUDA Single Window is implemented for Tonga. Full integration to be completed by mid-2023.
4. Is e-payment available for the e-application?	Yes [ ]		No [✓]	

4.1. What are the available payment options for the e-Application?	Please provide further information, such as website, date of implementation, etc.
[ ] EFT = electronic funds transfer [ ] CD = cash deposit [ ] CC = credit card [ ] CSH = cash [ ] Other options (please specify_____)	There is currently no e-application process/system for Tonga Quarantine. The work to develop an e-application process will begin in March 2022.

Annex IV. Cross-border paperless trade: A legal readiness checklist: Tonga

Introduction

1. The checklist serves to identify potential legal gaps and highlight what may need to be done to ensure the laws support engagement in cross-border paperless trade, as envisaged in the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific, which was adopted by the Economic and Social Commission for Asia and the Pacific (ESCAP) in 2016.

2. It should be noted that the checklist is not intended to assess the readiness of a country to join the Framework Agreement. This treaty contemplates that its parties ensure that their legal systems support the use of electronic communications and gradually adapt their laws for the purpose of cross-border paperless trade. It is not necessary for Governments to modernize their laws before ratifying or acceding to the Agreement.[8] Paperless trade implementation is a work in progress, and the Agreement is a tool meant to support such progress regardless of the level of readiness of a country.

3. In line with the substantive provisions of the Framework Agreement, the checklist organizes legal issues into four major parts as follows: (i) electronic transactions and signatures law; (ii) laws regarding paperless trade systems; (iii) cross-border aspects; and (iv) other considerations. Each part is divided into sections. In each part and section of the checklist, key legal issues are highlighted, and a list of focus questions is proposed.

4. The checklist is intended for use by all stakeholders involved in paperless trade facilitation and not only for legal specialists. While it includes references to legal concepts, it does so in general terms in order to reach a broad audience. Each question should be seen as the starting point for a broader reflection on the state of the law in the given area.

5. The term "law" should be understood to include statutes, regulations, administrative measures and any other binding rules. All questions about national laws can be applied to subnational laws as appropriate. In completing the checklist, it is recommended that the user indicate, where possible, the legal authority for the answers, for example the statute, regulation or other rule relevant to the answers. Some relevant obligations may arise through contract as well.

6. Additional guidance on how to use this checklist will be provided in a separate online guide.[9] A number of examples of country reports on readiness assessments for cross-border paperless trade carried out by ESCAP are also available online.[10] In addition, a general

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[8] Detailed information on the Framework Agreement, including an explanatory note and answers to frequently asked questions, is available at www.unescap.org/resources/framework-agreement-facilitation-cross-borderhttp://www.unescap.org/resources/framework-agreement-facilitation-cross-border-paperless-trade-asia-and-pacificpaperless-trade-asia-and-pacific.

[9] ESCAP, *Cross-border Paperless Trade Readiness Assessment Guide.* Available at http://readiness.digitalizetrade.org/

[10] Available at http://www.unescap.org/resources/readiness-assessments-cross-border-paperless-trade

introduction on legal issues related to cross-border paperless trade may be found in the ESCAP publication *Electronic Single Window Legal Issues: A Capacity-Building Guide*.[11]

I. Electronic transactions and signatures law

1. Part I of the checklist is focused on laws related to electronic transactions and electronic signatures. These concerns are addressed either directly or indirectly in articles 5, 6 and 7 of the Framework Agreement. In particular, the first three principles included in article 5 (on general principles) represent the principles guiding the legislative texts on electronic commerce prepared by the United Nations Commission on International Trade Law (UNCITRAL) and, as such, are an expression of international consensus.[12] Approximately half of the Governments in Asia and the Pacific have adopted at least one UNCITRAL text on electronic commerce.[13]

2. In order to promote interoperability, to the extent possible similar rules should apply to electronic communications exchanged among commercial operators and between commercial operators and public authorities. In the paperless trade facilitation environment, this means that trade-related data exchanged in commercial documents may be reused for submission to Single Windows. This should ensure high data quality with respect to its origin, integrity, accuracy, completeness and other characteristics.

