UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

ASYCUDA REPORT 2022/23

ACCELERATING CLIMATE SMART TRADE FACILITATION

United Nations

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

ASYCUDA REPORT 2022/23

ACCELERATING CLIMATE SMART TRADE FACILITATION

United Nations
Geneva, 2023

© 2023, United Nations

This work is available through open access, by complying with the Creative Commons licence created for intergovernmental organizations, at http://creativecommons.org/licenses/by/3.0/igo/.

The designations employed and the presentation of material on any map in this work do not imply the expression of any opinion whatsoever on the part of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Mention of any firm or licensed process does not imply the endorsement of the United Nations.

Photocopies and reproductions of excerpts are allowed with proper credits.

This publication has not been formally edited.

United Nations publication issued by the United Nations Conference on Trade and Development.

UNCTAD/DTL/ASYCUDA/2023/1
eISBN: 978-92-1-358637-2

FOREWORD

UNCTAD's largest technical cooperation programme, ASYCUDA, provides user countries with sophisticated IT systems and capacity building to cut red tape and promote trade facilitation, while at the same time advancing environmental sustainability. Harnessing digital technologies is becoming ever more critical in tackling the effects of climate change, which continues to significantly disrupt supply chains, impacting global trade and local economies. The United Nations, through the Sustainable Development Goals (SDGs), has defined measurable targets for member States to assess their transition to a green economy. However, the most vulnerable countries are facing a tougher burden from the climate crisis, and lagging behind the transition to a green economy due to a lack of financial and technological resources. ASYCUDA is working with governments and other stakeholders to ensure that trade is part of the solution, and the green transition is just and fair.

ASYCUDA's automated tools include the customs management software, ASYCUDAWorld; its bespoke electronic Single Windows for trade; ASYREC for the expedited relief of emergency consignments; and eCITES for managing the international trade in endangered species, to mention just a few. Today, ASYCUDA is operational in 102 countries and territories, including 38 least developed countries, 23 landlocked developing countries and 41 small island developing states. ASYCUDA systems help governments to increase public revenues, reduce corruption and ease trade, while eliminating the use of paper, promoting green transport and improving supply chain efficiency. The results on the ground show that the adoption of digital tools developed by ASYCUDA has accelerated climate smart trade and contributed to achieving the SDGs.

This report highlights ASYCUDA's progress during 2022/23 and presents its work through a green developmental lens. It is intended for ASYCUDA beneficiary countries and territories; donors; development partners; and trade and environment-focused organizations. It will also be useful to those interested in customs reform, trade facilitation and sustainable development.

Shamika N. Sirimanne,
Director, Division on Technology
and Logistics, UNCTAD

ABBREVIATIONS

ACP	African, Caribbean, Pacific
ASYADN	ASYCUDA Automatic Data Notification Tool
ASYCUDA	Automated System for Customs Data
ASYCUDA++	ASYCUDA's Customs Management System – Version 3
ASYCUDAWorld	ASYCUDA's Customs Management System – Version 4
ASYHUB	ASYCUDA Data Exchange and Data Integration Platform
ASYODS	ASYCUDA Ozone-Depleting Substances
ASYPCD	ASYCUDA Postal Customs Declaration
ASYPM	ASYCUDA Automated System for Performance Measurement
ASYPX	ASYCUDA Passenger Processing Module
ASYREC	ASYCUDA Automated System for Relief Consignments
ASYSPS	ASYCUDA Sanitary and Phytosanitary
CoP	Conference of the Parties
eCITES	ASYCUDA's Electronic Permit Management and Exchange System for Customs Control of Trade in CITES-listed Species
ECOWAS	Economic Community of West African States
eSW	Electronic Single Window
EU	European Union
GIZ	German Agency for International Cooperation
HFC	Hydrofluorocarbons
IATA	International Air Transport Association
IMO	International Maritime Organization
IMPACT	Improving Pacific Islands Customs and Trade Project
LDC	Least Developed Country
LLDC	Landlocked Developing Country
MoU	Memorandum of Understanding
MSME	Micro, Small and Medium-Sized Enterprises
MEAs	Multilateral Environmental Agreements
NDMO	National Disaster Management Office
ODS	Ozone Depleting Substances
PACER Plus	Pacific Agreement on Closer Economic Relations
PGA	Partner Government Agency
PRISE	Pacific Regional Integration Support Programme
SAD	Single Administration Document
SDGs	Sustainable Development Goals
SIDS	Small Island Developing States
SIGMAT	Interconnected System for the Management of Goods in Transit
TEU	Twenty-Foot Equivalent Unit
TIR-EPD	International Road Transport – Electronic Pre-Declaration
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UPU	Universal Postal Union
WB	World Bank
WCO	World Customs Organization
WTO	World Trade Organization
WEEE	Waste Electrical and Electronic Equipment
XML	Extensible Markup Language

CONTENTS

Foreword **03**

Abbreviations **04**

1. Overview **08**

1.1. ASYCUDA Journey 09

1.2. ASYCUDA Mandate 10

1.3. ASYCUDA and the SDGs 11

2. Funding & Expenditure **12**

2.1. ASYCUDA Budget 12

2.2. ASYCUDA Expenditure 13

3. ASYCUDA Impact 2022/23 . . . . . **15**

4. ASYCUDA Solutions **17**

4.1. ASYCUDAWorld 17

4.2. ASYPM 17

4.3. ASYREC 18

4.4. eCITES 18

4.5. ASYHUB 18

4.6. ASYPCD 18

4.7. ASYSPS 19

4.8. ASYPX 19

4.9. Single Window Implementation 19

5. Climate Smart Trade Facilitation **20**

5.1. Paperless and Contactless Customs Clearance 20

5.2. Green Transport and Logistics 22

5.3. Improving Trade Efficiency to Reduce Emissions 23

5.4. Enforcement of Environmental Regulations 24

6. Activities & Highlights **27**

6.1. Single Window 27

6.2. National ASYCUDA Projects 33

6.3. Regional Deployment 36

6.4. International Collaboration 44

Endnotes **48**

102 ASYCUDA COMMUNITY

38 LDCs / 23 LLDCs / 41 SIDS

AMERICAS AND THE CARIBBEAN ISLANDS

- Anguilla
- Antigua and Barbuda
- Aruba
- Barbados
- Belize
- Bonaire, Sint Eustatius and Saba
- Bolivia (Plurinational State of)
- Curaçao
- Dominica
- El Salvador
- Grenada
- Guyana
- Haiti
- Jamaica
- Montserrat
- Nicaragua
- Puerto Rico
- Saint Kitts and Nevis
- Saint Lucia
- Saint Pierre and Miquelon
- Saint Vincent and the Grenadines
- Suriname
- Trinidad and Tobago
- Turks and Caicos
- Venezuela (Bolivarian Republic of)

AFRICA

- Angola
- Benin
- Burkina Faso
- Burundi
- Cabo Verde
- Central African Republic (the)
- Chad
- Comoros (the)
- Congo (the)
- Côte d'Ivoire
- Democratic Republic of the Congo (the)
- Djibouti
- Equatorial Guinea

EUROPE AND CENTRAL ASIA

- Afghanistan
- Albania
- Bosnia and Herzegovina
- Georgia
- Gibraltar
- Kazakhstan
- Kosovo (United Nations Administrative Region, Security Council resolution 1244 (1999))
- Republic of Moldova (the)
- Tajikistan
- Turkmenistan

MIDDLE EAST

- Iraq
- Jordan
- Lebanon
- State of Palestine
- Syrian Arab Republic (the)
- Yemen

- Eritrea
- Eswatini
- Gabon
- Gambia (the)
- Guinea
- Guinea-Bissau
- Lesotho
- Liberia
- Libya
- Madagascar
- Malawi
- Mali
- Mauritania
- Mozambique
- Namibia
- Niger (the)
- Rwanda
- Saint Helena
- Sao Tome and Principe
- Seychelles
- Sierra Leone
- Sudan (the)
- Togo
- Uganda
- Zambia
- Zimbabwe

ASIA AND PACIFIC ISLANDS

- Bangladesh
- Cambodia
- Cook Islands
- Fiji
- Kiribati
- Lao People's Democratic Republic (the)
- Maldives
- Marshall Islands (the)
- Micronesia (Federated States of)
- Nauru
- Nepal
- New Caledonia
- Niue
- Palau
- Papua New Guinea
- Samoa
- Solomon Islands
- Sri Lanka
- Timor-Leste
- Tonga
- Tuvalu
- Vanuatu

1 OVERVIEW

Digital technology is a key component in delivering the green transition. Sustainable supply chains and environmental monitoring can only be achieved through the innovative and efficient use of technology. While the elimination of paper is the evident benefit of increased technology, there are other significant environmental benefits to digitalization. For example, the exchange of electronic data and interconnection of trade stakeholders facilitates better environmental risk management, improved logistical efficiency, stronger performance measurement and the ability to assess compliance and monitoring throughout the supply chain. However, one particular challenge is that technology is not accessible to all.

