National Feasibility Study on Cross-border Electronic Exchange of Trade-related Data and Documents:

The Philippines

ESCAP
Economic and Social Commission
for Asia and the Pacific

DEPARTMENT OF FINANCE
BUREAU OF CUSTOMS

National Feasibility Study on Cross-border Electronic Exchange of Trade-related Data and Documents:The Philippines

United Nations Publications

Trade, Investment and Innovation Division

ESCAP

Bangkok, Thailand

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ACKNOWLEDGEMENTS

EXECUTIVE SUMMARY

This study assesses the feasibility of implementing electronic exchange of trade-related data and documents between the Philippines and potential partners in the Asia-Pacific region.

The report begins by examining the background and current context of relevance to the country, including facts and figures on trade facilitation, the perspective of Small and Medium-Sized Enterprises (SMEs) – a key focus of the Philippine economy – in relation to paperless trade, updates to the recommendations from the readiness assessment on cross-border paperless trade that had previously been conducted for the Philippines, and international commitments that the Philippines is involved in. This is followed by a discussion and analysis centred on the survey and interview responses collected from Philippine stakeholders involved in the end-to-end cargo clearance process. The implications of these findings for cross-border exchange for the Philippines is presented next, and the report concludes with a list of policy areas for consideration in advancing cross-border paperless trade in the country.

The Philippines has made significant progress in implementing paperless trade and trade digitalization over the years. As the private sector have transformed themselves with digital technologies, expectations for the government to follow suit have also increased. Through the various policies, regulations and measures that have been established for paperless trade, the Philippines is technically and legally ready to exchange electronic data across borders with partner economies. This is reflected in the survey responses from Customs officials, who indicated that most of the core Customs operations are already digitalized, except for a few processes that are still manual. The implication of this is that a company conducting trade should be able to clear its goods shipment without having to physically visit Customs offices.

However, it is not so straightforward in practice – there are still manual processes in the application of permits, licenses, and certificates from the Trade Regulatory Government Agencies (TRGAs). Thus, only freely importable items, goods that may be freely imported to the Philippines without the need for import permits, clearances or licenses, can be cleared paperless. In addition, challenges exist that hamper the digitalization of trade processes, such as the lack of standardized data formats and interoperability among different trade-related systems across government agencies.

Based on the survey responses, the top three (3) documents identified for prioritization for cross-border exchange are the **Certificate of Origin, Export Declaration, and Phytosanitary Certificate.** As for the top three (3) potential trading partners, both co-chairs of the Philippine Trade Facilitation Committee (PTFC) indicated **China, Japan, and the Republic of Korea.**

Effectively operationalizing prospects and future opportunities in cross-border exchange, however, will require further efforts in enhancing the paperless trade environment in the Philippines. A clear need highlighted by survey respondents is for the systems of the Bureau of Customs and TRGAs to be made more interoperable and integrated, which would especially benefit SMEs as the easing of trade processes are expected to impact their operations and service delivery disproportionately. More seamless trade processes should also enable SMEs to better expand their markets, which in turn is a boost to the national economy.

The report discusses several areas for policy development and further consideration moving forward, including the strengthening of capacity-building, implementation of a standardized digital data governance, use of the National Single Window (NSW), harmonized data-sharing, identity management and trade data protection, the leveraging of emerging technologies, and implementation of an Authorized Economic Operator (AEO) scheme for SMEs.

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LIST OF ACRONYMS

AADCPII	ASEAN-Australia Development Cooperation Program Phase II
ABMS	Automated Bonds Management System
ACDD	ASEAN Customs Declaration Document
ADII	ASEAN Digital Integration Index
ADC	Advanced Certified Enterprises
AEO	Authorized Economic Operator Program
AHTN	ASEAN Harmonized Tariff Nomenclature
ARTA	Anti-Red Tape Authority
ASEAN	Association of Southeast Asian Nations
ASW	ASEAN Single Window
ATR	ASEAN Trade Repository
ATIGA	ASEAN Trade in Goods Agreement
BOC	Bureau of Customs
BPS	Department of Trade & Industry-Bureau of Product Standards
CCC	BOC's Customer Care Center
CMO	Customs Memorandum Order
CPBRD	Congressional Policy and Budget Research Department
CPRS	Client Profile Registration System
CPS	Customs Processing System
CPTA	Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific
CTI	Cargo Tracking Index
DDB	Dangerous Drugs Board
DDG	Digital Data Governance
DICT	Department of Information and Communications Technology
DIFAP	Digital Integration Framework Action Plan
DEFA	Digital Economy Framework Agreement
DSA	Data Sharing Agreement
DTI	Department of Trade and Industry
DTI-BITR	Department of Trade and Industry – Bureau of International Trade Relations
DTI-STMO	Department of Trade and Industry – Strategic Trade Management Office
E2M	Electronic to Mobile System
EODB	Ease of Doing Business
ECC	Convention on the Use of Electronic Communications in International Contracts
e-CO	Electronic Certificate of Origin
e-Phyto	Electronic Phytosanitary Certificate
ECMP	Enterprise Credit Management Programme
EGMP	E-Government Master Plan

FDA	Food and Drug Administration
FTEB	Fair Trade Enforcement Bureau
FTO	Field Training Officers
GACC	General Administration of China Customs
iBPLS	Integrated Business Permits and Licensing System
IPA	Investment Promotion Agencies
IPR	Intellectual Property Rights
ISCM	International Supply Chain Management
KPI	Key Performance Indicator
LGUs	Local Government Units
MDM	Master Data Management
MISTG	BOC's Management Information System and Technology Group
MRA	Mutual Recognition Arrangement
MSMEs	Micro, Small and Medium-sized Enterprises
nCEN	National Customs Enforcement Network
NGP	National Government Portal
NICTEF	National ICT Ecosystem Framework
NPC	National Privacy Commission
NSW	National Single Window
NTC	National Telecommunications Center
NTFC	National Trade Facilitation Committee
NTR	National Trade Repository
OECD	Organization for Economic Co-operation and Development
PBH	Philippines Business Hub
PEZA	Philippines Export Zone Authority
PNSW	Philippines National Single Window
PNTR	Philippines National Trade Repository
PTFC	Philippines Trade Facilitation Committee
TRGAs	Trade Regulatory Government Agencies
RMO	Risk Management Office
RKC	Revised Kyoto Convention
SAFE	Standards to Secure and Facilitate Global Trade
SC	Steering Committee
SAD	Single Administrative Document
SMEs	Small and Medium-sized Enterprises
SPS	Sanitary and Phyto Sanitary
SPS IC	Sanitary Phyto-sanitary Import Clearance
SRA	Sugar Regulatory Administration
STMO	Strategic Trade Management Office
TABS	Terminal Appointment Booking System
TF Champions	National Customs Trade Facilitation Champions
TRGAs	Trade Regulatory Government Agencies

UN	United Nations	
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business	
UNCTAD	United Nations Conference on Trade and Development	
URMS	Universal Risk Management System	
VA	Vulnerability Assessment	
VASP	Value Added Service Provider	
WTO	World Trade Organization	
WTO-TFA	World Trade Organization – Trade Facilitation Agreement	

1.0 INTRODUCTION

This study focuses on the electronic exchange of trade-related data and documents between the Philippines and potential partners in Asia-Pacific, especially countries that have been actively engaged in the development and/or implementation of cross-border paperless trade or the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (CPTA)[1], or where readiness assessments for cross-border paperless trade have already been conducted[2]. The study seeks to evaluate the feasibility of such an exchange for the Philippines through examining and identifying potential trade data or documents, potential partner economies, the steps required to do so, and the costs and benefits involved.

The Philippines acceded in 2019 to the CPTA, an inclusive and flexible cooperation and capacity-building platform on paperless trade (see Box 1), to benefit from the opportunity to build its capacity, and to promote and leverage the cross-border paperless trade solutions it has adopted in complying with its international and regional commitments in the implementation of cross-border data exchange[3].

Box 1: The Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (CPTA)

The Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (CPTA) is a UN treaty aimed at accelerating the implementation of digital trade facilitation measures for trade and development. It is designed as an inclusive instrument accessible to countries at all levels of development to facilitate paperless trade, by providing a dedicated intergovernmental framework to develop legal and technical solutions.

The treaty encourages the implementation of pilot projects on cross-border paperless trade as a basis for capacity building in ESCAP's developing Member Countries, and also aims to facilitate harmonization and interoperability between paperless trade systems. In addition, it supports member States in complying with the WTO Trade Facilitation Agreement, specifically on trade facilitation areas such as electronic commerce, support for SMEs and other customs modernization efforts.

In 2021, a study was conducted to assess the readiness of the Philippines for cross-border paperless trade, with the report and action plan serving as a foundation for future activities. Building on these earlier outputs and findings, this feasibility study is

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[1] https://www.unescap.org/projects/cpta

[2] See countries for which readiness assessments for cross-border paperless trade have been conducted: https://www.unescap.org/our-work/trade-investment-innovation/trade-facilitation-digital-trade/paperless-trade

[3] UN ESCAP readiness assessment for Cross-Border Paperless Trade: Philippines, 2021. Available at https://www.unescap.org/kp/2022/readiness-assessment-cross-border-paperless-trade-philippines.

the next step in analyzing and better understanding the circumstances and implementation potential of cross-border paperless trade for the Philippines.

This report is organized as follows:

- The remainder of Section 1 introduces some brief facts and figures on trade facilitation for the Philippines and its subregion of Southeast Asia, and discusses the context of paperless trade for Small and Medium-Sized Enterprises (SMEs), a focus of the Philippine economy and this study.
- Section 2 presents the objectives of this feasibility study.
- Sections 3 and 4 cover updates pertaining to, respectively, the technical and legal recommendations emerging from the readiness assessment for cross-border paperless trade that had been conducted previously for the Philippines.
- Section 5 enumerates the involvement of the Philippines in selected international commitments, such as the ASEAN agreements and the WTO Trade Facilitation Agreement.
- Section 6 covers the methodology of this study, particularly on its data collection methods and utilization of survey questionnaires to obtain first-hand perspectives from Philippine stakeholders.
- Section 7 discusses the inputs and results from the data collected.
- Based on the analysis of the various data and information obtained in the course of this study, Section 8 examines the implications for cross-border electronic exchange of trade-related data and documents for the Philippines.
- Section 9 presents policy areas and recommendations for consideration.

1.1 Where do the Philippines and Southeast Asia stand in the UN Global Survey on Digital and Sustainable Trade Facilitation?

In the 2023 UN Global Survey on Digital and Sustainable Trade Facilitation[4], the overall score for the Philippines was 87%, and together with past years' results, it can be seen that continued progress has taken place in the country since 2015. The survey covers measures specified in the WTO Trade Facilitation Agreement (TFA) as well as more advanced paperless trade measures, and trade facilitation measures in support of more inclusive and sustainable trade facilitation. The report for the 2023 Survey presents a selection of statistics and information relevant to the Philippines and its subregion of Southeast Asia, revealing that:
- The implementation rate of the measures by Association of Southeast Asian Nations (ASEAN) countries stands at 81%, which is significantly higher than the Asia-Pacific regional average of 67%.

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[4] Data and reports can be accessed at: https://www.untfsurvey.org/

- The Philippines, along with Indonesia, Malaysia, Singapore and Thailand, achieved high implementation rates of around 85% and above[5].
- The implementation rates of "Cross-Border Paperless Trade" and "Paperless Trade" for the Philippines stand at 85% and 67% respectively, which are higher than the ASEAN averages of 81% and 60%.
- With continued expansion and improvement of the ASEAN Single Window (ASW), ASEAN countries have seen significant progress in implementing cross-border paperless trade systems from 2021 to 2023. This is seen by the implementation rate of "Cross-Border Paperless Trade" being higher than the regional average. ASEAN member states have been deepening discussion with ASEAN Dialogue Partners on the exchange of trade-related documents.
- Implementation of SMEs in Authorized Economic Operator (AEO) schemes is less than 40%.
- ASEAN Member States have a relatively high implementation rate of long-term measures, due to cooperation among them strengthening over the years.
- The ASEAN-wide self-certification has been implemented with a platform for traders in all member states to self-declare the origin of their exports to minimize close contact during the pandemic.
- All ASEAN Member States have enabled the exchange of ATIGA Form D and the ASEAN Customs Declaration Document (ACDD). Currently, member states are working on the exchange of the electronic Phytosanitary (e-Phyto) Certificate through the ASEAN Single Window (ASW) System.
- ASEAN Member States have discussed with Dialogue Partners (DPs), i.e. China, Japan, Korea, and the United States on the possibility of exchanging electronic documents through the ASW.
- The survey report suggests that most potential trade cost reductions are associated with paperless trade measures rather than conventional trade facilitation measures. Full implementation of binding and non-binding WTO TFA measures could decrease trade costs by just over 3%. On the other hand, full implementation of digital trade facilitation measures, which enable seamless electronic exchange of trade data and documents across borders, could help to significantly reduce trade costs in ASEAN by more than 9%.
- In addition to existing initiatives and collaboration among ASEAN member states, the CPTA could provide ASEAN countries opportunities to promote ASEAN initiatives and solutions as well as support further development of the ASEAN Single Window for interoperability with other paperless trade systems being developed in the world and other parts of the region.

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[5] Ibid.

1.2   How can SMEs benefit from shifting to paperless trade?

This feasibility study takes into consideration the particular perspective of Small and Medium-sized Enterprises (SMEs), which account for 99.5% of firms[6] and 63.2 % of employment in the Philippines. An important issue is, how can these SMEs capitalize on or benefit from the shift to paperless trade? What are the pressing issues? Are there wider developments that would make an impact? It should be noted that the most vulnerable to unpredictable business climates are the SMEs, and they would benefit immensely not only from trade agreements that remove tariffs and improve market access, but also trade facilitation measures such as the digitalizing of all cargo clearance processes.

It should be recognized that the globalization of production processes has brought crucial opportunities in last mile delivery and production chains to bigger companies, especially in relation to accessing talent and services, and the sourcing of raw materials from local communities. By leveraging automation and digital technologies, big companies can reduce or eliminate manual labour and administrative tasks, resulting in more efficient and cost-effective delivery operations. Likewise, digitalizing the last mile delivery service and other aspects of operations, for instance, can also benefit SMEs and logistics providers connected along the production/value/supply chain. The participation of SMEs in such global value chains (GVCs) can thus allow them to expand and improve their businesses, including through taking advantage of opportunities to enhance their core processes and productivity. This could enable SMEs to better specialize in specific segments of production and last mile delivery, rather than having to master all the processes required to produce finished goods, and thus integrate into segments of the international supply chain. In turn, this can be a pathway towards overall economic development for a country through productivity growth of SMEs, which could also support big exporters and the production and direct export of more sophisticated products, and diversification that leads to a less concentrated export basket[7].

One way through which direct participation in GVCs takes place is when SMEs export intermediate goods and services for further processing. Evidence for Southeast Asian countries shows that selling inputs is particularly important: manufacturing SMEs in this region have a higher tendency than larger firms to export goods and services that are sold directly into GVCs[8]. Another way for SMEs to benefit from GVCs is through indirect exports, or by supplying intermediate goods and services to typically larger firms, whether domestic or foreign-owned, which then export the final goods[9].

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[6] https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsrp1905.pdf

[7] http://dx.doi.org/10.1787/5js009mzrqd4-en - Lopez Gonzalez, J., P. Kowalski and P. Achard (2015-06-26), "Trade, global value chains and wage-income inequality", *OECD Trade Policy Papers*, No. 182, OECD Publishing, Paris

[8] Ibid.

[9] Ibid.

In order for SMEs to better benefit from the country's move towards paperless trade, there is a need for them to be better connected, better resourced and have better visibility. Awareness of paperless trade is still low among SMEs. What they know is that manual processes are still prevalent in handling and verifying permits and certificates that are needed by Customs and TRGAs to expedite cargo shipments. Thus, it is important to focus on the underlying requisites of the SMEs by adopting cross-border paperless trade that can potentially reduce e-commerce transaction costs. This should in turn enable them to create a more seamless digital experience for their customers – a huge factor influencing purchase decisions and selling strategies.

In the Philippines[10], e-commerce plays an important role in the country's economic development, in which the Philippines has "all the ingredients – the economic assets – to make this happen: a young and digital native population, a growing middle class, available and affordable technologies and significant surpluses in the financial sector" and where "E-commerce is one of the most potent tools and fastest routes in unlocking these economic assets toward sustained accelerated economic development". Google, Temasek and Bain's e-Economy SEA 2022 report [11] found that the Philippines' digital economy has been continuing its upward trend, growing by 20 per cent to $20 billion in 2022 from a year ago, with e-commerce expected to propel it to $35 billion by 2025.

The Philippine Department of Trade and Industry (DTI) has found that the number of businesses conducting retail sales via the internet in the Philippines has increased. However, it was also noted that there has been an increase in the number of consumer complaints related to delays in the clearance of goods. Digitalizing the permit and certificate processes will eliminate much of the need for tedious, manual data entry of supporting documents required by Customs and contribute to quicker clearance of goods, which would ultimately lead to a better experience for retail customers and thus facilitate business for SMEs.

Meanwhile, there are new laws and regulations related to e-commerce that are currently being drafted, such as on privacy, digital taxation, the gig economy, and pivoting to a cash-light society.

At the same time, there are ongoing paperless trade facilitation initiatives involving key actors in the clearing of SME shipments. To date, the Bureau of Customs (BOC) has made significant progress on trade facilitation initiatives, specifically paperless cross-border and national-level exchange of electronic messages that support the fast

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[10] https://www.philstar.com/business/2022/11/06/2221739/e-commerce-vital-tool-economic-development-dti
[11] Ibid.

release of goods from BOC. Even prior to the completion of the ESCAP readiness assessment study in 2022, the BOC has prioritized and implemented Customs automation projects, including cargo clearance processes that support SMEs and the cross-border exchange of agreed documents with member states of the Association of Southeast Asian Nations (ASEAN)[12]. Other key actors are the Trade Regulatory Government Agencies (TRGAs), such as the Strategic Trade Management Office (STMO), Food and Drug Administration (FDA), National Telecommunications Office (NTC), etc., who have been involved in notable paperless trade initiatives specifically in the issuance and approval of permits and certificates that SMEs need to submit to BOC in clearing shipments.

An important development in the Asia-Pacific region that could translate into opportunities for SMEs to tap huge markets is the entering into force of the Regional Comprehensive Economic Partnership (RCEP). The Agreement, to which the Philippines is a party, holds the potential to help SMEs participate in the growing digital economy and leverage opportunities in increasing the export coverage for Philippine electronics and semiconductor manufacturers[13]. Importantly, the Agreement will reduce the prices of imported components and raw materials, and for the exported electronic goods. Moreover, imported components are often re-exported to other markets as intermediate products, further extending the economic distance between producers and the final consumer. Through greater market access enabled through RCEP, the Philippines is also aiming to attract investments that will enable it to move up the global value chain.[14]

Overall, RCEP encourages inclusive, comprehensive, and mutually beneficial economic policies that aim to enable SMEs to trade within the region with greater ease and enhanced tariff concessions. It is hoped that these benefits would, eventually, allow Filipino SMEs – especially those in e-commerce – to be able to focus more on enhancing their businesses rather than dealing with cargo clearance issues. Realizing these benefits will require continued efforts to involve SMEs in paperless trade.

2.0 OBJECTIVES

Though the Philippines has made significant progress in implementing trade facilitation measures, with its score in the UN Global Survey significantly above the Asia-Pacific regional average, digitalization measures remain uneven among agencies and stakeholders. In studying the feasibility of the country to conduct cross-border exchange, it is important to understand the state of digitalization across trade processes and stakeholders, while identifying areas of opportunity.

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[12] https://www.unescap.org/kp/2022/readiness-assessment-cross-border-paperless-trade-philippines - UN ESCAP readiness assessment for Cross-Border Paperless Trade: Philippines, 2021
[13] https://www.aseanbriefing.com/news/philippines-ratifies-rcep-agreement-opportunities-for-businesses/
[14] Ibid.

In this regard, this feasibility study focuses on answering the following questions:
- What specific data/documents should be used for cross-border electronic exchange between the Philippines and potential partner countries/economies?
- Which partner countries/economies should be prioritized for this electronic exchange of trade data/documents?
- To carry out this electronic exchange of the identified data/document with the identified partner country/economy, what systems and processes need to be improved/harmonized?
- What are the costs and benefits of doing this electronic exchange, and of improving/harmonizing the necessary systems/processes?

Exploring the above topics would provide a picture of the extent to which SMEs in the Philippines are able to clear goods through online processes, and consequently, the level of ease of their participation in cross-border exchange. In addressing these questions, and to form the basis of relevant recommendations in the later sections of this study, it would be vital to first take stock of the recommendations from the "Readiness Assessment for Cross-border Paperless Trade: Philippines", and analyze the current issues and challenges that limit the efficient and effective implementation of paperless trade in the Philippines. This analysis takes into account the technical as well as legal aspects, including the service delivery of actors involved in end-to-end cargo clearance processing.

Recommendations emerging from the technical readiness assessment include the following key areas[15]:
- Continuing the enhancement of trade-related electronic systems and other trade IT projects;
- Updating the Philippine National Single Window (PNSW) to handle all types of documents in cross-border trade;
- Implementation of, among others, the National Government Data Center Project, the National Government Portal, and the Integrated Business Permits and Licensing System;
- Adherence to the National ICT Ecosystem Framework;
- Implementation of the e-Government Master Plan 2022;
- Conducting an Annual Vulnerability Assessment and Penetration Test (VAPT);
- Ensuring stability of the BOC's Electronic-to-Mobile (e2M) system;
- Strict implementation of the Anti-Red Tape Act law;
- Data harmonization according to available international standards such as UN EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport) and those from WCO;
- Greater focus on capacity-building and budgetary support;
- Full implementation of the AEO Program; and

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[15] https://www.unescap.org/kp/2022/readiness-assessment-cross-border-paperless-trade-philippines - UN ESCAP readiness assessment for Cross-Border Paperless Trade: Philippines, 2021

- BOC should draft the plan on how to implement the ATA Carnet.

Among the remaining legal impediments to implementing full paperless trade are the lack of rules involving electronic notarization systems, and the treatment of authenticated electronic signatures or digital signatures as "disputable presumptions" subject to rebuttal by a party disputing their authenticity [16] . Other legal recommendations emerging from the legal readiness assessment include the following key areas:
- Legislative amendments to the Electronic Commerce Act (ECA) to ease the requirements for the recognition of electronic and digital signatures, facilitate electronic notarization and expressly recognize contracts formed by automated message systems as recognized under the United Nations Convention on the use of Electronic Communications in International Contracts (2005);
- Accession of the Philippines to the above-mentioned Electronic Convention, which will govern the legal recognition of cross-border electronic transactions, while domestic law will continue to govern domestic transactions; and
- Enactment of a law related to the management of the PNSW, and the rights and obligations attached to its use.

3.0 UPDATES ON TECHNICAL READINESS ASSESSMENT RECOMMENDATIONS

This section provides details on updates pertaining to the technical readiness assessment recommendations.

3.1 Continuing the enhancement of trade-related systems

The readiness assessment report recommended to continue the development and enhancement of trade-related electronic systems and other trade IT projects, such as:

- **BOC cargo processing system under the World Bank's Philippine Customs Modernization Project (PCMP)**

In October 2020, the World Bank approved a US$88.28 million loan for the Philippine Customs Modernization Project (PCMP), to improve administration, reduce transaction costs, enhance predictability and transparency of the clearance process at the border, as well as support the development of a world-class customs processing system. A consulting firm assisting in implementing the PCMP was awarded a contract in 2023. After awarding this Project Supervision and Quality Assurance Services (PSQA) contract, BOC and the World Bank would start procurement for the Customs

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[16] https://www.unescap.org/our-work/trade-investment-innovation/trade-facilitation-digital-trade/paperless-trade - UN ESCAP readiness assessment for Cross-Border Paperless Trade: Philippines, 2021

Processing and other PCMP project components[17]. However, the PCMP project is temporarily suspended due to a legal case[18] that prevents the BOC from pursuing any modification in its current system, such as the Customs Processing System, a key part of customs modernization.

The PSQA assignment includes two broad task clusters,; the first focuses on project supervision and quality assurance in procuring and implementing the core Cargo Processing System (CPS), enterprise resources planning system, remote image analysis center (RIAC) system, and related infrastructure, and the second cluster focuses on organizational development such as change management, capacity development, etc.

For many years, the growth potential of the Philippines was constrained by inefficiencies in trade facilitation, which could be attributed to outdated infrastructure and business practices. Though the BOC had embarked on a reform process to improve its trade procedures and implement many ongoing digitalization initiatives, there was more to be done[19]. The PCMP supported by the World Bank aims to accelerate these reforms of the BOC. Two particular areas for improvement are (i) the speed in clearing goods – which takes 120 hours on average in the Philippines, compared to Viet Nam (56 hours), Thailand (50 hours) and Malaysia (36 hours); and (ii) the percentage of manufactured goods exported – domestic firms in the Philippines export only 3.5% of their output, compared to 26% in Malaysia and Thailand, while the figures for foreign firms are 78.7% in the case of Viet Nam, 84% in Malaysia, and 93% in Thailand[20].

Traders, exporters, importers, port operators, shipping companies and transport providers – many of whom are SMEs employing many workers – are expected to directly benefit from this new project. Important processes such as trade management and registration, cargo inspection, duty payment, clearance and release, among others, would be integrated in a seamless online system. The project will also improve adherence to international standards and conventions for customs processing, including an audit trail of transactions.

- **Development of the Port Community System to be spearheaded by the Philippine Ports Authority (PPA)**

As the Philippines seeks to modernize its logistics sector, there is a need to embark on digitalization activities to increase productivity and provide greater efficiency. Part

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[17] https://www.portcalls.com/project-supervision-contract-for-ph-customs-modernization-project-awarded-by-june-30/

[18] https://www.portcalls.com/boc-modernization-project-temporarily-suspended/.

[19] https://www.worldbank.org/en/news/press-release/2020/10/27/philippines-customs-procedures-to-be-modernized-with-world-bank-support

[20] Ibid.

of this entails streamlining processes and facilitating the sharing of vessel-cargo related information within the port community.

In recent years, the two major container terminals in Metro Manila implemented the Terminal Appointment Booking System (TABS), a collaborative platform that enables real-time sharing of live container data and allows terminal operators to match the terminal resources with landside demand. Prior to TABS, the trucks would arrive randomly at the port, hence the long queues that resulted in chaotic traffic in the northern part of Manila. TABS regulates the traffic over a 24-hour period, which was proven to be effective. Efficiency increased by 25% during peak hours, unclogging ports and the roads leading to them.

Ongoing reform initiatives would allow the port authority to operate the metro and key provincial ports 24/7 to the highest level of capacity utilization possible. However, critical reforms are still needed in addressing the cumbersome processes of the Port Authority. The inefficient sea transport and distribution system has served through the years as an effective barrier to domestic trade. Low productivity at the farm level and low tourism numbers in the regions have resulted due to the high cost of transport. To a large extent, the high domestic transport cost between the islands could be traced to the inefficiencies in the ports.

- **NSW – Onboarding Status**

In June 2022, former Customs Commissioner Rey Guerrero facilitated the 4th Meeting of the National Single Window – Technical Working Group (NSW-TWG)[21] with regard to the onboarding activities of the NSW, through the DOF TRADENET Project Management Office (PMO), particularly the onboarding of the remaining TRGAs, and the integration of the NSW to other agencies' systems. The ARTA-NSW-Technical Working Group (NSW-TWG) Vice-Chair for Onboarding Matters, reported on the status of 21 TRGAs that were onboarded into the TradeNet Platform, four (4) of which were already using the live environment, while 17 were onboarded in the staging environment.

In addition, former Deputy Commissioner Allan C. Geronimo, NSW-TWG Vice Chair for Technical Matters, provided an intervention covering the activities in implementing the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (CPTA), in which the NSW-TWG further agreed to endorse the implementation of the proposed activities under the CPTA.

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[21] https://customs.gov.ph/boc-chairs-the-4th-meeting-of-the-national-single-window-technical-working-group-nsw-twg/

- **Full roll-out of the Central Business Portal / Philippine Business Hub**

In October 2019, as part of the commitment of the Department of Information and Communications Technology (DICT), the Central Business Portal was rolled out. The portal is designed to receive and capture data on business-related transactions and provide links to online registration services of various national government agencies.

In September 2021, the DICT, ARTA and DTI worked together to further improve the Central Business Portal and changed its name to Philippine Business Hub (PBH). The PBH is a platform where citizens and business owners can access the forms, information and requirements they need for their business-related transactions.

It offers a single site in promoting effective service delivery and transparency in the government, and seeks to streamline the registration of businesses, renewal of permits and other activities through online transactions. The platform is aligned with the Republic Act (RA) 11032 or the Ease of Doing Business and Efficient Delivery of Government Services Act, which provides for the creation of a single portal to make business transactions easier and faster.

In June 2022, the PBH was relaunched by the DICT and various other agencies. "Through the establishment of the PBH, the (number of) days for registering businesses was reduced from 33 days and 13 steps to only seven days with only one step," the Bureau of Internal Revenue said in a statement. The relaunch was headed by the DICT, ARTA, the Department of Trade and Industry, and the Securities and Exchange Commission. This iteration involved localizing of the program and a refreshing of the website.

ARTA plans to further improve the PBH over the years through its Business Process Mapping project, which would include mapping all permits and licenses involved in the business cycle, right up to business closures, and integrating them into the PBH.

- **Continuous updating of the contents of the Philippines National Trade Repository (PNTR)**

In January 2023, the ARISE Plus Regional Project's final report conveyed the completion of the ASEAN Trade Repository (ATR)[22], which provides a single point of access to all the trade-related information of ASEAN Member States. It is an electronic interface through which the public can freely access the information available on the National Trade Repositories (NTRs) of each ASEAN Member State (AMS). In the case of the Philippines, it is the Philippines National Trade Repository (PNTR). The information is linked by means of hyperlinks to a series of interoperable NTRs that provide and maintain the national-level trade related information and the actual

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[22] https://atr.asean.org/

contents. All the actual information is available on the NTRs of the AMS and duly maintained by their respective Governments.