No.	*Questions*	*Response*
Related provisions of the Framework Agreement: • Article 5 on general principles. • Article 6 on the national policy framework, enabling domestic legal environment and paperless trade committee. • Article 7 on the facilitation of cross-border paperless trade and development of Single Window systems (more specific questions on the Single Window appear below in part II).		

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[11] ST/ESCAP/2636.

[12] The Framework Agreement contains the internationally recognized criteria for these laws, such as non-discrimination of the use of electronic communications (the laws apply in the same way, or with the same effect, to paper and electronic documents), technological neutrality (the laws do not specify what technology to use to achieve the legal effect) and functional equivalence (electronic documents have the same practical or legal effect as their paper equivalents, even if they have different characteristics).

[13] For a list of UNCITRAL texts on electronic commerce, see part C.

I-A.	**Electronic transactions law: general principles**	
	This section is aimed at identifying the general features of electronic transactions law, including whether they implement internationally recognized general principles.	
I.A.1	What is the legal status of electronic transactions?	Tonga does not have a specific legislation to govern electronic transactions and data protection and privacy. But it has other legislation like the Evidence Act that recognizes electronic signatures in transactions. Tonga has a Consumer Protection Act, but this Act does not protect online fair trade and practices. Part 3 of the Computer Crimes Bill covers criminalization related to areas of computer related crimes with the focus on a computer system. There is also a provision for acts committed using mobile devices or through a social media post. However, the Computer Crimes Act does not criminalize online fraud and other related elements. In the past 2-3 years, there has been a drive by the 2 major international banks (ANZ & BSP Bank Tonga) to introduce, educate and get Tongans to utilize different forms of electronic transactions. This comprises of; Eftpos machines, ATMs, online banking services such as payment of bills online quite recently, visa and credit card services. One of the telecommunications companies, namely Digicel Tonga has introduced mobile money into the market, which allows for Tongans to receive funds from families overseas and people in Tonga can use their mobile phone to do shopping and pay for bills at participating outlets. As of to date, there are no specific laws that provide for electronic transactions in Tonga. Like most PICs, Tonga lacks the interoperable platforms that allow customers to transfer money from an account of one bank to another. That does not mean that transactions between banks are impossible, but that it requires manual interventions during processing. The cost is mostly borne by the customers and usually represents several percentage points of any transaction. This is a huge challenge that hinders the uptake of digital payments.
I.A.2	If an electronic transactions law exists, is it based on uniform models?	The Kingdom of Tonga currently does not have any legislation in place that directly deals with electronic transactions in the Kingdom. Tonga has prepared in 2018 (?) an e-Transactions Bill (based on UNCITRAL's Model Law on Electronic Commerce and the Model Law on Electronic Signatures) but this is yet to be enacted.

I.A.3	What are the conditions, if any, for the legal recognition of electronic transactions?	Please refer to IA.1
I.A.4	Does the law establish functional equivalence between paper documents and electronic communications?	Not expressly at this stage. Tonga has an Evidence Act that recognizes electronic signatures in transactions. The authentication of any electronic record in Tonga in any legal proceedings is on the person seeking to introduce the electronic records. Hence the authentication of electronic documents can be difficult in Tonga as Tonga may lack people with the appropriate expertise.
I.A.5	What is the legal status of electronic contracts?	Refer to I.A.1, I.A.3 and I.A.4
I.A.6	Are there special rules for the use of electronic communications in paperless trade?	Not at this stage. There was a Cabinet Directive in 2018 to process an Electronic Transactions Bill, the main purpose of the draft Bill is to facilitate the use of electronic technology by – (a) Reducing uncertainty regarding the legal effect of information that is in electronic form or that is communicated by electronic means; and the time and place of dispatch the receipt of electronic communications; and (b) Providing that certain paper – based legal requirements may be met by using electronic technology that is functionally equivalent to those legal requirements.
I.A.7	In particular, are there special rules for the use of trade-related data and documents in electronic form such as certificates of origin, invoices and phytosanitary certificates?	Not at this stage.
I.A.8	Are there special rules for the use of electronic transferable records such as bills of lading?	Not at this stage.