ASYCUDA responds to this by transferring technology and know-how. As a demand driven programme, ASYCUDA acts on government requests for technical assistance, by offering the latest technologies to digitalize trade processes and procedures. ASYCUDA systems are then customized to meet the specific needs of each user country. Local IT, customs and partner government agency (PGA) staff are upskilled to use, adapt and manage the new tools through comprehensive training programmes. For example, in 2022, ASYCUDA delivered over 300 training sessions to over 3,000 participants. Ownership of these customized systems is then handed over to the countries that receive technical assistance – and with the knowledge that ASYCUDA experts can be on hand to provide support when needed.

In addition to its well-recognized economic and social impacts, ASYCUDA strives to enable user countries to reduce their own ecological footprints by developing cutting edge IT solutions that contribute positively to climate change; biodiversity and ecosystems; and the environmentally sound management of chemicals and waste. These solutions not only help governments to better monitor trade but also to comply with their international obligations.

Electronic Single Window systems (eSW) based on ASYCUDA technology are helping user countries such as Timor-Leste and Vanuatu to monitor and track the trade in hazardous and ozone depleting substances. Built in collaboration with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat, ASYCUDA's eCITES solution helps to preserve ecosystems and biodiversity through the digitalization of procedures for the international trade of endangered species, currently implemented in Sri Lanka and Mozambique. In Albania, ASYCUDAWorld was adapted to undertake the automatic calculation and collection of taxes on single-use plastic and glass packaging materials, as well as a carbon tax. In sum, ASYCUDA delivers new technologies, builds digital capacities, helps countries to increase customs revenues, enhance transparency, cuts red tape in trade, and at the same time reduce environmental footprints.

The "ASYCUDA Report 2022/23 – Accelerating Climate Smart Trade Facilitation" details the activities, achievements, impact and new solutions developed by ASYCUDA, while also focusing on its contributions to improve environmental outcomes.

1.1. ASYCUDA Journey

In the early 1980s – at a time when the use of personal computers was rare in developing countries – UNCTAD was called upon by the Economic Community of West African States (ECOWAS) to help member States with the compilation of international trade statistics. It was soon realized that the ideal point at which to collect such data was at customs, being the location at which goods enter or leave a country. Very quickly, it became clear that the modernization and computerization of customs processes would not only enable the gathering of the required data, but also have the potential to boost member States' ability to engage in international trade. With that realization, in 1981, ASYCUDA was created. Even from that early stage, ASYCUDA demonstrated genuine value by helping UNCTAD member States generate essential international trade data, improve processes to increase access to global markets and support governments with the collection of correct revenues owed by traders.

Today, over four decades after its formation, ASYCUDA has released four versions of its flagship customs management software[1] that is operational in 102 countries and territories; supported 11 countries to build eSW for trade; developed tailored software to enhance countries' global trade potential; and helped user countries to deliver on their commitments under multiple international treaties such as the World Trade Organization (WTO) Trade Facilitation Agreement (TFA), Paris Agreement, CITES Convention, Montreal Protocol, and Basel, Rotterdam and Stockholm Conventions.

ASYCUDA was created when IT technologies were only starting to become accessible to populations in developed countries. Today, personal computer use is ubiquitous, but the digital divides continue to challenge those in developing countries. ASYCUDA will continue to help developing countries to access and use the latest technologies to modernize and automate trade processes and procedures. Through this collaboration, ASYCUDA will help government to better capitalize upon the growth and development potential of international trade.

1.2. ASYCUDA Mandate

ASYCUDA is currently operational in 102 countries and territories. They represent 83% of least developed countries (LDCs), 66% of landlocked developing countries (LLDCs) and 59% of small island developing states (SIDS). The reach of ASYCUDA's technical assistance is well recognized within the United Nations and particularly by UNCTAD member States.

During UNCTAD15, the organization's most recent ministerial conference, ASYCUDA's mandate was reasserted in paragraph 127 (c) of the Bridgetown Covenant, which notes that UNCTAD should "continue to provide assistance to developing countries to design and implement policies and actions aimed at improving the efficiency of trade transactions as well as the management of transport operations; it should also continue to cooperate with member States in implementing the Automated System for Customs Data (ASYCUDA); UNCTAD should also continue its work on taxation as it relates to investment policy".

In Paragraph 127 (n), the Covenant recognizes the importance of UNCTAD trade facilitation initiatives – the means by which ASYCUDA delivers its impact – noting that the organization should "continue and reinforce its work through its three pillars to support implementation of trade facilitation reforms, including the Agreement on Trade Facilitation of the World Trade Organization, and enhance its support to the development and the implementation of appropriate legal and regulatory frameworks that reduce trade transaction costs".

1.3. ASYCUDA and the SDGs

The deadline to achieve the 2030 Agenda is fast approaching and it is critical that UN agencies and the broader international community support member States to accelerate progress towards the SDGs. ASYCUDA's technical assistance and its associated IT solutions contribute positively to the SDGs. The figure below outlines the ways in which ASYCUDA directly and indirectly impacts upon them.

Figure 1. ASYCUDA's Impacts on the SDGs

ASYCUDA core impact		ASYCUDA contributes to	
1 NO POVERTY	• Domestic resource mobilization	8 DECENT WORK AND ECONOMIC GROWTH	• Improved economic competitiveness
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	• Reduce corruption and bribery • Develop effective, accountable and transparent institutions	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	• Deployment of adapted digital solutions • Supports regional cross border infrastructure
17 PARTNERSHIPS FOR THE GOALS	• Promote effective multilateral trading system • Increase the availability of high quality data		

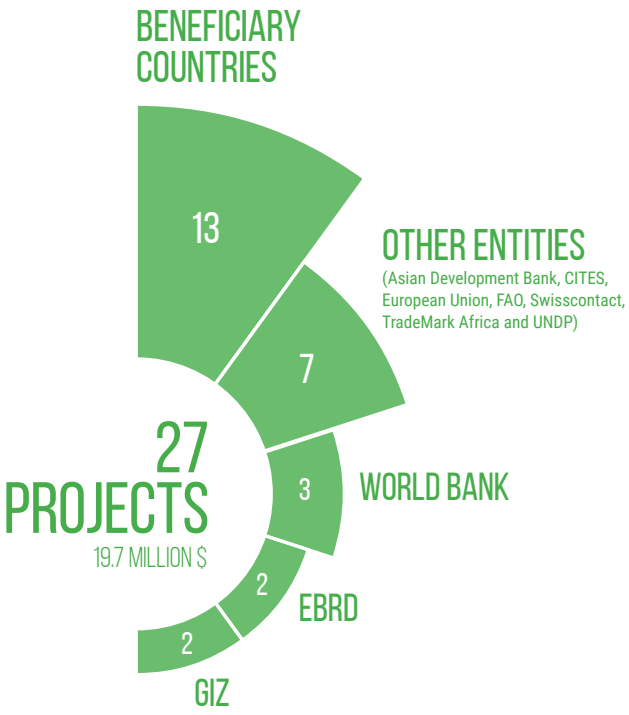
ASYCUDA also indirectly impacts SDGs:

2

FUNDING & EXPENDITURE

2.1. ASYCUDA Budget

ASYCUDA raised more than $19.7 million during 2022 through 27 new technical assistance projects and project extensions. The majority are for the maintenance, update or enhancement of ASYCUDAWorld, and for the development of tailored modules and interfaces for national eSW projects. The ASYCUDA community welcomed one new user country in 2022, Tajikistan. By end-August 2023, ASYCUDA had signed 15 new technical assistance projects and extensions, for the sum of $12m with more in the pipeline. All 2022/23 projects and extensions are listed in table 1.



Funding stems from beneficiary governments (13 projects), World Bank (3), EBRD (2), GIZ (2), Asian Development Bank (1), CITES (1), European Union (1), FAO (1), Swisscontact (1), TradeMark Africa (1) and UNDP (1).

48 per cent of projects and extensions in 2022 were funded by beneficiary governments. This demonstrates that developing countries and transition economies see ASYCUDA as a sustainable development partner, delivering clear impact for their economies, societies and the environment.

2.2. ASYCUDA Expenditure

ASYCUDA remains UNCTAD's largest technical assistance programme, accounting for 44 per cent of its technical cooperation delivery in 2022.[2] In 2022, ASYCUDA spent $23.8 million in staff and consultancy costs at headquarters and in the field (76 per cent), official travel (8 per cent), programme support costs (10 per cent) and other costs such as hardware and equipment (6 per cent).