AMS were requested to continue updating and maintaining the information in the following sub-categories of the NTR, *i.e.*, 1) Tariff nomenclature; 2) MFN tariffs, preferential tariffs offered under the ATIGA and other Agreements of ASEAN with its Dialogue Partners; 3) Rules of origin; and 4) all remaining sub-categories under category 4 on NTMs to populate the ATR.

The private sector in ASEAN countries, including the Philippines, should be made more aware of the wealth of information already available on the NTRs and become a regular user of the resources freely available. Continued regular use and feedback of these resources by stakeholders should help contribute to improving trade facilitation within the region, and also help foster the rule of law, legal certainty and commercial predictability, and help ensure that users' demand and oversight are incorporated in and contributory to the goals of the Trade Repository.

3.2 Continuing development and enhancement of other trade and IT-related electronic systems

- In 2019, the World Customs Organization (WCO) under its Mercator Program conducted a diagnostic study that identified several challenges in the implementation of risk management in the BOC, such as the need for a strategic focus in implementing integrated risk management that requires the cooperation of TRGAs. Other challenges included the absence of reliable means in making risk decisions due to the lack of digitalized intelligence sharing with other TRGAs, and the lack of feedback mechanisms in place to avoid multiple examinations. Feedback from the private sector also showed the lack of a feedback loop/mechanism within Customs that resulted in continued examination of similar consignments, over many years, even though the inspections were not identifying discrepancies.

- In June 2020, as challenged by WCO Diagnostic Report findings, the BOC Risk Management Office (RMO) and Management Information System & Technology Group implemented the Universal Risk Management System (URMS) [23]. The system was designed to improve the risk management capabilities of the Bureau through the migration of information to a more user-friendly interface that allowed storage of larger amounts of information and the promotion of a paperless system. Initial implementation to all ports were being conducted based on existing risk parameters that would provide a quicker

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[23] https://www.portcalls.com/boc-adopts-new-risk-management-system/ - BOC adopts new risk management system

means of tagging shipments. Complex data integration and the use of a Business Intelligence Tool (Artificial Intelligence) were tested.

Moreover, the BOC RMO enhanced the Selectivity System in the URMS wherein the BOC activated the new color lane (Orange Selectivity) in September 2020. The new color lane was assigned to medium to high-risk cargoes. Goods with declarations tagged "Orange" would undergo x-ray scanning and if the image is found to be suspicious, it would be subjected to physical examination.

- In 2020, the BOC also issued Guidelines on the utilization of the National Customs Enforcement Network (nCEN) System of the WCO and established the nCEN Database. The nCEN is a system developed by the WCO to assist Customs administrations with the collection and storage of law-enforcement information on the national level with the additional capacity to exchange seizure or suspect information at regional and international level, while supporting the digitalization of Customs operational processes. The BOC-RMO serves as the National Contact Point for the Global CEN to increase intelligence sharing, as part of its mandate to maintain a database of all smuggling cases, seizures and offenses, suspicions, and related data of consignees, for risk assessment.

- In July 2020, the BOC RMO started the cooperation with TRGAs in relation to the need for seamless inter-agency information sharing. A Technical Working Group (TWG) on DTI's Strategic Trade Management Office (STMO)-BOC-Philippine Export Zone Authority (PEZA) coordination was created to ensure that an electronic inter-agency communication mechanism was in place regarding approved licenses of the STMO. This TWG covers how to address commodity identification inquiries from BOC and PEZA. Moreover, another technical working group was created on establishing inter-agency protocols for risk targeting of shipments and intelligence sharing under transit and trans-shipment regimes.

- In December 2020, the Food and Drug Administration (FDA) implemented automated systems for regulating food manufacturing plants, electronic records and signatures of key approving officials in relation to food safety, including infant formula quality control procedures using complex automated systems.

- In January 2022, in line with strengthening border protection and enhancing trade facilitation, the BOC, through its Legal Service and Management Information System and Technology Group, and together with the Department of Agriculture (DA) – Trade Remedies Unit (TRU), held a virtual signing of the BOC-DA Data Sharing Agreement (DSA). The DSA is intended for data and information sharing between the BOC and the DA-TRU regarding importation

and exportation of agri-fishery products under ASEAN Harmonized Tariff Nomenclature (AHTN) Chapters 1-24. The DSA was also created to improve the regulation and implementation of the Trade Remedy Measures and Customs Purposes with respect to customs duties, safeguard duties, anti-dumping duties, general safeguard duties and other duties.

3.3   Updating the PNSW to handle all types of cross-border data

In December 2021, the Philippines joined the electronic exchange of the ASEAN Customs Declaration Document (ACDD), a multi-purpose trade document used for facilitating the exchange of export declaration information that also supports risk targeting and profiling activities at the importing country. The use of the ACDD Management Portal benefits participating exporters through potentially reducing Customs clearance time for shipments, broadening economic integration, supporting the digitalization of BOC processes, and improving the ease of conducting intra-ASEAN trade. Through the ACDD Management Portal, the Philippines can now electronically exchange the customs declaration document with other ASEAN states, broadening the Philippines' economic integration and maximizing the potential of intra-ASEAN trade.

In February 2022, under the leadership of the BOC, with technical assistance provided by the USAID's ASEAN Policy Implementation Project, the development and implementation of the ACDD Management Portal, including enhancements of the PNSW and reconfiguration of the ASW Gateway platform helped support ASEAN's digitalization of trade processes and broaden regional trade connectivity[24]. The PNSW and ASW platforms streamline electronic cargo clearance exchanges, reduce clearance times and boost clearance reliability. The platforms also contribute to reducing costs for storage and labor, help ensure equitable administration of trade regulations, and lower the cost of doing business in the region.

In July 2022, the BOC Project team worked with a partner donor in supporting the development and implementation of the exchange of the electronic phytosanitary certificate with ASEAN Member States to support their risk management systems. The ASEAN Sanitary and Phytosanitary Contact Points (ASCP) agreed to support the possible exchange of the e-SPS certificates through the ASW. These documents include the electronic phytosanitary certificate (ePhyto), the electronic Animal Health Certificate (e-AH), and the electronic Food Safety Certificate (e-Food Safety). ASEAN agreed to continue the live exchange of ePhyto using the ASW system, under the endorsed ASW 2022 Priorities. The Philippines started exchanging the e-Phyto certificate with Indonesia on 10 June 2024 and with Thailand in July using the BOC Electronic Phytosanitary (e-Phyto) Management Portal. The BOC e-Phyto Portal also

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[24] https://asean.usmission.gov/usaid-and-the-philippines-bureau-of-customs-launch-the-asean-customs-declaration-document-acdd-digital-portal-to-expedite-trade/

has access to the e-Phyto certificates issued by Department of Agriculture – Bureau of Plant Industry, the country's official National Plant Protection Organization (NPPO), as well as to e-Phyto certificates issued by the respective NPPOs of exporting countries[25].

Under the leadership of Commissioner Bienvenido Y. Rubio, the BOC will continuously collaborate with ASEAN counterparts to support its priority program on conducting the Study of the New Generation of the ASW, including the implementation of the ATIGA e-Form D, the ASEAN Customs Declaration Document, the Generic Customs Response, and exchanges with Dialogue Partners [26]. As Commissioner Rubio emphasized, "This initiative not only enhances trade efficiency but also strengthens economic ties among member states, paving the way for a more unified and prosperous ASEAN region."

The launch of this BOC's ePhyto Management Portal is expected to improve bureaucratic efficiency, strengthen market competition, and reduce barriers to entry and limits to entrepreneurship. The portal will also help to ensure compliance with international agreements while also assisting efforts to eliminate agricultural smuggling.

In September 2022, BOC and the TRGAs agreed to utilize the BOC Application Programming Interface (API) bridge, which is a component of the ACCD exchange that serves as an interface between the ACDD Management Portal and the PNSW (TradeNet) / ASW, in order to send, receive and route other agreed documents and its acknowledgment response messages. The API bridge also serves as the messaging interface for the exchange of eCO ATIGA Form D and its acknowledgment response messages between the BOC eCO Platform and the PH ASW Gateway, as well as an interface to TradeNet. The BOC API Bridge is also used for the exchange of Sanitary and Phytosanitary Import Clearance (SPS IC) and ePhyto Certificates between the Bureau of Plant Industry (BPI)'s Trade System and the BOC ePhyto Management Portal, as well as for the exchange of the ePhyto Certificates between the Philippines and the AMS through the ASW. In this regard, the initial configuration of the infrastructure (Azure Hosting Services) for the API Bridge, should be reviewed and upgraded to be able to handle the increased volume of ACDD, eCO, SPS IC, and ePhyto messages, connectivity to more servers, as well as the provision of a back-up system.

As part of the BOC public outreach campaign, supported by the USAID-ASEAN Policy Implementation (API) Project, the BOC team together with the API team completed

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[25] https://customs.gov.ph/asean-confirms-philippines-participation-in-the-live-exchange-of-e-phyto-certificate-during-the-67th-meeting-of-the-working-group-on-technical-matters-for-the-asean-single-window-asw/ -

[26] Ibid.

the PNSW and ACDD tutorial video presentations to help client traders learn more about the digitalization initiatives of the Philippines.

3.4   National Government Data Center

The Department of Information and Communications Technology (DICT) lauded the huge investment of the private sector led by the joint venture of the Ayala Group and its Singaporean partner to build the largest data center in the Philippines as they prepare for the entry of tech giants[27]. The 124-megawatt data center in Quezon City would start running by 2025 with an initial capacity of 25 MW that can be scaled up depending on incoming demand.

Once finished, the facility can cater to the needs of both enterprises and hyperscalers, which refers to tech giants like Amazon, Google and Meta. Based on estimates, the hyperscale market is expected to become one of the strongest revenue generators of the economy in the future[28]. The data center industry can grow by an average of 25% every year until 2027, providing a boost not only to the economy, but also to employment.

3.5   National Government Portal

The Philippine Government promotes partnership between the government and its citizens to achieve reforms in the country. Through the National Government Portal (NGP), e-participation is encouraged. The portal was designed to facilitate more responsive and transparent governance, and is a set of online tools that provides access to government information, a mechanism for consultation and a platform for collaboration.

In September 2017, during the initial launch, low public uptake was one of the challenges noted. While there have been mechanisms available for civic participation, there were many barriers in using them, particularly for poverty-stricken communities with limited resources for engagement in accessing the portal. Another barrier was redundancy, as certain features were already being provided by the private sector for free.

In a project review, it was recommended that in future action plans the project should not be carried forward as a standalone commitment, but could be part of an E-Government Masterplan. The e-participation tools that have been developed may be redeployed and become instrumental in other commitments with clear policy aims[29].

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[27] https://www.philstar.com/business/2023/05/19/2267272/ayala-putting-1-billion-data-center-biggest-philippines
[28] https://newsinfo.inquirer.net/1667747/no-budget-workers-for-national-government-data-center-dict
[29] https://www.opengovpartnership.org/members/Philippines/commitments/PH0050/

3.6   Integrated Business Permits and Licensing System (iBPLS)

In March 2022, the iBPLS became available online[30]. The platform aims to address the high cost of doing business in the Philippines – a constraint to the competitiveness of the country – by streamlining the business permits and licensing system of cities and municipalities nationwide. The initiative was developed in response to the call of President Marcos in his 1st State of the Nation Address (SONA) to streamline government processes that would make starting businesses easier.

In sustaining the operation of this platform, DICT's action plans for this initiative are the following:
- Develop capacity building programs for iBPLS streamlining;
- Organize government agencies at the regional level to work with Local Government Units (LGUs) in implementing the BPLS reform initiative;
- Harness private sector support and participation; and
- Harmonize different reform initiatives by development partners on iBPLS streamlining

3.7   Inter-agency Information Sharing Initiative

In December 2020, the BOC, Department of Trade and Industry – Strategic Trade Management Office (DTI-STMO), and several investment promotion agencies (IPAs) signed a Memorandum Of Agreement (MOA) to facilitate the trade of strategic goods. The MOA developed measures in establishing identity management, managed by DTI-STMO, for persons engaged in strategic trade of dual-use items[31] that would expedite online clearance and reduce transition time and costs. Further, the agreement developed electronic procedures for involved actors and entities for monitoring and validating authorizations issued by the DTI-STMO. These procedures contribute to preventing the diversion of strategic goods while in transit.

Consequently, the STMO implemented an authorization system for the export of strategic goods in January 2021, including an online registration process of all persons engaged in the export of strategic goods and transmission of software and technology[32]. A screening procedure unit covers product classification / identification, end-use screening, end-user screening, and risk assessment. Another unit handles shipment control to ensure verification and final check of documents, licenses, and other requirements before shipment. This electronic inter-agency communication mechanism prevents the diversion of strategic goods while in transit.

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[30] https://dimasalang.gov.ph/attention-the-integrated-business-permits-and-licensing-system-ibpls-is-now-online/

[31] Strategic goods are goods, technology, and software that are dual use, in that they can be used for both civilian and military applications, and/or contribute to the proliferation of weapons of mass destruction.

[32] https://wts.com/global/publishing-article/20210401-philippines-customsnl~publishing-article

Moreover, in cooperation with the private sector, an industrial mapping measure for sharing online information was also implemented by the STMO in providing an initial determination of companies currently engaging in the trade of strategic goods or dual-use items in the Philippines, which would be updated annually and shared with the Bureau of Customs Risk Management Office (BOC RMO). The BOC RMO is the unit responsible for centralized risk management and strategic goods shipment, while the role of IPAs is to contribute to information sharing in harmonizing the risk management of strategic shipments. Both BOC and STMO agreed to the sharing of digitalized data and information with any requesting agency on transactions and profiles which undergo the standard risk management process. However, this sharing should not circumscribe other existing BOC selectivity rules. Further, BOC and IPAs are able to verify the authenticity of authorizations through a Quick Response (QR) code system or email to STMO's designated lines.

3.8   Adherence to the National ICT Ecosystem Framework (NICTEF)

In February 2019, the DICT with support from the Internet Society launched the NICTEF[33] – a successor to the Philippine Digital Strategy 2011 – 2016[34]. The NICTEF is a blueprint for the collection, management, and development of national ICT data and serves as a: (1) viewfinder into the national ICT environment and its relation to other ICT environments; (2) strategic compass for responding to ICT-related challenges through the identified areas; and (3) an implementation and communication plan for the stakeholder groups involved in supplementing ICT data to an evolving ICT environment.

The NICTEF framework provides avenues to synchronize policy formulation, evolution of technology, and regulatory regimes to pave the ground for ICT inclusion in various government processes, and society in general. Centers of excellence and sectoral champions are identified to lead industry growth through compliance with global standards.

The NICTEF is now an authoritative reference that guides the development of the digital ecosystem in the Philippines to enable all sectors to benefit from the use of ICTs. To date, both government and the business community are adhering to the NICTEF in harmonizing and coordinating national ICT plans, programmes and projects.

In June 2022, DICT conveyed that, in order to keep the NICTEF relevant and responsive to evolving developmental needs and dynamic ICT innovation, the DICT with its stakeholder partners would maintain and engage in processes that allow for ongoing inputs and periodic reviews of revisions to the framework. To further foster

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[33] https://www.internetsociety.org/wp-content/uploads/2019/11/NICTEF-Case-Study_EN.pdf
[34] https://dict.gov.ph/ictstatistics/wp-content/uploads/resources/NICTEF.pdf

multistakeholder participation and operationalize the NICTEF as a living document, the DICT would:

- Set up and maintain a website to serve as a focal point for continuing the review, assessment, tracking, revision and augmentation of NICTEF policies, plans and projects;
- Conduct periodic regional engagement activities to validate and adopt sector-specific result matrices that each sector or representative agency has identified in the projects on-boarded to NICTEF; and
- Validate and adopt measures being undertaken to leverage or improve utilization of ICTs by the sector organizations or relevant government agencies.

3.9   Implementation of the e-Government Master Plan 2022

The underlying principle of e-government, supported by an effective e-governance institutional framework, is to improve the internal workings of the public sector by reducing financial costs and transaction times, so as to better integrate workflows and processes and enable more effective resource utilization across public sector agencies. Through innovation and e-government, governments around the world can be more efficient, provide better services, better respond to citizen demands for transparency and accountability, and be more inclusive, all of which can contribute to building the trust of citizens in their governments.

In July 2022, the Philippine government launched the e-Government Masterplan (EGMP) 2022 [35] which was formulated by the Department of Information and Communications Technology (DICT). The plan seeks to achieve "One Digitized Government" by developing the country's e-Government systems through the digital transformation of basic services that cut across the government. Through the EGMP, the government is expected to strategize how processes can be simplified; to help make access to accurate information faster and less costly; and to deliver services with more transparency and greater accountability. Moreover, the plan aims to provide more efficient and cost-effective public services to citizens and businesses.

These aims are to be achieved by optimizing government operations through improved organizational and inter-governmental coordination, streamlining procedures, enhancing the government workforce's ICT capacity, and by engaging citizens. The EGMP 2022, together with parallel ICT plans of the government, are expected to make operations more efficient. Additionally, the government would be more equipped in implementing an interoperable e-Government within their respective agencies. Among the programs that will be Included in the E-Government Master Plan are:

- Philippine Government Interoperability Framework;
- Database and Other Resources Sharing Network;

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[35] https://opengovasia.com/the-philippines-dict-launches-e-government-masterplan-2022/

- Archives and Records Management System;
- Full Disclosure and Transparency System;
- Government Online Payment System;
- Citizen Frontline Delivery Services;
- Public Financial Management;
- Procurement System; and
- Cybersecurity Protection and Data Privacy Measures.

Through the establishment of a comprehensive plan that aims to enable the full interoperability of all government systems and services, public service is expected to be more effective, efficient and responsive to the needs of the people.

The National Government Portal (NGP) will act as the EGMP's frontline program. This will provide users with easy access to government services, whether internally to government employees, between government agencies, or with external clients. Once the National Government Portal is completed, the next step is to target the bandwidth allocation for high-speed internet connections, which is being addressed by the National Broadband Program (NBP).

3.10 Conduct of the Annual Vulnerability Assessment and Penetration Test (VAPT)

In June 2020, the DICT issued a statement promoting cybersecurity and data privacy protection in the corporate sector amid the pandemic crisis[36]. The DICT encouraged corporations to assess their exposure to cybersecurity risks and craft appropriate measures to address such risks. Moreover, the DICT highlighted that it was offering its Philippines National Public Key Infrastructure services, and that the issuance of digital certificates could ensure confidentiality, authenticity, integrity, and non-repudiation of electronic transactions and documents.

Further, it stated that it was conducting vulnerability assessment and penetration testing (see Box 2) for its clients, and advised corporations to report cybersecurity incidents in their systems to the DICT's Cybersecurity Bureau.

Box 2: Vulnerability Assessment and Penetration Testing defined

Vulnerability assessment[37] is a process of defining, detecting, categorizing and prioritizing security vulnerabilities in a computer system, application or network. Organizations rely on vulnerability assessments to provide crucial intelligence and risk contexts to understand and respond to cybersecurity threats. At the end of the

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[36] https://dict.gov.ph/dict-backs-sec-in-promoting-cybersecurity/
[37] https://brightsec.com/blog/penetration-testing-and-vulnerability-assessment/

process, a vulnerability assessment report lists the results obtained from the assessment tool.

Penetration testing[38] is a security method that allows organizations to identify, test and prioritize vulnerabilities in computer systems and networks. Ethical hackers usually perform penetration tests – these ethical hackers may be internal employees or third-party contractors.

3.11 Update in stabilizing the BOC's e2M system

In October 2020, the BOC MISTG - Technical Management Service (MISTG-TMS) led the stabilization program of the Electronic-to-Mobile (E2M) system, which was implemented in 2005 on top of BOC's Automated System for Customs Data (Asycuda++), which in turn was installed in 1995. The E2M system faces significant challenges due to outdated infrastructure, a weak information security module and an archaic risk management system. The BOC has acquired and implemented hardware and software systems as part of the stabilization program. Acquired hardware includes a high-performance server and co-location servers, while the disaster recovery server has been deployed – a network redundancy that can take over when the primary network goes down[39].

Moreover, BOC has also made use of a private cloud environment that provides an easily manageable, flexible and reliable high-capacity environment to host BOC's systems and database. As stated by Mr. Jonathan Soriano, Chief, MISTG-TMS, "The effects of these upgrades resulted in noticeable E2M performance and reliability. Currently, the E2M system has experienced no slowdown or downtime since the upgrades were done[40]". He acknowledged, however, that it remains "a continuous process and we will continue to implement enhancements to ensure that our stakeholders get the service needed." The following year, several projects were also implemented:

- In June 2021, the BOC implemented the Automated Bonds Management System (ABMS) for Warehousing, an automated procedure under the E2M system that monitors the status of bonds from their approval, charging, cancellation up to liquidation and expedites the settlement or collection of dues and demandable bonds. In the next few months, the BOC developed the Forfeited Status of the goods declaration as part of the E2M system. This is an additional feature in the system that can be used by the Assessment Personnel to tag goods declarations that are subject to forfeiture. Moreover, the Auto Assignment of Declaration was also embedded in the E2M system. It replaced

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[38] Ibid.
[39] https://www.portcalls.com/boc-deploys-projects-to-stabilize-e2m/
[40] Ibid.

the Goods Declaration System (GDVS) which randomly assigns entries for assessment to BOC examiners and appraisers.

In July 2021, the BOC implemented the Raw Materials Liquidation System (RMLS) which tracks duty-free raw material importations by Customs Bonded Warehouses that are used in processing semi-finished or finished products for export. The system is also capable of automatically liquidating warehousing entries covering raw materials used up in the manufacture of these products when cleared for export. The system interfaces with the ABMS to automate the charging of warehousing bonds filed to cover the duties and taxes on raw material imports and the subsequent cancellation of the charged amount upon liquidation of the warehousing entry.

- In September 2021, the BOC successfully deployed its Automated Inventory Management System for Customs Bonded Warehouses at the Port of Manila. This system determines and monitors the stock inventory of bonded goods from the time of their entry into the warehouse up to the liquidation of the goods declaration covered by the warehousing single administrative document. Through the establishment of the electronic tracking of containerized cargo system (E-TRACC system), the BOC can track, monitor and audit the location and condition of containers, as well as set up real-time alarms on, among other issues, the diversion and tampering of cargoes.

- In October 2021, the BOC's Customer Care Centers[41] (CCC) were upgraded to allow the uninterrupted processing of shipments, thus helping to keep businesses afloat during the crisis, and removing the need for traders to physically deal with Customs Officials in clearing shipments. The CCCs provide services such as online centralized document receiving and releasing, and act as an information area for inquiry and other general concerns.

- In November 2021, the Customs Operations Center[42] (COC) was established by BOC to serve as the headquarters to integrate and analyze customs-related intelligence, enforcement and operational information gathered from various sources online. The COC is the coordinating facility of the BOC Operations Group in the proper collection of customs duties and taxes, enforcement of tariff and customs laws, prevention and suppression of all forms of customs fraud, and other economic frauds in all ports of entry. Further, it supervises and monitors the movement of imports, exports, foreign mail, and the clearance of vessels and aircraft in all ports of entry. Other functions include monitoring and supervision of the daily operations of the principal ports of entry and sub-ports. It is also mandated to coordinate with the Philippine Navy, Philippine Coast

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[41] https://cares.customs.gov.ph/kb/faq.php?cid=1
[42] https://www.portcalls.com/boc-sets-out-rules-governing-operations-center-activities/

Guard, Philippine Ports Authority and other related port and maritime agencies in monitoring the disposition and activities of sea vessels operating within the country's area of responsibility. It also coordinates with the Philippine Air Force, Civil Aviation Authority of the Philippines, Air Transportation Office and other aerospace agencies in monitoring the disposition and activities of air vessels.

- In January 2022, the BOC issued Customs Memorandum Order (CMO) No. 1-2022 [43] to protect the BOC from risks of loss to revenue collection and reputational losses. The Information Security Policy in the CMO, based on ISO 27001 – 27005, aims to define the security requirements for the proper and secure use of information-related services. It also aims to mitigate risks related to damage, loss, and misuse of BOC's information systems, by ensuring that all users understand their responsibilities to protect the data that they handle.

- In October 2022, the BOC upgraded its Payment Application Secure (PAS6) system in line with its thrust to computerize manual processes and enhance its ICT systems and infrastructure. The PAS6 is now connected to the Bureau's Electronic-to-Mobile (E2M) System which enables all stakeholders to access more efficient payment facilitation. Stakeholders who pay duties and taxes through Security Bank, Landbank, Asia United Bank, and Metropolitan Bank and Trust Company would be the first to experience the round-the-clock payment service which can be accessed from home. Roll-out to other banks is also currently in process.

  The added feature ensures the accurate and immediate exchange of transaction information on the assessment details of payable duties and taxes. In addition, the system allows the processing of shipments to be cleared in a shorter period of time as payments are processed in a seamless manner. The PAS6's design allows the completion of payments within minutes and is directly connected to the PhilPass through the PCHC (Philippine Clearing House Corporation) Payment Gateway, ensuring that remittances to the BOC's Treasury Single Account are done immediately and accurately.

For the long term, BOC looks forward to the implementation of the Philippines Customs Modernization Project (PCMP) that aims to improve BOC's core customs processing system, which is expected to enhance BOC's frontline service delivery, integrity, accountability and organizational performance[44].

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[43] https://customs.gov.ph/Boc-implements-information-security-policy/
[44] https://www.portcalls.com/boc-deploys-projects-to-stabilize-e2m/

3.12 Strict implementation of the Anti-Red Tape Act (ARTA)

The technical and legal readiness assessment report for the Philippines notes the uneven implementation of paperless trade and cross-border paperless trade among agencies and stakeholders. Many islands of automation – or individual, siloed projects – have been implemented by agencies involved in trade clearance. One of the systems which the government has put in place is the National Single Window (NSW), a computerized internet-based system that allows parties involved in trade to lodge information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements. The facility was developed to interconnect government agencies involved in the processing of import and export shipments, but not all government agencies have participated.

Traders are still experiencing long queues in government offices for the submission of cargo clearance documents, and for enquiries on status of transaction and other help desk issues. Thus, there is strong demand among traders for more efficient and less burdensome government services. Red tape, or the excessive regulations and bureaucracies involved in processing documents in the government, has been a bane for the Philippines.

In June 2018, when then-President Duterte assumed office, he pushed for the passage of Republic Act 11032 or the "Ease of Doing Business and Efficient Government Service Delivery Act of 2018," which amended the old Anti Red Tape Act (ARTA) law. The ARTA's mandate[45] to oversee a national anti-red tape policy includes two important categories of powers and functions: empowerment and enforcement. ARTA is tasked to monitor, recommend, and assist government agencies on initiatives that could make their processes faster and more efficient using modern technology. On the other hand, ARTA's enforcement function can crack the whip on government agencies that fail to comply with the Anti-Red Tape Law. ARTA's investigative function enables it to file cases against government officials, if they are found to have violated any provisions of Section 21 of the ARTA Law.

As suggested by its very title, the ARTA law further strengthened the mandate for the Ease of Doing Business law by employing a zero-contact policy; requiring the implementation of streamlined procedures for licenses, clearances, permits, certifications, and authorizations; and mandating the development of a fast and reliable interconnectivity infrastructure.

Moreover, the ARTA law mandates all covered government agencies to regularly undergo evaluation and improvement of clearance processes, including a re-engineering of business and information processes that entails review and

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[45] https://lawreview.ust.edu.ph/cutting-red-tape-empowerment-of-ar/

harmonization of permitting and licensing laws, policies and regulations, and the elimination of redundant and undue regulatory burdens to the transacting public.

3.13 Data harmonization initiatives

In June 2022, the BOC Project team comprising the BOC RMO and the PH NSW stakeholders completed the NSW Technical Reference Guidelines[46] which conveyed that advances in technology may be critical for connecting to service delivery models. However, the various TRGAs have emphasized that alignment, a secure pipeline, harmonization and simplification of processes such as master data management or technical reference modelling, and a connected government strategy will further enable these institutions to deliver more value to internal and external clients and be more responsive to cargo clearance stakeholders' needs.

Further, the report stated that it is necessary for BOC and TRGAs to re-strategize on how to improve and facilitate the timely and seamless cross-border electronic exchange of advance information between trading partners, including inter-agency information sharing of cargo clearance requisites to support each other's risk targeting and profiling activities.

Practices should be aligned with international instruments and tools such as the Revised Kyoto Convention and WCO's Immediate Release Guidelines in harmonizing and simplifying cargo clearance processes. Further, BOC and TRGAs should be encouraged to attend trainings on master data management (MDM) and technical reference modelling. This would help the management in setting up a uniform set of information rules that can unify reference data services across the international supply chain to support paperless trade and risk management initiatives.

3.14 Full implementation of the Authorized Economic Operator (AEO) Program

In December 2019, the AEO Philippines was launched and the Interim AEO under the BOC was established. The Program implements Section 1227 and 1228 of the Republic Act No. 10863, otherwise known as the Customs Modernization and Tariff Act (CMTA) and Customs Administrative Order No. 5-2017 which establishes the Authorize Economic Operator Program in the Philippines by providing, among others, the infrastructure, facility, mechanism, process and benefits necessary for its full implementation.

In January 2020, a WCO Expert conducted a review of the AEO program processes in which recommendations were made on the AEO evaluation criteria and validation process, including on how to develop the AEO Self-Assessment Questionnaire.

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[46] https://customs.gov.ph/wp-content/uploads/2023/01/Gazette_JanFeb2022.pdf - BOC coordinates work on the Single Window Initiatives with the Bases Conversion and Development Authority.

Moreover, a review of the PH AEO program was conducted by the ASEAN AEO team as part of the preparation and negotiation in finalizing the ASEAN AEO Mutual Recognition Arrangement (MRA).

In January 2022, a validation session with the interim AEO officials conveyed that a functioning AEO program was already in place – formalized through several legal orders, institutionalized by the establishment of an AEO office, and organized with a designated official leading the interim AEO office with concurrent support staff. The Interim AEO office was created under the Office of Deputy Commissioner, Assessment and Operations Group in managing and handling the AEO program.