I-B.	**Electronic signatures and trust services**	
	Electronic signatures serve to identify the originator of an electronic communication and ascertain their intention with respect to that communication. Certain types of electronic signatures, namely digital signatures based on public key infrastructure certificates, may provide additional information, for instance on the integrity of the data message and on timestamping. Many laws deal with the legal recognition of electronic signatures. However, legislative approaches may vary significantly, in particular with respect to technological neutrality and the recognition of service providers. Trust services are electronic services that provide assurance on the quality of data. Trust services are often used to establish confidence in the use of electronic communications.	
I.B.1	Does the law address how electronic signatures, including identification, authorization and authentication, are carried out in an electronic environment? Does it require the use of a specific technology or method for electronic signatures or is it technology neutral?	The authentication of any electronic record in Tonga in any legal proceedings is the responsibility of the person seeking to introduce the electronic records. Hence the authentication of electronic documents can be difficult in Tonga, as the country may not have people with the expertise in this area. There are no express provisions in Tongan law for such recognition. As of to date, electronic signatures in Tonga are prescriptive to a certain extent as they must following the rules of evidence to be identified and recognized in a court of law. The Draft Electronic Transactions Bill takes Fiji's two-tier approach on electronic signature. The person providing the electronic signature must first give consent to the use of his/her electronic signature. This is as per Section 29 (Legal requirement for signature).
I.B.2	Does the law adopt a functional equivalence approach for electronic signatures?	No it does not.
I.B.3	Is the law based on international standards?	Not at the moment.
I.B.4	Does the law recognize foreign electronic signatures?	Not at the moment.
I.B.5	Are there special rules for the use of electronic signatures in paperless trade?	Not yet.
I.B.6	Does the law deal with trust services?	Not right now.

I-C.	**Privacy and data protection**	
	Privacy and data protection are important elements of the legal landscape of electronic commerce as they may impose conditions to data transfer between the parties. This section is aimed at identifying laws relating to privacy and data protection, with special attention to those relevant to paperless trade.	
I.C.1	Is there a law on privacy and data protection? If so, what are its features? Is it based on international standards?	The existing Privacy Bill in Tonga provides for the following; a) (28) Collection of personal information and sensitive information b) (29) Notification to individuals. In 2018, the Tonga Government approved a policy directive to process a Privacy Bill to apply to both the public and private sectors. It was identified that the enactment of such Bill will require extensive consultations with the general public. However, Government has not re-introduced this policy. The potential challenge of introducing a new Privacy Bill for Tonga is that it might introduce a law that may disrupt how Government Ministries and agencies operate in terms of data collection and usage.
I.C.2	Does domestic law address the transfer of data abroad?	Not yet.
I.C.3	Do international agreements contain provisions relevant for privacy and data protection?	Not at this stage.
I.C.4	Does the law require data localisation? If so, does it apply to paperless trade?	NO
I.C.5	Is there any special rules on privacy and data protection in paperless trade?	Work in progress
I.C.6	Does the law protect the confidentiality of commercial information in electronic form?	This law is yet to be passed
I.C.7	Are there provisions on cybercrimes applicable to paperless trade?	Tonga currently has a pending Computer Crimes Bill which was drafted to ensure that Tongan cybercrime laws are in line with the Budapest Convention.

I-D.	**Data sharing**	
	Paperless trade systems are often built around the notion of a Single Window for customs operations, which involves collecting trade-related data and documents and sharing them among participants. This process raises delicate issues. Besides general rules on privacy, data protection and data retention, specific legal texts may address data sharing, especially among public entities.	
I.D.1	Are there agreements or policies for collecting, accessing, using and sharing data among government agencies participating in a paperless trade system	The main purpose of the draft Privacy Bill is to make provisions for the collection, holding, security use, correction and disclosure of personal information consistent with the right of an individual to privacy with respect to their personal information. The existing provisions need to be reviewed to ensure that personal privacy interests do not interfere with efficient government.
I-E.	**Data retention and electronic evidence**	
	The legal effect of electronic records often depends on their evidentiary value, i.e. the ability to use those records before a court to substantiate a legal claim. This section is aimed at clarifying which retention and evidence rules apply.	
I.E.1	Does the law set forth general requirements for data retention, including a minimum and maximum retention period? Do they apply to electronically-stored data?	The existing Privacy Bill provides for the following – a) (30) Personal information to only be retained for as long as necessary. b) (31) Security of personal information c) (32) Minister may regulate for notification of certain data security incidents d) (33) Processing of personal information e) (34) Accuracy and completeness of personal information f) (35) Other authorised processing. The existing provisions are sufficient to deal with the key elements identified.
I.E.2	Does the law require or favour the use of specific trust services or service providers for data retention?	Please refer to answer to I.E.1
I.E.3	Do data custodians, such as data centres, assume liability for loss or damage to electronically stored information? Is such liability contractual, statutory or both?	There are only a handful of electronic data custodians in Tonga. The main one would be MEIDECC for the Government and the private sector stakeholders would be liable for maintaining their own individual electronic data records for their respective entities (each stakeholder will have their own contractual arrangements). MEIDECC would be liable to the Government by contractual agreement for loss or damage to electronically stored data.
I.E.4	Is electronic evidence admissible in judicial and other proceedings?	Yes, refer section 54I of the Evidence Act.