Table 1. New ASYCUDA Projects Signed Between 1 January 2022 – 30 September 2023

Economy/Region	Project Title	Donor	Category[a]
International	Enhancement of the ASYCUDA eCITES Base Solution	CITES	N/E
	Enabling Pre-Arrival and Pre-Departure Processing of Express Consignments Through Digital B2G Exchange Between ASYCUDAWorld and Express Operator's Platforms	GiZ	N
Afghanistan	Supporting Exemption System for Humanitarian Agencies	UNDP	E
	STFA Joint Programme for the South-Eastern Region of Afghanistan	UNDP	N
Albania	ASYHUB & ASYCUDAWorld Systems in the Albanian Customs Administration	Government	N
Angola	ASYCUDA Project in Angola	Government	E
Bangladesh	ASYCUDAWorld – ASYCUDA Support Mechanism for Asia (Addendum 3 & 4)	Government	E
Burundi	Deployment of Single Window Modules	TMEA	E
	Support Project for the Strengthening of Capacity of the Burundi Revenue Authority	Government	N
Cambodia	Improving Small Package e-Trade for SMEs (SeT4SME)	Swisscontact	N
	eCITES Feasibility Study	FAO	N
	For Customization Deployment & Piloting of a Solution for Pre-arrival/Departure Processing for Express Consignments	GIZ	N
Chad	Strengthen the use of ASYCUDAWorld in Chad	Government	N
Djibouti	Regional Economic Corridor in Djibouti	WB	N
Georgia	Development and Implementation of NTCS System of Georgia Revenue Service	EU	E
Guinea-Bissau	ASYCUDA Project in Guinea-Bissau	AfDB	N
Haiti	Dematerialization of Clearance Procedures	Government	E

Economy/Region	Project Title	Donor	Category[a]
Jamaica	ASYCUDAWorld Upgrade Project at the Jamaica Customs Agency	Government	N
Jordan	To Enhance the Digital Transformation of Jordan Customs	GiZ	N
Kazakhstan	Technical Support & Upgrade of IS ASTANA-1 (2022/2023)	Government	E
Lebanon	Implementation of ASYCUDAWorld in Lebanon	Government	E
Malawi	Southern Africa Trade and Connectivity Malawi	WB	N
Maldives	ASYCUDA Support Mechanism for the Asia Region (ASMA)	Government	E
	Development of an API for the Exchange of Customs Import Declarations and Other Payments	ADB	N
Moldova	Digitalization and Strengthening of the Operational Capacity of the Customs Services in Moldova	EBRD	N
	Development & Implementation of the National Transit System (NTS) for Customs	EU	N
Mongolia	Mongolia: Digitalization of Customs Services	EBRD	N
Nepal	ASYCUDA Support Mechanism for Asia in Nepal	Government	E
State of Palestine	Strengthen the Use of ASYCUDAWorld in State of Palestine	Government / TASDEER	N/E
Sri Lanka	ASYCUDA Support Mechanism for Asia	Government	E
Sudan (the)	ASYCUDA Support Mechanism	Government	R
Suriname	ASYCUDAWorld Consolidation	Government	E
Tajikistan	Phase Four of the Central Asia Regional Links Programme (CARS-4) Tajikistan	WB	N
Togo	ASYCUDA UPU Project in Togo	Government	N
Uganda	Uganda Electronic Single Window – Phase II	Government	E
Venezuela (Bolivarian Republic of)	ASYCUDAWorld Support to the SENIAT – New Version 4.3.3	Government	N
	ASYCUDAWorld Support to the SENIAT	Government	N
Zambia	Enhancement of ASYCUDAWorld Zambia	COMESA	N
Aruba	ASYCUDAWorld Consolidation at the Aruba Customs & Excise Department	Government	E
Bonaire, Sint Eustatius and Saba	ASYCUDAWorld Support (2022/2023)	Government	E
Kosovo (United Nations Administrative Region, Security Council resolution 1244 (1999))	ASYCUDA Project – Support of Customs	Government	E
New Caledonia	Implementation of ASYCUDAWorld in New Caledonia	Government	E

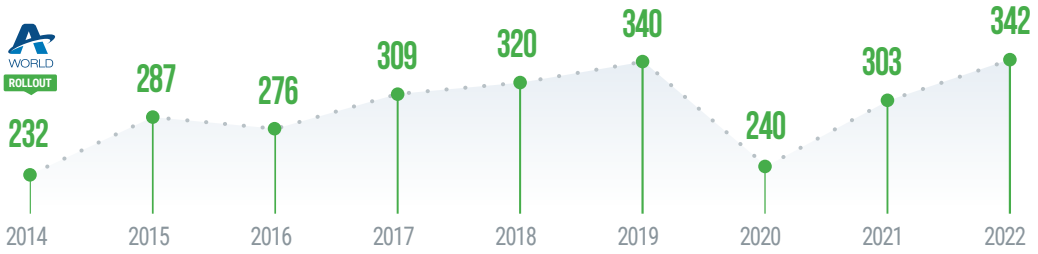
a (E) Extension, (N) New project, (R) Renewal.

3

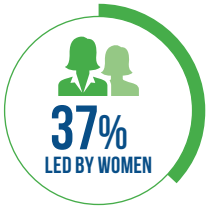
ASYCUDA IMPACT 2022/23

Aruba

Customs annual revenue evolution (Million $)



Afghanistan



capacity building
876 MSMEs

Antigua and Barbuda

in customs revenue
from 2021 to 2022

Bangladesh

in customs revenue
from 2021 to 2022

Barbados

in trade transactions
in 2022

Cambodia

in customs revenue
from 2021 to 2022

Chad

in customs revenue after ASYCUDAWorld launch at
International Airport in Nov 2022

Côte d'Ivoire

in trade transactions
in 2022

Djibouti

in the number of import, export and transit processed
from 2021 to 2022

Fiji

in trade transactions
in 2022

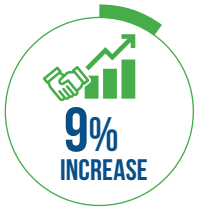
Gambia (the)

customs revenue target
YTD July 2023

Jamaica

in trade transactions
in 2022

Lao
People's Democratic Republic (the)



in trade transactions
in 2022

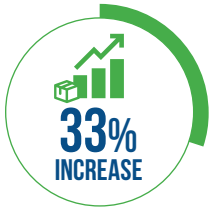
Papua New Guinea

in customs revenue
from 2021 to 2022

Republic of Moldova (the)

in customs revenue
from 2021 to 2022

Solomon Islands



in customs revenue
from 2020 to 2022

Timor-Leste

100% paperless for vehicle import permits

=

5000 sheets of paper from 2022 to 2023

Tuvalu

in customs revenue
from 2021 to 2022

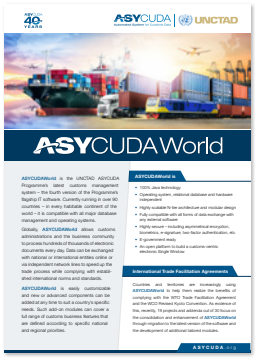
Vanuatu

Single Window processed

129 import permits
Jan-Mar 2023

4 ASYCUDA SOLUTIONS

ASYCUDA provides multiple solutions ranging from its flagship ASYCUDAWorld customs management software to several integrated, specialized platforms to support user countries or territories in their trade digitalization efforts. Some of the solutions are outlined below:



4.1. ASYCUDAWorld

ASYCUDAWorld is ASYCUDA's flagship IT system and the latest generation of its customs management software. It is implemented in 99 of the 102 ASYCUDA user countries and territories worldwide.

4.2. ASYPM

The Automated System for Performance Measurement (ASYPM), developed in 2014 in cooperation with the World Customs Organization (WCO), identifies inefficient customs management processes, in the form of 29 performance indicators to support decision makers. ASYPM is running or being implemented in nine countries (Angola, Gabon, Jamaica, Lesotho, Liberia, Madagascar, Rwanda, Zambia and Zimbabwe).

4.3. ASYREC

ASYREC, developed in cooperation with OCHA in 2020, provides a platform for the automated coordination of different humanitarian actors and facilitates the processing by customs of international relief during humanitarian crisis, natural disasters, and complex emergencies (such as the COVID-19 pandemic). ASYREC is being implemented in Vanuatu with the roll-out expected to be completed in 2023.

4.4. eCITES

eCITES, developed in 2018 with UNEP's CITES Secretariat, is a cloud-based electronic permit system that automates permit application, processing, issuance and reporting for the international trade in endangered species of fauna and flora. In 2022, two countries, Sri Lanka and Mozambique, are running eCITES.

4.5. ASYHUB

ASYHUB is an open, standardized, platform for the pre-arrival processing of cargo data and facilitates communications between ASYCUDAWorld and conveyance data provider systems. By enabling the customs clearance of consignments in advance of arrival at port, the system accelerates the release of consignments. The platform is cloud-native and microservices oriented. The software is live in Vanuatu and being piloted in Cambodia and Sri Lanka.

4.6. ASYPCD

ASYPCD, developed in 2015 with the UPU, is a module which interfaces ASYCUDAWorld at customs and UPU's CDS postal declaration system present in national post offices. It is currently active in Gibraltar, Georgia and Republic of Moldova (the).

4.7. ASYSPS

ASYCUDA Sanitary and Phytosanitary Module, ASYSPS, launched in 2021, was developed to improve biosecurity within the Vanuatu eSW. It automates the process of applying, approving, and paying for SPS certificates.

4.8. ASYPX

The ASYCUDA Passenger Processing Module, ASYPX, is designed to facilitate traveller clearance and manage risks associated with illegal migration, smuggling, organized crime, trafficking, and terrorism.

4.9. Single Window Implementation

In 2012, ASYCUDA broadened its scope to include collaborating with governments on the design, development and implementation of an integrated platform for trade-related stakeholders to process customs clearance and improve information sharing between PGAs and traders – according to UNECE Recommendation 33.

All, or a mix, of the ASYCUDA systems mentioned in this section come together to form part of an eSW implementation. ASYCUDA-based eSWs are active or being implemented in 11 countries (Barbados, Burundi, Comoros (the), Jamaica, Kazakhstan, Rwanda, Timor-Leste, Turkmenistan, Uganda, Vanuatu and Zimbabwe).