Managing a crucial program on a "per need" basis comes with risks. A temporary setup taken to address specific AEO tasks may result in an unintended negative impact on other BOC operational functions. Current AEO staff should be given intensive training and advanced studies on key areas. Equally important is to increase the number of employees relative to program growth. Consequently, crafting a design framework for the continuous improvement of the program is crucial for its success.

The BOC AEO Program covers importers and exporters, customs bonded warehouses, third party logistics providers, non-vessel operating common carriers, freight forwarders, and shipping lines and their agents, including authorized agent banks and local transport operators' facilities and equipment. The list of importable and exportable items indicated in their Client Profile Registration System (CPRS) database by prospective applicants are factored in as part of the AEO evaluation process. The program is designed based on the US Customs Trade Partnership Against Terrorism where three levels of accreditation are covered with corresponding benefits, and the AEO pre-screening clearance process is similar to the AEO programs of Japan and Republic of Korea.

Under BOC CMO No. 09-2020, an applicant for AEO level 1 accreditation must have been operating for at least one year prior to the date of application. The "screening and evaluation" process, defined in Section 5 of CMO 26-2021 and Section 9 of CMO 9-2020, is conducted by the AEO Accreditation Unit. Applicants with multiple services may submit one application form for several categories, but the AEO Certificate of Accreditation will be per category.

In February 2022, BOC[47] granted Level 1 AEO accreditation to Toyota Philippines, Panasonic and Coca Cola, which exempts the AEO importer member from annual renewal of accreditation. An AEO Level 1 member[48] is eligible for expedited shipment by submitting digitalized trade documents (bill of lading or commercial invoice) and supplementary goods declaration through the E2M system.

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[47] https://www.portcalls.com/Toyota-gets-first-ever-ph-aeo-accreditation-4-others-up-next/
[48] Ibid.

The BOC team had shared that they were encouraging Samsung, Yokohama and other big manufacturers in the country to take advantage of its AEO scheme. Further, they are working closely with the Strategic Trade Management Office, Sugar Regulatory Administration (SRA), Fair Trade and Enforcement Bureau (FTEB) and the Bureau of Product Standards (BPS) in enhancing and streamlining trade facilitation procedures that will expedite the processing of required permits, licenses, and certificates for the shipments of AEO members.

For AEO Level 2 accreditation, the Post Validation Unit performs the screening and evaluation process, which requires the applicant to submit a compliance history of at least three continuous years of operation that covers information security policy and business continuity procedures before becoming eligible for upgrade. The established mechanism on data protection and information security are indicated in Section 7 of CMO 26-2021. The CMO for AEO level 2 accreditation is still being prepared for implementation. There is no timeline yet for the implementation of level 3 accreditation. The BOC AEO team is now working with a technical expert in designing the level 3 criteria, including its benefits, cooperation arrangement with the TRGAs, seamless exchange of AEO-related information, and issues to consider in negotiating Mutual Recognition Arrangements (MRAs) for interested trading partners.

In January 2023, the MRA between the Philippine Bureau of Customs and the General Administration of Customs of the People's Republic of China (GACC) on the Authorized Economic Operator Program was signed during the state visit of President Ferdinand Marcos Jr. to China[49]. The AEO Program's MRA is a partnership pursued globally by customs administrations to secure and facilitate trade by providing incentives to traders working jointly with customs administrations to improve supply chain security.

The AEO program's MRA will serve as a platform to provide additional benefits to their members through international recognition with partner countries. Generally, MRA benefits include a higher level of facilitation during cargo clearance, both domestic and overseas; priority treatment if the cargo has been selected for inspection; and expedited customs cargo clearance in the event of trade disruption. The AEO companies would thus enjoy cost savings due to better predictability of cargo movement. Under the MRA, level 2 AEO members accredited by the BOC who are exporting to China will be afforded trade facilitation benefits.

Similarly, exporters to the Philippines accredited as Advanced Certified Enterprises (ACE) under the measures of the Enterprise Credit Management Programme (ECMP) of GACC will be afforded trade facilitation benefits by the BOC. It was agreed that both parties will develop an implementation plan for mutual recognition of AEO certification

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[49] https://www.china-briefing.com/news/china-philippines-bilateral-trade-investment-and-future-prospects/

criteria and evaluation procedures, trade facilitation benefits, and exchange of information before implementation of the MRA six months after its signing.

In July 2023, the World Customs Organization (WCO) supported BOC to further develop its AEO program through a capacity-building mission held in Manila. The mission was designed to improve the Philippines' AEO program and further build the necessary skill set of BOC officials to conduct validations of AEO security criteria in line with the WCO SAFE Framework of Standards and Article 7.7 of the WTO TFA[50].

The capacity building consisted of classroom training followed by hands-on AEO security validation exercises at the traders' premises. Through the hands-on validation process, BOC received practical technical training and insights on the application of validation techniques to ensure the WCO AEO security criteria were met.

This initiative supported BOC's effective validation process, including during joint validations with other members in the Association of Southeast Asian Nations region, and was expected to contribute to a more enabling business environment.

During the interactive sessions and discussions with the management of the BOC AEO program, there was follow-up support for more in-depth training on the criteria, and the pre-validation process was identified. This would include capacity-building to set timelines and standard operating procedures, developing a scorecard for objective accreditation, and a more streamlined and simplified self-assessment questionnaire[51].

3.15 Implementation of the ATA Carnet System

In April 2022, the BOC issued Customs Administrative Order (CAO) 2-2022[52], prescribing the rules and regulations in the implementation of the ATA Carnet System in the country. The ATA Carnet refers to the papers used for the temporary admission of goods, excluding the means of transport. This allows for the free movement of goods across frontiers and their temporary admission into a customs territory with relief from duties and taxes.

Importation of goods under CAO 2-2022 grants temporary admission subject to the following conditions:
- The goods, including means of transport, must be imported for a specific purpose.
- The goods must be intended for re-exportation within the minimum period specified under the Istanbul Convention.

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[50] https://www.portcalls.com/wco-supports-boc-in-aeo-program-development/
[51] Ibid.
[52] https://customs.gov.ph/wp-content/uploads/2023/01/cao-02-2022-Rules-and-Regulations-in-the-Implementation-of-the-ATA-System-in-the-Philippines.pdf

- The goods shall not undergo any change except normal depreciation due to the use made of them.
- The BOC shall accept, in lieu of the regular Single Administrative Document (SAD) or Informal Declaration and Entry (BOC Form no. 177), a validly issued ATA Carnet as a goods declaration for goods temporarily imported into the country.

The BOC and the Philippine Chamber of Commerce and Industry (PCCI) officially launched the full implementation of the ATA Carnet, also known as the "Passport for Goods," on July 15, 2024.

3.16 Launch of the E-Government Philippines Portal

In June 2023, the eGov PH, also known as the e-Government Philippines, was launched by President Marcos. It is a mobile application that simplifies transactions between the government and citizens. With a vision to build a connected nation, the platform integrates the multi-sectoral government through a one-stop online system that aims to minimize economic costs for the citizens.

As the government leverages on the use of modern technology, the eGov PH Super App provides a "Digital Philippines" through the adoption of digital transformation solutions, spearheaded by the DICT. Filipinos can now have easy access to various government online services and information, covering across local and national levels of public agencies. Made possible through the collaboration of all agencies, eGov PH combines logistics, marketing, payments, access to loans, and source materials into a single ecosystem. This makes the whole government delivery process easier and more convenient, which is particularly beneficial for SMEs when it comes to conducting their businesses and trade.

4.0 UPDATES ON LEGAL READINESS ASSESSMENT RECOMMENDATIONS

This section provides updates pertaining to the legal readiness assessment recommendations.

4.1 Legislative amendments to the Electronic Commerce Act and Accession to the Electronic Communications Convention

In June 2021, House Bill No. 9642 was introduced by Representative Wes Gatchalian, amending certain provisions of Republic Act No. 8792, otherwise known as the "Electronic Commerce Act." (ECA), which was enacted in June 2000. The ECA allowed for the recognition of electronic contracts under Philippine Law that served as the groundwork for electronic transactions in the country.

In June 2007, the Philippines had signed the United Nations Convention on the Use of Electronic Communications in International Contracts, also known as the Electronics Communications Convention (ECC), and ratified/acceded to it in 2021. The convention governs the legal recognition of cross-border electronic transactions, while domestic transactions continue to be governed by domestic laws. However, international electronic contracts can only receive recognition under Philippine Law if these contracts are compliant with the ECA, even if such contracts adhere to the ECC. To address this issue, the amendments to RA 8792 proposed by Rep. Gatchalian align Philippine law with the ECC to achieve a common rule of recognition between electronic communications / contracts between domestic parties, and those involving a foreign contracting party.

In particular, Philippine Laws are being aligned with regard to the legal recognition of electronic signatures, formation and validity of electronic contracts, errors in electronic communications or electronic documents, the time and place of dispatch and receipt of electronic communications and documents. In addition, the proposed amendments would also introduce electronic and remote notarization, which became increasingly relevant during the pandemic. Overall, the amendments aim to align Philippine Law with the ECC and remove current inconsistencies. This is expected to ease cross-border transactions and greatly improve the efficiency of e-commerce. As of July 2024, the House Bill is still pending approval.

4.2   Enactment of a law related to the management of the NSW

Given increasing recognition of the NSW's importance in the country's effort to digitalize and become more resilient in the face of continuing and future global health threats and supply chain disruptions, renewed efforts to put in place the new NSW – the "TradeNet" system – should be accompanied by its institutionalization[53].

To date, there are 86 identified TRGAs involved in the implementation of TradeNet. These TRGAs are categorized into: (a) regulatory, (b) monitoring and oversight, (c) ecozones, and (d) policy. Regulatory TRGAs are those that are mandated by law to process and issue permits, licenses, certificates, or accreditation prior to the importation or exportation of goods. Monitoring and oversight TRGAs use trade data to process statistical reports, trends, profiling, and analysis, among others. Ecozones are TRGAs that govern special economic zones, free trade zones, and free ports. These three (3) categories comprise 73 TRGAs that have been identified for onboarding onto TradeNet. The final category, policy TRGAs, are not required for onboarding but provide advisory, legal, and technical inputs for the implementation of the NSW and ASW. The onboarding process is divided into five (5) stages: (a) Agency

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[53] https://cpbrd.congress.gov.ph/index.php/component/content/

Counterpart Team (ACT) creation, (b) data gathering, (c) requirement analysis, (d) systems implementation, and (e) go live.

However, only three (3) out of the 73 TRGAs have actively utilized TradeNet. Although pronouncements cite four (4) TRGAs currently on live operations, further validation revealed that only three (3) of them are completely onboard and have active users of TradeNet, while the remaining TRGA has experienced unresolved technical issues with the platform. The three (3) agencies on live operations have total enrolled users of 152. This reveals the low utilization of the platform, when comparing to the BOC list of 16,909 importers with active status as of 19 October 2020, while the DTI Export Marketing Bureau had 2,350 registered exporters on their Tradeline portal as of 20 July 2022[54].

Given these challenges, there is a clear need to strengthen the institutionalization of the NSW and its management. In this regard, the Congressional Policy and Budget Research Department (CPBRD) endeavors to provide the rationales for establishing the Philippines' NSW by reviewing the literature and experiences of other countries. In addition, it aims to identify key provisions that should be included in a legislative proposal by analyzing the issues and challenges in TradeNet's program theory, service delivery and utilization, and program organization that limit its efficient and effective implementation. The CPBRD's paper on this issue concludes by proffering recommendations for a policy that enables the expeditious and sustainable implementation of the Philippines' NSW, specifically, in the context of enhancing previous legislative proposals on the NSW[55].

The necessity of establishing an NSW, beyond its expected impacts on efficiency and facilitation of processes for (domestic) stakeholders, is further highlighted by its critical role in serving as a prerequisite for the Philippines to integrate into regional single windows. As the ASEAN Member States centralize, digitalize, and harmonize their trade processes on a national level through their respective NSWs, the ASW serves to link the NSWs and support the exchange of trade-related documents in the region. With this, the benefits of individual NSWs to governments, enterprises involved in trade, and the economy widen in scope.

Thus, the BOC and the TRGAs should provide support to the CPBRD in recognizing the NSW's importance in the country's effort to digitalize cargo clearance procedures, and to become more resilient in the face of continuing and future global challenges and crises.

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[54] Ibid.
[55] Ibid.

5.0 INVOLVEMENT IN INTERNATIONAL COMMITMENTS

The Philippines is involved in regional and multilateral commitments to implement its paperless initiatives through the National Single Window, and to support activities under ASEAN agreements and the World Trade Organization Trade Facilitation Agreement (WTO-TFA).

5.1 ASEAN Agreements

As a member of ASEAN, the Philippines is involved in the bloc's initiatives and efforts related to paperless trade. One of the key ASEAN agreements on paperless trade, the "Agreement to Establish and Implement the ASEAN Single Window", was signed on 9 December 2005 upon the collective recognition of the ASEAN member states that an effective and efficient arrangement to expedite customs release and clearance contributes to the shared goal of establishing the ASEAN Economic Community. Part of the Philippines' obligations under this agreement is to operationalize its NSW, and to operationalize the exchange of the Electronic Certificate of Origin and the ASEAN Declaration Documents, for which the Philippines is already exchanging live data with ASEAN member states and has thus met its obligation on this.

Given accelerating digital transformation in all sectors, ASEAN member states have reaffirmed their vision to embrace digital transformation and establish ASEAN as a leading digital community and economic bloc, powered by secure and transformative digital services, technologies, and ecosystems. Part of this entails addressing the digital divide to unlock further growth of the ASEAN digital economy. ASEAN member states have highlighted the importance of expediting the study for the Digital Economy Framework Agreement (DEFA), to examine areas that can be included in a framework to accelerate ASEAN's digital integration towards a regionally integrated economy. The strategic objectives that could be covered by the framework agreement include, but are not limited to, the following:
- Enhance capacity building for SMEs to adapt to cross border e-commerce;
- Work towards harmonization through a coherent and comprehensive legal framework for online dispute resolution, taking into account available international standards;
- Promote interoperability and align e-commerce-related regulations and standards to facilitate cross-border transactions;
- Establish coherent and comprehensive framework for personal data protection; and
- Promote seamless and efficient cross-border logistics.

External partners are supporting the implementation of several paperless trade projects and initiatives with member states, including:

- USAID IGNITE – ASEAN Digital Integration Framework Action Plan (DIFAP) Review and development of the ASEAN Digital Integration Index (ADII) Report;
- ASEAN-Australia Development Cooperation Program Phase II (AADCP II) – Study for the ASEAN Digital Economy Framework Agreement (DEFA); and
- US-ASEAN Business Council (US-ABC) – proposed project in advancing digital transformation and other initiatives related to the digital economy and e-commerce.

There have been significant efforts to harmonize data standards, data governance, and data protection frameworks, such as the "OECD Guidelines on the Protection of Privacy and Cross-border Flows of Personal Data," and the APEC Privacy Framework. To keep pace, ASEAN needs to develop forward-looking and enabling frameworks and policies that facilitate the growth of the digital economy. There is also a need to strengthen the governance of digital data in ASEAN with a view to promoting trade growth and data flow within and among AMS in the digital economy. Progress on digital data management issues also varies considerably across ASEAN. There is a significant opportunity to improve transparency on requirements related to data management and identify areas for improvement[56].

The agreed ASEAN Framework on Digital Data Governance[57] identifies four strategic priorities and initiatives of digital data governance that support the ASEAN digital economy, namely:
- Data Life Cycle and Ecosystem supported by the ASEAN Data Classification Framework;
- Cross Border Data Flows supported by the ASEAN Data Classification Framework;
- Digitalization and Emerging Technologies supported by the ASEAN Digital Innovation Forum; and
- Legal, Regulatory Policy supported by the ASEAN Data Protection and Privacy Forum

5.2 WTO-Trade Facilitation Agreement (TFA)

The Philippines' commitments under the WTO-TFA is supported by the Philippine Trade Facilitation Committee (PTFC). The PTFC acts as the official "National Trade Facilitation Committee" of the country and is mandated to provide the mechanisms to facilitate both domestic coordination and implementation of the provisions of the WTO-TFA (see Box 3). The PTFC is chaired by the Department of Finance (DOF) with the Department of Trade and Industry (DTI) as co-chair and BOC as vice chair. Under EO 136, the PTFC is tasked to study, propose and coordinate the position, activities or

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[56] https://asean.org/wp-content/uploads/2012/05/6B-ASEAN-Framework-on-Digital-Data-Governance_Endorsedv1.pdf
[57] Ibid.

actions of the Philippine government on matters pertaining to implementation of the WTO-TFA and other trade facilitation commitments. Thus, the PTFC recognizes the importance of a coordinated approach in complying with the WTO trade facilitation measures; the BOC was tasked to develop a pool of **National Customs Trade Facilitation Champions (TF Champions)** that are equipped with enhanced knowledge and understanding of the WTO trade facilitation technical measures.

Over the past several years, the TF Champions have collaborated with key external stakeholders involved in trade facilitation. In raising the importance and awareness of the WCO multi-year Mercator program, the Philippines has achieved remarkable progress. As per the WTO-TFA database, the current rate of implementation of commitments for the Philippines stands at 100% with a time frame from February 2017 to June 2022.

Box 3: WTO-TFA Articles relevant to paperless trade

There are a number of **WTO-TFA[58] Articles relevant to paperless trade** that countries should take into consideration in designing their paperless initiatives. These are:

- Article 7.1 - "Each Member shall, as appropriate, provide for advance lodging of documents in electronic format for pre- arrival processing of such documents."
- Article 7.2 - "Each Member shall, to the extent practicable, adopt or maintain procedures allowing the option of electronic payment for duties, taxes, fees, and charges collected by customs incurred upon importation and exportation."
- Article 10.2 - "Each Member shall, where appropriate, endeavor to accept paper or electronic copies of supporting documents required for import, export, or transit."
- Article 10.3 - Encourages Members to "use relevant international standards or parts thereof as a basis for their import, export, or transit formalities and procedures" which in theory would apply to standards relevant for e-commerce as well.
- Article 10.4 - "Members shall endeavor to establish or maintain a single window, enabling traders to submit documentation and/ or data requirements for importation, exportation, or transit of goods through a single entry point to the participating authorities or agencies." The article further stipulates that "Members shall, to the extent possible and practicable, use information technology to support the single window."

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[58] https://www.wto.org/English/docs_e/legal_e/tfa-nov14_e.htm

6.0 METHODOLOGY AND MANAGEMENT

Data collection for this feasibility study is based on the following: (i) desk research of relevant materials and information, as presented in previous sections and also in the later sections of this report; (ii) surveys that were distributed to targeted respondents in coordination with BOC, TRGAs and economic operators (the trading community and logistics actors); and (iii) interviews with government officials and private sector representatives.

The survey questionnaires (see Appendixes) used were the key method of primary data collection, and were aimed at understanding the degree of digitalization at each stage of an end-to-end cargo clearance process in the Philippines, for each major trade actor involved. Survey questions were tailored for different categories of trade actors, and were designed to cover, as much as possible, a wide breadth and depth of perspectives on cross-border (digital) exchange, including technical challenges faced in developing and implementing robust and effective cross-border electronic information exchange.

BOC, as the lead agency in facilitating paperless trade in the Philippines, coordinated and disseminated the survey questionnaires to the targeted respondents. The actors and entities surveyed in this exercise were:
- National Trade Facilitation Committee – (consulted only on policy and governance issues)
- Customs Authority (Bureau of Customs)
- Trade Regulatory Government Agencies (licensing / sanitary / phytosanitary / environment / public health / certificate of origin authorities)
- Trading Community (Exporter, Importer and Customs Broker)
- Port Community

The following briefly introduces the types of stakeholders covered in the survey questionnaires:

- The **National Trade Facilitation Committee (NTFC)** serves to enable more efficient and effective coordination among the government agencies and economic operators involved in paperless trade. This is particularly so when it has a strong governance structure drawn from both public and private sectors. The functions of an NTFC could cover:
  - Streamlining and improving cargo clearance procedures and facilitating the implementation of rational, efficient, and simple customs procedures. Emphasis is on pre-customs procedures, assisting companies to easily trade across borders, and streamlined, quick and digital procedures.

- o Trade facilitation reform which aims to bring about a mentality change within the public administration and the setting of new parameters for public-private sector engagement.
- o Building the necessary trust and cultivating a concrete relationship between economic operators and TRGAs, in which the perspectives and needs of traders are actively heard and taken into consideration.

- The **Customs Authority (Bureau of Customs** for the Philippines) is the executive agency of all external trade policy measures. It verifies the classification of goods (for duty collection and statistics), the valuation or other qualification of goods (for the assessment of duty), and the requirement for goods to undertake Customs procedures (according to the provisions of the internationally accepted Revised Kyoto Convention) – actions and activities which have repercussions on the application of non-tariff measures such as checking licenses and permits issued by the TRGAs as supporting documents of the customs declaration (import/export restrictions, etc.). Customs performs risk targeting and profiling activities through its selectivity process on the customs declaration. As a single point of collection, it could be charged with the collection of any duties, taxes, fees, and charges due on Customs clearance; and finally releases the goods to the port / airport operator for export, and thereby states formally the export and import regimes.

- The Customs Authority is generally the primary executive organ for administering external trade policy at the border. Besides Customs, several government agencies are also responsible for formulating and implementing external trade policies. Within their general mandates, **Trade Regulatory Government Agencies (TRGAs)** assess and implement trade policy instruments, including quantitative export limitations, as measures of regulating external trade flows. Intervention by TRGAs in cross-border trade depends on the kind of goods involved, the Customs procedure intended for the individual consignment, and, not least, the purpose of introduction of those goods into the national economy of the importing country. Most of such interventions and subsequent decisions by Customs are regulated by the Revised Kyoto Convention.

- The **Carrier**, being in possession of the "freight documents" (bills of lading, manifests, etc.), is the primary source of any pre-arrival information to ports of destination authorities, Customs, etc. The Carrier physically transports the goods (i.e. "carries") through all or part of the route from port to consignee.

- The **Forwarder** organizes forwarding of consignment from consignor or port of export to port of import or consignee ("logistics"), i.e. organizes transport operations from port to port, to Customs office of destination, and on to consignee at the importing country.

- Hired by the exporter, the **Transport Operator** is responsible for the actual functioning of transport operations effectuated by carriers. The freight forwarder / transport operator may receive freight orders/information from the consignor for presentation of the goods at point of first destination. The freight forwarder / transport operator / carrier may inform not only the destined port of arrival, but also the consignee about necessary/intended transit and the relevant data.

  On the basis of this knowledge, the **Freight Forwarder / Transport Operator / Carrier** may prepare for necessary documentation for taking into account non-tariff commercial measures for exports of specified goods. With the freight documents, the invoice (evidence of value), and substantiating documentation issued by the consignor, they lodge a goods declaration for Customs clearance for export. According to orders by the person represented, they may also enter into an insurance coverage for the export journey. The Declarant orders a commercial bank to pay the fees / total taxes coming due for this specific transaction at the time prescribed by national legislation (e.g. at the time of lodgment of the export declaration) to a defined bank account indicated by the declarant.

- The (registered) **Exporter/Consignor** is one of the key players in the international supply chain. Before the goods are exported, the trader or consignor will apply for export permits, authorizations, licenses, etc. with Trade Regulatory Government Agencies (TRGAs), and for necessary clearance documentation/procedures.

  An **Exporter** should be familiar in classifying products for duty, determining whether their products are controlled for export, quota and statistical purposes. In case of a necessary financial security (for the transport/transit from the point of manufacturing to the port of departure), the consignor also provides the basis for its assessment. The consignor orders the bank (or his/her representative) to provide financial security (bank guarantee). In most cases, export procedures are not subject to "non-tariff measures", i.e. measures of commercial policy implication (e.g. quantitative limitations). Protection of natural resources, security of supply to domestic consumers, adherence to international agreements, control of dangerous substances (including inflammable goods, explosives, arms and weapons, etc.) are among the reasons for export limitations and export control.

  Export of goods under international surveillance, including legal trade in endangered species of fauna and flora, narcotics, drugs and psychotropic substances, etc. is also administered by TRGAs (and finally executed by Customs). An **Exporter** does not transfer only physical goods. Any transmission of "knowledge technology" to a trading country is a "deemed export" in such form as technical specifications, plans, blueprints, etc. Though the export regime requisites are not sourced through cross-border exchange, these documents are

requested by importing actors to expedite the preparatory work for customs formalization and application permits for TRGAs at the importing country.

- The (registered) **Declarant** is to be understood as the person making the Customs declaration in his/her own name or the person in whose name a Customs declaration is made. In most countries a declarant needs to be registered with Customs to clear goods. Such representation may be direct, in which case the representative shall act in the name of and on behalf of another person; or indirect, in which case the representative shall act in his/her own name but on behalf of another person. Any country may restrict the right to make Customs declarations so that the representative must be a Customs agent (Customs Broker) carrying out his/her business in that Customs Territory.

- The **Customs Broker**, i.e. the representative, applies for export permits, authorizations, licenses, etc. with TRGAs, as well as for necessary clearance documentation/procedures.

  With the freight documents, the invoice (evidence of value), and substantiating documentation issued by the consignor, the customs broker lodges a goods declaration for Customs clearance for export. According to orders by the person represented by the customs broker, the customs broker may also enter into an insurance coverage for the export journey. The **Declarant** orders a commercial bank to pay the fees / total taxes coming due for this specific transaction at the time prescribed by national legislation (e.g. at the time of lodgment of the export declaration) to a defined bank account (indicated by the declarant).

  The (registered) **Trader/Importer** initiates the supply chain, after having received an offer from the supplier/trader for a certain quantity of goods of specific quality for an agreed price based on a purchase order. The Trader/Importer receives, after having placed a purchase order with the supplier, a first delivery announcement, a pro forma invoice and freight documents.

  Before the goods arrive, the Trader/Importer (or by his/her orders a representative, i.e. a broker) applies for import permits, authorizations, licenses, etc. with TRGAs, as well as for necessary clearance documentation/procedures. Once the freight documents, the invoice (evidence of value), and other substantiating documentation are received from the consignor, the Trader/Importer (or by his/her orders a representative, i.e. broker) lodges a goods declaration for Customs clearance for free circulation (or any other appropriate Customs procedure).

  They then order a commercial bank to pay the total of duties, taxes and fees coming due for this specific transaction at the time prescribed by national legislation (e.g. at the time of lodgment of the declaration in case of self –

assessment) to a defined bank account (indicated by the Declarant); and acquit the insurance after the safe and sound arrival of the goods at the point of destination.

7.0   RESULTS AND DISCUSSION

The analysis of the survey results is organized based on the submitted responses from the survey questionnaires, the issues and challenges faced by the targeted respondents and other considerations that are relevant to paperless trade, as well as the underlying demands of SMEs for fully automated cargo clearance processes.

Other primary sources of data came from key informal interviews with BOC and DTI-STMO officials, supplemented by available secondary data and information from project documents, relevant policies, and related literature to substantiate the responses and deepen the discussion. Further, face-to-face discussions in completing the NTFC and BOC questionnaires were held on April 10, 2023, at Bureau of Customs Headquarters[59].

The survey targeted five key categories of actors involved in the end-to-end cargo clearance process: the NTFC, BOC, TRGAs, and for the economic operators, the trading community and logistics actors/entities. The Philippine Trade Facilitation Committee and the BOC, both of which are directly mandated to coordinate and sustain the participation of the Philippines to the CPTA, are the lead actors in this feasibility study. TRGAs are government entities that have been identified to be involved in paperless trade either as a regulatory agency, monitoring and oversight agency, free trade and economic zone agency, or policy agency. Finally, the economic operator respondents are the beneficiaries or end users, which are private enterprises involved in trade, among which the trading community are clients of BOC and the TRGAs. (*Please see Appendixes for the survey questions and a summary of the responses received*).

7.1   Survey of the Public Sector

For the public sector, the survey was conducted from mid-March to early April 2023 and garnered a total of 26 completed questionnaires: 1 from BOC-PTFC and 1 from Department of Trade and Industry – Bureau of International Trade Relations (DTI-BITR) as the NTFC bodies, 4 from Customs (BOC) and 20 from TRGAs.

During the face-to-face meeting with the PTFC governing bodies, the need to take stock of the lessons learned from the experience of the pandemic was highlighted. The pandemic had shown the importance of both the WCO Revised Kyoto Convention

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[59] The face-to-face meeting was attended by officials from the BOC NTFC team, MISTG and key front-line officials, along with ESCAP staff (online) and consultants (see appendix D).

(RKC) and the WTO Trade Facilitation Agreement, including major concepts supported by these instruments: an all-digital clearance process, support interventions to SME e-commerce actors and efficient risk management. Customs administration and the private sector should engage with each other in order to gain a clear view of the challenges in managing compliance and supporting trade facilitation. Of key importance is the need to have well-developed continuity plans that enable Customs and TRGAs to operate outside of their normal environment.

The survey of the public sector actors clearly conveys that digitalization has never been more important than now for SMEs, and in general, for the trading community. A move towards a paperless environment should lead to eliminating the need for printed copies, date stamps, manual notarization of contracts and face to face approvals, and promote the use of digital signatures.

Further, the surveys reveal that stakeholders and processes are interconnected across many areas, and that there are advantages to having strong interlinkages. At first glance, the task of moving from paper-based to paperless administration of cross-border trade and inter-agency sharing of information may seem relatively straightforward. However, because of the need to coordinate electronically across borders and the need to harmonize and standardize processes and documents, the impetus for greater international and national cooperation rise (e.g., Customs-Customs and Customs-TRGAs) once trade is rendered paperless.

As such, government agencies need to engage meaningfully with cargo clearance stakeholders to deliver needed interventions of paperless trade and utilize a variety of arrangements in addressing the challenges faced by users, particularly SMEs, in clearing shipments, as well as leverage trade agreements to establish the governance structures necessary for paperless trade. Initiatives on paperless trade, therefore, serve as a promising means to deal with the cargo clearance and logistical challenges of e-commerce and, in particular, those related to small shipments from SMEs.