| I.E.5 | Is electronic evidence that is generated, stored or collected abroad admissible? If so, under which conditions? | This can be admissible but it needs to be reviewed on a case by case basis. |

II. Laws regarding paperless trade systems

1. Part II of the checklist is focused on laws related to implementing and developing a paperless trade system (including but not limited to a Single Window system). These matters relate in particular to articles 6 and 7 of the Framework Agreement. The wide scope of article 6 can encompass several aspects of creating an enabling national policy framework for paperless trade. In article 7, parties are specifically encouraged to implement and develop a cross-border paperless trade system, in particular a Single Window. Accordingly, in part B, issues related to the implementation of a Single Window and/or other paperless trade system(s) are covered first. Part II also includes questions on end-user agreements, service-level agreements and memorandums of understanding on paperless trade.

No.	Questions	Response
Related provisions of the Framework Agreement: • Article 6 on the national policy framework, enabling domestic legal environment and paperless trade committee. • Article 7 on the facilitation of cross-border paperless trade and development of Single Window systems.		
II-A.	**Establishment of a paperless trade system** The establishment and operation of a paperless trade system often requires a set of dedicated laws and regulations. This section is aimed at identifying those laws and regulations as well as the basic features of governance of the paperless trade systems.	
II.A.1	Does a dedicated paperless trade system, such as a Single Window, exist? If so, what legal instruments are used to establish and operate it? How do these instruments define the rights and obligations of the participants?	As of today, there are currently no Single Window operators in Tonga and no legal framework for their operation. This is a work in progress as the ASYCUDA system is currently being rolled out in Tonga with the plan to implement it as a single-window system.

II.A.2	Which government agencies participate in the paperless trade system? On what legal basis?	All government agencies participate in the e-government project led by the Ministry responsible for information (MEIDECCC), however Government Ministries vary in terms of the level of achievement pertaining to paperless trade system. Government Ministries have the general power as a Government entity to participate in the paperless trade system, as long as they have the resources and infrastructure to integrate into the system.
II.A.3	Is there a central body tasked with setting up and managing the paperless trade system?	The Tonga Government under MTED is in the process of establishing a national trade committee that will coordinate all trade-related matters including the paperless trade system for Tonga.
II.B.	**Quality of information exchanged with the paperless trade system** The main function of the paperless trade system, including the Single Window, is to facilitate the exchange of trade-related data and documents in electronic form. The information is originally submitted on paper or electronically by commercial operators that have a duty to make complete and correct statements. Moreover, in an electronic environment, there could be special procedures to attribute the declarations originating from the various participants. Electronic signatures may play a significant role in the attribution of the declarations.	
II.B.1	Does the law on the substantive requirements of trade-related data and documents also apply to paperless trade?	Tonga does not have specific legislation that deals with electronic transactions. The main gaps identified of e-transaction laws in Tonga are as follows - (a) Tonga does not have specific legislation to recognize electronic transmissions, however specific legislation recognizes that the electronic transmission of lodging applications as seen in Regulation 23 of the Revenue Services Administration Regulations or transfer of documents in an electronic format as seen in Regulation 5 of the Customs and Excise Management Regulations. (b) The Evidence Act provides for the admissibility of an electronic signature in Tongan Courts, however the admissibility of electronic transmissions as evidence is only applicable to criminal matters and not civil matters. (c) There is no specific legislation in Tonga to deal with the formation of contracts through electronic means. (d) The authentication of any electronic record in Tonga in any legal proceedings is on the person seeking to introduce the electronic records. Tonga has no specific legislation to deal with electronic payments, despite having a number of EFTPOS machines available in Tongatapu.