Figure 2. Electronic Single Window Benefits to Government, Business, Society, and the Environment

GOVERNMENT
- Streamlines trade procedures and reduces red tape
- Improves transparency and reduces corruption
- Facilitates inter-agency cooperation and coordination
- Enhances revenues through more efficient tax collection

BUSINESS
- Reduces the time and cost for companies adhering to trade regulations
- Improves predictability and reliability of trade procedures
- Increases competitiveness by reducing barriers to trade
- Enhances market access, domestically and internationally

SOCIETY
- Creates job opportunities and boosts economic growth
- Improves living standards through increased trade and better access to goods and services
- Enhances consumer protection by improving information about imported goods

ENVIRONMENT
- Supports sustainable trade by facilitating implementation of environmental regulations
- Promotes use of cleaner technologies and environmentally friendly products
- Encourages development of sustainable supply chains

5

CLIMATE SMART TRADE FACILITATION

Since the inception of the 2030 Agenda for Sustainable Development, there has been a greater push to ensure that global economic growth is climate smart. It is a fact that the LDCs, LLDCs and SIDS that contributed least to carbon emissions and climate change over the past few decades, disproportionately bear the burden of climate change impacts. In the words of UNCTAD Secretary-General, Ms. Rebeca Grynspan, to help these nations to grow in an environmentally sustainable manner, *"the international community must consider [LDCs] development needs and fully support them to ensure a just, balanced and sustainable low-carbon transition."* ASYCUDA supports developing countries to achieve their green growth aspirations, through the delivery of cutting-edge IT solutions to facilitate trade. It helps countries to: establish paperless and contactless clearance processes; achieve green transport and logistics; improve clearance times, reduce trade costs and emissions; and enforce environmental regulations.

5.1. Paperless and Contactless Customs Clearance

Using digital technologies to share data between government agencies and the international trading community reduces the time and emissions associated with

physical, in-person customs clearance. With ASYCUDA's help, user countries can plan for a future where paperless trade is the norm and electronic security clearances are the accepted practice. ASYCUDA has helped Angola, Aruba, Timor-Leste, Tuvalu and Vanuatu to save paper and reduce carbon emissions.

To help governments create an enabling environment for traders, UNCTAD and ASYCUDA have supported over 30 countries to implement trade information portals that reduce the need for traders to travel to a government agency to seek information. For example, the COMESA-ASYCUDA Regional Support Centre is currently developing and implementing a regional trade information portal to provide traders in the region with up-to-date information on tariffs, applicable taxes, rules and regulations. Further, ASYCUDA has delivered e-payment facilities to countries and territories around the world to reduce fraud, accelerate customs clearance and decrease emissions associated with in-person payments.

In ECOWAS, before the implementation of the *ASYCUDA SIGMAT solution for regional transit*, the transit procedure involved the processing and printing of eight documents. The procedure was complex, especially at the border, as it required the closing of the first transit document when exiting the border of the transiting country, and then manually typing in a manifest, a declaration and generating a second transit document upon entry in the destination country. The procedure was first streamlined before its automation so that the same transit document could be used throughout the transit procedure.

ASYCUDA's sanitary and phytosanitary module, ASYSPS, that automates the process of applying, approving and paying for sanitary and phytosanitary (SPS) certificates not only helps to ensure that food safety and animal and plant health standards are met, but reduces paper usage and carbon emissions associated with the customs clearance process.

These are selected examples of the experiences shared by ASYCUDA user countries, but it is worth considering that with ASYCUDA's latest customs management software being active in over 100 jurisdictions globally, ASYCUDA enables many of these to reduce paper usage and cut carbon emissions in the clearance processes.

Angola

ASYCUDAWorld
Simplified customs clearance
processes reduced from 30 to 7 steps

Aruba

ASYCUDAWorld
e-Payments saved printing
376 000 documents in 2022

Timor-Leste

ASYCUDAWorld **saved**
15 000 KG CO_2
emissions between 2015 and 2022

Vanuatu

ASYCUDAWorld
Less physical trips reduced
carbon emissions CO_2 67%

ECOWAS

SIGMAT reducing transit
paper usage by 88%

ASYSPS
99% Less **paper**

5.2. Green Transport and Logistics

With fossil fuel combustion producing 83 per cent of global CO2 emissions, the greening of all forms of transport – air, road and sea – is critical. In recent years, ASYCUDA has worked to ensure that its software covers the automation of processes throughout the supply chain, making processes and procedures more efficient, contributing to greener transport and logistics.

With shipping accounting for 3% of global greenhouse gas emissions, it is also one of the hardest to abate sectors as the world targets a shift to net-zero. For maritime transport, a solution which contributes to decarbonizing the shipping sector is the ASYHUB Maritime system. This system simplifies and automates the process of submitting sea cargo manifest information, connecting those transporting goods with the authorities responsible for clearing their release. It helps shippers to forecast and use the most fuel-efficient means of transportation – supporting logistics methodologies such as Just in Time.

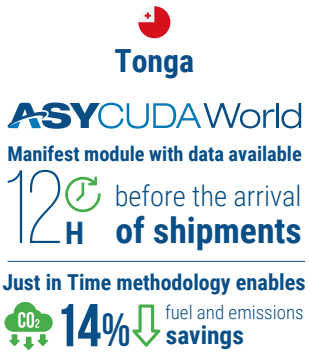
Considering the air transport industry, ASYCUDA has partnered with IATA to help reduce carbon emissions through the development of the IATA Cargo XML module. This module, designed for use in ASYCUDAWorld, helps airlines, express operators, freight forwarders and shippers to provide customs authorities with advanced cargo information that is accurate and in line with the standards established by international bodies such as WCO and United Nations. The *IATA Cargo XML module*, collects and shares advanced cargo information before departure, allows transporters to plan ahead and improve fuel efficiency. It also facilitates customs risk assessments for air cargo shipments, improves compliance with security regulations and enhances efficiency, driving trade growth and maximizing safety and security. The solution is currently implemented in Albania, Angola, Bangladesh, Jamaica, Namibia, Seychelles, Uganda and Zambia.

In Turkmenistan, to help reduce the environmental impact of road transport, ASYCUDA integrated the 'International Road Transport – Electronic Pre-Declaration' (TIR-EPD) information system with ASYCUDAWorld's transit module for the automatic exchange of electronic information between the International Road Transport Union (IRU) and customs. Road transit automation and facilitation is of paramount importance in Turkmenistan as approximately 75 per cent of declarations are transit declarations.

Further, ASYCUDA is working with governments, multilateral agencies and other partners to boost regional collaboration that improves the flow of consignments across borders, reducing the carbon emissions associated with cargo transportation.

The simplification and subsequent automation of the transit process through SIGMAT, has led to trucks crossing borders faster as the required transit documentation is generated when the truck leaves the transit departure office. As evidence of the improvement, the average transit time from departure to arrival office in the corridor Abidjan-Ouagadougou is now seven hours compared to more than two weeks before the implementation of SIGMAT.[3]

ASYCUDAWorld helped governments to greening their customs operations while supporting Just in Time supply chain management. For example, in Tonga, use of the manifest module achieved emissions savings of 14 per cent.



5.3. Improving Trade Efficiency to Reduce Emissions

Digitalization and automation help customs to increase operational efficiency and, in turn, contribute to the lowering of emissions associated with the import, export and transit of consignments. ASYCUDAWorld helps to generate processing efficiencies that save traders time and money. To take one case, in Bangladesh, ASYCUDAWorld helped to simplify and accelerate the release of consignments by customs with 82% of declarations being processed within three days.

eSWs further contribute to decreasing trade costs and clearance times by digitally connecting government agencies responsible for approving the release of consignments. As an example, ASYCUDA supported the Government of Jamaica with the implementation of an eSW based on ASYCUDA technology that has helped overall clearance times drop from several days to 32 hours, while also saving considerable associated costs.

Digital tools can also be used to manage risks and enhance supply chain efficiency. For example, ASYCUDAWorld provides customs with the facility to tag trusted traders as low risk, reducing the need for physical inspections and accelerating the import and export of consignments. In Belize, customs implemented a Trusted Trader Programme (TTP) based on voluntary compliance by economic operators. TTP allowed qualified traders to establish internal controls in trade operations while customs minimized the intervention rate of trusted traders' consignments through ASYCUDAWorld. Over a five-year period, the customs intervention rate fell from 91% to 45%. TTP also helped to decrease the time to import by 38% over a 48-month period.

5.4. Enforcement of Environmental Regulations

Over the years, the international community has reached multiple legally binding agreements to protect the global environment. Customs authorities whose governments are signatories to these agreements have a responsibility to ensure their effective implementation on the ground.

ASYCUDA supports customs with the tools to monitor the legal trade and prevent the illegal trade in Ozone Depleting Substances (banned under the Montreal protocol). The ASYODS module is specifically designed for use in an eSW to manage the trade in such substances and helps user customs agencies to contribute to global efforts to gradually recover the ozone layer. Vanuatu launched ASYODS in 2022 as part of the country's eSW, granting 350 ODS permits in 2022. In 2023, Timor-Leste also implemented ASYODS, with Jamaica expected to launch the system in the near future.