The term "paperless trade" can be used in a broader sense to refer to the electronic exchange of data in a purely national commercial and regulatory context. For instance, when it comes to banks and transport entities, they might refer to paperless trade as applied to trade finance processes which have a cross-border exchange component, such as in relation to getting assurance that a cross-border transaction would be paid. Further, different stakeholders may diverge on where the line is drawn on what is considered paperless trade as applied to trade administration documents versus the broader digital commercial universe. The possibility that different entities may have different starting points and perspectives regarding paperless trade should be kept in mind when discussing paperless trade issues. Given this, it should be recognized that the end-to-end cargo clearance processes are not static, but multi-dimensional.

In other words, cargo clearance is complex, requiring a balance among the mandates of Customs and TRGAs in performing their functions. Most agencies look at the same documents but are only interested in some of the data elements. As such, the challenge is how to address the disparate and diverse systems of the many agencies and entities involved in cargo clearance, to move towards mutually beneficial and agreed common goals. A key consideration is to utilize ICT in sharing information and knowledge, driven by defined business and information rules.

At the same time, BOC and TRGA domain experts should be clearly informed of their responsibilities and accountabilities with respect to cross-border and national-level paperless trade processes. It should be emphasized that implementing paperless trade (digital) exchanges is a core responsibility, and includes identifying key officials who have the accountability and authority to manage digital cross-border and national exchanges.

While BOC is concerned primarily with duties and taxes, it is also often responsible for assessing, on behalf of the TRGAs, risks and controls related to economic security, national security, public safety, and health[60]. For example, when a company imports fresh fruit, it could be subjected to controls by multiple agencies simultaneously. Application of these controls in a haphazard and uncoordinated fashion, with no regard to overall end-to-end cargo clearance processes, will be detrimental to traders, and especially so for SMEs, which often have lower capacity to handle administrative processes. It is thus important to identify mechanisms for paperless trade to support SMEs, under the premise of expedited goods clearance, sound security governance, as well as data interoperability.

For the past several years, besides Customs, TRGAs have not received much attention and funding support from international organizations and the government itself in digitalizing their processes. Thus, progress has been more on islands of automation or in a siloed manner. Most of the available tools, reform and modernization guidelines, or best practices generally are confined to Customs. Few practical mechanisms have been developed to help the TRGAs cooperate efficiently and share information in expediting cargo clearance. Moreover, little work has been done to analyze the role dynamics and process mandates of TRGAs that affect their ability to cooperate properly in paperless trade.

7.1.1 The Philippine Trade Facilitation Committee (PTFC)

The PTFC is chaired by the Department of Finance and co-chaired by the Department of Trade and Industry (DTI), with the Bureau of Customs (BOC) serving as vice-chair. There are 11 members from the Government, and notably, there are no representatives from the private sector. A roadmap has been developed describing

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[60] https://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/tools/single-window-guidelines.aspx

the allocation of responsibilities among its member-agencies and the corresponding key performance areas (KPAs) and indicators (KPIs) of these tasks, as well as the necessary resources and associated risks involved in achieving the goal of enhancing trade facilitation from 2023 to 2028.

These KPAs are geared towards achieving the PTFC's vision of transparent, inclusive, digital, efficient, and secure customs and trade procedures, while fostering better cross-border trade response. The KPAs include (1) Stakeholder Engagement; (2) Inter-agency Coordination; (3) Technology Infrastructure; (4) Legal and Regulatory Framework; (5) Emergency Response Measures; and (6) Support to SMEs, which is a core focus of this feasibility study.

It is targeted that by 2028, SMEs in the Philippines will have enhanced access to relevant rules, regulations, incentives and procedures and are able to trade and participate in global value chains through transparent and simplified procedures. It is hoped that through support and close coordination with the government, SMEs will be able to have access to modern trade and customs systems and trusted trader schemes. This is to be achieved through:
- Capacity building in trade regulations and procedures
- Facilitating the use of IT to engage in paperless trade procedures
- Increased access of SMEs to trusted trader schemes
- Establishment of a single point of contact for first time exporters
- Increased SMEs' awareness and utilization of timely trade information in the Philippine National Trade Repository, NSW and other online trade portal or tools
- Regular consultations that focus on the particular needs of SMEs
- Streamlining of processes and procedures in order to lower the cost of trade

7.1.2 The PTFC-DTI-BITR

Key highlights from the responses provided by the DTI-BITR as one of the PTFC bodies include:
- The Philippines currently has in effect Republic Act 8792, or The Electronic Commerce Act (ECA) of 2000, which aims to facilitate domestic and international transactions through the utilization of electronic mediums and technology to recognize the authenticity and reliability of electronic documents.
- There was an initiative by the House of Representatives to support the ECA of 2000 by unanimously approving the third and final reading of House Bill (HB) No. 4, or the proposed "Internet Transactions Act" (ITA), on 12 December 2022, which seeks to create an electronic commerce bureau to protect consumers and merchants engaged in internet transactions. It aims to establish an effective regulation of commercial activities through the internet or electronic means to ensure that consumer rights and data privacy are protected.

Moreover, the President underscored the need to enact this law to encourage innovation and ensure that fair advertising practices and competition are promoted, that a secure pipeline, online transactions and intellectual property rights are protected, and that product standards and safety are observed.

- On 5 December 2023, President Ferdinand Marcos Jr. signed into law the Internet Transactions Act of 2023 (ITA). The ITA (Republic Act No. 11967 entitled "An Act Protecting Online Consumers and Merchants Engaged in Internet Transactions, Creating for this Purpose the Electronic Commerce Bureau, Appropriating Funds Therefor, and for Other Purposes") is intended to regulate e-commerce to protect consumer rights and data privacy, encourage innovation, promote competition, secure internet transactions, uphold intellectual property rights, ensure product standards and safety compliance, and observe environmental sustainability.

- The Philippines deposited the instrument of ratification of the Convention on the Use of Electronic Communications in International Contracts during the Digital Week of the 55th annual session of the United Nations Commission on International Trade Law (UNCITRAL) in July 2022[61]. The Convention assures that contracts concluded and other communications exchanged electronically are as valid and enforceable as their traditional paper-based equivalents. The intent is to strengthen harmonization of the rules regarding electronic commerce and to foster uniformity in the domestic enactment of UNCITRAL model laws.

- The National Privacy Commission (NPC) Circular 16-02 – Data Sharing Agreements Involving Government Agencies[62], was enforced in October 2016. The general principle of the Circular is that, to facilitate the performance of a public function or the provision of a public service, a government agency may share or transfer personal data under its control or custody to a third party through a data sharing agreement. Where the personal data is in custody of a personal information processor, the sharing or transfer of personal data shall only be allowed if it is pursuant to the instructions of the personal information controller concerned. It should be noted that nothing in the Circular shall be construed as prohibiting or limiting the sharing or transfer of any personal data that is already authorized or required by law.

- Republic Act No. 10173 or the Data Privacy Act of 2012 is the primary legislation in the Philippines on data privacy and protection.

- The partner economies that should be prioritized for cross-border electronic exchange, as suggested by the DTI-BITR, are **China, Japan, Republic of Korea and Hong Kong, China**.

- Government agencies that are involved in deciding which partner economies to prioritize the exchange are the **Department of Foreign Affairs, Bureau of**

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[61] https://unis.unvienna.org/unis/en/pressrels/2022/unisl332.html
[62] https://www.privacy.gov.ph/memorandum-circulars/npc-circular-16-02-data-sharing-agreements-involving-government-agencies/

Customs, Department of Trade and Industry, Department of Finance, Department of Agriculture, and the National Statistics Office.

7.1.3 The PTFC-BOC

Key highlights from the responses provided by the BOC-PTFC include:

- In May 2021, in compliance with the WTO-TFA commitments, the Philippines issued Executive Order (EO) No. 136, s 2021, which created the Philippine Trade Facilitation Committee (PTFC). The PTFC is mandated to digitalize all cargo clearance processes, assist in reducing trade transaction costs, and enable SMEs to participate more actively in international trade. The EO also highlighted a clear service framework by BOC and TRGAs in providing support for SMEs and the trading community in general.

- Despite the obstacles and challenges faced by the BOC in utilizing the Single Window platform for its digitalization processes, there are ongoing paperless initiatives that are implemented outside the single window platform. Thus, the outlook for digitalization activities is positive.

- More TRGAs are now onboarding using the TradeNet system. Ongoing arrangements are now being implemented by the Department of Finance (DOF) team in modernizing and digitalizing the cargo clearance processes.

- The Client Profile Registration System[63] (CPRS) is a module of the BOC's Electronic-to-Mobile (e2m) system that facilitates an automated process of registration and renewal of all stakeholders by appropriate BOC accrediting offices. Once registered with the CPRS, the system will provide a customs client number – a unique identifier for every role that the stakeholder acquires in the CPRS registration process. All transactions in the Customs e2m system are required to be electronically signed by the entity submitting the transaction. A digital signature is issued by the e2m system to each stakeholder. CPRS requires importers to nominate at least one e2m Customs-registered broker in their CPRS application. In view of this, Customs brokers must endeavour to register ahead of their client to be accepted as "broker" by the CPRS system.

- The Whole-of-Government Reengineering Manual is a reference document containing tools and principles in streamlining, digitalizing and reengineering processes, derived from principles and practices in business reengineering tailor-fitted to the public sector. The manual (ARTA MC 2021-09 series of 2021) provides a walkthrough of the process of reengineering methodology and the tools that agencies can use to support their reforms.

- Republic Act No. 10173 of 2012, otherwise known as the Data Privacy Act, is a law that seeks to protect all forms of information, be it private, personal, or sensitive. It is meant to cover both natural and juridical persons involved in the processing of personal information.

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[63] https://customs.gov.ph

- The partner economies that should be prioritized for cross-border electronic exchange are **China, Japan, Republic of Korea, United States and Hongkong, China**, as suggested by the DTI-BITR.
- Government agencies that can decide on which partner countries to prioritize the exchange are the **Department of Foreign Affairs, Bureau of Customs, Department of Trade and Industry, Department of Finance and the NTFC.**
- The TRGAs that are technically ready for such cross-border exchange are the **BOC, Bureau of Plant Industry (BPI) and STMO**.
- The cross-border documents that are being considered for pilot projects are the **Certificate of Origin, Export Declaration, and the Electronic Phyto Sanitary Certificate (e-Phyto).**
- The systems and processes that need to be improved for any pilot exchange are the **Single Window, Customs Processing System and the TRGA systems**.
- The Customs and TRGAs have an existing legal framework for any pilot exchange.
- The findings and recommendations of this feasibility study will be utilized for ongoing and future implementation of AEO MRAs and customs modernization.
- **The estimated budget per year allocated for digitalization activities is approximately USD 2 million**.
- Trade facilitation benefits that are expected to be realised once cross-border paperless trade becomes operational are:
  - Reduction in processing time
  - Increase in control
  - Simplification of procedures
  - Transparent decision-making process
  - Increased trader's compliance

7.1.4 Customs Authority

The questionnaire was sent to more than 10 key officials of the Bureau of Customs, of whom four responded. The following summarizes key highlights from their responses.

Digitalization Challenges

Customs administrations today face a variety of political and administrative pressures and challenges. This includes, but is not limited to, fluctuating workload with static or declining resources, growing business expectations, and continuous pressure to meet often-conflicting government revenue, digitalization activities, trade facilitation, social protection, and national security objectives.

As time progresses, customs administrations are increasingly required to integrate their automated systems with the global logistics networks used by international trade

and transport operators. To cope with this progression, the international customs community looks to the use of information technology (IT) as a catalyst for improving digitalization for operational efficiency and effectiveness.

Pre-Departure and Pre-Arrival Processes

The pre-departure processes are mostly automated except for a few manual processes. The electronic commercial invoice, packing list, and other pre-departure information are submitted as attachments prior to customs formalization or the goods declaration process. Further, the expected time of departure is usually provided to the Port Authority, including the electronic manifest and the means of transport documents before the declarant can submit the export declaration for clearance.

Only Customs Brokers and Exporters registered with the Client Profile Registration System (CPRS) are allowed to lodge electronically the Export Declaration SAD in the BOC E2M system through the BOC Accredited Value-Added Service Providers (VASPs). Exporters are required to secure the export clearance, license and/or permits for regulated products from government agencies using the Philippine National Singe Window (PNSW) platform prior to filing of the export declaration with Customs. However, most of the respondents said that the electronic submission of documents to BOC could not be used for risk targeting since most systems are not yet fully integrated.

For import regime, it was also pointed out that the commercial invoice, packing list, bill of lading, inward manifest and other pre-arrival information are required as supporting documents prior to accepting the customs import declaration SAD.

TRGA Processes

All respondents said that they can initiate inspection procedures for any urgent processes (e.g., dangerous goods, regulated goods) in digitalized form since there is an inter-agency sharing arrangement between BOC and STMO on dual-use items (strategic goods).

BOC and TRGAs proactively improve their processes using computerized systems for their clearance processes. However, the current solutions face challenges in moving towards seamless cross-agency integration and coordination. As a result, the process of digitally transforming Customs will take time, especially when it comes to IT solutions. This requires identifying and integrating an IT platform that is flexible and compliant. Consequently, such a platform may facilitate the transition from simple standalone software for the data input of Customs declarations to complex, multi-module web-based systems.

The goal for this digitalization is to simplify Customs clearance procedures and TRGAs' LCPO processes, and then organize the approach as small building blocks, referred to as information packages, which will house cloud-based information for each agency to accommodate cross-agency data management and coordination, while maintaining network security. Certain information packages, such as Customs declarations or cargo reports, are directly related to Customs procedures and are therefore maintained by data management entities. Some other information packages are related to data requirements and processes that fall under the purview of TRGAs.

Logistics Processes

All respondents said that electronic payment with logistics actors is fully automated using the BOC core customs system (E2M) and electronic payment system (PAS6). Moreover, more improvements are in the pipeline in relation to electronic payment.

However, some documents from shippers are still submitted in printed forms such as the shipper's letter of instruction, inland bill of lading and ocean bill of lading.

Customs Processes (Export and Import Regimes)

All respondents said that the E2M system for export regime is now fully automated. Customs reference identifier for export declaration is "E" while mode of declaration type for clearance is "EX" followed by a procedure code that could be any of the following:
- 1000 – permanent export of domestic origin
- 1021 – permanent export after temporary entry for customs outward processing procedure
- 1022 – permanent export after temporary entry in unaltered state

Clearing of the export cargo for loading will trigger the payment instructions to the Authorized Agent Bank (AAB) to collect payment fees for cargo handling. Manual processing is allowed when the computer system breaks down, AAB is off-line, or upon authorization by the Deputy Commissioner of BOC MISTG.

No amendment of lodged export declarations is allowed. The export declaration could be cancelled but this has to be requested in writing and within 15 days of its submission.

Authorized Agent Bank Processes

All respondents said that the electronic payment of the E2M system that is interfaced with the payment system of banks is now fully automated. A bank reference number is given by the Authorized Agent Bank (AAB) upon submission of a Certificate of

Registration in the CPRS. The BOC's E2M system enables all stakeholders to have access to online services at any time, and is now linked to the electronic payment system for a more efficient payment facilitation.

The added feature. "autodebiting". ensures the accurate and immediate exchange of transaction information on the assessment details of payable duties and taxes between BOC and the AAB. The AAB receives the amount of duties and taxes to be paid from BOC. Then the AAB "autodebits" the payment for duties and taxes to the BOC's account.

In addition, the system allows the processing of shipments to be cleared in a shorter period of time as payments are processed in a seamless manner. It allows the completion of payments within minutes and is directly connected through the Philippine Clearing House System (PCHC) Payment Gateway, ensuring that remittances to the BOC's Treasury Single Account are done immediately and accurately.

Closure Procedures

All respondents said that closure procedures are now fully automated.

The cross-border documents that Customs would like to receive/send with partner economies, and the number of respondents (out of four) who indicated so, are:
- Commercial Invoice – 4 respondents
- Packing list – 4
- Master air waybill (AWB) / House AWB – 4
- Pre-arrival information (estimated arrival of carrier, including date and carrier reference number) – 4
- Sanitary & Phytosanitary certificate – 4
- Certificate of Origin – 4
- Inward Manifest – 3
- Animal Health Certificate – 2
- Health Certificate (Food Safety Certificate) – 2

Actors and Entities in the Philippines with whom Customs would like to receive/send cross-border documents with partner economies, and the number of respondents who indicated so, are:
- Customs Authority – 4 respondents
- Strategic Trade Management Office – 3
- Exporter – 2
- Deconsolidator – 2
- Trade Regulatory Government Agency – 1

- Carrier – 1
- Port Authority (Land, Air, and Sea Ports) – 1
- Freight Forwarder – 1
- Consolidator – 1

The benefits expected to be realized once the cross-border paperless trade becomes operational, and the number of respondents who indicated so, are:
- Reduction of processing time – 4 respondents
- Increase in control – 4
- Simplification of procedures to obtain permits and certificates – 4
- Transparent decision-making process – 4
- Increase compliance – 2

7.1.5 Trade Regulatory Government Agencies (TRGAs)

The questionnaire was sent to more than 30 TRGA officials, of whom 20 responded. The following summarizes key highlights from their responses.

Digitalization Challenges

There are ongoing initiatives such as the Single Window, Coordinated Border Management, One-Stop Border Posts, Time Release Study, National Trade Repository, etc., which have some common themes, and which promise significant improvements in border management and clearance times. Yet, TRGAs still face technical, institutional, and procedural problems that have proved extremely difficult to overcome. As a result, manual processes are still prevalent, and the silo approach is the easiest way for TRGAs to progress individually and to declare compliance with government reform requirements.

As such, there are applications and tools that can be considered by TRGAs in its ongoing digitalization activities by ensuring cargo clearance data is not only accurately collected, but retains its integrity over time. An example is a data cleansing tool that can fix corrupted, incorrectly formatted, duplicate, or irrelevant data within a data set. Instead of correcting data once it has already entered into a database, the tool can prevent bad data from getting into the system altogether by either removing or transforming it during Extract Transfer Load (ETL) processes.

This feeds into a single source of truth database principle that helps in performing integrity and accuracy checks of data processed by the TRGAs. Predictive and adaptive tools or mechanisms should be made available to TRGAs for ensuring data accuracy and integrity in inter-agency information sharing. Process stamps for the time of application, authentication, and verification of data should also be incorporated.

Ensuring data accuracy in a common data layer would provide easier storage of truth database in performing risk targeting and profiling. Digitalizing all processes within the legal framework (national and international information exchanges) will allow calculated controls and visibility of available information prior to customs formalization. All TRGAs engaged in trade should be capable of incorporating their risk assumptions into the risk management system to examine all potential risks associated with a shipment and determine its selectivity.

Export Regime Processes

The majority of the respondents noted that less than 30% of the digitalization processes are paperless. Only four respondents gave the maximum score of 5 (indicating fully digital) for all the questions on the processes of the export regime. Most of the respondents said that their agency was still developing their automated procedures. Four respondents said that securing a permit to import, lodgement, assessment, release, and gate pass involve human intervention and are not a continuous procedure. A processed entry is still required to be routed (by hardcopy) to complete the record keeping process. The following lists selected comments from the responses received:

- The full digitalization is in process. Digitalization is currently on VIS - Vessel Information System only.
- Strongly suggest that to be able to be compliant through fully digitalized procedure, a centralized customs clearance system be implemented (e.g., eCO, e-assessed processed SAD, etc). All files coming from digitalized record keeping at consignee's system should be maintained as well for audit purposes.
- Required permits for export declaration are processed partially digitalized for air & sea.
- The mentioned digitalization is not applicable to an "oversight" agency, or the agency mandate (on digitalization) is only for policymaking and monitoring but not part of the license or permit approval process.
- We can use email in sending the supporting LCPO data to Customs and trading community for now.
- Suggest standardizing the digitalization for export for both air & sea and ensure that the assessment and e-Airway Bill are always updated/tally on breakdown.
- Still conceptualizing on how to fully digitalize.
- Still at the planning stage.
- The Dangerous Drugs Board (DDB) has already been using an online platform called online application for certification and exemption information system (OACEIS). Enhancement is ongoing.

__Import Regime Processes__

The majority of the respondents noted that less than 40% of the digitalization processes are paperless. But some respondents gave the maximum score of 5 (indicating fully digital) for some processes of the import regime. Most of the respondents said that their agency was still developing their automated processes. The following lists selected comments from the responses received:

- The need for a digitalized inter-agency sharing of information is possible once BOC is already included in the procedure or as part of the agency's licensing system.
- The request for inter-agency sharing of information to support BOC's cargo processing system is now in its planning stage.
- No information available in relation to the question "Does the TRGA's risk management system have the ability to be triggered by pre-arrival notification of freight information in digitized format (e.g. manifest, bill of lading, etc.)", but the suggested feature is nice to have.
- The mentioned digitalization is not applicable to an "oversight" agency, or the agency mandate (on digitalization) is only for policymaking and monitoring but not part of the license or permit approval process.
- Planning to digitalize.
- Using LinkBiz Portal of Landbank for the electronic payment of customs duties and taxes, including transaction fees.
- Dangerous Drugs Board (DDB) is issuing certification and exemption through the OACEIS.

7.2 Survey of the Economic Operators

For the survey of the economic operators, a total of 21 completed questionnaires were received: 9 from the logistics actors and 12 from the trading community.

The Logistics actors that participated in the survey consist of **Freight Forwarder, Transport Operator, Consolidator (NVOCC) and Carrier.** They may be involved in preparation of necessary documentation for taking into account non-tariff commercial measures for exports of specified goods. With the freight documents, the invoice (evidence of value), and substantiating documentation issued by the consignor, they typically lodge a goods declaration for Customs clearance for export. According to orders by the person represented, they may also enter into an insurance coverage for the export journey.

7.2.1 Logistics Actors

The questionnaire was sent to more than 20 logistics companies, of whom nine responded. The following summarizes key highlights from their responses.

Digitalization Challenges

Looking at the responses from the logistics actors, many companies are still relying on traditional methods and manual processes. But most responded recognizing the need to embrace digital technologies in order to remain competitive and provide efficient delivery service to their clients, specifically the SMEs. These digital technologies are being used to improve visibility and streamline operations.

The logistics industry is an integral part of the global economy and one that is constantly evolving to meet the needs of the trading community. As noted in the answers of the respondents, many companies have ongoing digitalization activities and are continuously finding new ways to overcome challenges and provide the best possible interoperability with Customs and TRGA systems, with the intent of minimizing manual processes.

Export Regime

The majority of the respondents said that more than 50% of the digitalization processes are paperless. Also, the majority of the respondents gave the maximum score of 5 (indicating fully digital) for all the questions on the processes of the export regime. Most of the respondents said that their companies were developing their automated processes. The following lists selected comments from the responses received:

- Freight orders are coordinated manually.
- Digitalized processes are not available.
- Manifests are electronically submitted to Customs.
- Information sharing and submission of electronic messages are available depending on the shipping / airline.
- Some payments are still manually done.
- Tracking of status is done through the Customs Portal.
- Some data still need to be requested from BOC.
- In relation to the need for the trader or broker to get the shipping documents, email or electronic notifications for the shipping charges to be paid are provided.

Import Regime

The majority of the respondents said that more than 50% of the digitalization processes are paperless. Also, the majority of the respondents gave a score of 5

(indicating fully digital) for all the process questions of the import regime. Most of the respondents said that their companies were developing their automated processes. The following lists selected comments from the responses received:

- Freight orders are coordinated manually.
- Receiving freight orders from consignor for presentation of the goods at the point of arrival is still paper-based (manual process).
- Digitalized processes are not available.
- Processing freight papers needed for onward journey or any request by the counterpart transport at the destination country is still paper-based.
- Some payments are online, but some are still manual.
- Informing the destined port of arrival the expected time of arrival and content of freight ("manifest) in digitized form depends on the shipping lines' application system.
- Need further info for transport licenses requested by the importer in processing the necessary transport licenses required by the TRGAs (e.g. dangerous goods, regulated goods, etc.). (Note: International forwarders have additional skills that allow them to assume preparation of import-export-documents, procedures with TRGAs if necessary, and customs clearance of the goods.)
- Not available for manually paid fees. (Note: the question asked "Does it have the ability to receive an electronic notification for all electronic payments completed.")

7.2.2 Trading Community

The questionnaire was sent to more than 20 trading community actors, 12 of whom responded. The Trading Community actors that participated in the survey consist of **Exporter, Importer and Customs Broker.** The following summarizes key highlights from their responses.

Digitalization Challenges

The traders noted the several measures that have been undertaken by Customs and some TRGAs in improving and expediting the movement of legitimate trade, which resulted in substantial changes in the legal framework, and cooperation among border control agencies. However, there are still some obstacles that impede BOC's ability to effectively facilitate trade, specifically the need to submit supporting documents to the customs declaration in printed forms and the lack of a system that can track transactions online.

With respect to addressing such significant challenges, interviewed SMEs expressed their concerns about digitalization. A commonly held view among them regarding the concept of paperless could be seen in the following comment: "we don't care how the government would do it, whether through a visual snapshot of a paper document –

either a scanned or a pdf version – or through portal or electronic messaging; as long as we can clear our shipments without physically going to Customs or TRGAs, we are okay with that." Further, they suggested that the government address the overlapping responsibilities of regulatory agencies by merging some agencies to provide a more dynamic coordination between BOC and TRGAs.

In addition, the interviewed SMEs suggested the implementation of a feature that can be part of the BOC Cargo Processing System or the NSW system that can easily populate subsequent requisites from the cross-border documents and advanced information such as the commercial documents and freight papers provided by the carriers, which would eliminate double encoding in the process. On the other hand, the advanced information could be used for risk targeting by involved government agencies based on the single window re-usability benefit. Thus, this NSW data governance mechanism can support the cooperation of TRGAs in information sharing to improve clearance times, which are determined by the weakest link in border chain processing.

The interviewed SMEs recognize that the implementation of paperless trade initiatives could result in an expedited cargo clearance process, and more efficient logistic visibility that uses technology to track their shipments, which provides them with a sense of confidence about their shipment. From the time an SME places an order to the time their shipment arrives and is cleared by Customs, they expect to be regularly updated on its delivery status and to be able to track it themselves and easily manage all their shipping information through digitalized processes.

In a broad sense, SMEs actively participate in the monitoring and development of paperless initiatives in the Philippines. For instance, SMEs have a crucial role in strengthening the e-commerce industry: they are pushing for the creation of an E-Commerce Promotion Council composed of both government and SMEs. Other private sector organizations involved in cargo clearance are also asked to join the council in order to provide support in terms of research, technology development, and training.

Export Regime

The majority of the respondents said that more than 50% of the digitalization processes are paperless. Also, the majority of the respondents gave the maximum score of 5 (indicating fully digital) for all the questions on the processes of the export regime. Most of the respondents said that their companies were developing their automated processes. The following lists selected comments from the responses received:
- Key applications in relation to other Customs regimes are being developed.

- Registration process varies depending on the agency. For BOC, accreditation is applied through the E2M system, but manual docs are still submitted.
- Reverted to manual procedure due to new top management decision.
- Single Window System only covers import and export permits.
- Yes, but the NSW search function is limited.
- Yes, the NSW system can route, send and receive electronic documents.
- Yes, HS or AHTN (ASEAN Harmonized Tariff Nomenclature) codes can be used when searching data in the Trade Repository for finding out about the licenses and permits required for exportation or importation of goods.
- Current systems are not interoperable.
- Data models and information rules are used, but they are not interoperable.
- Yes, export declarations are already automated.
- B2B documents are still in manual format.
- Awaiting TradeNet's Project Management Office to include export procedure in the electronic processing.
- Health certificates are still manual.
- Loading freight papers are still manual.
- Letter of Credit processing is still manual.

Import Regime

The majority of the respondents said that more than 50% of the digitalization processes are paperless. Also, the majority of the respondents gave the maximum score of 5 (indicating fully digital) for all the questions on the processes of the import regime. Most of the respondents said that their companies were developing their automated processes. The following lists selected comments from the responses received:
- PH exchanges ATIGA e-Form D through TRADENET / ASW systems.
- Reverted to manual procedure due to new top management decision.
- Electronic manifests are available online and can be submitted to BOC system.
- Providing the list of permits / licenses / certificates that are needed to complete the customs formalization, as supporting documents to an import declaration can be submitted through a separate customs portal/ ticketing system.
- Customs declarations are fully digitalized.
- The NSW and Customs systems are separate systems.
- The NSW provides date and time stamps and email notifications.
- Not all permits can be applied online.
- Shipping charges are paid using the shipping lines system.
- Inspections/examination schedules are done/coordinated through the separate system portal.
- BOC has a facility for electronic payment (PAS6).
- Letter of Credit is still manually processed.

8.0 IMPLICATIONS FOR CROSS-BORDER EXCHANGE

8.1 What specific documents should be used for cross-border electronic exchange between the Philippines and potential partner economies?

Before identifying the specific documents that should be used for cross-border electronic exchange, we have to recognize the essential legal areas and the platform that should be used for cross-border exchange. Both the Philippine Digital Transformation Strategy 2022 and the e-Government Masterplan 2022 focus on the next stage of e-government transformation, which aims to develop the country's e-government systems through the digital transformation of basic services that cut across the government. The goal is to achieve "One Digitized Government" for the country. The development of TradeNet as a vehicle for the PNSW and link to the ASEAN Single Window is included in the masterplan.

The TradeNet system is designed to allow the Philippines to utilize its automated trade facilitation capabilities with partner countries for cross-border exchange. TradeNet was built by the Department of Information and Communications Technology (DICT) to make the experience of the general public when transacting with foreign trade partners and government agencies more seamless, pleasant, transparent, faceless, cashless, convenient, and eventually completely paperless.

The Single Window provides a synchronized electronic environment that requires cooperation between exporting and importing countries that goes beyond setting up an electronic exchange mechanism in supporting the regulatory agencies in clearing goods. Of equal importance are formal interoperability technical mechanisms, regular reviewing, and the need to synchronize or replicate the databases with the intent of unifying the exporting and importing dimensions. For this purpose, together with the digitalization of Customs, TRGAs and economic operators, basic-level interoperability between the systems of the customs authorities of involved trading partners should be established.