II.B.2	Are there specific rules for the exchange of trade-related data and documents in electronic form?	Not yet. However, there was a Cabinet Directive in 2018 to process an Electronic Transactions Bill, the main purpose of the draft Bill is to facilitate the use of electronic technology by –
		(a) Reducing uncertainty regarding the legal effect of information that is in the electronic form or that is communicated by electronic means; and the time and place of dispatch the receipt of electronic communications; and
		(b) Providing that certain paper – based legal requirements may be met by using electronic technology that is functionally equivalent to those legal requirements.
II-C.	**Service-level agreements and memorandums of understanding** A number of legal texts, such as service-level agreements, memorandums of understanding, end-user agreements and other contractual agreements, are relevant to the operation of a paperless trade system. These legal texts define the obligations of the participants in the paperless trade system. For instance, service-level agreements define the obligations of the service provider with respect to the availability of the system, response time, processing time and other technical requirements that are critical to define to ensure the availability and smooth operation of the system.	
II.C.1	Are there service-level agreements or memorandums of understanding governing paperless trade operations? If so, who are the parties and what is the legal authority for concluding these agreements?	Not yet

III. Cross-border aspects

1. Part III of the checklist is focused on the cross-border aspects of paperless trade, which directly relates to the ultimate goal of the Framework Agreement. Certain cross-border aspects are already raised in part I as they relate to general matters that may be relevant to paperless trade facilitation. The questions in part III are specific to cross-border paperless trade facilitation. They are inspired by the Agreement, in particular article 8 on cross-border mutual recognition of trade-related data and documents in electronic form; article 9 on international standards for exchange of trade-related data and documents in electronic form; and article 10 on the relation to other legal instruments enabling cross-border paperless trade.

2. A key issue in achieving seamless cross-border paperless trade is the legal recognition of trade-related data and documents of one country by the authorities of another. Recognition involves attributing a legal status to electronic messages exchanged across borders. A

variety of legal mechanisms may achieve that goal. Some of them will apply to certain types of transactions (for instance, business-to business or business-to-government), while other legal mechanisms will apply only to specific types of documents or data sets, or to specific types of trust services (for example, electronic signatures). Some legal mechanisms will establish legal recognition in a technology-neutral manner, or without regard for the method or technology used, while others will do so in a technology-specific manner. With respect to legal form, some mechanisms are treaty-based and therefore may be directly legally binding. Other mechanisms favour the harmonization of legal systems through the adoption of uniform laws, while others still are based on bilateral or regional agreements or memorandums of understanding and similar technical arrangements.

3. In article 8 of the Framework Agreement, the mutual legal recognition of trade related data and documents in electronic form is promoted and the notion of substantially equivalent level of reliability is used to indicate that mutual legal recognition can be based on the general principle of technology neutrality. However, no specific legal recognition mechanism is established. Rather, the expression of this criterion is left open to various options. Accordingly, many of the questions in part III are aimed at identifying which laws and technical arrangements may contribute to achieving mutual legal recognition. The scope of the questions also extends to include the broader focus of articles 9 and 10 on laws and other relevant agreements that prohibit, restrict or facilitate cross-border data flows for paperless trade and any related activity. An indicative list of relevant international instruments is provided at the end of part C for ease of reference.