Sri Lanka

eCITES processed

1178 permits in 2022

Processing time reduced from

5 Days to **27 Hours**

In terms of preserving critical biodiversity, ASYCUDA has partnered with UNEP's CITES Secretariat to develop the eCITES tool. This web-based system helps customs and management authorities to quickly and efficiently manage the legal trade, and prevent the illegal trade, of endangered species. Sri Lanka is an eCITES pilot country that is benefiting from the eCITES system. The eCITES system is further detailed in 6.4.

ASYCUDA also supports countries with specific requests to improve certain environmental aspects of their customized ASYCUDAWorld system. In Gibraltar, to help the territory to manage the trade of hazardous substances, the ASYCUDAWorld declaration module was tailored to comply with international and national regulations that cover the import of electrical and electronic equipment (EEE). In ASYCUDAWorld, the EU's Waste Electrical and Electronic Equipment (WEEE) form is now automatically generated from the declaration and the collection of a tax for environmental waste automated.

As another example, the Government of Bosnia and Herzegovina introduced laws to encourage the purchase and use of hybrid, electric and plug-in vehicles by suspending or reducing customs duties on imports and limiting the import of non-environmentally friendly vehicles by making such vehicles liable for green taxes. Customs has established a one-stop-shop for vehicle import and registration, including the application of vehicle taxation policies. It also enforces a progressive excise tax based on CO2 emissions and tax reductions for the import of zero and low-emission vehicles.

Council of Ministers of Bosnia and Herzegovina, affirming cooperation with UNCTAD's ASYCUDA Programme

In Bosnia and Herzegovina's ASYCUDAWorld, the Single Administration Document (SAD) declaration was tailored to capture the information needed to automate this process. These measures are bearing fruit as the number of hybrid and electric cars increased by 50 per cent in 2022.[4]

Box 1. Commitment to Green Customs

The WCO defines green customs as strengthening the role of customs in implementing green trade policies for environmental protection.[5]

At an operational level, the green customs concept deals with the application of quotas, taxes and exemptions; the review of the Harmonized System (HS) tariff; and compliance with environmental international standards and conventions. One strength of ASYCUDA systems is that they can easily be adapted to change, whether for compliance with international standards and regulations; application of emergency actions due to natural disasters or security breaches; or implementation of quotas, new taxes and exemptions. For instance, ASYCUDA cooperates with WCO to efficiently implement and maintain its Data Model within ASYCUDAWorld. The HS tariff is updated and integrated in all user countries seamlessly without ASYCUDA's intervention. Thus, as the WCO seeks to add or amend HS codes to better support green customs, ASYCUDA systems will be adapted to evolve with such changes.

Table 2. Trade Measures for Environmental Protection & their Implementation in ASYCUDA Systems

Trade Measures	ASYCUDA's Support	ASYCUDA's Environmental Impact Examples

Paperless & Contactless Customs Clearance	• ASYCUDAWorld
	• eSW
	• ASYHUB
	• ASYPM
	• ASYREC
	• eCITES
		• Angola: 70% reduction in paper use
		• Aruba: 99.8% of remote online payments
		• ECOWAS' SIGMAT: 88% reduction in paper use
		• Timor Leste:
		  • Saving 14 paper documents per transaction
		  • Clearance times for biosecurity goods reduced from more than a week to less than two days thanks to eSW
		• Vanuatu: Reduction of paper use by 99% and trips by 98% for SPS applications processing

Trade Measures	ASYCUDA's Support	ASYCUDA's Environmental Impact Examples

Green Transport & Logistics	• ASYCUDAWorld
	• eSW
	• ASYHUB
		• Jamaica: Timely submissions of manifests through IATA Cargo-XML module improved by 40%
		• Tonga: Manifest data available at least 12 hours before the arrival of shipments
		• Turkmenistan: 350,000 road transit declarations processed through ASYCUDAWorld's TIR-EPD module per annum
		• Vanuatu:
		  • 100% availability of postal consignments and related data in eSW
		  • No need for customs officer or broker services

Improving Clearance Times & Costs	• ASYCUDAWorld • eSW • ASYHUB • ASYPM • ASYREC	• Belize: WB "Time to Import" indicator decreased from 48 hours to 30 hours year-on-year • ECOWAS' SIGMAT: Average transit time from departure to arrival office in the corridor Abidjan-Ouagadougou reduced to approx. seven hours • Jamaica: Overall clearance time reduced to 32 hours following ASYCUDAWorld and eSW implementation • Rwanda: $18 million saved in trade costs over three years following eSW implementation • Turkmenistan: Cargo clearance 14 times quicker • Vanuatu: Postal consignments cleared within the day of arrival compared to more than three days before the exchange of data between eSW and UPU's Customs Declaration System (CDS)

Enforcing Environmental Regulations	• ASYCUDAWorld
	• eSW
	• ASYREC
	• eCITES
		• Bosnia and Herzegovina:
		  • Customization of ASYCUDAWorld to comply with national and regional green import taxations and regulations
		  • Number of hybrid and electric cars increased by 50%
		• Gibraltar: Customization of ASYCUDAWorld to comply with EU's Waste Electrical and Electronic Equipment (WEEE) regulations
		• Timor-Leste and Vanuatu: Implementation of ASYODS to monitor the legal trade and prevent the illegal trade in Ozone Depleting Substances banned under the Montreal Protocol
		• Sri Lanka:
		  • 96% of requests accepted and compliant with CITES regulations
		  • Average permit processing time fell from 120 hours to 27 hours

6 ACTIVITIES & HIGHLIGHTS

This section showcases selected ASYCUDA operations during the reporting period 2022/23. It highlights good practices in eSW implementation, national and regional programmes, the launch of new ASYCUDA modules, and international collaborations that underpin ASYCUDA operations.

6.1. Single Window

Jamaica Single Window: Monitoring Hazardous Substances

Since the launch of the ASYCUDA-based eSW in 2020 and the inclusion of three government agencies responsible for issuing import and export licences and permits, the system has helped to improve the way in which businesses operate. By the end of 2022, 10 PGAs had joined the Jamaica Single Window For Trade (JSWIFT) and the government targets the eventual inclusion of 20 PGAs.

In 2022, the Hazardous Substances Regulatory Authority (HSRA) was onboarded into JSWIFT. The Government of Jamaica officially launched HSRA in October 2020 to ensure safety and security in the operation of facilities involving ionizing radiation and nuclear technology in the country. The functions of HSRA include licensing the use of ionizing radiation sources and nuclear technologies; regulatory compliance; and collaboration with other authorities involved in the process.[6]

The services delivered by HSRA's onboarding into the eSW facilitate the processing of hazardous substance import and export permits. JSWIFT introduced checks to verify the registration of traders and controlled commodities. The further make the movement of hazardous substances more transparent and prevent the storage of dangerous levels of hazardous substances. Finally, it also enhance cooperation with customs and PGAs on the security, inspection and clearance of such goods as recommended by the WCO SAFE Framework of Standards.

The effective elimination or management of disease-carrying pests using nuclear technology also enhances food security and safety. We are able to reduce waste"

Minister of Industry, Investment and Commerce, Government of Jamaica, Hon. Audley Shaw [7]

Timor-Leste: Sustainable Economic Growth and Environmental Protection

Launched in 2021, the Timor-Leste Electronic Single Window (TileSW) based on ASYCUDA technology connects customs, the private sector, and PGAs that deal with the movement of people and goods, to facilitate the clearance of goods traded internationally. Aware of the environmental challenges, future climate change scenarios, and the global push for a post-COVID-19 green recovery, TileSW is built as an environmentally-friendly platform that reduces paper consumption and carbon emissions.

In 2022, TileSW made significant progress. Serviços Médicos Autónomos e Equipamentos de Saúde (SAMES), a public institution within the Ministry of Health responsible for the procurement, storage and distribution of drugs and medical supplies for Timor-Leste's health facilities, joined four other agencies on the eSW platform. During 2022, SAMES submitted 173 customs declarations without the intervention of customs brokers. Significant time was saved thanks to information being made available prior to the arrival of goods, as well as brokerage costs of $100 per declaration[8]. By using TileSW, SAMES was able to improve the accuracy of data provided, and to lower the number of physical trips to customs, thus generating less CO2 emissions.

The National Directorate for External Trade (DNCE) and the National Directorate of Land Transport (DNTT) joined TileSW in March and April 2022 respectively. They are responsible for the trade, pre-approval and registration of commercial vehicles. In 2022, DNCE granted 1,091 commercial vehicle import permits for 141 vehicle dealers that are registered on the platform. DNTT granted 963 permits for the total registration of 6,586 commercial vehicles. Further, customs granted 151 permits for individual vehicles. This is an excellent example of how eSW systems allow for enhanced collaboration among government administrations, including customs, to facilitate and encourage trade.

In 2022, the TileSW module for biosecurity processed 470 import and 42 export permits. Clearance times were reduced from more than a week to less than two days, with only one physical trip required to process and collect a permit. TileSW's capabilities were expanded again in July 2022 when, under the remit of the Ministry of Agriculture and Fisheries, TileSW's National Directorate of Quarantine and Biosecurity module went live. It now enables the granting of permits for the trade of food and plants.

Further, in September 2022, the port authority at the new Tibar Bay Port joined the eSW. Prior to onboarding, its operational processes were improved and a mechanism to share manifest and declaration data between ASYCUDAWorld and the port management system was developed. Between September 2022 and the end of the year, 8,032 import and 255 export containers were cleared. Overall, at Tibar Bay Port, the average customs clearance time dropped from six to two days.