Looking at the "pre-border" stage, Customs and TRGA actors recognize the critical roles that the carriers and international freight forwarders play in paperless trade by providing advance information from the exporting country to the importing country in expediting goods clearance. Once the exporting Customs clears the goods, the export declaration, certificate of origin, and the Sanitary and Phytosanitary (SPS) certificates (if applicable) are already available. Thus, the three cross-border documents that should be prioritized by the Philippines with a trading partner are the following:
- Preferential and Non-Preferential Certificate of Origin
- Export Declaration (all data elements similar to the EU's Single Administrative Document)

- Phytosanitary Certificate

Exchange of the Non-Preferential Certificate of Origin

Certificates of origin help exporters in obtaining preferential tariff rates from importing countries, by certifying that their export shipment is wholly obtained, produced, manufactured, or processed in their country. Though a concern was raised by BOC in relation to its technical readiness at the onset in exchanging the electronic certificate of origin, such exchange with ASEAN Member States has facilitated the participation of the Philippines in global trade networks. The Philippines' joining of the live data exchange of the e-CO message within ASEAN has strengthened the ASEAN single market. Similarly, it is expected that expanding the coverage of the electronic exchange of the certificate of origin with non-ASEAN Trading Partners would boost global market access for the Philippines and provide tremendous benefits for exporters and manufacturers in the country. The push toward e-COs would give the SMEs a better opportunity to participate in global trade.

Expanded digitalization of the e-CO to non-ASEAN trading partners would cut customs clearance times and eliminate unnecessary administrative burdens, saving time and money for traders.

Exchange of the Export Declaration with non-ASEAN Trading Partners

The ASEAN Customs Declaration Document (ACDD) is a paper document that was based on the ASYCUDA++ System's Single Administration Document (SAD). The ACDD has evolved into a set of "information parameters", where each data element has been defined by a unique box number, name, and description. As agreed by ASEAN Member States (AMS), the intent of the exchange of the ACDD is to use it as advanced information to support the Customs authority of the importing country in carrying out risk targeting and profiling.

In 2014, AMS collectively agreed to develop an electronic equivalent of the ACDD as the next document to be exchanged via the ASEAN Single Window (ASW), to follow the successful implementation of the ATIGA e-Form D. Subsequently, in January 2015, at the 30th ASW TWG meeting, AMS came to a common understanding on the exchange of the ACDD. While the trading community (exporter, manufacturer, importer, and customs broker) is directly involved in the ATIGA e-Form D (certificate of origin), it would not be a direct actor in the exchange of the ACDD, since the exchange is a government-to-government transaction between customs administrations.

In December 2021, after months of focused strategies, the Philippines started exchanging the electronic ACDD, which supports their risk targeting and profiling

activities. Further, this exchange contributed to optimizing the management of trade facilitation activities and achieving greater visibility of cross-border cooperation between Philippines and AMS. Incentives through risk-based and trade facilitation support are being worked out by BOC for participating exporters. Exporters from AMS may join the ACDD exchange by granting prior consent to their exporting Customs Administration.

In January 2022, the BOC ACDD Operations Portal, which connects to the ASW system through the country's NSW, was formally launched. The portal encapsulates every ACDD operational process, e2M data extraction of export information parameters, and supports risk profiling activities that would translate to benefits in the following areas:

- Reduction of coordinating costs, particularly in requesting for export information from the origin country;
- BOC users can expect to significantly reduce the time they spend on documentation in providing data to the Risk Management Office, and when the ACDD business processes are aligned;
- Promote re-usability of data (e2M data); and
- Electronic notification

Expanding the coverage of the electronic exchange of the certificate of origin with non-ASEAN Trading Partners would further improve BOC's risk targeting and profiling activities on a wider, more global scale.

Exchange of the Electronic Phytosanitary Certificate

The third document that is proposed to be exchanged is the Phytosanitary Certificate. In international trade, various types of sanitary and phytosanitary (SPS) certificates are issued by regulatory agencies at the time of export, including phytosanitary certificates, veterinary certificates and health certificates. The utilization of such certificates ensures that traded items are in compliance with SPS measures, which are regulations aimed at protecting human, animal and plant health from diseases, pests or contaminants. In the case of phytosanitary certificates and thus their measures, these are typically applied to plants and plant products, and focus on preventing the spread of plant pests and diseases. The exchange of electronic certificates would reduce the risk of fraudulent certificates, expedite the clearance of perishable commodities and enhance compliance with SPS measures.

To enable countries to exchange electronic SPS certificates for agricultural products or communicate laboratory results in the agri-food industry, the International Plant Protection Convention (IPPC), a multilateral treaty under the UN Food and Agriculture Organization, has developed a globally harmonized approach for electronic phytosanitary certificate exchange that uses UN e-business standards.

Consequently, the exchange of the electronic phytosanitary certificate is supported by the **Philippine Development Plan 2023-2028**, which provides the umbrella framework for the exchanging of the ePhyto certificate with ASEAN Member States and eventually with non-ASEAN counterparts. Chapters 5, 9, and 10 of the Philippine Development Plan 2023-2028 emphasize the vital role of advancing agriculture and agribusiness modernization. The plan also highlights the importance of promoting trade and investment, as well as promoting competition and improving regulatory efficiency. This calls for a dynamic regulatory system to modernize the agri-food system and better enable policies and institutions conducive for private sector investment. Relevant government agencies, together with the private sector, are to focus on (a) adopting global standards for product safety and quality and business practices; (b) facilitating the entry of foreign investment and talents; and (c) promoting partnerships between foreign and domestic investors. Supporting these interventions is the strengthened implementation of Ease of Doing Business and Efficient Government Service Delivery Act (RA 11032).

Moreover, **the Republic Act No. 11032**, known as the Ease of Doing Business and Efficient Government Service Delivery Act of 2018, amends the Anti-Red Tape Act of 2007. Section 5 of the Act requires government agencies to undergo evaluation and improvement of their transaction systems and procedures, and to reengineer them if deemed necessary to reduce bureaucratic red tape and processing time (Official Gazette, 2018). And the **Republic Act No. 10863**, known as the Customs Modernization and Tariff Act (CMTA), was signed into law on 30 May 2016. CMTA amends the Tariff and Customs Code of the Philippines with the aim of modernizing Customs rules and procedures for faster trade, reducing opportunities for corruption, improving Customs service delivery, and improving the supply chain. Implementing the exchange of ePhyto would be in alignment with these objectives.

Other government policies that are complementary to or that would support the exchange of the ePhyto certificate are the following:
- Under **Executive Order 482-2005**, a PNSW Task Force for Cargo Clearance was created, composing of a Steering Committee (PNSW-SC) and a Technical Working Group (PNSW-TWG). In 2017, the PNSW Steering Committee issued Resolution No. 01-2017 establishing TradeNet as an online trading platform to perform the functions of the PNSW (PIA, 2020).
- **Customs Memorandum Order 15-2018** established an e2m user-access policy, emphasizing the importance of access and use of the BOC's systems and applications, as well as protecting data from possible threats and abuses. The application of this policy helps maintain the integrity of customs data and prevent unauthorized access to customs systems and applications, by defining BOC expectations of users who have been granted access to the e2m systems and other customs applications (Cu, 2018).

- **Customs Memorandum Order 4-2007** provides the implementation plan of the memorandum of agreement (MOA) between the Department of Agriculture and the Bureau of Customs on Anti-Smuggling in support of the government's drive against smuggling and illegal entry of agricultural and fishery products into the Philippines.
- **Department of Agriculture Circular No. 4-2016** provides guidelines on the Importation of Plants, Planting Materials and Plant Products for Commercial Purposes and BPI Memorandum s. 2022 covers the Implementation of the Electronic Phytosanitary Certificate Application with regard to transitioning from manual to online application.

In June 2024, the ASEAN Secretariat announced the successful exchange of the electronic Phytosanitary (e-Phyto) certificate between the Philippines and Indonesia through the ASEAN Single Window (ASW) regional platform during the 67th Meeting of the Working Group on Technical Matters for the ASW (TWG). This would allow the BOC to expand the exchange of the e-Phyto to other regional trading partners, and bilateral exchange with non-ASEAN countries.

8.2 Which partner economy should be prioritized for this electronic exchange of trade data/documents?

Both PTFC Co-Chairs, DTI-BITR and DOF-BOC, named **China, Japan, Republic of Korea, Hong Kong, China and the United States** as the top five potential trading partners that they want to prioritize. These economies are among the top export/import partners of the Philippines.[64] The analysis here focuses on the top three that were named.

Cross-border exchange of the e-CO, e-Export SAD, and e-Phyto certificate with these partners would be complementary with the Marcos administration's Philippines Development Plan 2023-2028, which seeks to build on the gains the country has achieved in the past two decades, while being mindful of the setbacks that have been caused by the pandemic. The plan's overarching goals are to reinvigorate job creation and accelerate poverty reduction by promoting trade and investment, enhancing competition and improving regulatory efficiency, expediting digitalization, supporting the creation of dynamic innovation ecosystems, and enhancing and investing in digital and physical connectivity, among others.

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[64] https://wits.worldbank.org/CountryProfile/en/Country/PHL/Year/2021/Summary

China

The Philippines and China established formal diplomatic relations in 1975. The early decades of diplomatic engagements concluded the signing of several bilateral agreements and treaties, which included a bilateral investment treaty in 1992. Trade between the two countries has been growing considerably over the last five years.

During President Marcos's trip to Beijing in January 2023, 14 bilateral deals were signed to strengthen cooperation between the two countries in a range of areas. These include a joint action plan for 2023 to 2025 on agricultural and fisheries cooperation, an MOU on cooperation on China's Belt and Road Initiative, an MOU on digital and ICT cooperation, a protocol of phytosanitary requirements for the export of fresh durians from the Philippines to China, an MOU on electronic commerce cooperation, and an MOU on authorized economic operators program, among others.

Total trade between the Philippines and China has continued to grow over the recent years, with the Philippines' imports from China growing at an average annual rate of 20.7 percent from 2010 to 2022[65]. This led to China becoming the Philippines' largest trading partner in 2022.

According to statistics from the Philippine Department of Trade and Industry, in 2021, China rose to become the Philippines' second largest export market. The top products[66] exported from the Philippines to China in 2021 are the following:

Product Category	Amount in million US$
Electrical Machinery and equipment and parts; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	12,963.5
Machinery, mechanical appliances, nuclear reactors, boilers, parts thereof	3,718.7
Ores, slag, and ash	3,424.4
Copper and articles thereof	1,439.7
Mineral fuels, mineral oils, and products of their distillation, bituminous substances, mineral wax	675.9

Cooperation in the areas of bilateral trade and economics have brought tangible benefits to both countries. Given the growing trade figures, and the signing of deals that would serve as important foundations in their respective domains, there is much potential for further collaboration between the Philippines and China on cross-border electronic exchange.

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[65] https://www.china-briefing.com/news/china-philippines-bilateral-trade-investment-and-future-prospects/
[66] Ibid.

Japan

Japan is one of the Philippines' major foreign investors and for decades has been a major trading partner. Japan has also been the biggest single source of official development assistance to the Philippines.

During President Marcos's February 2023 visit to Japan, he committed to strengthen the bilateral partnership by mapping out transformative future-oriented initiatives that are responsive to new developments. 35 specific letters of intent between business leaders were signed, covering ventures or reaffirming plans on clean energy projects, highly skilled manufacturing, infrastructure development, and retail.

Japan has supported the Philippines' economic growth since the 1970s, in terms of infrastructure development, agricultural development and now, even digitalization. The leading Philippine exports to Japan consist of electronic products, ignition wiring sets, fresh bananas, and iron ores. Japan is also the biggest export market of the Philippines for asparagus, bananas, papayas, nata de coco, mangoes, chicken, shrimps, prawns, and yellowfin tuna. The leading Philippine imports from Japan consist of electronic products, industrial machinery and equipment, transport equipment, iron and steel and electrical machinery.

Free trade agreements (FTAs) enhance the competitiveness of sectors and industries in which one country has a comparative advantage vis-à-vis the other. The importation of raw materials and capital equipment also becomes cheaper, bringing down further the cost of production. Cheaper, quality imports are expected to benefit consumers through lower prices and better quality products. Moreover, agro-industrial production, employment generation, and exports earnings of competitive sectors and industries are expected to increase with FTAs.

Philippine agricultural exports, which are subject to immediate tariff removal under the Japan-Philippines Economic Partnership Agreement (JPEPA), include marine products such as frozen lobsters, frozen shrimps and prawns, fruits and vegetables such as coconuts, cashew nuts, durians, potatoes, cabbages, lettuce, carrots, cucumbers, mushrooms and spinach.

However, the Philippine Institute of Development Studies (PIDS) has recommended an evaluation of FTAs with Japan, given the low utilization rates of Philippine exporters in availing the preferential rate for products originating from the Philippines. The PIDS shared that the government should look into the leading products traded with Japan under general tariffs, as well as their respective tariff margins in the Philippine FTAs, and how the utilization of certificates of origin benefits the Philippines and Japan. Such analysis would complement efforts to advance digitalization of the cross-border exchange of the e-CO, electronic export declaration, and e-phyto certificate. The PIDS

also made recommendations on streamlining the procedures on FTA utilization, ensuring accuracy of exports transactions data, and assessing the impact of non-tariff measures on FTA utilization.

In February 2023, the Philippines and Japan signed a memorandum of cooperation (MOC)[67] to strengthen cooperation and development in the field of information and communications technology, notably to boost broadband infrastructure and cybersecurity. It would reinforce previous areas of cooperation on digital transformation, big data and artificial intelligence, the internet of things, and cultural relationships through broadcasting content. Through the MOC, both countries will work within five years on the formulation of joint ICT projects, exchanging professionals, delegations, and information on ICT policies, technologies, and regulations. Such initiatives would also be beneficial to any efforts on advancing cross-border electronic exchange of trade data and documents between the two countries.

Republic of Korea

In November 2022, the Philippines and the Republic of Korea reaffirmed their interest to work together in facilitating cooperation centered on research and development, renewable energy and green technology [68]. Philippine Trade Secretary Alfredo Pascual and Trade, Industry, and Energy Minister Duk-Geun Ahn from Republic of Korea had a productive discussion on trade and investment issues during the APEC Ministerial Meeting in Bangkok, Thailand. Both ministers agreed to increase cooperation in green metals and related industries such as electric vehicles and semiconductors, focusing on building stable and sustainable supply chains for raw materials for production and manufacturing.

Trade Undersecretary Ceferino Rodolfo further said that "we are positioning the Philippines as a key player in the supply chain of critical minerals given our vast resources of green metals such as nickel, cobalt and copper – inputs for the production and manufacture of electronic goods and batteries for electric vehicles. With Korea's manufacturing capabilities especially in electronics, we hope to pursue a meaningful relationship in this area."[69]

In 2021, Republic of Korea exports to the Philippines were worth $9.23B. The main products exported were integrated circuits, refined petroleum, and cooper wire. The Philippines exported $3.19B worth of goods to Republic of Korea, with the main products being integrated circuits, office machine parts and bananas. One way for the Philippines to address its large trade imbalance with the Republic of Korea is through

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[67] https://www.pna.gov.ph/articles/1195279
[68] https://qa.philstar.com/business/2022/11/19/2224779/philippines-south-korea-reaffirm-economic-cooperation
[69] Ibid.

increasing its export of agricultural products; advancing the cross-border exchange of the certificate of origin and e-phyto certificates between the Philippines and the Republic of Korea would be appropriate steps in leveraging the position of the Philippines in trade negotiations.

The Philippine Institute of Development Studies (PIDS) has also recommended an evaluation of FTAs with the Republic of Korea, given the low utilization rates of Philippine exporters in availing the preferential rate for products originating from the Philippines. The PIDS shared that the government should look into the leading products traded with Republic of Korea under general tariffs, as well as their respective tariff margins in the Philippine FTAs, and how the utilization of certificates of origin benefits the Philippines and Republic of Korea. Such analysis would complement efforts to advance digitalization of the cross-border exchange of the e-CO, electronic export declaration, and e-phyto certificate. The PIDS also made recommendations on streamlining the procedures on FTA utilization, ensuring accuracy of exports transactions data, and assessing the impact of non-tariff measures on FTA utilization.

8.3   Systems and processes that need to be improved / harmonized

As indicated in the survey responses, the Philippines needs to improve its cross-border exchange of trade-related data/documents with partner economies, such as for the e-CO, e-Export SAD, and the e-Phyto certificate mentioned in previous subsections. Such efforts will be complementary with the thrust of the current Philippines administration in improving trade partnership with China, Japan and Republic of Korea, and contribute to addressing the low utilization rates of the FTAs with these trading partners.

The completed questionnaires from 20 TRGAs were collated and analyzed to obtain a detailed understanding of the challenges and achievements of SMEs in integrating and using the TradeNet system in providing services to their clients, and to determine the technical and process gaps that should be considered for improvement. The analyses led to informal validations with a few TRGA officials that were conducted in April 2023. The qualitative data from the validation sessions were encoded and analyzed to inform this study and to serve as a reference for their respective organizations, as well as other key stakeholders. The following highlights some of these findings.

TRGA	CURRENT STATUS AND CONCERNS
Department of Trade and Industry – Strategic Trade	DTI-STMO is a new agency, but the structure is established for coordination and operational processes. There is also a mechanism in place to check the submitted supporting documents on dual-use items. At present, the current arrangements are adequate for the agency's operations. However, there are other

Management Office (DTI-STMO)	new mechanisms embedded in the NSW that can be useful moving forward, such as certain functionalities that are introduced by the system developers, as well as the improved relative ease of use if these new mechanisms are integrated within DTI-STMO's system. Data storage and collection is currently being housed in the cloud and is well underway towards digital transformation, while being mindful of cyber security protocols.
Fair Trade and Enforcement Bureau (FTEB)	At present, FTEB has an automated system with BOC as an end-user to verify validated permits in securing and regulating incoming importations. One concern here is proper linking, alignment, and interfacing. In addition to that, given the current system's mandate to be a nationwide platform, proper training and efficient technical support is highly essential.
National Tobacco Administration (NTA)	For NTA, they are currently on manual data processing, using MS Excel and, on some occasions, MySQL. All data are being submitted in MS Excel format for logging and reporting, which means data management is a challenge in the absence of a cloud- based server. In lieu of their upgrading process for better client service, one feature they are eyeing is an analytics dashboard for evidence-based decision-making.
Optical Media Board (OMB)	The agency utilizes an online portal for license applications as well as for import/export permits. Most applications are submitted and processed in the portal using local servers. When it comes to data management, the agency still produces printouts of the applications to serve as back-up copies. In addition to that, if data entered by the applicant is insufficient, the application will automatically be rejected and will potentially be part of the manual check.
Bureau of Animal Industry (BAI)	The data management system is a challenge. They are currently working on an automated workflow and the next thing is data management. Data sharing is good, but confidence regarding data and data quality are essential. There is a strong need to convince the management while building the agency's IT capacity as well in the process.
Biodiversity Management Bureau (BMB)	The agency envisions that there will be a border-to-border information exchange (BOC and other customs organizations abroad); information exchange, e-control, e-reporting, and e-permitting.
Bureau of Plant Industry (BPI)	Collaborating with other agencies regarding its system and technology infrastructure via a secure intercommunication server.

Data Harmonization through Master Data Management

As conveyed by the responses from TRGA officials, the end-to-end cargo clearance process is complex, requiring a balance among the mandates of Customs and TRGAs in performing their functions in relation to cargo clearance processes. Most agencies look at the same documents but are only interested in some of the data elements. As such, the challenge is how to address the disparate and diverse systems of the many agencies and entities involved in cargo clearance, to move towards mutually beneficial and agreed common goals. A key consideration is to utilize ICT in sharing information and knowledge, driven by defined business and information rules. The TRGAs welcome not only the identification of new technological solutions and how these might enable further innovations in processes, but also highlighted the need for a connected strategy integrated into processes and technological sub-functions.

While BOC is concerned primarily with duties and taxes, it is also often responsible for assessing, on behalf of the TRGAs, risks and controls related to economic security, national security, public safety, and health[70]. An imported item, such as fresh fruit, could be subject to controls by multiple agencies simultaneously. Application of these controls in a haphazard and uncoordinated fashion, with no regard to overall end-to-end cargo clearance processes, will be detrimental to trade facilitation as well as to the actual application by regulatory authorities.

It is thus important to identify mechanisms for information exchange between Customs and TRGAs under the premise of sound security governance as well as data interoperability. This is where Master Data Management comes into play. Awareness of technical-level officials should be raised on the use and benefits of Master Data Management, as a primary tool in addressing the lack of information interoperability between applications, and to improve data sharing interoperability throughout the border clearance chain. To help enhance the efficiency of NSW services and clearly establish the responsibility and accountability of participating TRGAs, a strong human resource organization is also needed. Each staff member and the management team must have specific competencies that will support the exchange of electronic messages for the Single Window platform, including the inter-agency process and integration of technical and functional requirements both internally and externally.

In this context, the goal of Master Data Management would be to merge all the information of cargo clearance actors, business processes and accountable forms into one master data. This will provide a unified reference data service across the Single Window, enabling the platform to make sure that accurate and comprehensive master data, with proper versioning control, will be used by Single Window actors in performing cargo clearance processes.

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[70] https://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/tools/single-window-guidelines.aspx

Moreover, proper management of data can facilitate efficient interoperability, even by multiple applications. Otherwise, a data error in one place can cause errors in all the applications that use it. Consequently, the ability to share reference data across domains would promote efficient inter-agency information sharing among Single Window actors.

In Master Data Management, each data discipline will include recommended measures or protections that should apply to that specific category of data (see Box 4). These include steps that can be taken to allow data to be processed, shared, or transferred with TRGAs. The factors that could be considered for the development of this management include data sensitivity, risk assessment, protection impact management, storage and storage standards, or applicable industry regulations and standards. While identifying master data entities is straightforward, not all data that fits the definition of master data should necessarily be managed as such. In general, master data is typically a small portion of all data from a volume perspective, but it is some of the most complex data and the most valuable to maintain and manage.

However, based on the survey responses, awareness about Master Data Management is still low. Survey respondents were generally not clear on the benefit and use of Master Data Management as they rated it as minimal to none. However, some respondents see the use of master data management in improving license, certificate, permit, and others (LCPO) processing for improved data quality and for streamlined data sharing.

There is thus value in promoting the concept of Master Data Management (MDM) in setting up a uniform set of information rules that can unify reference data service across the domestic/international supply chain, including harmonized pop-up tables at the national or agency level. This will feed into data management covering data sensitivity, risk assessment, and synchronized data sets that may unify both the importing and exporting country dimensions. Consequently, Customs and TRGAs can rely on a harmonized and seamless link among data elements in a data model with a single source of truth among entities and multiple forms in the entire end-to-end cargo clearance. The different data disciplines are master, transactional, reference, metadata, hierarchical, and unstructured data.

Box 4: Master Data Management Priority Areas

- Master Data Definitions and Scope: determine organizational entities and their attributes to create a common definition of each domain of master data used by the government agency.
- Master Data Policies: establish internal and external regulations that must be adhered to as part of the management and use of master data.

- Master Data Rules: define how an organization integrates, implements, and enforces policies.
- Master Data Catalog: catalog documents where master data is, in applications and analytical data stores on-premises and across multiple cloud ecosystems. It is also beneficial to align these with other government agencies that an agency works with.
- Master Data Lineage: identify, trace, and monitor how master data moves across sources and is used in analytical and operational processes.
- Master Data Stakeholders: determine internal and external stakeholders. Key departments and actors within a government agency in essential organizational functional areas should be identified, mobilized, and engaged.
- Master Data Workflow: streamline and optimize workflows. It is important to explore and establish relevant processes used to manage master data in order to establish and create an optimal workflow.
- Master Data Metrics and Means of Verifications (MOVs): metrics need to be defined to help measure and manage data, processes, and people. It is also necessary to integrate these into an agency's Monitoring and Evaluation (M&E) activities.

8.4 What are the costs and benefits of conducting electronic exchange?

The Department of Budget and Management had proposed a P12.47-billion (approximately US$220 million) allotment in 2023 for the transformation and digitalization of government processes and transactions across national government agencies, in line with the vision of the Marcos administration.

During the Development Budget Coordination Committee briefing at the Senate, Budget Secretary Amenah Pangandaman said the allotted fund under the 2023 national budget emphasized the importance of information and communications technology in the new normal. The amount, Pangandaman said, would help boost the capacity of government agencies, particularly in collecting fees and taxes in digital channels[71].

For this 2023 budget, a section on digital payments of government financial transactions[72] was included. The Executive Order 170 signed by former President Duterte calls for the adoption of digital payments for government disbursements and collections. The implementation of digitalizing the government frontline agencies is

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[71] https://www.philstar.com/business/2022/09/17/2210170/dbm-earmarks-p125-billion-digitalization-2023
[72] Ibid.

well underway, in which the implementing rules and regulations have been crafted and are now under consultation.

The Department of Information and Communications Technology (DICT) was set to receive the largest allocation amounting to P4.24 billion (approximately US$75 million) for its ICT systems and infrastructure development. Meanwhile, the Department of Finance (DOF) was allocated P3.56 billion (approximately US$63 million), which was seen to help improve revenue collection. The government's economic team recognized that the digitalization of government processes and transactions will contribute to enabling quicker and more responsive delivery of public services to citizens.

For example, the BOC spends the equivalent of at least US$200,000 per year on printed forms alone, most of which become obsolete within the reglementary period of retaining the paper documents and end up being disposed. In addition, stakeholders involved in cargo clearance spend 20-30 percent of their time looking for documents in physical file cabinets. Digitalization will go a long way to improving the efficiency of these processes, not least in reducing the amount spent on printed forms annually.

It was noted by survey respondents that data sensitivity is an issue when it comes to estimating the possible costs in implementing paperless trade. Survey respondents did not provide inputs regarding estimated costs, and hence this study would only be able to take a rough reference from other digitalization projects.

One example, for reference, relates to the implementation of the ASEAN Customs Declaration Document (ACDD) management portal. In April 2021, the USAID ASEAN Policy Implementation (API) project provided the Request for Proposal (RFP): Technical Assistance for the Philippines' Bureau of Customs in the: (1) Development of the ACDD Operations Portal and (2) Development of an API routing platform to support the BOC in expediting its participation in the cross-border exchange of the ACDD with ASEAN Member States.

The development of the ACDD Operations Portal needed to facilitate incoming and outgoing ACDD messages between the portal and each ASW Gateway B2Bi software hosted by concerned government agencies. At the same time, the portal needed to provide the necessary record keeping and tracking of all electronic messages passing through the system to enable designated operators to verify exchanges with ASEAN Member States, including compliance with the technical requirements of the ASW Project Management Office (PMO) at the ASEAN Secretariat.

For the development of the BOC API routing platform, an API bridge script needed to be developed and be able to route, send and receive the ACDD electronic message/s to and from the ASW gateway B2Bi, including validation of the electronic messages

and appropriate interfaces with relevant systems. Furthermore, the API solution needed to connect to the TradeNet system and BOC's E2M system based on the agreed ACDD Message Implementation Guide and Process Specifications. It was expected for the offeror to provide the following:

- Essential Legal Elements - provide inputs to BOC officials in crafting the essential legal elements for processing the ACDD information parameters (inbound and outbound), access to ACDD data, data retention, electronic archiving, data protection, and information security should be clearly established;
- User Acceptance Testing – Internal testing of the entire ACDD Operations Portal and Routing Platform for outbound and inbound ACDD;
- Testing with Member States – Cross-border testing of the ACDD Operations Portal and using the Routing Platform with AMS
- End of Iteration Review
- Regression Testing
- Demonstration
- Process Improvements Based on End of Iteration Review Comments
- User Acceptance Testing of both the ACDD Operations Portal and the Routing Platform
- Cutover to Live Operation of the ACDD exchange

Proposals were evaluated based on a combination of quality (80%) and cost (20%). The **estimated total budget for the assignment was USD$150,000**. The estimated duration of the assignment was nine (9) months[73].

The proposals for development of the e-phyto management portal were also evaluated based on the same combination of quality (80%) and cost (20%) with **an estimated budget cost of USD 120,000** and the duration was nine (9) months.

Another example for reference relates to the automation of customs processes. In January 2023, President Marcos said that digitalization of the Bureau of Customs would be an important part of the government strategies to curb rampant smuggling in the country. Though the BOC already implemented many digitalization projects over the years, only 91% of the processes are automated. The remaining 9% would be part of the Philippine Customs Modernization Program (PCMP), a project expected to improve the country's customs administration by streamlining and digitalizing all clearance procedures.

The World Bank-funded PCMP was officially launched in March 2021. It has a total cost of $104.38 million, of which $88.28 million would be funded through the World

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[73] https://customs.gov.ph/wp-content/uploads/2023/02/2021-06-21a-RFQ-for-the-ACDD-Management-System-FINAL.pdf

Bank's official development assistance, and the balance shouldered by the government. Implementation of the program has, however, stalled due to a case filed against BOC. The supervision contract, in particular, has not yet been awarded due to ownership issues involving the potential contractor.

9.0   RECOMMENDATIONS

Following the discussions in the previous sections, and the identification of needs and areas for improvement from the stakeholders interviewed/consulted through the course of conducting this study, this section covers some policy areas and recommendations that could be considered moving forward, as the Philippines continues to advance its capabilities in cross-border paperless trade. Enhancements in these areas would be beneficial to current and future initiatives on electronic exchange with partner economies, including the exploring of possible pilots with potential partners using particular documents, as identified in this study.

9.1   The NTFC to take the lead in promoting and advancing cross-border paperless trade

As the BOC continues in advancing its digitalization efforts, it is suggested that the NTFC takes the lead in coordination and outreach activities, with the support of partners and donors, in making trade procedures as efficient as possible. In particular, such efforts would entail the implementation of integrated, digitalized and interoperable government systems involved in cargo clearance. Coordination of such paperless trade measures is rapidly becoming essential not only to maintain trade competitiveness, but also to address the trade control and logistics challenges that come with an increase in small shipments of SMEs and cross-border e-commerce. The NTFC is well placed to lead efforts in these areas.