No.	Questions	Response
Related provisions of the Framework Agreement:		
• Article 8 on cross-border mutual recognition of trade-related data and documents in electronic form.		
• Article 9 on international standards for exchange of trade-related data and documents in electronic form.		
• Article 10 on relation to other legal instruments enabling cross-border paperless trade.		
III-A.	**International agreements relevant for cross-border paperless trade facilitation**	
III.A.1	Which international agreements relevant for paperless trade facilitation are in force in your country?	PACER Plus. •Tonga is one of more than five PICs that have ratified the PACER+ Agreement which will stimulate trade and investment between PICs and Australia and New Zealand. This agreement is important for Tonga's move towards paperless trade as there are resources

		being mobilized under this agreement to assist with customs modernisation and the use of ICT to streamline and provide world class trade processes. This agreement is a comprehensive free trade agreement covering goods, services and investment and came into full force in December of 2020.
		•Prior to the PACER+, Tonga was and is part of the PICs Trade Agreement (PICTA) and South-Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA). The PICTA is a reciprocal free trade agreement among 12 PICs basically covering trade in goods but excluding alcohol and tobacco products. PICTA was signed in 2001 and entered into force in 2006. This agreement was notified to the WTO under the clause in 2008. On the other hand, SPARTECA is a longstanding preferential agreement, in place since 1981, between 15 PICs including Tonga, Australia and New Zealand. Under SPARTECA, the PICs that are members receive free-duty access to Australia and New Zealand.
III.A.2	Are there technical or operational international agreements providing for legal recognition of electronic communications or documents?	Nil
III.A.3	Are contracts used to provide for mutual recognition of electronic communications and signatures?	Tonga is not yet at this stage.
III-B.	**International standards, guidelines and recommendations**	
III.B.1	Which standards, regulations or guidelines are in use for the cross-border exchange of trade-related electronic communications?	Tonga has been a member of the WTO since 2007 and this is of importance as the WTO uses electronic documents and communications for trade processes, hence Tonga will eventually have to adhere to this paperless trade model. Tonga has applied the WTO customs component but it has yet to ratify the Trade Facilitation component of the WTO Agreement.
		It is important to note that that there is a wide range of e-commerce legal and regulatory measures (as mentioned in section IV) in Tonga but much of this framework is outdated. There is a need to update and upgrade the current framework to ensure that it reflects recent developments in e-commerce. The development of a more robust legal framework will ensure that e-commerce related activities in Tonga are properly monitored.
		However, due to competing Government priorities, these Bills have not been processed through the Government legal process. The draft Bills were based on international models, for example the draft Electronic Transactions Bill was based on the UNCITRAL Model Law

	on Electronic Commerce and Model Law on Electronic Signatures. The draft Computer Crimes Bill was based on Tonga's commitments to the Budapest Convention and the draft Consumer Protection Bill will be reviewed to include online consumers protection. As a result of the impacts of COVID-19 on consumers, Tonga now realizes the need to urgently develop a robust e-commerce regulatory framework.

VI. Treaties and model laws relevant to cross-border paperless trade facilitation

1. A number of international treaties are relevant to cross-border paperless trade facilitation, because their adoption and implementation may provide a significant contribution to addressing some or several of the legal challenges arising from cross-border paperless trade facilitation. In particular, those treaties may be useful in achieving legal recognition, usually on a multilateral basis. Model laws may also be useful in facilitating mutual recognition as their enactment by jurisdictions brings national laws closer. Sharing legal concepts and provisions significantly enhances mutual understanding of how the law operates, which may pave the way to granting legal recognition. Additional important provisions may be found in bilateral and multilateral free trade agreements, namely in the chapters on electronic commerce and on customs or trade facilitation. Those agreements and any other relevant legislative texts should be added to the list.[14]

Legal readiness checklist: Non-exhaustive list of treaties and model laws

Treaty/Model Law	*Implementation status*
Customs and trade facilitation	
Association of Southeast Asian Nations (ASEAN) Single Window Agreement (2005) and Legal Protocol (2017)	Nil
Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (2016)	Nil

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[14] User may add or delete from the list as necessary.