Clearance processing time reduced from 1 week to 2 Days

The potential benefits of the Single Window are great and reducing our need for paper processing via the digitalization and automatic exchange of information is fully aligned with this government's reform strategy"

Timor-Leste Prime Minister, H.E. Taur Matan Ruak [9]

Turkmenistan Single Window and Transit Module

Following the success of ASYCUDAWorld, in 2020, the Turkmenistan government, UNCTAD, and UNDP signed an agreement to collaborate on building an eSW, bringing together 19 PGAs. The project aims to help the State Customs Service (SCS) to configure and implement an eSW system.

In 2022, customs teams and ASYCUDA analyzed legislation, procedures, documents and interagency business processes for the control of import-export operations. Subsequently, the requirements for hardware, ICT infrastructure and software were analyzed and determined. The eSW portal was customized in compliance with national requirements and regulations. One main achievement was the installation at customs of ASYCER, the ASYCUDA module that grants sanitary and phytosanitary certificates.

In parallel with the eSW development, in October 2022, SCS integrated the International Road Transport – Electronic Pre-Declaration information system (TIR-EPD) with ASYCUDAWorld's transit module. TIR-EPD technology is a secure interface for the automatic exchange of electronic information on goods transported by road and intended for import and transit between IRU and customs. Such electronic information enables customs authorities to improve risk management; monitor pricing, quantity and type of goods; accelerate trade; and increase the country's transport and transit potential.

Using tried-and-tested UN conventions, such as TIR and CMR, and their digital versions, eTIR and e-CMR, will reinforce security, transparency and trust among all actors involved along the supply chain, while significantly improving the flow of goods"

IRU Secretary-General, Mr. Umberto de Pretto [10]

Vanuatu: Single Window for Trade and Environment

In 2021, Vanuatu launched its electronic Single Window (VeSW) based on ASYCUDA technology. VeSW seeks to adopt trade facilitation measures, such as the automation and integration of PGA processes and procedures.

In early 2022, Vanuatu successfully onboarded ASYODS within VeSW, designed to control and monitor the import of ozone-depleting substances. It assists the Department of Environment in the global effort to protect the ozone layer and is the second module that the Ministry of Climate Change launched under the eSW.

From January to June 2022, 212 ODS permits were granted in the eSW.

In September 2022, another module was successfully launched in Port Vila by the Telecommunications Radiocommunications and Broadcasting Regulator (TRBR) to facilitate the application and processing of permits for the importation of radiocommunication and telecommunication terminal equipment. During the first quarter of 2023, 129 import permits were processed in VeSW.

In 2022, Vanuatu also started work on adding the duty concession module to the VeSW, as well as the ASYREC system. The ASYREC implementation project was officially launched in May 2022. ASYREC will help the Vanuatu National Disaster Management Office (NDMO) to effectively coordinate, facilitate and monitor the import and distribution of humanitarian supplies during an emergency. Vanuatu will be the first country worldwide to pilot ASYREC.

In preparation for the implementation of eCITES, a national workshop was conducted for environment and law enforcement officials, and other stakeholders in Port Vila on 29 and 30 September 2022.

As an indicator of progress, the United Nations Global Survey on Digital and Sustainable Trade Facilitation awarded Vanuatu a 71 per cent trade facilitation score in 2023, compared with 50 per cent in 2019.[11]

Once the TRBR starts issuing these permits through the module, it will be linked to customs clearance systems to access more accurate information of the import goods along with their quantities"

Vanuatu Electronic Single Window Project Manager, Mr. Stanley Trief

Zimbabwe Electronic Single Window Boosting Trade and Transparency

In June 2022, ASYCUDA and the Government of Zimbabwe launched a project to develop an electronic Single Window, ZeSW, to make it easier for traders to comply with Zimbabwe Revenue Authority (ZIMRA) requirements and obtain clearances from PGAs. As well as accelerating customs clearances, the system brings increased transparency by providing real-time clearance statuses.

Two ZeSW modules were developed in 2022: one to manage and monitor certificates of origin, and one for the Port Health. Within the Ministry of Health, the Port Health department inspects vaccination certificates, imported foodstuffs and chemicals. To join the ZeSW, Port Health processes were automated and linked with customs' systems to exchange risk assessment data. By the end of 2022, ZIMRA organized user testing of both modules for their final validation by stakeholders.

Further, in 2022, two benchmarking missions were undertaken by ZIMRA to Jamaica and Uganda to learn from their experiences implementing ASYCUDA-based eSW systems. Also, a workshop for Ministry of Agriculture staff was delivered to help them better understand the eSW system and its benefits.

ZeSW went live in October 2023 with Zimbabwe's Port Health Authority as the first PGA.[12]

The launch of the Zimbabwe Single Window is in fulfillment of the Trade Facilitation Agreement where we made a commitment to create ease of doing business by creating a single portal where information required by the various stakeholders at the ports will be submitted once […] it will be processed in the back end. With the launch of the Zimbabwe electronic Single Window […] there is minimum human intervention in terms of face-to-face interactions. It will enhance our process efficiencies, once you have process efficiencies, you then notice that corruption tends to go down"

ZIMRA Acting Commissioner General, Ms. Regina Chinamasa [13]

Benefits to be achieved upon successful implementation of the Single Window in Zimbabwe include faster movement of goods through ports of entry, easy access to information, online access to information, enhanced collections of fees, duties and penalties, reductions in corruption and illegal trade activities and enhanced transparency and accountability"

Permanent Secretary in the Ministry of Finance and Economic Development, Government of Zimbabwe, Mr. George Guvamatanga [14]

6.2. National ASYCUDA Projects

Chad, Full Automation of Customs Procedures

In 2021, the Government of Chad and ASYCUDA signed a technical assistance project for the modernization of customs procedures through the implementation of ASYCUDAWorld. The project involved the migration from ASYCUDA++, the third generation of the ASYCUDA customs management system, to ASYCUDAWorld.

The first activities of the project were to simplify and streamline processes through legal reforms and ensure customs procedures were as efficient as possible. The ASYCUDAWorld prototype was then configured and computer servers setup. The customs IT team was then trained on how to configure and use the system.

ASYCUDAWorld was successfully launched at the International Airport of N'djamena on 31 October 2022. Newly introduced procedures cover all customs clearance regimes, including freight, transit, inspection, selectivity, accounting, automated calculation of taxes and duties and release of goods.

[ASYCUDAWorld] will save users' time and money for all customs operations and will especially contribute to effectively fighting fraud and corruption for better revenue mobilization"

Minister of Finance and Budget, Government of Chad, Mr. Tahir Hamit Nguilin [15]

Tajikistan's Modernization of Customs and International Trade Capacities

In 2022, ASYCUDA and Tajikistan Customs Service agreed a four-year technical assistance project, focused on the modernization and automation of customs.

The first phase aims to analyze and revise customs business processes to deliver ASYCUDAWorld technical and functional training to develop the interfaces for data exchange between ASYCUDAWorld and the national eSW; and to pilot the ASYCUDAWorld declaration and transit components. ASYCUDAWorld prototype was completed as of September 2023.

The second phase will provide for the full maintenance and operation of ASYCUDAWorld. It will also involve the setting up of an ASYCUDA Disaster Recovery Centre and subsequent national roll-out of ASYCUDAWorld.

The third and final phase will involve the development of additional modules and tools, and exchange of trade data, including the full implementation of the ASYCUDAWorld Dashboard and Statistical Reporting; electronic exchange of customs data with Kazakhstan, Kyrgyzstan and Uzbekistan; and the implementation of ASYPM, ASYREC, Post and Express consignment modules.

This very ambitious project expects to increase customs revenues and shorten customs clearance times, contributing to improved competitiveness. Further, ASYCUDAWorld will help provide the Government of Tajikistan with reliable trade data.

Becoming 100% paperless will involve the full automation of all procedures in every Tajikistan customs offices; the implementation of electronic signatures; automated exchange of certificates, licences and permits; introduction of e-payment functionalities; and the automatic exchange of data with PGAs.

The Head of the Tajikistan Customs Service, Mr. Karimzoda Khurshed Abdurahmon, and UNCTAD Secretary-General, Ms. Rebeca Grynspan, launched the project in October 2022.

The ASYCUDA project has come at exactly the right time to provide the necessary support in this grand strategy that will position Tajikistan as a land-linked transit hub, as a proactive player in the regional trade and economic processes of a booming Central Asia"

UNCTAD Secretary-General Ms. Rebeca Grynspan [16]

The project will help create a favorable environment for business development and improve Tajikistan's international business and investment ratings"

Mr. Karimzoda Khurshed Abdurahmon,
Head of the Tajikistan Customs Service [17]

Box 2. Other ASYCUDA Operations Around the World in 2022/2023

ASYCUDAWorld, the latest generation of ASYCUDA's IT customs management system, was implemented for the first time in Cook Islands, Iraq and Tonga, and upgraded in Albania, Belize, El Salvador, Gambia (the), Jordan, Montserrat, State of Palestine, Rwanda and Venezuela (Bolivarian Republic of).