9.2   Strengthen capacity-building programs and consultations

To sustain the country's digitalization initiatives, it is essential to build capacity among stakeholders, especially SMEs, which often lack knowledge and expertise of the topic, and are often not able to maximize the advantages of going paperless. SMEs may lack access to the internet, encounter slow connections, or pay high internet usage rates. Even with access, they may not have the digital skills to use new IT systems or services, or be able to leverage digital tools for trade.

It is recommended for government agencies to conduct workshops and consultations with SMEs in discussing the digitalization of trade processes – including taking stock of what trade information is already processed electronically and what blockages exist for SMEs participating in the electronic exchange of documents. Appropriate resources and facilities accorded to capacity-building would further enhance the

learning process, such as through the use of facilities and software to aid hands-on learning when it comes to electronic processes and mobile applications.

Capacity building on the basic overview of how paperless trade can benefit SMEs in clearing goods online may frame the discussion on the need to define legal cross-border cooperation requisites on paperless trade. There are several key aspects in legal governance. For example, the principle of non-discrimination between the use of electronic communications and paper when submitting documents, such as those required by regulatory agencies. Laws that allow the submission of electronic information are essential for launching an effective paperless trade system. Also important is the principle of technological neutrality, which implies ensuring that legislation does not favour specific technologies.

Paperless trading is also reliant on domestic rules on the legal validity of electronic documents, electronic signatures, where these are applied, and other data-regulation requirements. Further, if paperless trade is to be more effective in cross-border exchange , governments should be able to accept data at customs and within regulatory agencies without also requiring original paper documentation. In other words, a paperless system that still requires the submission of paper-based documents at some point in the trading chain destroys much of the value of the digital tools for traders. Capacity building on these important concepts should help raise the awareness and knowledge of paperless benefits among SMEs, and drive support and future adoption of paperless practices among them.

9.3   Implement a standardized digital data governance

Passing a law that covers digital data governance and paperless trade should form part of the continuous improvement of the BOC core processes. Digital data governance is the business process for defining, implementing, and enforcing data policies. It is a system of decision rights and accountabilities for administering cargo clearance data for information-related processes, executed according to agreed-upon models which describe who can take what actions with what information, when, under what circumstances, and using what methods. Digital data governance also refers to the organizational bodies, rules, decision rights, and accountabilities of people and information systems as they perform sensitive trade data processes.

For these benefits to be effective, the BOC and TRGAs need to agree on their role dynamics on who they may share data with, the types of data that may be shared, how to access the data and information, and how they may share such data.

9.4   Use and enhancement of the National Single Window Platform

Many countries are developing single windows that serve as one simple point of entry for submitting regulatory documents and other supporting evidence when merchandise is imported or exported. Almost all single windows implemented today are electronic systems with a web-based interface. As such, running an electronic single window usually requires the ability to process electronic message exchanges. The World Trade Organization (WTO) Trade Facilitation Agreement (Article 10.4) includes an endeavour to maintain or establish a single window using information technology to the extent possible and practicable. If information is electronic, individual data elements should only be submitted once.
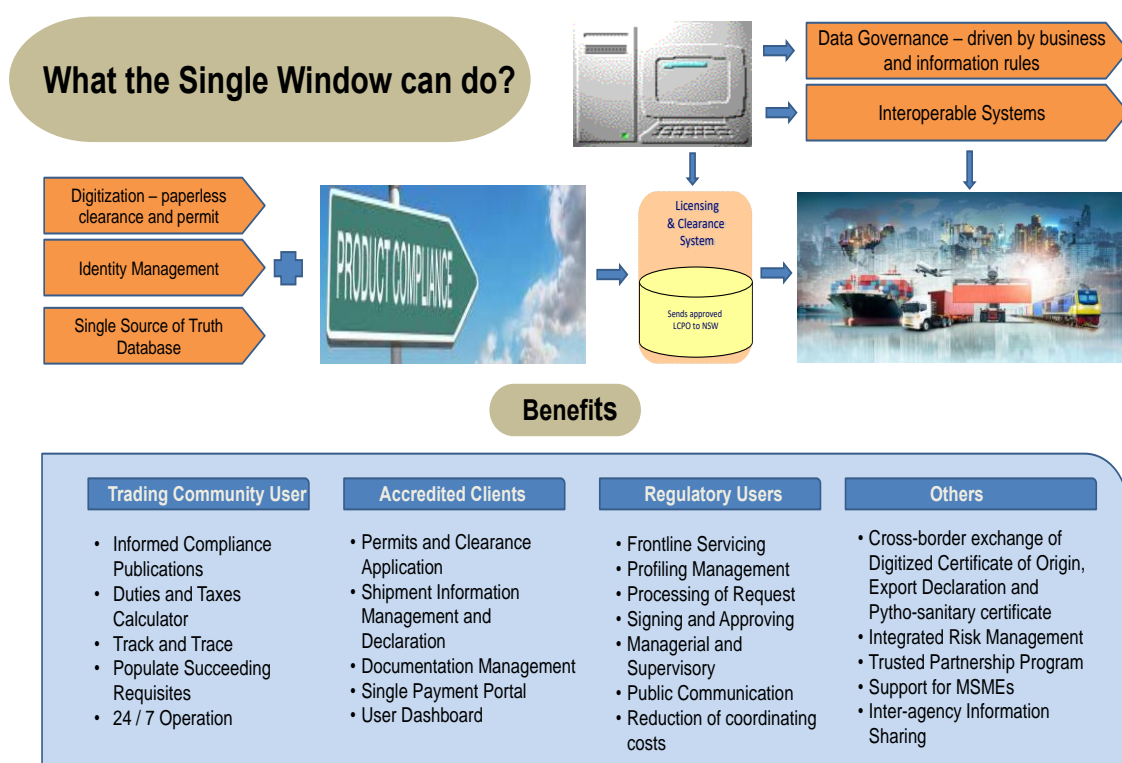
Source: Diagram provided by the author

The benefits of a National Single Window (NSW) in cross-border paperless trade are extensive. SMEs would be able to obtain, from one single source, all the information that exporters may require to comply with regulatory obligations in relation to expediting clearance of export, import or warehousing regimes. The single-source nature of an NSW will benefit Customs, TRGAs and the SMEs in getting full visibility of the end-to-end cargo clearance process for informed decision making.

In crafting specific provisions for handling paperless processes, Customs should recognize that the TRGA actors and entities involved could have different or differing

mandates, viewpoints, expectations and capabilities. Hence, the complexities of required essential legal and operational areas that might arise among different actors need to be systematically factored into the development and enhancement of the Philippine NSW system, such as when it comes to electronic signatures and messaging guidelines. To ensure the effectiveness of cross-border digitalization initiatives, in relation to the NSW, reforms in the governance system and other relevant areas should be in line with international best practices.

However, merely focusing on the operational aspects of implementing a single-window computing environment should be avoided: for instance, specifically designing the platform while focusing only on the operations of a particular agency should be avoided. For a single window platform to operate efficiently and deliver its full potential, the border-agency processes included need to have been sufficiently synchronized and coordinated beforehand. (This may be one reason why, despite their significant benefits, implementation of single window remains one of the areas where least progress has been made among the provisions of the TFA.) Such inter-agency coordination at the organizational and planning stages would be necessary, first, in order to ensure that enhancements to the Philippine NSW can be fully effective for users.

9.5   The need for a harmonized data sharing agreement

A harmonized legal and regulatory digital data environment at the national level plays a vital role in generating trust from economic operators and the government agencies themselves. Though the Customs Modernization and Tariff Act (CMTA) clearly provides the legal foundation for inter-agency information sharing, there are still many areas to be improved and considered, especially for the purposes of supporting paperless trade.

Crafting an executive order that aims to manage paperless trade between BOC and TRGAs is an ongoing challenge. Government officials should address legal uncertainties in clearing goods that hamper the development and implementation of digitalization of LPCOs. Addressing these issues will contribute to building confidence among cargo clearance stakeholders in using digitalized processes, such as digitalized messaging.

The following lists several essential legal elements that may be considered, or that may warrant further consideration, in designing an initiative on inter-agency information sharing:
- The use of electronic signatures – essentially a process that uses computers to authenticate the signatory and certify the integrity of the document.
- Data Governance – addresses the management of data on a day-to-day basis to ensure data is secure, accurate, available and usable. It includes the

actions that users must take, the processes that they must follow, and the technology that supports them throughout the data life cycle.

- Access to and sharing of Single Window Data – it is important to know whether one state management agency is permitted to share data and information with another or, conversely, to provide such information to another line ministry if requested to do so. Further, in cross-border transactions, it is crucial to know the privacy or confidentiality laws or regulations of the trading partner.
- Data Retention and Electronic Archiving – establishing the necessary regulatory framework for data retention and electronic archiving to meet regulatory and recordkeeping obligations, including safekeeping of electronically stored information for anticipated legal matters.
- Revocation, Modification, and Amendment to Access and Share Data – laws and regulations providing for such Revocation, Modification and Amendment should be addressed to provide security and control on the use of the Single Window platform.

In the meantime, this inter-agency sharing initiative can be done through the issuance of mutually binding legal agreements such as Memoranda of Understanding (MOU) or Interconnection Security Agreements (ISAs). These types of agreements would provide guidance for planning, establishing, maintaining, and terminating interconnections between/among available information technology systems that are owned and operated by diverse TRGAs, including the Customs Authority.

Significant benefits that could be realized through this system interconnection include reduced operating costs, greater functionality, and improved efficiency. Data should be built up progressively, where data is being progressively captured as it becomes available, and the result should be that all necessary trade data is available to those who are involved in paperless trade.

Overall, Customs and TRGAs should work closely in pushing for simplified clearance formalities/procedures utilizing electronic messages.

9.6   The need for Identity Management and Trade Data Protection

Customs and TRGAs should be encouraged to set up their "Identity Management System", which would provide a unique reference number for actors and entities, covering authorization and authentication.

Data protection is an essential component in advancing cross-border paperless trade. In this context, personal identification refers to the process of associating a specific person with a specific identity, and addresses certain concerns about an individual, such as "Is the person who he/she claims to be?", "Has this person been here before?", or "Should this individual be allowed access to our system?" Identification is beneficial for organizations since it:

- Can be easily integrated into various systems;
- Is inexpensive; and
- Serves as a deterrent to imposters.

A major problem with e-authentication policies is the mandatory use of specific technologies, which hinders the development of new technologies and the growth of the industry in general. In crafting a decree on inter-agency information sharing, such as one on e-authentication policies, countries should maintain technology neutrality and the dynamicity of their private sectors. Otherwise, the government can intervene to establish trust between consumers and sellers early on.

9.7   Leverage modern technology and promote its use

Modern technology is developing at a rapid pace and has become increasingly widespread in availability in this era of real-time supply chain collaboration. Technologies such as online standard data exchange structures that integrate analytics and big data computing environments already exist. However, only a minority of countries are using these industrial 4.0 technologies. A key challenge, moving forward, is how to leverage these emerging technologies in cross-border paperless trade, such as in providing a more flexible and interoperable way of standardizing business operations for information exchange throughout the supply chain.

In line with the ASEAN Digital Innovation Initiative, the Philippines is encouraged to set up a digital innovation forum, to create avenues for businesses that have embraced industrial 4.0 technologies to share with SMEs their learning experiences on improving productivity and logistics capabilities. Such forums would function as an avenue for the dissemination of information on emerging digital trends and relevant regulatory issues, and could include hands-on workshops for participants to experiment with the latest technological solutions, which could motivate them to adopt new technologies. Ideally, these forums would encourage collaboration between technology firms and other private and public sector organizations, promote data-driven innovation and improve awareness of key issues such as cybersecurity in ASEAN and the Philippines, and contribute to building up capabilities in cross-border paperless trade.

In the customs environments of countries such as China, Republic of Korea, and the United States, significant technology investments are in place to protect strategic information assets. Such progressive countries use advanced technologies to effectively extend their borders to the point of origin of every cargo or individual who intends to enter their physical borders, giving their Customs authorities sufficient time to profile and analyze inbound goods or people whether by sea, air, and land.

One modern technology that is seeing increasing use is Artificial Intelligence (AI), which holds potential to have an impact on the development and implementation of

paperless trade. One example of an AI project that has been initiated is the DOST-Advanced Science and Technology Institute-Automated Labeling Machine (ASTI-ALaM) Project: specifically, the DOST-ASTI component of the Philippine Sky Artificial Intelligence Program (SkAI-Pinas). The project aims to develop an optimized workflow in developing machine learning and artificial neural network-based models for different application domains, as well as to develop an online model store where the developed models of the project can be accessed for tasks such as mapping and computer vision using traditional remote sensing, machine learning, and deep learning[74].

BOC could stand to benefit from capturing geodata similar to DOST's ASTI-ALaM project, such as by adopting and tweaking it to support BOC's AEO and Risk Management System programs in addressing the required security measures in the movement of goods. Currently, BOC uses geodata for tracking the movement of goods based on submitted customs declaration: GPS or RFID devices are installed on means of transport or on containers, enabling officers to monitor, in real-time, the location of goods in transit and to be informed of any incident, stop or deviation from the assigned itinerary. However, in the current case, little analytical use is made of the geodata collected; apart from cargo tracking, the potential uses of geodata seem to be generally overlooked.

Encouraging the use of geodata and leveraging AI for its processing and analysis in Customs could garner meaningful, tangible results to aid better understanding and tracking of the movement of goods, including in a border protection and risk management context. Some possible uses of geodata by Customs could be the following:
- delineating coastal areas where clandestine crossings can be processed easily;
- optimizing the deployment of sensors at border areas;
- correlating the destinations of express freight parcels with the level of crime in a city.

Generating geodata with applications to BOC's fields of interest (borders, trade, transport, logistics, taxation, corruption, etc.) could help BOC strengthen its role in border management, as an intelligence, security, policy and development actor. As the use of geodata increases and as AI development continues to accelerate, there could be opportunities for BOC to take advantage of the tools available and enhance collection and exploration of data, with a view to both securing and facilitating cross-border economic activities.

Furthermore, AI can be used to improve predictions of future trends, such as changes in cargo clearance processes, and to better manage risks along the supply chain. AI tools could also play a part, for instance, when it comes to information sharing in cargo

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[74] https://asti.dost.gov.ph/projects/alam-project/

clearance, by allowing TRGAs and the trading community to collaborate more efficiently in populating succeeding requirements in expediting cargo clearance processes. Moreover, the development and use of AI builds upon other digital technologies, with the key ones being cloud computing, big data, and the internet of things. These digital technologies also rely on cross-border data flows.

Another area of relevance to TRGAs where AI is augmenting current practices is in document management. Optical Character Recognition (OCR) is often used for the digitalizing of physical copies of documents, where the documents are scanned and the data in the scanned images are processed into electronic machine-encoded text. With reasonable-quality images and PDF documents, the accuracy of data extraction is now close to what can be perceived by the human eye directly. The combination of OCR and AI tools – which can facilitate the checking of human mistakes, filtering of content for analysis, and automatic generation of reports – can increase the efficiency of document management and thus benefit cross-border paperless processes.

As another example, given the repetitive nature of submitting customs declarations and applications for permits and licenses, Robotic Process Automation (RPA) could help in automating various supply chain processes, including data entry and predictive risk management. Moreover, RPA could also address errors that might occur when automating repetitive processes to streamline informed decision-making. The rule-based RPA evolved from screen scraping, workflow automation, and artificial intelligence, allowing the software to aggregate data, trigger responses, and initiate new actions.

9.8   Develop an AEO Scheme for SMEs

An Authorized Economic Operator (AEO) program for SMEs, at its core, should bring about positive impacts in efficiency, productivity and profits for participating firms. Faster customs checks, a global network of improved suppliers and a certificate of reliability and safety will have considerable benefits for any SME. AEO benefits should be transparent and meaningful to justify the additional costs sustained by economic operators in meeting AEO program requirements. On a practical level, the AEO status means that items pass through customs as quickly as possible. It also means that:

- It will be quicker and easier to obtain customs clearance
- The AEO will be subjected to fewer physical and document checks at borders
- If the traded item is selected at controls, priority will be given as an AEO consignment
- Any certified AEO can request that a control be held at a different place

Together with the Department of Trade and Industry (DTI), the Bureau of Customs is exploring setting up an AEO program for SMEs, by pushing for a pragmatic approach in accrediting MSMEs, as well as encouraging them to work together to pool their

resources to achieve higher levels of production, better manufacturing processes, and determine the necessary support and interventions that the government can provide.

The BOC AEO office may consider working closely with Philippine Export Agency in getting their inputs on how to support the AEO scheme for SMEs, and to consider possible exemptions of AEO requirements for SMEs due to the nature of their business and operations, which can differ significantly to those of large companies. Aside from the benefits being given to an accredited AEO, BOC could also consider providing to SMEs in an AEO program expedited clearance for the importation of raw materials that are being used for manufacturing of goods for export. Some Customs Authorities have relaxed the compliance criteria for SMEs, for example through the following parameters[75]:

- The condition requiring a business to have handled a minimum of 25 customs documents in the last financial year relaxed, such that SMEs handling ten documents (five documents each half-year) are eligible and can apply for an AEO certificate;
- The condition of not receiving a show-cause notice during the last three financial years involving forgery, fraud, clandestine removal of excisable goods, etc. during the last three financial years being reduced to the last two financial years for SMEs;
- The condition of the business being financially solvent during the last three financial years being relaxed to last two financial years for the SMEs to avail AEO status.

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[75] https://cleartax.in/s/aeo-package-msmes

10.0 APPENDIXES

10.1 Appendix A: Survey Questionnaires and Responses

Tell us more about the current processes, awareness, and challenges that your organization face in the end-to-end cargo clearance. This will help the ESCAP Consultant assess the specific documents that would be exchanged/prioritized for cross-border electronic exchange, including how to improve the processes and the costs/benefits in doing so.

The purpose of this survey is for the ESCAP Consultant to conduct a feasibility study on the electronic exchange of trade-related data and documents with a partner country/economy in Asia-Pacific. In particular, a trading partner that has been actively engaged in the development and/or implementation of the Framework Agreement or where paperless trade readiness assessment had already been conducted. The Consultant will evaluate the feasibility of a selected country and the partner country to engage in cross-border electronic exchange of trade-related data and documents, and assessing the costs and benefits of exchanging specific documents or harmonizing systems.

10.1.1   DTI-BITR's completed NTFC Questionnaire

General Information

Date	31 March 2023
Name	
Agency/Office	**DTI-Bureau of International Trade Relations**
Position	
E-mail *(for updates and feedback)*	
Phone Number *(optional)*	

1. Governance Structure[76]					
No.	**Questions**	**Y/ N**	**S**	**Elaboration on Status**	**On-going Process Improvement / Suggestions**
N11	Is there a National Trade Facilitation Council that oversees customs modernization reform, digitized TRGAs and digital data governance initiatives intended for paperless trade? Note: Protocol of Amendment to the International Convention on the simplification and harmonization of Customs Procedures (Revised Kyoto Convention, 2006)				
N12	Does your automated application have the ability to register the actors involved in the end-to-end cargo clearance process?				
N13	Does it authenticate and authorized users electronically (issuing a unique reference number)?				
N14	Does it have a business continuity plan?				
N15	Does the National Trade Facilitation Council or similar agency have powers to enter into agreement with other countries				

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[76] This relates to Article 6 of the Framework Agreement on Cross-border Paperless Trade in Asia and the Pacific, on enabling domestic legal environment and paperless trade committee.

	to facilitate cross-border paperless trade transactions?			
2. Essential Legal Areas[77]				
N21	Is there an Electronic Commerce Act in place?	Y	The Philippines currently has in effect Republic Act 8792 or The Electronic Commerce Act of 2000 which aims to facilitate domestic and international transactions through the utilization of electronic mediums and technology to recognize the authenticity and reliability of electronic documents.	The House of Representatives unanimously approved on third and final reading House Bill (HB) No. 4, or the proposed "Internet Transactions Act" on 12 December 2022. On the other hand, the proposed administration bill of the ITA under the 19th Congress is still pending review by the Committee on Trade, Commerce and Entrepreneurship.
N22	Did the country ratify the 2005 UN Convention on Electronic Communications?	Y	The Philippines deposited the instrument of ratification of the Convention on the Use of Electronic Communications in International Contracts ("Convention") during the Digital Week of the 55th annual session of the United Nations Commission	

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[77] This relates to Article 9 of the Framework Agreement on Cross-border Paperless Trade in Asia and the Pacific, on international standards for exchange of trade-related data and documents in electronic form.

			on International Trade Law (UNCITRAL) in July 2022. Press release: https://unis.unvienna.org/unis/en/pressrels/2022/unisl332.html	
N23	Is there an existing inter-agency sharing agreement/framework of data and information among/between TRGAs?			NPC Circular 16-02 – Data Sharing Agreements Involving Government Agencies (https://www.privacy.gov.ph/memorandum-circulars/npc-circular-16-02-data-sharing-agreements-involving-government-agencies/)	
N24	Has data harmonization (data modelling) being conducted for Customs and TRGA procedures?				
N25	Has business process re-engineering and simplification of procedures being conducted for Customs and TRGA procedures?				
N26	Is there a law / special rules on data privacy and data protection?	Y		Republic Act No. 10173 or the Data Privacy Act of 2012 is the primary legislation in the Philippines on data privacy and protection.	

N27	Are there service-level agreements governing paperless trade?				
N28	Is there a law that covers resolving disputes in relation to cross-border exchange of cargo clearance requisites?				
N29	Is there any mutual recognition agreement/legislation for accepting electronic document of other jurisdictions?				
N30	Is there any Institution authorize to enter into agreement with trading partner countries to mutually recognize electronic data/document originating from their jurisdiction?				

Section B: Identify the targeted partner economies and assess their technical and legal readiness for cross-border exchange

It is important to ensure that the bilateral arrangement in identifying partner economies for cross-border exchange is based on a foundation of common interests whereby two economies are encouraged to determine their technical and legal readiness for cross-border exchange and develop partnerships for continuous improvements of digitized processes. Additional questions are provided here to support the assessment of readiness of identified trading partners for cross-border paperless trade.

Targeted Respondent: Perspective of the National Trade Facilitation Council – Governance, Legal, and Technical Areas

3. Identify Partner Economy: [Indicate Partner Economy 1], [Indicate Partner Economy 2]	
No.	**Questions**	**Elaboration on Status**

N61	Which partner economies should be prioritized for this electronic exchange of trade data/documents?	**China, Japan, Republic of Korea, Hong Kong, China** (Note: Suggested by BITR but can defer to BOC)
N62	Please identify the stakeholders involved in a decision for the partner economies that should be prioritized for cross-border electronic exchange of trade data / documents	[ ] NTFC [x] Ministry of Foreign Trade [x] Customs [ ] Trading Community [x] Ministry of Industry and Commerce [x] Ministry of Finance [x] Others, if any, please indicate <u>Ministry of Agriculture, Ministry responsible for Statistics</u>
N63	In your opinion, does the identified partner have the capability to promote cross-border paperless trade in order to maximize the value of partnership?	**Yes**
N64	In your opinion, would the identified partner agree to coordinate with your country on the regular review and improvement of the bilateral arrangement on cross-border paperless trade in order to maximize efficiencies and standardization of the processes?	*Defer to BOC*
N65	Is the identified trading partner a signatory to the WCO SAFE Framework of Standards? (The intent is to foster Customs-to-Customs partnership, maximize reciprocal benefits and foster a	*Defer to BOC*

	healthy negotiating agreement on cross-border paperless trade)				

10.1.2   BOC PTFC's completed NTFC Questionnaire

General Information

Date	March 20, 2023
Name	BOC NTFC
Agency/Office	
Position	
E-mail *(for updates and feedback)*	
Phone Number *(optional)*	

Note: For most of the questions, respondents indicated Y/N for yes/no, and a self-assessment score from 1 to 5 ("X" in the table below denotes a non-response):

- *5 – fully digitized*
- *4 – majority of processes are already digitized, except for a few manual processes*
- *3 – some of the key processes are already digitized but more support is needed in digitizing other key manual processes*
- *2 – manual processes are prevalent, except for a few digitized procedures*
- *1 – all processes are manual*

Profile of the National Trade Facilitation Council

Governance Structure					
No.	**Questions**	**Y/N**	**S**	**Elaboration on Status**	**On-going Process Improvement / Suggestions**

N11	Is there a National Trade Facilitation Council that oversees customs modernization reform, digitized TRGAs and digital data governance initiatives intended for paperless trade? Note: Protocol of Amendment to the International Convention on the simplification and harmonization of Customs Procedures (Revised Kyoto Convention, 2006)	Y	5	In May 2021 in compliance with the WTO-TFA commitments, the Philippines issued Executive Order (EO) No. 136, s 2021, which created the Philippine Trade Facilitation Committee (PTFC). The PTFC will act as the official "National Trade Facilitation Committee (NTFC)" and is mandated to assist in reducing trade transaction costs and enable SMEs to participate more actively in international trade and broaden their participation in global value chains.	The PTFC roadmap (2022-2028) identified six key reform areas, these are: • Stakeholder engagement • Interagency coordination • Technology infrastructure • Legal and regulatory framework • Emergency response measures • Support to SMEs
N12	Does your automated application can register the actors involved in the end-to-end cargo clearance process?	Y	5	The Client Profile Registration System is a module of the BOC's electronic to mobile (e2m) system that facilitates an automated process of registration and renewal of all stakeholders by appropriate BOC accrediting offices.	You can download the following from the BOC website (https://customs.gov.ph) • CPRS procedures • CPRS application forms for Single proprietorship, partnership, and corporation • CPRS documentary requirements
N13	Does it authenticate and authorize users electronically (issuing a unique reference number)?	Y	5	Once registered with the CPRS, the system will provide a customs client number (CCN) – a unique identifier for every role that the stakeholder acquires in the CPRS registration process. All transactions in Customs e2m are required to be electronically signed by the entity submitting the transaction. A digital signature is issued	CPRS requires importers to nominate at least one e2m customs registered broker in their CPRS application. In view of this, Customs broker must endeavour to register ahead of their client to be accepted as "broker" by the CPRS system.

				by Customs e2m system to each stakeholder.	
N14	Does it have a business continuity plan?	Y	5	The BOC business continuity plan is subsumed under their BOC Information Security Policy (CMO NO. 01-2022) that defines the security requirements for the proper and secure use of information-related services, including disaster recovery plan.	You can download the BOC Information Security Policy from the BOC website (https://customs.gov.ph) under "Issuances" tab.
N15	Does the National Trade Facilitation Council or similar agency have powers to enter into agreement with other countries to facilitate cross-border paperless trade transactions?	N		The PTFC (Section 2 of EO No. 136) have the following responsibilities: • Study, propose and coordinate the position, activities, or actions of the government on matters pertaining to the implementation of the WTO-TFA and other trade facilitation commitments. • Represent and advance the interests of the Philippines in meetings on the implementation of the WTO-TFA and other trade facilitation commitments. • Call on the assistance of and coordinate with relevant government agencies and stakeholders on various trade and trade-related concerns covered by the WTO-TFA and other trade facilitation commitments. • Submit appropriate and timely reports on the compliance of the Philippines with	

				the WTO-TFA and other trade facilitation commitments	

4. Essential Legal Areas[78]

N21	Is there an Electronic Commerce Act in place?	Y	5	Electronic documents, signatures and communications are recognized under Philippine law as the source of obligations and contractual relations by virtue of RA No. 8792, known as the Electronic Commerce Act of 2000. It recognizes paperless transactions, whether between domestic parties or involving cross-border transactions.	
N22	Did the country ratify the 2005 UN Convention on Electronic Communications?	Y	5	The Philippines has ratified the United Nations Convention on the Use of the Electronic Communications in International Contracts (2005 – The Electronic Communications Convention). It is the sixteenth State Party to the convention, and it entered into force last February 1, 2023.	
N23	Is there an existing inter-agency sharing agreement/framework of data and information among/between TRGAs?	Y	5	There are two existing inter-agency sharing agreements signed by BOC and TRGAs, these are: • In January 2022, Bureau of Customs and the Department of Agriculture signed a data sharing agreement to improve the regulation and	This effort headed by DTI is in consonance with Republic Act 10697 known as the "Strategic Trade Management Act" (STMA), authorizing the establishment of the STMO to serve as the executive and technical agency of the national

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[78] This relates to Article 9 of the Framework Agreement on Cross-border Paperless Trade in Asia and the Pacific, on international standards for exchange of trade-related data and documents in electronic form.

				implementation of the Trade Remedy Measures and Customs Purposes with respect to customs duties, safeguard duties, anti-dumping duties, general safeguard duties, countervailing duties, and other duties. • In December 2020, the Bureau of Customs entered into a Memorandum of Agreement with the Strategic Trade Management Office (STMO), Authority of the Freeport Area of Bataan (AFAB), Clark Development Corporation (CDC), Philippine Economic Zone Authority (PEZA, and Subic Bay Metropolitan Authority (SBMA) to establish an effective coordination and cooperation mechanism towards enhanced trade facilitation, optimize information sharing, boost the capability of frontliners to identify strategic goods, and reduce complexity of doing business of legitimate and compliant strategic goods exporters.	government for the establishment of the management systems for the trade in strategic goods. The BOC and Implementing Participating Agencies (IPAs) shall ensure that all strategic goods have appropriate authorizations from the STMO prior to export. Trainings would be provided by the STMO to BOC and IPAs on commodity identification, risk profiling and targeting for strategic goods.
N24	Has data harmonization (data modelling) been conducted for Customs and TRGA procedures?	Y	5	In February 2022, the Ateneo School of Government, and the Bureau of Customs, held a roundtable discussion for representatives of government, institutions, academe, in discussing the administrative procedures of respective government agencies regarding measuring import	

				statistics, information sharing, and reporting of official statistics to stakeholders. The event was attended by representatives from the Bureau of Customs, Philippine Statistics Authority, Bangko Sentral ng Pilipinas, Department of Trade and Industry, National Economic Development Authority, Philippine Economic Zone Authority, Senate Economic Planning Office, Congressional Policy and Budget Research Department, and the Bureau of Internal Revenue.	
N25	Has business process re-engineering and simplification of procedures been conducted for Customs and TRGA procedures?	Y	5	The Whole-Government Reengineering Manual is a reference document containing tools and principles in streamlining and reengineering processes, derived from principles and practices in business reengineering tailor-fitted to the public sector. The manual (ARTA MC 2021-09 series of 2021) shall provide a walkthrough of the process of reengineering methodology and the tools that agencies can use to support their reforms.	
N26	Is there a law / special rules on data privacy and data protection?	Y	5	Republic Act No. 10173 of 2012, otherwise known as the Data Privacy Act is a law that seeks to protect all forms of information, be it private, personal, or sensitive. It is meant to cover both natural and juridical persons involved in the processing of personal information.	