World Trade Organization Agreement on Trade Facilitation (2013)	Tonga has applied the WTO customs component but it has yet to ratify the Trade Facilitation component of the WTO Agreement
Protocol of Amendment to the International Convention on the Simplification and Harmonization of Customs Procedures (Revised Kyoto Convention, 2006)	Nil
International Convention on the Harmonization of Frontier Controls (1982)	Nil
Transport	
Convention on the Contract for the International Carriage of Goods by Road (CMR Convention) (1956)	Nil
Additional Protocol to the Convention on the Contract for the International Carriage of Goods by Road concerning the electronic consignment note (2008)	Nil
Customs Convention on the International Transport of Goods under Cover of TIR Carnets (1975)	Nil
Convention concerning International Carriage by Rail (1980)	Nil
International Maritime Organization Amendments to the Annex to the Convention on Facilitation of International Maritime Traffic, 1965, as amended (2005)	Nil

International Maritime Organization Guidelines for the Use of Electronic Certificates (2016)	Nil
United Nations Convention on the Carriage of Goods by Sea (Hamburg Rules) (1978)	Nil
United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (Rotterdam Rules) (2008)	Nil
Electronic transactions	
United Nations Convention on the Use of Electronic Communications in International Contracts (2005)	This law is influencing Tonga's drafting of paperless trade legislation.
UNCITRAL Model Law on Electronic Commerce (1996)	Nil
UNCITRAL Model Law on Electronic Signatures (2001)	Nil
UNCITRAL Model Law on Electronic Transferable Records (2017)	Nil
Convention on Cybercrime of the Council of Europe (Budapest Convention) (2001)	Nil

Others (please specify):	Nil

V. Other considerations

1. For paperless trade to be conducted in the best possible manner, the Framework Agreement requires parties to create an enabling national legal framework (article 6) and remove all legal barriers. It is therefore recommended that the parties aim to build a national policy framework to implement the Agreement that addresses all the pertinent legal issues and is consistent with international legal instruments and standards for cross-border electronic data and document exchange. Besides the topics specifically addressed in substantive provisions of the Agreement, parties may also wish to deal with related issues, such as data ownership, liability, dispute settlement, electronic payment and competition, which in some cases may have been addressed in other legal agreements (see article 10). These matters may affect the effective operation of Single Window and other paperless trade systems, particularly in the cross-border environment.

2. These legal issues may be addressed in different sets or sources of legal rules. Therefore, there is no one-size-fits-all solution or approach. The legal framework, action plan and capacity-building programmes may and should be customized at the national level, depending on the various levels of awareness and preparedness of different member States, as already envisaged in article 6, 12 and 14 of the Framework Agreement. The list of legal issues in part IV is not exhaustive, and other relevant issues may emerge.

No.	*Questions*	*Response*

- Article 6 on the national policy framework, enabling domestic legal environment and paperless trade committee.
- Article 10 on the relation to other legal instruments enabling cross-border paperless trade.
- Article 12 on the action plan.
- Article 14 on capacity-building.

IV-A.	**Ownership of information in the paperless trade system**	
	Paperless trade facilitation involves the collection and exchange of a large amount of information. Delicate issues arise with respect to data subject rights, confidentiality and other rights on that information. For instance, the paperless trade system operator may acquire the right to use, analyse and redistribute the information submitted to the system. In other cases, the system may be designed to avoid the storage of any information, so as to simplify compliance with privacy and data retention laws.	
IV.A.1	Does the law or do contractual agreements define rights in information exchanged in the paperless trade system?	This is not clearly articulated under any law at this stage; however, this has certainly been considered in the draft bills pertaining to paperless trade.
IV-B.	**Liability issues related to cross-border paperless trade system**	
	Trading parties and other concerned entities may suffer losses from the incorrect transmission of information and may seek compensation for those losses from those liable for them under contracts among the transacting parties or, if this is not possible, under the general law of civil wrongs. This form of liability is separate from any sanction that may apply under criminal and administrative law.	
IV.B.1	May the operator of the paperless trade system be held liable for providing its services?	At this stage, this is the responsibility of those that are involved in paperless trade. The reason for this is that Tonga is at a very early stage of the paperless trade system so this matter has yet to be fully addressed. There is not yet "an operator" or even a single paperless trade system as contemplated by the question.
IV.B.2	May government agencies participating in the paperless trade system be held liable for their interaction with the system?	Please refer to the previous answer for section IV.B.1.
IV.B.3	May service providers, such as internet service providers and trust services providers, be held liable for interacting with the paperless trade system?	Yes, there are certain KPIs and criteria that service providers need to meet as per the guideline from the Tonga regulator's office.
IV.B.4	May other participants in the paperless trade system (e.g. customs brokers) be held liable for their interaction with the system or their role in the passage of information or data passing through their systems?	Yes, but this would be based on their contract with customers.