In Afghanistan, customs implemented a dedicated system with ASYCUDAWorld to streamline the procedure of requesting tax exemptions and reducing the clearance time for humanitarian relief and other tax-exempt goods. During 2022, 46 workshops were conducted by UNCTAD and ASYCUDA which built the capacities of 876 MSMEs, 37 per cent of which are led by women.

In Albania, customs and ASYCUDA enhanced the Albania-Kosovo (United Nations Administrative Region, Security Council resolution 1244 (1999)) Common Transit Information Exchange and implemented an interface for the automatic exchange of tax registration numbers.

In Barbados, the Ministry of Energy, Small Business, and Entrepreneurship was identified as the lead agency with overall responsibility for the implementation of the eSW based on ASYCUDA technology. A Technical Working Group, composed of representatives from key cross-border government agencies, was established to work on the legislative review with UNCTAD.

In Burundi, an eSW module for the automated management of tax exemptions by the Agency for Development was successfully deployed.

In Iraq, the ASYCUDAWorld prototype was installed on servers and adapted to national specifications. A legal analysis of the customs environment was conducted, and a high-level awareness seminar for PGAs, private sector and international community was organized in Baghdad.

In September 2022, the Republic of Moldova (the) customs service started piloting the ASYCUDA Postal Customs Declaration (ASYPCD) module to simplify the process for smaller firms to engage in e-commerce, making it more affordable and efficient to export their products.

Togo has become the third country, after Côte d'Ivoire and Madagascar, to install ASYADN, the software module that facilitates the compilation of trade statistics for WTO via the extraction of trade and customs data.

The ASYCUDA Regional Centre for the Americas undertook several activities in the Caribbean region. In addition to the provision of technical support for the upgrade of ASYCUDAWorld in Belize and Montserrat, it enhanced ASYCUDAWorld with new interfaces and interoperability with government systems setup in the Caribbean Netherlands.

6.3. Regional Deployment

ASYCUDA Regional Programme in Pacific-SIDS

In 2022, ASYCUDA enhanced the trade facilitation capabilities of Pacific Small Island Developing States, mostly within two regional technical cooperation projects, namely Pacific Agreement on Closer Economic Relations (PACER Plus) and the Pacific Regional Integration Support Programme (PRISE).

PACER+ & PRISE Projects
15 ASYCUDAWorld
2 e-Single Window

PACER Plus Project

In 2019, UNCTAD and six Pacific SIDS (Cook Islands, Kiribati, Nauru, Niue, Tonga, and Tuvalu) signed a project for improving the procedural efficiency of customs clearance processes and the implementation of ASYCUDAWorld. It is part of the PACER Plus trade agreement.

On 4 July 2022, the **Cook Islands** went live with their customized version of ASYCUDAWorld.

The implementation of ASYCUDAWorld simplified the country's customs clearance processes, helping to increase the pace and rate of trade, and in turn grow the domestic economy. Customs clearance by Cook Islands is now supported by ASYCUDAWorld, enabling the paperless processing of customs declarations and the collection of payments online.

Kiribati and **Tuvalu** deployed ASYCUDAWorld in December 2021. Both islands are among the world's most economically and environmentally vulnerable nations. The roll-out of ASYCUDAWorld enables the two nations to improve visibility and predictability in terms of automating import and export clearance procedures while reducing the time and cost of trading goods across their borders. Now, both nations benefit from faster processing times; have all items declared and subject to proper duties; have improved the efficiency of revenue collection; and use uniform and consistent implementation of taxes and regulations.

Tuvalu, after launching ASYCUDAWorld, reported a 20 per cent increase in revenue collection due to improved transparency, compliance and clearance efficiency.

ASYCUDAWorld automated 13 procedural steps, which required 14 paper documents and integrated seven government agencies and institutions – including the Ministry of Finance, Ministry of Transport, Ministry of Health – to help importers adhere to 10 different laws when clearing their containers.

The previously manual deferred payment facility is now fully automated and cleared of all outstanding debts. There is improved visibility and officers are alerted at different stages to ensure minimal outstanding payments. Tuvalu can now, in real-time, measure its revenue collection performance against revenue targets. Additionally, PGAs (such as the Price Controller, Bureau of Statistics, Treasury and Taxation) have access to ASYCUDAWorld and can run specific reports. Tuvalu customs collected $4.5 million in 2022. 49 sea cargo manifests were processed through ASYCUDAWorld, and 1,068 import declarations cleared for a total of 1,193 TEU containers.

In Kiribati, the Secretary of Finance was given access to view the customs dashboard, which eliminates the need for customs to calculate monthly revenue data manually and allows the ministry to run reports as required. From April to December 2022, Kiribati customs collected $11.6 million in duties and taxes. In 2022, 51 cargo manifests were processed through ASYCUDAWorld, and 1,039 declarations cleared for a total of 4,243 TEU containers.

Niue launched ASYCUDAWorld and ASYPX in January 2023. Through the ASYCUDAWorld implementation, customs target the reform and modernization of its business processes, with the system well placed to support the government mission of "Working Together to Protect the People and the Environment".

In August 2022, as part of phase one of the ASYCUDAWorld implementation, Niue customs launched the cargo manifest module. For many years, manifest submission and processing was manual, time consuming, involved printing and physical travel. The automation allows fast manifest capture and full processing; manifest generation from transit documents; bill of lading capture; generation of barcodes; automatic cross-check between cargo control and declaration processing; and reporting.

Since September 2022, Niue customs embarked on the second phase of the ASYCUDAWorld implementation project by launching the declaration module. This phase of the project enables all importers and brokers to submit their import declarations online using ASYCUDAWorld, which eliminates unnecessary paperwork and travel to and from the customs office. Niue customs will also train all importers and brokers on the declaration module.

Tragically, in January 2022, **Tonga** was devastated by a massive volcanic eruption and subsequent tsunami. As well as causing immense direct human suffering, an underwater fiber-optic cable that connects the country to high-speed internet was severed and remained offline for two weeks, making the emergency response even more challenging. The international community came together to support Tonga, responding to the emergency and providing disaster recover assistance. Despite huge challenges, just over six months on from that date, on 1 August 2022, Tonga customs successfully launched ASYCUDAWorld.

Using ASYCUDA software as a service (SaaS) ensures that ASYCUDAWorld remains online 24/7 and provides Tonga with a disaster resilient, cutting edge, customs management system.

The system […] has allowed my team to be able to carry out operational activity more effectively"

Mr. Cameron Strickland, Senior Customs Officer, Cook Islands Customs Service

Paperless customs procedures have really made it simpler for traders. They are quite happy as they are no longer required to make frequent trips to the offices. We now mostly communicate through the ASYCUDA system"

Ms. Sania Teisini, Director of Tuvalu's Revenue and Customs Department [18]

There are a lot of benefits for our private sector stakeholders. Less printing. Less travelling. You can use the system even when you are not on the island. It's a very good system for all stakeholders"

Mr. Chamberlain Pita, Senior Customs Officer, Niue Customs [19]

ASYCUDAWorld enables customs to have more and better control of goods coming in and going out of the country. Now customs can easily produce reports, make and track changes, and find existing information using the system"

Ms. Lisala Fifita, Manifest Officer at the Customs & Trade Division of Tonga [20]

With advance manifest, we can work on manifests before the vessel arrives and submit to customs well before time. Our customs broker can then start working on the customs declarations. This is very useful for a business with a shipping agent and customs broker operations such as ours"

Ms. Litea Inia, Polynesian Shipping Agency (Tonga)

The PRISE Programme's IMPACT Project

The Improving Pacific Islands Customs and Trade (IMPACT) project, aims at harmonizing customs operations across 15 Pacific islands, implementing ASYCUDAWorld in the Micronesia (Federated States of), Marshall Islands (the) and Palau, facilitating the electronic exchange of trade data in the region.

In 2022, ASYCUDA reviewed existing customs laws and regulations to ensure that the system and processes complied with all relevant legal requirements to align with WTO trade facilitation priority measures and economic partnership agreement (EPA), including other free trade agreements. A customs modernization workshop was held in Vanuatu in April 2023 with a total of 29 participants, with female representation comprising 38% of all attendees. The workshop helped initiate discussions with IMPACT countries on the level of implementation of customs related measures pertaining to the WTO TFA, Revised Kyoto Convention (RKC) and EPA.

ASYCUDA also leveraged UNCTAD's broader expertise and coordinated the delivery in June 2023 of workshops by UNCTAD specialists for participants from customs, National Trade Facilitation Committees, Ministries of Trade and Commerce, other PGAs and private sector stakeholders from Fiji, PNG, Solomon Islands and Vanuatu.

In August 2022, an ASYCUDAWorld mobilization seminar was held to raise awareness among Palau government agencies, traders and other key stakeholders. The seminar covered how ASYCUDAWorld will work in practice, explaining the new automated and paperless clearance processes as well as the need to improve trade facilitation and customs procedures. In November 2022 a similar session was held in the Micronesia (Federated States of) and in May 2023 for Marshall Islands (the). Further, in July 2023, ASYCUDAWorld functional training was delivered to national project staff from each of these three countries and system prototype development work picked up pace.

In 2023, eSW blueprints were developed and finalized for Fiji and Papua New Guinea. ASYCUDA further conducted a requirements analysis for the implementation of eSW in the two countries.

The project strengthened the technical understanding, leadership, statistical capacities and developed institutional training plans in Samoa, Tonga, Solomon Islands, and Papua New Guinea.