N27	Are there service-level agreements governing paperless trade?	Y	4	Under the ASW Agreement	
N28	Is there a law that covers resolving disputes in relation to cross-border exchange of cargo clearance requisites?	Y	4	Under the CMTA. At the ASEAN level, Member States approved policy (i.e. message implementation guidelines) in addressing cross-border messaging errors	
N29	Is there any mutual recognition agreement/legislation for accepting electronic document of other jurisdictions?	Y	4	Under the ASW Agreement and AEO MRA	
N30	Is there any Institution authorize to enter into agreement with trading partner countries to mutually recognize electronic data/document originating from their jurisdiction?	Y	5	The Department of Trade Industry (DTI)	
5. Single Window Platform[79]					
N31	Does your single window platform can provide the functional equivalence of manual processes manifested through a clear service framework in expediting clearance of goods?	Y	2		

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[79] This relates to Article 7 of the Framework Agreement on Cross-border Paperless Trade in Asia and the Pacific, on the facilitation of cross-border paperless trade and development of single window platform(s).

N32	Does it provide visibility, appropriate electronic notification, data accuracy, and seamless and secure pipeline in inter-agency information exchange?	Y	3		
N33	Does it provide cross-validation and cross-referencing capability among electronic documents or specific data elements with a single source of truth in data management?	Y	3	There are available data warehousing systems in specific agencies but now an NSW wide single source of truth database.	
N34	Does the agreed design architecture include user-friendly web-based application that encapsulates every end-user requirement for cross-border and national exchanges and operational processes defined in a message implementation guideline and process specifications?	Y	4	Based on agreed ASEAN messaging guidelines on the exchange of e-CO, ACDD, and e-Phyto	
N35	Does it cover the basic services that include user interface services, common services, and interfaces to connect and interact with external systems by proving host-to-host connectivity? [80]	Y	5	Based on agreed ASEAN messaging guidelines in providing host-to-host connectivity	
N36	Does it address the disparate and diverse systems of involved TRGAs	Y	3	None	

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[80] This relates to Article 10 of the Framework Agreement on Cross-border Paperless Trade in Asia and the Pacific, on international standards for exchange of trade-related data and documents in electronic form.

	and economic operators to interact towards mutually beneficial and agreed common goals, using ICT in sharing information driven by defined business and information rules?				
N37	Does the agreed design architecture allow the development and implementation processes to proceed gradually as more and more applications become available for information sharing, cross-border exchange, and interfacing, while new approaches / procedures are agreed upon and added?	Y	**4**	None	
N38	Does the agreed design architecture allow the exchange of specific data elements and not the whole electronic document intended from cross-border and national level inter-agency exchange of information?	Y	**5**	None	
N39	Does the agreed design architecture automatically populate succeeding required supporting documents promoting reusability of information?	Y	**3**	None	
N40	Does the agreed design architecture use a customized code or the use of UCRN?	Y	**5**	None	

6. Training

N41	Has your country conducted any awareness program or workshop on technical reference modelling that will be able to support single window operation?	Y	4		
N42	Does your country conducted a business process analysis, data modelling or data harmonization particularly in combining multiple items in one transaction or customs declaration?	Y	4	Regulator training of BOC and TRGA officials on E2M system	
N43	Has your country conducted any awareness program or workshop on information security and cybersecurity that will be able to support single window operation?	Y	4	Regulator training of BOC and TRGA officials on information security and how to address cybersecurity incidents	

7. Trade Facilitation Areas

N51	Has your country implemented a program on integrated risk management?	Y	5		
N52	Has your country implemented an authorized economic operator program? [81]	Y	5		

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[81] This relates to Article 8 of the Framework Agreement on Cross-border Paperless Trade in Asia and the Pacific, on cross-border mutual recognition of trade-related data and documents in electronic form.

N53	Has your country implemented a program in expediting low value shipments?	Y	5		
N54	Has your country implemented advanced ruling program?	Y	5		
N55	Has your country implemented informed compliance publication program?	Y	4		

Section B: Identify the targeted partner economies and assess their technical and legal readiness for cross-border exchange.

It is important to ensure that the bilateral arrangement in identifying partner economies for cross-border exchange is based on a foundation of common interests whereby two economies are encouraged to determine their technical and legal readiness for cross-border exchange and develop partnerships for continuous improvements of digitized processes. Additional questions are provided here to support the assessment of readiness of identified trading partners for cross-border paperless trade.

Targeted Respondent: Perspective of the National Trade Facilitation Council – Governance, Legal, and Technical Areas

8. Identify Partner Economy: [Indicate Partner Economy 1], [Indicate Partner Economy 2]		
No.	**Questions**	**Elaboration on Status**
N61	Which partner economies should be prioritized for this electronic exchange of trade data/documents?	**China** **Japan** **Republic of Korea** **US** **Hong Kong, China**

N62	Please identify the stakeholders involved in a decision for the partner economies that should be prioritized for cross-border electronic exchange of trade data / documents	[X] NTFC [X] Ministry of Foreign Trade – Department of Foreign Affairs [X] Customs [ ] Trading Community [X] Ministry of Industry and Commerce – Department of Trade and Industry [X] Ministry of Finance – Department of Finance [ ] Others, if any, please indicate _____
N63	In your opinion, does the identified partner have the capability to promote cross-border paperless trade to maximize the value of partnership?	Yes.
N64	In your opinion, would the identified partner agree to coordinate with your country on the regular review and improvement of the bilateral arrangement on cross-border paperless trade to maximize efficiencies and standardization of the processes?	Request the DFA to coordinate with China since there is an existing MRA on AEO between the Philippines and China
N65	Is the identified trading partner a signatory to the WCO SAFE Framework of Standards? (The intent is to foster Customs-to-Customs partnership, maximize reciprocal benefits and foster a healthy negotiating agreement on cross-border paperless trade)	Yes.

Section C: Identify the systems and processes that need to be harmonized/improved for cross-border exchange.

Please note the following cross-border documents (highlighted in Gray in Section B) that are being considered in relation to the degree of digitalization of processes:

- Purchase / Shipment Order
- Commercial Invoice
- Master Airway Bill
- House Airway Bill
- Outward Manifest / Inward Manifest
- Pre-arrival information of the carrier (reference number, estimated time of departure, estimated time of arrival, etc.)
- Export Declaration cleared by Customs.
- Certificate of Origin
- Phytosanitary Certificate
- Animal Health Certificate
- Food Safety Certificate
- Export Permits
- Other permits, licenses, and certificates suggested by the Border Regulatory Agencies

Aside from the identified documents/processes having an average score of at least 3.0 and below 5.0, several factors should be considered in determining the processes that should be harmonized/improved in relation to the exchange of specific cross-border documents. Prior to any consideration of cross-border exchange for paperless trade, the following qualifiers should be in indicated:

Targeted Respondent: Perspective of the National Trade Facilitation Council – Governance, Legal, and Technical Areas

9. Trade Volume / Top Markets		
No.	**Questions**	**Elaboration on Status**
N71	Which TRGAs do you think are technically ready for cross-border exchange?	**BOC, BPI and STMO**

N72	What cross-border electronic documents are you considering for any pilot-project?	**e-CO, export declaration, and e-phyto (SPS)**
N73	Please indicate the systems and processes that need to be improved based on the identified cross-border data/document for cross-border exchange	**Single Window, Customs-Processing System, TRGAs systems**

10. Operational Platform and Cooperation Between Customs and TRGAs

N81	Does Customs and TRGAs have an existing legal framework in providing seamless inter-agency exchange using the NSW platform? (The intent is to have a dynamic coordination and interoperable linkage between Customs and TRGAs with respect to the issuance of permits, clearances, and other supporting documents, so that the same may be transmitted to the trading partner through a secure pipeline, if required.)	**Yes.**

11. Future Endeavours

N91	How likely are you to utilize the findings and recommendations that would be in the final report of this feasibility study, for other trade facilitation initiatives (such as advance ruling, advance submission of cross-border requisites to support expedited clearance of e-commerce shipments, mutual recognition arrangements supporting the trusted partnership program, and integrated risk	**For ongoing and future implementation of AEO MRAs and Customs Modernization project.**

	management in the exchange of unstructured data supporting risk profiling and targeting activities)?	

Section D: Assess the costs and benefits in improving / harmonizing necessary systems and processes.

This section covers questions on assessing the costs involved and the benefits that could be realized in improving / harmonizing the systems and processes necessary (that have been identified in the previous section) for cross-border paperless trade. The respondent/conductor of the study can refer to the Annex on the core principles of cross-border paperless trade in answering the questions.

Targeted Respondent: National Trade Facilitation Council – Governance, Legal, and Technical Areas

12. Costs Involved		
No.	**Questions**	**Elaboration on Status**
N101	Please indicate the estimated costs involved in the development and implementation of CBPT application systems in exchanging cross-border documents based on previous related projects, if any	**BOC is implementing a modern Customs processing system with an estimated cost of 52 million USD**
N102	Please indicate the estimated costs involved in sustaining the CBPT program in exchanging cross-border documents	**Estimated cost is 2 million USD per year**
N103	What is your estimate of the percentage of cost savings you anticipate when cross-border paperless trade is in place?	[ ] wage _____ % of cost savings [ ] materials _____ % of cost savings [ ] transaction fee _____ % of cost savings [ ] error _____ % of cost savings [ ] dispatch _____ % of cost savings

		[ ] travel expenses to go to agencies _____ % of cost savings [ ] Others: please indicate
13. Benefits that Could be Realized		
N111	Please indicate the cost savings that could be realized in digitized processing compared to manual processing	**N/A**
N112	Please indicate the reduction in time to export / time to import that could be realized in digitized processing compared to manual processing	**N/A**
N113	Please provide the benefits of digitized processing in supporting your risk targeting and profiling activities	**N/A**
N114	Which trade facilitation benefits (as a government agency) do you think would be realized once cross-border paperless trade becomes operational?	[X] Reduction of processing time [X] Increase in control. [X] Simplification of procedures to obtain permits and certificates [X] Transparent decision-making process [X] Others: please indicate: Increased trader compliance

10.1.3   Customs Questionnaire (4 Respondents)

General Information

Date	
Name	
Agency/Office	
Position	
E-mail *(for updates and feedback)*	

Phone Number *(optional)*	

Note: For most of the questions, respondents indicated Y/N for yes/no, and a self-assessment score from 1 to 5 ("X" in the table below denotes a non-response):

- *5 – fully digitized*
- *4 – majority of processes are already digitized, except for a few manual processes*
- *3 – some of the key processes are already digitized but more support is needed in digitizing other key manual processes*
- *2 – manual processes are prevalent, except for a few digitized procedures*
- *1 – all processes are manual*

(The distribution of scores below are presented in an "X-Y" format, where X is the number of respondents who indicated a score of Y. An average of the scores is also provided.)

Perspective of the Customs Authority (Export Side)

Pre-Departure				
No.	**Questions**	**Y/N**	**S**	**Elaboration on Status**
C11	Does your application can receive information about the expected time of departure and content of freight ("manifest") as well as about means of transport (carrier, flight no., etc.) may initiate risk management procedures?	1Y 3N	1-5 2-4 1-3 Ave: 4.00	Response 1: The commercial invoice, packing list, and other predeparture information are required prior to customs declaration. Response 2: The expected time of departure is usually provided to the Port Authority, including the manifest. The means of transport documents are required by Customs prior to formalization through the submission of the customs declaration. Response 3: No Info Response 4: We do not have info on the expected time of departure. Additional fields on data being exchanged
TRGA Processes				

C21	Does it can capture any urgent processes (e.g. dangerous goods, regulated) initiated in digitized form?	4Y	4-4	Response 1: There is an inter-agency sharing arrangement between BOC and STMO on dual-use items (strategic goods) that can initiate risk targeting activities. Response 2: There is an inter-agency information sharing agreement between BOC and STMO in handling dual-use items or strategic goods for export.
Transport / Logistics Processes				
C31	Does it can settle the financial security or fees through electronic payment?	4Y	4-5	Response 1: BOC has operational core customs system (E2M) and electronic payment system (PAS6) Response 2: More improvements in relation to electronic payment is in the pipeline
Customs Procedures				
C41	Does it can receive digital submission of export declaration lodged by the trader exporter, including the necessary electronic notification confirming receipt of the said declaration?	3Y 1N	2-5 1-4 1-3 Ave: 4.25	Response 1: BOC has operational core customs system (E2M)
C42	Does it check and verify the electronic documents, such as permits, authorizations and consignment transmitted by the TRGAs as to its completeness, authenticity and accuracy?	1Y 3N	4-3	Response 1: BOC network is connected to the NSW system that allows its official to check some permits from TRGAs. Needs system integration. Response 2: Verification of permits is done on another system. Response 3: Verification of permits is done on another system. Needs system integration.

C43	Does it provide the color status of the said declaration in relation to your selectivity program in digitized form?	4Y	4-5	Response 1: BOC has operational core customs system (E2M)
C44	Does it can register, calculate and assess eventual duties, taxes and fees and send an assessment details to the trader exporter in digitized form?	4Y	4-5	Response 1: BOC has operational core customs system (E2M)
C45	Does it can transmit the amount for duties and taxes to be paid to the authorized agent banks?	4Y	4-5	Response 1: BOC has operational core customs system (E2M) and electronic payment system (PAS6)
C46	Does it can generate a customs release message or notification in digitized form in releasing the goods for export and authorizes the removal of the goods from the Customs offices premises?	4Y	3-5 1-4 Ave: 4.75	Response 1: BOC has operational core customs system (E2M)
C47	Does it can generate a digitized customs export declaration that can be transmitted to the destination country's customs authority as an advance information to support their risk targeting and profiling activities, if requested or agreed?	4Y	1-5 2-4 1-3 Ave: 4.00	Response 1: BOC has operational core customs system (E2M) and started sending ACDD to ASEAN Member States
Banking / Guarantee Procedures				

C51	Does it can confirm in digitized form the assessment details (duties and taxes to be paid by the trader exporter) transmitted by Customs, including the transmission of the payment details to the Customs Authority?	4Y	2-5 2-4 Ave: 4.50	Response 1: BOC has operational core customs system (E2M) and electronic payment system (PAS6)
Closure / Data Warehousing / Statistical Authority				
C61	Does it process the release of the goods for export and authorize the removal of the goods from the Customs premises, and thereby records formally the export transaction in digitized form?	4Y	3-5 1-4 Ave: 4.75	Response 1: BOC has operational core customs system (E2M)

The Perspective of the Customs Authority (Import Side)

Pre-Arrival				
No.	**Questions**	**Y/N**	**S**	**Elaboration on Status**
C71	Does your application can receive through the port of destination information about the expected time of arrival and content of freight ("manifest") as well as about means of transport (carrier, flight no., etc.) may initiate risk management procedures?	4Y	4-5	Response 1: The advance manifest, commercial invoice, packing list, house / master BL, and prearrival information of the carrier are required prior to customs declaration
TRGA Processes				

C81	Does it can capture any urgent processes (e.g. dangerous goods, regulated) initiated in digitized form?	4Y	2-5 2-4 Ave: 4.50	Response 1: BOC has inter-agency agreements with regulatory agencies and port operators
Transport / Logistics Processes				
C91	Does it can settle the financial security or fees through electronic payment?	4Y	4-5	Response 1: BOC has operational core customs system (E2M) and electronic payment system (PAS6)
Customs Procedures				
C101	Does it can receive digital submission of import declaration lodged by the trader exporter, including the necessary electronic notification confirming receipt of the said declaration?	4Y	4-5	Response 1: BOC has operational core customs system (E2M)
C102	Does it check and verify the electronic documents, such as permits, authorizations and consignment transmitted by the TRGAs as to its completeness, authenticity and accuracy?	3Y 1N	2-5 2-2 Ave: 3.50	Response 1: The Customs System is separate from the NSW system and Customs system receives the permit issued by the Bureau of Internal Revenue
C103	Does it provide the color status of the said import declaration in relation to your selectivity program in digitized form?	4Y	4-5	Response 1: BOC has operational core customs system (E2M)

C104	Does it can transmit the amount for duties and taxes to be paid to the authorized agent banks?	4Y	4-5	Response 1: BOC has operational core customs system (E2M) and electronic payment system (PAS6)
C105	Does it can receive guarantees / bonds from surety companies in digitized form?	4Y	4-5	Response 1: BOC has operational Automated Bonds Management System (ABMS)
C106	Does it can generate a customs release message or notification in digitized form in releasing the goods for import and authorizes the removal of the goods from the Customs office premises?	4Y	4-5	Response 1: BOC has operational core customs system (E2M)

Banking / Guarantee Procedures

C111	Does it can settle the financial security or fees through electronic payment?	4Y	4-5	Response 1: BOC has operational core customs system (E2M) and electronic payment system (PAS6)

Closure / Data Warehousing / Statistical Authority

C121	Does it process the release of the goods for import and authorize the removal of the goods from the Customs premises, and thereby records formally the import transaction in digitized form?	4Y	4-5	Response 1: BOC has operational core customs system (E2M)

General Areas

B131	Please indicate the data/documents that you want to receive/send (cross-border	Commercial Invoice - 4 Packing list - 4 Master AWB / House AWB - 4

	electronic exchange) with partner countries	Pre-arrival information (estimated arrival of carrier, including date and carrier reference number) - 4 Inward Manifest - 3 Sanitary & Phyto-sanitary certificate - 4 Certificate of Origin - 4 Animal Health Certificate - 2 Health Certificate (Food Safety Certificate) - 2 Others: please indicate:
B132	Please tick the actors / entities that you want to receive/send (cross-border electronic exchange) with partner countries	Customs Authority - 4 Border Regulatory Agency, please indicate - 1 Exporter - 2 Carrier -1 Port Authority (Land, Air, and Sea Ports) - 1 Freight Forwarder - 1 Consolidator - 1 DE consolidator - 2 Strategic Trade Management Office - 3 Others: please indicate
Benefits		
C131	Which trade facilitation benefits (as a government agency) do you think would be realized once cross-border paperless trade becomes operational?	Reduction of processing time - 4 Increase in control – 4. Simplification of procedures to obtain permits and certificates. - 4 Transparent decision-making process - 4 Others: please indicate: • Increase compliance – 2 • Predictability - 1

10.1.4   Trade Regulatory Government Agencies

Twenty (20) questionnaires completed by TRGAs were received. The key highlights (selected questions and their responses) for both export and import perspectives are shown in the table below.

General Information

Date	
Name	
Agency/Office	
Position	
E-mail *(for updates and feedback)*	
Phone Number *(optional)*	

Note: For most of the questions, respondents indicated Y/N for yes/no, and a self-assessment score from 1 to 5 ("X" in the table below denotes a non-response):

- *5 – fully digitized*
- *4 – majority of processes are already digitized, except for a few manual processes*
- *3 – some of the key processes are already digitized but more support is needed in digitizing other key manual processes*
- *2 – manual processes are prevalent, except for a few digitized procedures*
- *1 – all processes are manual*

(The distribution of scores below are presented in an "X-Y" format, where X is the number of respondents who indicated a score of Y. An average of the scores is also provided.)

Export Side

	Questions	Y/N	Score	Elaboration on Status
Pre-Departure				
B11	Does the TRGA's risk management system can be triggered by **pre-departure** notification of freight	5Y 14N	1-4 4-3	• Currently developing automation system (4 respondents) • Not applicable to our agency (3 respondents)

	information in digitized format (e.g. manifest, etc.)?	1-X	7-2 7-1 1-X Ave:1.95	• Securing permit to import, lodgement, assessment, release, and gate pass have human intervention and not a continuous procedure. A processed entry is still required to be routed (hardcopy) to complete the record keeping (4 respondents) • The Full Digitization is in process. Digitization is currently on VIS - Vessel Information System only (3 respondents) • Strongly suggest that to be able to be compliant through fully digitized procedure, a centralized customs clearance system be implemented (e.g., eCO, e-Comparative Tracking Index, assessed e-Single Administrative Document (SAD), etc). All files coming from digitized record keeping at consignee's system should be maintained as well for audit purposes (4 respondents)
TRGA Processes				
B21	Does the TRGA application can issue digitized export permits that can be transmitted to the destination country, if requested or agreed?	1Y 18N 1-X	5-4 7-2 7-1 1-X Ave: 2.16	• For export, Export Declaration is processed partially digitized for air & sea (4 respondents) • Not applicable to our agency (3 respondents) • We can use email in sending the data for now (3 respondents) • Suggest standardizing the digitization for export for both air & sea and ensure that the assessment and e-Airway Bill are always updated/tally on breakdown (3 respondents). Still conceptualizing on how to fully digitize (2 respondents)
B22	Does the TRGA application can issue digitized certificate of origin that can	1Y 18N	1-4 11-2	• N/A or Not applicable to our agency (7 respondents) • We are using email in sending data (3 respondents)

	be transmitted to the destination country, if requested or agreed?	1-X	7-1 1-X Ave: 1.74	
B23	Does the TRGA application can issue digitized phytosanitary certificate that can be transmitted to the destination country, if requested or agreed?	1Y 18N 1-X	1-4 8-2 10-1 1-X Ave: 1.58	• Conceptualizing on digitalization / revising the process flow for digitization (3 respondents) • N/A or Not applicable to our agency (7 respondents)
B24	Does the TRGA application can issue digitized animal health certificate that can be transmitted to the destination country, if requested or agreed?	1Y 18N 1-X	1-4 8-2 10-1 1-X Ave: 1.58	• Still at the planning stage (3 respondents) • N/A or Not applicable to our agency (7 respondents)
B25	Does the TRGA application can issue digitized food safety certificate that can be transmitted to the destination country, if requested or agreed?	1Y 18N 1-X	1-4 2-3 8-2 8-1 1-X	• N/A or Not applicable to our agency (7 respondents) • Still planning stage (3 respondents)

		Ave: 1.79	
B26	Does the TRGA application can issue any other digitized license, permit, or certificate (please indicate in the "elaboration on status" column) that can be transmitted to the destination country, if requested or agreed?	9Y 11N 1-4 4-3 3-2 11-1 1-X Ave: 1.74	• Dangerous Drugs Board (DDB) has already been using an online platform called online application for certification and exemption information system (OACEIS). Enhancement is ongoing. • By using email (3 respondents) • No information about e-Cargo Tracking Index (CTI), eCO (4 respondents) • Not applicable to our agency (3 respondents)
B27	If yes, does it can exercise selectivity or risk targeting as a tool of risk management and may request for checking samples of goods or request Customs to physically check the goods?	6Y 14N 1-4 11-2 7-1 1-X Ave: 1.74	• BOC will be part of the system as end-user. Enhancement is ongoing. • No information (4 respondents) • Planning stage / refining the process flow (3 respondents) • Not applicable to our agency (3 respondents)
B28	Does the TRGA application can issue digitized export permits that can be transmitted to the destination country, if requested or agreed?	1Y 18N 1-X 1-4 8-2 10-1 1-X Ave: 1.58	• N/A or Not applicable to our agency (7 respondents) • Still planning stage (3 respondents)

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	Transport / Logistics Processes			
B31	Does it can settle the financial security or fees through electronic payment?	6Y 14N	5-4 4-2 10-1 1-X Ave: 2.00	• Use LinkBiz Portal of Landbank • Planning (3 respondents) • No information (4 respondents) • Not applicable to our agency (3 respondents)
	Customs Procedures			
B41	Does your system process in digitized form the result of any physical examination jointly with Customs? In the context of risk management, physical examination of the goods should be carried out, if possible, jointly with Customs.	1Y 19N	1-4 8-2 10-1 1-X Ave: 1.58	• Planning to have a digitalization (3 respondents) • No information (4 respondents) • Not applicable to our agency (3 respondents)
B42	Does it receive customs release notification in digitized form so that any second border process can take place (e.g. product standard conformance prior to domestic circulation)	1Y 19N	1-4 8-2 10-1 1-X Ave: 1.58	• Planning to have a digitalization (3 respondents) • No information (4 respondents) • Not applicable to our agency (3 respondents)
	Banking / Guarantee Procedures			
B51	Does your system can process transactional fees paid by the actor	6Y	5-4	• LinkBiz Portal • Planning to digitize it (3 respondents)

		14N	4-2	• No information (4 respondents)
	getting license or permit from a TRGA through electronic payment system (auto debiting or payment messaging through a bank clearing house)?		10-1	• Not applicable to our agency (4 respondents)
			1-X	
			Ave: 2.00	
Closure / Data Warehousing / Statistical Authority				
B61	Does your system receive customs release notification or a digitized copy of the export declaration for data warehousing?	5Y 15N	5-4 4-2 10-1 1-X Ave: 2.00	• Planning to digitize it (3 respondents) • No information (4 respondents) • Not applicable to our agency (3 respondents)

Import Side

	Questions	Y/N	Score	Elaboration on Status
Pre-Arrival				
B71	Does the TRGA's risk management system can be triggered by **pre-arrival** notification of freight information in digitized format (e.g. manifest, etc.)?	1Y 18N 1X	1-4 8-2 10-1 1-X Ave: 1.58	• Planning stage (3 respondents) • There is no information available, but a system that can be triggered by pre-arrival is nice to have (4 respondents) • Not applicable to our agency (3 respondents)

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TRGA Processes				
B81	Does the TRGA application can issue digitized licenses, quota allocations, authorizations, and necessary import permits?	6Y 14N	5-4 4-2 10-1 1-X Ave: 2.00	• Dangerous Drugs Board (DDB) is issuing certification and exemption through the OACEIS. • Planning (3 respondents) • No information/ no update (4 respondents) • Not applicable to our agency (3 respondents)
B82	If yes, does it can exercise selectivity or risk targeting as a tool of risk management and may request for checking sample of goods or request Customs to physically inspect the goods?	2Y 18N	1-4 8-2 10-1 1-X Ave: 1.58	• This activity is possible once BOC is already included in the procedure or as part of the system. • Planning (3 respondents) • No information (4 respondents) • Not applicable to our agency (3 respondents)
Transport / Logistics Processes				
B91	Does it can settle the financial security or fees through electronic payment?	6Y 14N	5-4 4-2 10-1 1-X Ave: 2.00	• Use LinkBiz Portal of Landbank • Planning (3 respondents) • No information (4 respondents) • Not applicable to our agency (3 respondents)
Customs Procedures				

B101	Does your system process in digitized form the result of any physical examination jointly with Customs? In the context of risk management, physical examination of the goods should be carried out, if possible, jointly with Customs.	1Y 19N	1-4 8-2 10-1 1-X Ave: 1.58	• Planning to have a digitalization (3 respondents) • No information (4 respondents) • Not applicable to our agency (3 respondents)
B102	Does it receive customs release notification in digitized form so that any second border process can take place (e.g. product standard conformance prior to domestic circulation)	1Y 19N	1-4 8-2 10-1 1-X Ave: 1.58	• Planning to digitize it (3 respondents) • No information (4 respondents) • Not applicable to our agency (3 respondents)
Banking / Guarantee Procedures				
B111	Does your system process transactional fees pay by the trader importer through electronic payment system?	6Y 14N	5-4 4-2 10-1 1-X Ave: 2.00	• LinkBiz Portal • Planning to digitize it (3 respondents) • No information (4 respondents) • Not applicable to our agency (4 respondents)
Closure / Data Warehousing / Statistical Authority				
B121	Does your system receive customs release notification or	5Y	5-4	• Planning to digitize it (3 respondents) • No information (4 respondents)

		15N	4-2	• Not applicable to our agency (3 respondents)
	a digitized copy of the import declaration for data warehousing?		10-1	
			1-X	
			Ave: 2.00	
B131	Please indicate the data/documents that you want to receive/send (cross-border electronic exchange) with partner countries			• Commercial Invoice – 12 respondents • Packing list – 12 • Master AWB / House AWB – 13 • Pre-arrival information (estimated arrival of carrier, including date and carrier reference number) – 8 • Inward Manifest – 13 • Sanitary & Phyto-sanitary certificate – 4 • Certificate of Origin – 9 • Animal Health Certificate – 8 • Health Certificate (Food Safety Certificate) – 4 • Others: Certified true copy of the updated MSDS/SDS and certification from suppliers (if required) • Did not specify answer – 4
B132	Please tick the actors / entities that you want to receive/send (cross-border electronic exchange) with partner countries			• Customs Authority – 17 • Border Regulatory Agency– 17 • Exporter – 13 • Carrier – 12 • Port Authority (Land, Air, and Sea Ports) – 17 • Freight Forwarder – 12 • Consolidator – 12 • Deconsolidator – 8 • Strategic Trade Management Office – 4 • Others: *no response*

		• Did not specify answer – 3
B141	Which trade facilitation benefits (as a government agency) do you think would be realized once cross-border paperless trade becomes operational?	• Reduction of processing time – 17 • Increase in control – 16 • Simplification of procedures to obtain permits and certificates – 19 • Transparent decision-making process – 15 • Others: *no response*

10.1.5   Logistics Actors

Nine (9) completed questionnaires were received from Logistics Actors and the key highlights are in the table below:

General Information

Date	
Name	
Agency/Office	
Position	
E-mail *(for updates and feedback)*	
Phone Number *(optional)*	

Note: For most of the questions, respondents indicated Y/N for yes/no, and a self-assessment score from 1 to 5 ("X" in the table below denotes a non-response):

- *5 – fully digitized*
- *4 – majority of processes are already digitized, except for a few manual processes*
- *3 – some of the key processes are already digitized but more support is needed in digitizing other key manual processes*
- *2 – manual processes are prevalent, except for a few digitized procedures*
- *1 – all processes are manual*

(The distribution of scores below are presented in an "X-Y" format, where X is the number of respondents who indicated a score of Y. An average of the scores is also provided.)