IV-C.	**Dispute settlement and conflict of laws**	
	The following section is aimed at examining the dispute settlement mechanisms for the operators of a Single Window or other paperless trade system.	
IV.C.1	Do national laws deal with choice-of-forum and choice-of-law issues relevant to paperless trade facilitation?	There is currently no law in Tonga pertaining to choice of forum or choice of law issues relevant to paperless trade facilitation.
IV.C.2	Does the law contemplate alternative means of resolving disputes in international trade such as arbitration and mediation? Are the results of any such means clearly enforceable across borders?	International Arbitration Act – currently pending Royal Assent. Mediation Manual – Court appointed mediators available in Tonga.
IV.C.3	Are online dispute resolution mechanisms used in paperless trade facilitation?	No.
IV-D.	**Electronic payments and electronic transferable records**	
	Electronic payments are the backbone of the digital economy. To the extent that electronic payments are available, they could be incorporated in the paperless trade system. Usually, this is done by using electronic funds transfers, i.e. by ordering a bank to transfer money (wire transfer) or by using credit or debit cards. In other cases, certain commercial documents may be used to perform payment or give guarantee of payment.	
IV.D.1	Does the paperless trade system accept or initiate electronic payments?	This component is yet to be developed for Tonga. In terms of cashless payment solutions for Tonga, the country is in a transition stage whereby the banks and financial institutions are in the process of educating the key stakeholders and general public on the products that financial institutions offer for people to adopt electronic payment solutions. Tonga was the second Pacific country to launch Digicel Mobile Money (in 2011). In May 2012, Digicel partnered with VeriFone to launch Beep and Go, the world's first fully inclusive mobile payment system that does not require the use of a bank account, credit card or smartphone. Digicel customers in Tonga are able to receive mobile remittances through Digicel's partnership with KlickEx Pacific. One of the two telecommunications company in Tonga, Digicel, provides mobile phone financial services which allows customers to use their mobile phones to pay bills and do shopping at select retail outlets. The number of Automated Teller Machines (ATMs) and Electronic

		funds transfer at point of sale (EFTPOS) branches tripled between 2015 and 2020, and agent penetration rose from three to every 10,000 adults to 52.
		One of the critical challenges that the banks and financial institutions in Tonga are working to resolve is the provision of a holistic payment gateway system so that local Tongan businesses can sell products online and receive their payment into their bank accounts in Tonga. What is happening in this space is most Tongan businesses that sell products to overseas markets either get their funds manually wired by the consumer via western union or a remittance service or the local Tonga business sets up a bank account overseas so they can receive direct payment to their overseas bank account.
		This transition process will take up to 2-3 years from 2021 to reach its full potential in terms of changing people's cultural and lifestyle habits so that at least seventy-five percent of Tonga's population utilizes electronic payment solutions (at the moment, it is restricted to mostly the CBD and urban areas so approximately twenty-percent of the population).
IV.D.2	Does the paperless trade system accept electronic transferable records?	These records are not yet implemented or used in Tonga.
IV-E.	**Competition laws** The following section is aimed at examining the competition law issues involved in a Single Window or other paperless trade system.	
IV.E.1	Does a competition law exist? If so, is it applicable to Single Window operators or other paperless trade services providers?	No. Tonga is yet to arrive at this stage.
IV.E.2	Does the law give authorized economic operators preferential access to the paperless trade system?	Not at this stage.
IV.E.3	Are paperless trade service providers selected on a competitive basis? Are foreign providers admitted?	Not at the moment.

Trade, investment and innovation are powerful engines for growth and sustainable development. The expansion of trade across the Asia-Pacific in recent years has been a key driver of economic dynamism and rising prosperity. Trade and investment, for example through participation in global networks of production, have created employment, raised incomes and helped spread knowledge and technology throughout the region. But not all individuals and communities have been able to benefit from the growth that comes from engagement in international markets, and too many barriers to inclusion remain.

ESCAP's objective is to promote trade, investment and technology and innovation for inclusive and sustainable development in the Asia-Pacific region. We work with Member States to ensure that the benefits of trade, investment, technology and innovation are extended to all.

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