Export Side

	Questions	Y/N	Score	Elaboration on Status
Pre-Departure				
F11	Does your automated application have the ability for the trader exporter to receive electronic freight orders from consignor for presentation of the goods at the point of departure, and from consignor or from consignee for change of destination?	4Y 5N	2-5 1-4 1-3 5-1 Ave: 2.44	• Freight orders are coordinated manually (5 respondents) • N/A (1 respondent)
F12	Does the carrier's system application have the ability to submit or transmit the electronic manifest (primary source of any pre-arrival information) to ports of destination authorities, Customs, etc.?	9Y	6-5 3-4 Ave: 4.67	• Manifest are electronically submitted to Customs (5 respondents) • N/A (1 respondent)
F13	Does the carrier's system application have the ability to submit or transmit the electronic master airway bill or house airway bill (primary source of any pre-arrival information) to ports of destination authorities, Customs, etc.?	9Y	6-5 3-4 Ave: 4.67	• Same as F12 (5 respondents) • N/A (1 respondent)
F14	Does the carrier's system application have the ability to submit or transmit electronic pre-arrival information	9Y	1-5	• This process is available depending on the shipping/ airline (5 respondents)

	such as the carrier identity number, estimated time of departure, estimated time of arrival, etc. (primary source of any pre-arrival information) to ports of destination authorities, Customs, etc.?		3-4 5-3 Ave: 3.56	• N/A (1 respondent)
F15	Does it support electronic payment in processing necessary financial security and insurance coverage?	9Y	2-5 2-4 5-3 Ave: 3.67	• Insurance are manual but can be paid online (5 respondents) • N/A (1 respondent)
F16	Does your application have the ability to receive, as port of destination, the expected time of departure, content of freight ("manifest"), as well as means of transport (carrier, flight no. etc.) in digitized form?	9Y	1-5 3-4 5-3 Ave: 3.56	• Same as F14 (5 respondents) • N/A (1 respondent)
TRGA Processes				
F21	Does the TRGA application have the ability to process electronic transport licenses for dangerous goods or regulated products?	7Y 2N	7-4 2-2 Ave: 3.56	• But not all BRAS are using online portals (5 respondents) • N/A (1 respondent)
F22	If yes, does it have the ability to track the application process for licenses from submission, verification, to	7Y 2N	6-5 1-4	• The system has the identified features (5 respondents) • N/A (1 respondent)

	approval with date and time stamps, including electronic notifications?		2-1 Ave: 4.00	
F23	Does the TRGA system allow you to settle the license application fees through electronic payment?	4Y 5N	4-4 5-2 Ave: 2.89	• Some payments are still manually done (5 respondents) • N/A (1 respondent)
F24	Do the airport and port authorities have the ability to inform TRGAs, regarding the transport of dangerous weapons (e.g. inflammables, explosives, arms, and weapons), and regulated goods under international surveillance (e.g. legal trade in endangered species, narcotics, drugs and psychotropic substances, etc.), in digitized form?	4Y 5N	2-4 7-1 Ave: 1.67	• This information's still manual (5 respondents) • N/A (1 respondent)
Transport / Logistics Processes				
F31	Does your application system have the ability for the trader exporter to receive certificates of loading / freight papers from consignor and transfer the digitized freight papers to port authorities and / or consignee?	4Y 5N	4-4 5-1 Ave: 2.33	• Freight papers are still manual (5 respondents) • N/A (1 respondent)
F32	Does it have the ability to process electronic documentation (freight papers) needed for onward journey or any request by the counterpart transport at the destination country?	4Y 5N	1-5 1-4 2-2 5-1	• Still manual (5 respondents) • N/A (1 respondent)

			Ave: 2.00	
Customs Procedures				
F41	Does your system provide a digital notification regarding the transfer of goods to Customs' designated area for physical examination?	7Y 2N	1-5 1-4 2-3 5-2 Ave: 2.78	• Tracking of status is done through the Customs Portal (5 respondents) • N/A (1 respondent)
Banking / Guarantee Procedures				
F52	Does it have the ability to receive an electronic notification for all the electronic payments completed?	9Y	1-5 8-4 Ave: 4.11	• Notifications for payments are provided (5 respondents) • N/A (1 respondent)
Closure / Data Warehousing / Statistical Authority				
F61	Does it have the ability to generate management reports of all your export transactions for a given period that you can use to reconcile your internal data in digitized format?	9Y	1-5 3-4 5-3 Ave: 3.56	• Some data still need to be requested from BOC (5 respondents) • N/A (1 respondent)

Import Side

	Questions	Y/N	Score	Elaboration on Status
Pre-Arrival				
F71	Does your automated application have the ability to receive electronic freight orders from consignor for presentation of the goods at the point of arrival?	4Y 5N	1-5 3-4 5-1 Ave: 2.44	• Manual process (5 respondents) • N/A (1 respondent)
F72	Does it inform the destined port of arrival the expected time of arrival and content of freight ("manifest) in digitized form?	9Y	1-5 3-4 5-2 Ave: 3.00	• Using the shipping lines systems which are different from each other (5 respondents) • N/A (1 respondent)
F73	Does it support electronic payment for processing necessary fees in sending required digitized freight papers and other pre-arrival information?	9Y	4-4 5-3 Ave: 3.44	• Some payments are online, but some are still manual (5 respondents) • N/A (1 respondent)
TRGA Processes				
F81	Upon order by the importer, does your application have the ability to process the necessary transport licenses required by TRGAs (e.g. dangerous goods, regulated goods) in digitized form?	4Y 5N	1-5 3-4 5-1	• Need further info for transport licenses (5 respondent) • N/A (1 respondent)

			Ave: 2.44	
F82	If yes, does it have the ability to track the application process for licenses from submission, verification, to approval with date and time stamps, including electronic notifications?	4Y 5N	2-4 2-2 5-1 Ave: 1.89	• Same as F81 (5 respondents) • N/A (1 respondent)
Transport / Logistics Processes				
F91	Does your application system have the ability to receive electronic certificates of loading / freight papers from consignor and transfer the digitized freight papers to port authorities and / or consignee?	2Y 7N	2-4 2-3 5-1 Ave: 2.11	• Same as F81 (5 respondents) • N/A (1 respondent)
Customs Procedures				
F101	Does your system provide a digital notification regarding the transfer of goods to Customs' designated area for physical examination?	6Y 3N	2-4 2-3 5-2 Ave: 2.67	• Same as F41 (5 respondents) • N/A (1 respondent)
Banking / Guarantee Procedures				
F111	Does it have the ability to order a commercial bank to pay for the terminal handling charges in digitized form?	4Y 5N	3-4 1-3	• Manual payments (5 respondents) • N/A (1 respondent)

			5-1 Ave: 2.22	
F112	Does it have the ability to receive an electronic notification for all electronic payments completed?	4Y 5N	3-4 1-3 5-1 Ave: 2.22	• Not available for manually paid fees (5 respondents) • N/A (1 respondent)

Closure / Data Warehousing / Statistical Authority

F121	Does it have the ability to provide electronic notification stating safe arrival of goods (closure process) for acquittance of insurance?	4Y 5N	2-4 2-3 5-1 Ave: 2.11	• Info is still manual (5 respondents) • N/A (1 respondent)
F131	Which trade facilitation benefits (as an economic operator) do you think would be realized once cross-border paperless trade becomes operational?			• Expedited clearance – 10 respondents • Reduction of costs – 9 • Gain predictability – 8 • Transparency – 8 • Did not specify – 12
F132	Which trade facilitation benefits (as a government agency) do you think would be realized once cross-border paperless trade becomes operational?			• Reduction of processing time – 9 respondents • Increase in control – 6 • Simplification of procedures to obtain permits and certificates – 9 • Transparent decision-making process – 8

		• Did not specify – 4
F133	As a logistics actor, what is your estimate of the percentage of cost savings you anticipate when cross-border paperless trade is in place?	• wage _____ % of cost savings – 4 respondents • materials _____ % of cost savings – 2 • transaction fee _____ % of cost savings – 1 • error _____ % of cost savings • dispatch _____ % of cost savings • travel expenses to go to the involved agency _____ % of cost savings – 1 • Did not specify – 10

10.1.6   Trading Community

Twelve (12) completed questionnaires were received from actors from the trading community, and the key highlights are in the table below:

General Information

Date	
Name	
Agency/Office	
Position	
E-mail *(for updates and feedback)*	
Phone Number *(optional)*	

Note: For most of the questions, respondents indicated Y/N for yes/no, and a self-assessment score from 1 to 5 ("X" in the table below denotes a non-response):

- *5 – fully digitized*
- *4 – majority of processes are already digitized, except for a few manual processes*

- *3 – some of the key processes are already digitized but more support is needed in digitizing other key manual processes*
- *2 – manual processes are prevalent, except for a few digitized procedures*
- *1 – all processes are manual*

(The distribution of scores below are presented in an "X-Y" format, where X is the number of respondents who indicated a score of Y. An average of the scores is also provided.)

Export Side

	Questions	**Y/N**	**Score**	**Elaboration on Status**
One-Time Registration				
T11	Does your automated application have the ability to connect / process a one-time registration of your company with Customs Authority and TRGAs' system that will allow electronic submission of cargo clearance requisites?	5Y 7N	1-5 6-4 2-3 2-2 1-1 Ave: 3.33	• Key applications in relation to other Customs regimes are being developed (2 respondents) • Registration process varies depending on the agency. For BOC, accreditation is applied through the E2M system, but manual docs are still submitted (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T12	Does your automated application have the ability to connect / process a one-time registration of your company with any Single Window platform or similar system that will allow electronic submission of cargo clearance requisites?	4Y 8N	1-5 3-4 4-3 2-2 2-1	• Reverted to manual procedure due to new top management decision (1 respondent) • Single Window System only covers import and export permits (8 respondents)

			Ave: 2.92	
T13	Does your organization have the ability to receive a unique reference number (registration process) from Customs, TRGAs, or Single Window platform that you can use as part of your master data management?	12Y	9-5 2-4 1-1 Ave: 4.50	• Reverted to manual procedure due to new top management decision (1 respondent) • YES. For Customs accreditation. (8 respondents)
T14	Does it have the ability to view the list of permits / licenses / certificates needed for a particular commodity in filing an export declaration from the single window platform, as supporting documents?	12Y	3-5 3-4 2-3 3-2 2-1 Ave: 3.25	• Yes, but the search function is limited (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
Availability of Single Window Platform (UNCITRAL Model Law on Electronic Commerce 1996)				
T21	Does it provide features that can route, send, and receive any cross-border electronic message to and from agreed external systems, including validation of the electronic messages and appropriate interfaces with any relevant system?	12Y	8-5 3-4 1-1	• Yes, the system can route, send and receive electronic documents (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

			Ave: 4.42	
T22	Does it have the ability to generate a meta data structure for a particular HS code selected that will be able to serve as a checklist of supporting documents that will be submitted together with the export declaration?	12Y	9-5 2-4 1-1 Ave: 4.50	• Yes, HS or AHTN (ASEAN Harmonized Tariff Nomenclature) codes can be used when searching data (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T23	Does your operational platform have the capability to route, send, and receive any cross-border TRGA electronic message to and from the single window platform, including validation of the electronic messages?	12Y	8-5 1-4 2-3 1-1 Ave: 4.25	• Yes, same with T22 (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T24	Are its schemes interoperable, such that your application system is able to connect to or interface with any government application system or economic operator portals?	2Y 10N	1-4 2-3 4-2 5-1 Ave: 1.92	• Current systems are not interoperable/ doesn't allow (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

	Master Data Management (International Standards on Data Modelling)			
T31	Has your company conducted any awareness program on master data management that will be able to support cross-border paperless trade through seamless and interoperable exchange of data between involved actors/entities?	10Y 2N	8-5 1-4 3-1 Ave: 3.92	• Yes, through NSW-related activities/ meetings (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T32	Does the company's operational system(s) have the capability of setting up a uniform set of information rules that can unify reference data service across the organization? This will feed into data management covering data sensitivity, risk assessment, and synchronized data sets.	10Y 2N	4-4 3-3 2-2 3-1 Ave: 2.67	• Data models and information rules are used, but they are not interoperable (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
	Pre-Departure			
T41	Does your automated application have the ability to receive digitized purchase/shipment orders from the consignee?	4Y 8N	2-5 1-4 2-3 3-2 4-1	• B2B documents are still in manual format (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

			Ave: 2.50	
T42	Does your automated application have the ability to receive digitized commercial invoice and packing list?	4Y 8N	2-5 1-4 2-3 3-2 4-1 Ave: 2.50	• Same as T41 (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T43	Does it populate (Single Window Interoperability Reuse of Data) the succeeding requirements such as application for permits, license or certificates with TRGAs and export declaration with Customs?	10Y 2N	9-5 2-2 1-1 Ave: 4.17	• ACDD Portal of BOC allows the exchange of Export data (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T44	If the answer to T43 is yes, does your automated application have the ability to encode missing data elements to complete the export declaration and application for permits?	12Y	8-5 1-4 2-3 1-1	• Yes, application will not proceed if there are missing data (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

		Ave: 4.25		
T45	Is there an available electronic application that generates a pro-forma export declaration prior to Customs formalization for the clearance of goods for export?	12Y	4-5 1-1 7-X Ave: 4.20	• Yes, Export declarations are already automated (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T46	Does your automated application have the ability to receive a certificate of origin in digitized form provided by the supplier?	11Y 1N	7-5 1-4 3-3 1-1 Ave: 4.08	• Yes, through the TRADENET and ASW systems (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T47	Does your automated application have the ability to receive a shipper's letter of instruction, manufacturer's declaration for customs purposes on whether or not the goods are toxic or hazardous and what materials the goods contain, and dangerous goods form?	1Y 11N	1-4 7-2 4-1 Ave: 1.83	• These dues are still manual (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
TRGA Processes				

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T51	Is there an available electronic application that allows you to apply for any necessary licenses, authorizations or permits with TRGAs for clearance for export?	10Y 2N	8-5 3-4 1-1 Ave: 4.42	• Yes, through the NSW systems (6 participants) • These dues are still manual (2 participants) • Reverted to manual procedure due to new top management decision (1 respondent) • Awaiting TradeNet Project Management Office to include export procedure in the electronic processing (1 respondent)
T52	If yes, does it have the ability to track the application permit process from submission, verification, to approval with date and time stamps, including electronic notifications?	11Y 1N	9-5 2-4 1-1 Ave: 4.50	• Health certificates are still manual (1 respondent)
T53	Does your automated application have the ability to receive digitized Phyto-sanitary certificates from the TRGA that you can use as supporting documents to an export declaration?	9Y 3N	9-5 2-2 1-1 Ave: 4.17	• Loading freight papers are still manual (1 respondent) • Reverted to manual procedure due to new top management decision (1 respondent)
T54	Does your automated application have the ability to receive digitized health certificates from the TRGA as supporting documents?	1Y 11N	1-5 3-2 8-1	• Health certificates are still manual (7 respondents) • Same as T61 (1 respondent) • Reverted to manual procedure due to new top management decision (1 respondent)

		Ave: 1.58	
Transport / Logistics Processes			
T61	Does the transport operator have the ability to issue electronic certificates of loading / freight papers (as consignor) indicating the final destination?	1Y 11N	3-4 1-3 2-2 6-1 Ave: 2.08	• Loading freight papers are still manual (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T62	Does your automated application provide the mode of transport (Full Container Load, Lesser Container Load, Reefer, Break Bulk, or Flat Racks) to the shipper in digitized form?	3Y 9N	1-5 2-4 1-3 4-2 4-1 Ave: 2.33	• Same as T61 (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T63	Does the transport/logistics system(s) have the ability to provide track and trace for the movement of your goods?	11Y 1N	8-5 3-4 1-1	• Yes, status of vessels can be tracked online (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

		Ave: 4.42	
T64	Does your system get the billing charges from the transport/logistics service provider in digitized form?	11Y 1N	10-5 1-4 1-1 Ave: 4.58	• Yes, but depends on the transport/ logistics provider (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T65	Does it have the ability to settle the terminal landing, arrastre charges and financial security through electronic payment?	11Y 1N	10-5 1-4 1-1 Ave: 4.58	• Yes, these changes can be paid online (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
Customs Procedures				
T71	Is there an electronic submission of customs declaration to Customs authority or orders broker to lodge an electronic Customs declaration for export with all complementary documentation?	11Y 1N	11-5 1-1 Ave: 4.67	• Yes, through the E2M customs system (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

T72	Does Customs have the ability to provide track and trace in clearing your goods, from submission to release of goods?	11Y 1N	10-5 1-4 1-1 Ave: 4.58	• Same as T71 (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T73	Does Customs provide full electronic notification of receipt of export declaration, color selectivity (risk management), assessment, electronic payment, and release message?	11Y 1N	10-5 1-4 1-1 Ave: 4.58	• Same as T71 (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T74	If yellow lane (documentary check), does your system have the ability to receive electronic notification of the digitized documents that should be submitted?	11Y 1N	10-5 1-4 1-1 Ave: 4.58	• Yes, but these docs will be submitted through the various BOC Port Portals (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
Banking / Guarantee Procedures				
T81	Is there an available electronic payment system for the trader exporter to process financial security, such as through a commercial bank to pay (duties, taxes and) fees to the account of	12Y	10-5 1-4 1-1	• Yes, BOC has a facility for electronic payment (PAS6). (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

	Customs, fees to the account of the transport operator, and fees to the account of the TRGAs in the application of permits?	Ave: 4.58	
T82	When an order is made, is there an available electronic application through which one can obtain a letter of credit in digitized form in guaranteeing payment of goods?	3Y 9N	2-5 1-4 5-2 4-1 Ave: 2.33	• Letter of Credit is still manual (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T83	Does it have the ability to receive an electronic notification that any electronic payments were completed?	11Y 1N	10-5 1-4 1-1 Ave: 4.58	• Yes, the system can notify the payments made (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

Closure / Data Warehousing / Statistical Authority

T91	Does the Customs data warehousing system have the ability to generate management reports of all your export transactions for a given period, that you can use to reconcile your internal data with Customs and TRGAs?	9Y 3N	4-4 4-3 1-2 3-1	• Yes, but for Customs, internal data only (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

			Ave: 2.75	

Import Side

	Questions	Y/N	Score	Elaboration on Status
Pre-Arrival				
T101	Does your automated application have the ability to receive digitized certificates of origin from the exporting country?	11Y 1N	8-5 3-4 1-1 Ave: 4.42	• PH exchanges ATIGA e-Form D through TRADENET / ASW systems (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T102	Does your automated application have the ability to receive digitized commercial manifests from the carrier?	11Y 1N	10-5 1-4 1-1 Ave: 4.58	• Yes, manifests are available online and can be submitted to BOC system (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T103	Does it view the list of permits / licenses / certificates that are needed to complete the customs formalization, as supporting documents to an import declaration?	11Y 1N	5-4 6-3 1-1	• Yes, but through the separate customs Portal/ ticketing system (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

			Ave: 3.25	
T104	Does it have the ability to apply for Customs declaration for clearance of goods for importation for free circulation (or any other Customs procedure) in digitized form?	11Y 1N	10-5 1-4 1-1 Ave: 4.58	• Yes, customs declarations are fully digitalized (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T105	Does it have the ability to process the necessary financial security (shipping charges) with the transport entity / actor through electronic payment?	3Y 9N	2-5 1-4 3-3 5-2 1-1 Ave: 2.83	• Yes, but shipping changes are paid using the shipping lines system (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
TRGA Processes				
T111	Does it have the ability to apply for any necessary licenses, quota allocation, authorizations or any other permit with TRGAs for clearance for import, and then applies for issuance of clearance documents with Customs in digitized form?	12Y	2-5 4-4 3-3 2-2 1-1	• Yes, but not all permits can be applied online (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

		Ave: 3.33	
T112	If yes, does it have the ability to track the application permit process from submission, verification, to approval with date and time stamps, including electronic notifications?	12Y	10-5 1-4 1-1 Ave: 4.58	• Yes, the NSW provides date and time stamps and email notifications (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T113	Does it have the ability to receive the import permit as a supporting document to the import declaration?	3Y 9N	2-5 1-4 1-3 4-2 4-1 Ave: 2.42	• The NSW and Customs systems are separate (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
Transport / Logistics Processes				
T121	Does the transport operator have the ability to provide an electronic notification that the shipping documents are available, including the pre-arrival information of the carrier?	1Y 11N	1-4 5-2 6-1	• Notification is not electronic (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

			Ave: 1.67	
T122	Does it have the ability to settle the financial security or insurance coverage through electronic payment?	1Y 11N	1-4 2-3 4-2 5-1 Ave: 1.92	• Insurance is still manual but can be paid online (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

Customs Procedures

T131	Does the Customs system have the ability to lodge an electronic submission of customs declaration to the Customs authority for import with all complementary documentation?	11Y 1N	10-5 1-4 1-1 Ave: 4.58	• Customs declarations are electronic (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T132	Does your automated application have the ability to receive the electronic notification on the import declarations' color selectivity and amount of duties and taxes to be paid, and customs release message?	11Y 1N	10-5 1-4 1-1 Ave: 4.58	• This information is accessible to the importer/ brokers account only (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

T133	If yellow lane (documentary check), does your system have the ability to receive electronic notification of the digitized documents that should be submitted?	11Y 1N	2-5 3-4 3-3 3-2 1-1 Ave: 3.17	• Submission of requirements are done using a separate system/portal (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
T134	If red lane, does your system have the capability to receive digitized notification of the physical inspection schedule?	11Y 1N	2-5 5-4 1-3 3-3 1-1 Ave: 3.33	• Inspections/examination schedules are done/coordinated through the separate system portal (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)
Banking / Guarantee Procedures				
T141	Does it have the ability to order a commercial bank to pay Customs duties, taxes and fees to the account of Customs in digitized form?	12Y	10-5 1-4 1-1 Ave: 4.58	• Yes, BOC has a facility for electronic payment (PAS6). (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

T142	Does it have the ability to receive an electronic notification that electronic payments were completed?	3Y 9N	2-5 1-4 5-2 4-1 Ave: 2.33	• Letter of Credit is still manual (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

Closure / Data Warehousing / Statistical Authority

T151	Does it have the ability to generate management reports of all your import transactions for a given period that you can use to reconcile your internal data in digitized format?	11Y 1N	10-5 1-4 1-1 Ave: 4.58	• Yes, the system can notify the payments made (8 respondents) • Reverted to manual procedure due to new top management decision (1 respondent)

T161	What are your top 3 export markets?	• Republic of Korea – 3 respondents • China – 2 • Japan – 2 • Malaysia – 1 • Taiwan Province of China – 1 • Singapore – 1 • N/A – 8
T162	What are your top 3 products for exports?	• Electronics – 2 • Cigarettes – 1 • Cigars – 1 • Unmanufactured tobacco – 1

		• N/A – 8
T163	What are your top 3 import markets?	• China – 3 • Republic of Korea – 2 • Taiwan Province of China – 2 • Indonesia – 1 • India – 1 • Russia – 1 • Brazil – 1
T164	What are your top 3 imported products?	• Electronics – 2 • Unmanufactured tobacco – 1 • Tobacco products – 1 • Spare parts for cigarette making machine – 1 • N/A – 8
T165	Which trade facilitation benefits do you think would be realized once cross-border paperless trade becomes operational?	• Expedited clearance – 6 • Reduction of costs • Gain predictability • Transparency – 1 • Others – 4 • Did not specify – 2 • Interoperable / Single system for Customs and NSW – 2
T166	As an exporter or importer, what is your estimate of the percentage of cost savings you anticipate when cross-border paperless trade is in place?	• wage _____ % of cost savings – 3 • materials _____ % of cost savings – 2 • transaction fee _____ % of cost savings – 2 • error _____ % of cost savings – 6 • inventory _____ % of cost savings – 4 • travel expenses to go to the involved agency – 1 • Others – 1

		• Interoperable / Single system for Customs and NSW – 1 • No information – 3

10.2 Appendix B: List of Respondents

There were 47 respondents who submitted their survey questionnaires:

Survey Questionnaire	Total Respondents	Remarks
National Trade Facilitation Committee	2	DTI-BITR & BOC PTFC
Customs	4	1 PTFC & 3 MISTG
Trade Regulatory Government Agencies	20	20 TRGAs
Logistics Actors	9	7 Freight Forwarders and 2 Warehouse Operators
Trading Community	12	Importers and Exporters

10.2.1   National Trade Facilitation - List of Respondents

No.	Organization
1	Department of Trade and Industry – Bureau of International Trade Relations
2	Bureau of Customs (BOC)

10.2.2   Bureau of Customs - List of Respondents

No.	Organization
1	Bureau of Customs (BOC)
2	Bureau of Customs (BOC)
3	Bureau of Customs (BOC)
4	Bureau of Customs (BOC)

10.2.3   TRGAs - List of Respondents

No.	Government Agency
1	National Tobacco Administration
2	Bureau of Customs (BOC)
3	National Economic Development Authority (NEDA)

3	Department of Finance (DOF)
4	Sugar Regulatory Commission
5	Department of Trade and Industry – Bureau of International Relations
6	Department of Information and Communications Technology
7	Philippine Veterans Investment Development Corporation Industrial Authority (Phividec)
8	Department of Trade and Industry – Bureau of Import Services
9	Department of Trade and Industry – Fair Trade Enforcement Bureau
10	Department of Trade and Industry – Strategic Trade Management Office
11	Philippine Coconut Authority
12	Department of Agriculture – Bureau of Plant Industry
13	Insurance Commission
14	Philippine Ports Authority – Port Management Office Negros Occidental
15	Department of Health – Food and Drug Administration
16	Philippine Ports Authority – Port Management Office Bataan/Aurora
17	Dangerous Drugs Board
18	National Meat Inspection Service
19	Tariff Commission
20	Fertilizer and Pesticide Authority

10.2.4 Logistics Industry - List of Respondents

No.	Organization
1	Freight Forwarder
2	Freight Forwarder
3	Freight Forwarder
3	Freight Forwarder
4	Freight Forwarder
5	Freight Forwarder
6	Freight Forwarder
7	Freight Forwarder
8	Container Yard – Container Freight Station for LCL Shipment

No.	
9	Shipping Line

10.2.5   Trading Community - List of Respondents

No.	Organization
1	Exporter
2	Exporter
3	Exporter
3	Exporter
4	Exporter
5	Exporter
6	Importer
7	Importer
8	Importer
9	Importer
10	Importer
11	Importer
12	Customs Broker

10.3 Appendix C: DTI-BITR's Letter Response to the Survey

dti PHILIPPINES — TRABAHO NEGOSYO KONSYUMER

31 March 2023

Atty. Maria Yasmin Obillos-Mapa
Head, PTFC Secretariat
Bureau of Customs
Port Area, Manila

Dear Atty. Obillos-Mapa:

This refers to your request for responses, through a letter dated 20 March 2023, on the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) Survey for the Feasibility Study on the Electronic Exchange of Trade-Related Data and Documents in the Philippines.

We are pleased to provide the Bureau of International Trade Relations' proposed responses/comments on questions within the purview of the Bureau (**Annex A**). We defer to the BOC and other relevant border regulatory agencies to respond to the survey. We would also appreciate receiving a copy of the consolidated responses from other agencies.

For any queries/clarifications, your office can coordinate with Ms. Eliza Lim (ElizaLim@dti.gov.ph), copy Ms. Norma Arpafo (NormaArpafo@dti.gov.ph) and Ms. Marietta B. Trimpe (MariettaTrimpe@dti.gov.ph).

Thank you.

Sincerely,

31 March 23

Angelo Salvador M. Benedictos
Director

Copy : Deputy Commissioner Vener S. Baquiran, BOC-AOCG

BUREAU OF INTERNATIONAL TRADE RELATIONS

10.4 Appendix D: Consultative Session CMO and Photos

BUREAU OF CUSTOMS
MAKA___ONG ADUANA, MATATAG NA EKONOMIYA

PROFESSIONALISM · INTEGRITY · ACCOUNTABILITY

March 20, 2022

CUSTOMS PERSONNEL ORDER
No. D - 021 - 2023

In the interest of service, the following customs officials and personnel are hereby authorized to attend the **Consultative Session for the Feasibility Study on the Electronic Exchange of Trade-Related Data and Documents with the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)** on March 21, 2023 (Tuesday), 9:30AM - 12:00PM at the OCOM Situation Room.
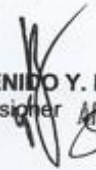
1. Coll. Wilnora L. Cawile - Acting Chief, Planning and Policy Research Division, Internal Administration Group
2. Atty. Julito Doria - Chief, Prosecution and Litigation Division, Legal Service, National Customs Trade Facilitation Champion
3. Jonathan T. Soriano - Chief, Technical Support Division - Technology Management Service, MISTG
4. Reginaldo P. Linang - Information Technology Officer II, MISTG
5. Christian R. Tibo - Supervising Customs Operations Officer, AOCG, National Customs Trade Facilitation Champion
6. Genilyn D. Minardo - Customs Operations Officer V, Post Clearance Audit Group National Customs Trade Facilitation Champion
7. Rhoan P. Escarmosa - Customs Operations Officer V III, OCOM, NSW-TWG Secretariat
8. Analyn P. Cortez - Technical Assistant, OCOM, NSW-TWG Secretariat
9. Phoebhis A. Barcelon - Management and Audit Analyst Planning and Policy Research Division, Internal Administration Group
10. Jerome P. Tomas - Management and Audit Analyst III, Planning and Policy, Research Division, Internal Administration Group

The purpose of this Meeting is to finalize the Customs Authority and National Trade Facilitation Council (NTFC) Surveys of Feasibility Study on the Electronic Exchange of Trade-Related Data and Documents. The purpose of this survey is for the ESCAP Consultant to conduct a feasibility study on the electronic exchange of trade-related data and documents with a partner country in South Asia.

All expenses to be incurred under this Order shall be charged against appropriate Bureau of Customs funds, subject to accounting and auditing rules and regulations.

For strict compliance.

BIENVENIDO Y. RUBIO
Commissioner APR 05 2023

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8527-4537, 8527-2935 | www.customs.gov.ph | boc.cares@customs.gov.ph