This digital platform allows our Customs and Tax Administration [...] to simplify and harmonize manifests and customs declarations, along with accounting, transit, and suspense procedures. This should enhance our government's capacity to fulfill its mandate in a transparent manner"

His Excellency David W. Panuelo, President of the FSM [21]

I want to thank the UN, the EU, and UNCTAD for their support in making sure that this ASYCUDA system is implemented in Palau. It's really about partnership and without strong partners like you, we wouldn't have been able to move this project forward to build a more prosperous and safer Palau"

Mr. Surangel Whipps Jr., President of Palau [22]

Reducing the time Palau moves goods in and out is one of the many interventions we support in the Pacific to promote regional economic integration"

Dr. Erja Askola, Chargé d'Affaires of the EU Delegation for the Pacific [23]

ECOWAS Automated Regional Customs Transit System

In 2017, UNCTAD and the ECOWAS Commission signed a technical assistance project to train software developers from ECOWAS member States' customs administrations and then, together, develop an automated customs transit solution for the region. Dubbed SIGMAT – translated as the Interconnected System for the Management of Goods in Transit – the system's main achievements are the implementation of an automated solution for regional transit; the reduction of manual clearance procedures and bottlenecks at borders; transparent and facilitated procedures for traders and customs administrations in the region; improved collection of taxes and facilitated exchange of trade and security data among member States.

Prior to SIGMAT, there were frequent queues of trucks at borders that caused delays and damage to the environment by generating unnecessary waste, noise, and CO2 emissions. The simplification of the transit process and its automation through SIGMAT, has led to trucks crossing borders faster as the required transit documentation is generated when a truck leaves the transit departure office, also reducing the environmental impact of the transit process.

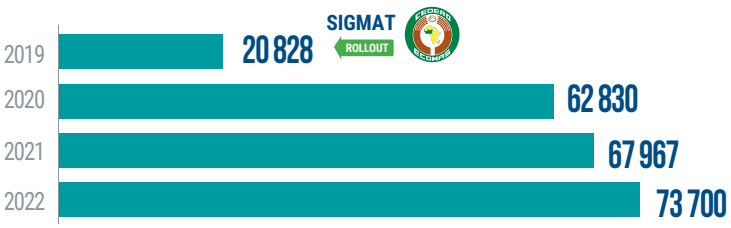
At the start of 2022, five member States, namely Benin, Burkina Faso, Côte d'Ivoire, Niger (the) and Togo, were using the SIGMAT solution, along four corridors (Abidjan-Ouagadougou, Lomé-Ouagadougou, Cotonou-Niamey and Ouagadougou-Niamey).

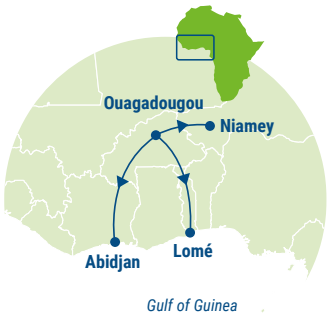
Burkina Faso and Côte d'Ivoire have even extended its use to rail transit. Customs officers and the trading community gave the SIGMAT system an 80+ per cent satisfaction rate. In Togo, customs offices responsible for transit procedures reported a 95 per cent satisfaction rate with the system.

In September 2022, the SIGMAT interconnection between Benin and Togo customs was launched. The official launch took place at the border control post of Hillacondji/Sanvee Condji. This interconnection streamlines trade between both countries; secures the international supply chain and collection of revenue; and minimizes risk and fraud.

As evidence of how SIGMAT has simplified transit and boosted regional trade, in Burkina Faso, along the three corridors of Abidjan-Ouagadougou, Lomé-Ouagadougou and Ouagadougou-Niamey, the number of transit documents generated by customs increased every year from 20,828 in 2019 to 73,700 in 2022 – with 87 per cent of transit documents and goods deemed compliant by customs at arrival.

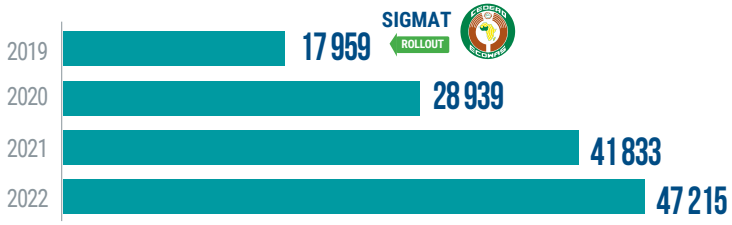
Number of transit documents generated by Burkina Faso customs





In Côte d'Ivoire, along the corridor Abidjan-Ouagadougou, the number of road transit documents generated by customs increased every year from 17,959 in 2019 to 47,215 in 2022. For rail transit, the number of transit documents went from 12,824 in 2021 to 26,113 in 2022, with 91 per cent of transit documents being deemed compliant by customs upon arrival.

Number of road transit documents generated by Côte d'Ivoire customs



The vehicles that pass through the borders normally spend days or weeks at the borders before they are cleared. With the SIGMAT project, it is now reduced to barely hours so the costs for transportation are reduced"

Mr. Wale Ajala, Director, IT Services Directorate, ECOWAS Commission [24]

6.4. International Collaboration

Enhanced Cooperation with the World Customs Organization

On 4 October 2022, UNCTAD and WCO deepened their decade-long cooperation through a memorandum of understanding (MoU) to establish a high-level consultation framework between both parties. The MoU will boost customs modernization by enabling interoperability between ASYCUDA and multiple WCO projects, increasing customs data quality and accuracy for both UNCTAD and WCO member States. 77 WCO members out of the 184 in total (42 per cent) are using ASYCUDAWorld as their integrated custom data management system.

Further, ASYCUDAWorld's conformity with WCO's Data Model will be improved to contribute to better supply chain data exchange. Using the WCO's Data Model as the internationally recognized standard helps all parties, including private sector operators, to submit the necessary data in a uniform manner, that ensures consistency and simplifies customs clearance processing.

ASYCUDA and WCO collaborate further to maintain ASYCUDA systems compliance with WCO standards, and facilitate statistics data collection and processing through ASYCUDAWorld using WCO's statistics collection methodology.

The memorandum of understanding is a robust foundation towards closer cooperation with UNCTAD. Customs has long led border modernization and this new partnership is expected to enhance this potential further and bring it to a new level"

WCO Secretary-General, Dr. Kunio Mikuriya [25]

It is worth noting that ASYCUDA systems are fully compliant with the international instruments and standards developed by the WCO. Our collaboration will be instrumental in the successful delivery of our respective goals and activities"

UNCTAD Secretary-General, Ms. Rebeca Grynspan [26]

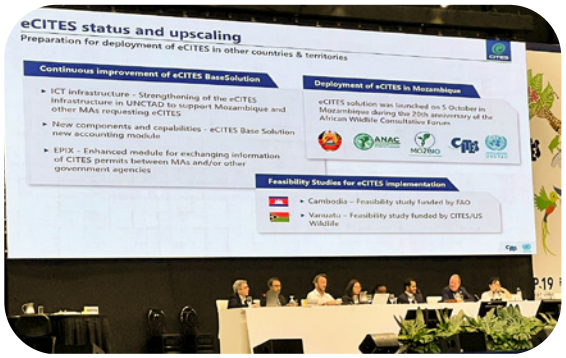
Strengthening eCITES

UNEP's Convention on the International Trade of Endangered Species of Fauna and Flora, known as CITES, regulates and controls the trade in endangered species of animals and plants. The process to regulate the export and import requires both transparency and rigor at the borders to allow legal trade to proceed while preventing illicit wildlife trade. This involves reducing clearance times, simplification and automation of clearance processes and trade procedures, and improvement of risk management and inspection by customs and border agencies.

eCITES, developed by ASYCUDA in cooperation with the CITES Secretariat, is a cloud-based electronic system offering automated support for permit application, processing, issuance and reporting for the international trade in endangered species of fauna and flora.

The system is valued by Sri Lanka's Department of Wildlife Conservation (DWC) and traders alike. In 2022, 1,178 permit requests for the trade of endangered species were issued, compared to 844 in 2020. Further, eCITES has improved compliance to rules and regulations, enabling better control and monitoring by the government. This was demonstrated in 2022, by the 96 per cent acceptance rate of permit requests. Also, the average processing time for permits fell from 120 hours in 2020 to just 27 hours in 2022.

In October 2022, eCITES v2 went live in Mozambique. Improvements to the system include the strengthening of the UNCTAD managed ICT infrastructure; integration of a new accounting module allowing for the electronic payment of taxes; and the development of an interface for the automatic cross-border exchange of CITES permits with neighbouring countries. The solution, as well as training materials, were all translated into Portuguese.[27]



In November 2022, at the CITES CoP19 held in Panama, ASYCUDA shared the experience and benefits of the implementation of eCITES in Sri Lanka and Mozambique, and announced the release of eCITES v2.

eCITES has clear advantages in efficiency, transparency, and accountability when compared to traditional paper permits. Beyond being an environmentally friendly, paper-saving, and efficient solution, it is also a powerful tool for combating illegal trade"

CITES Secretary-General, Ms. Ivonne Higuero [28]

Accelerating Maritime and Postal Customs Clearance

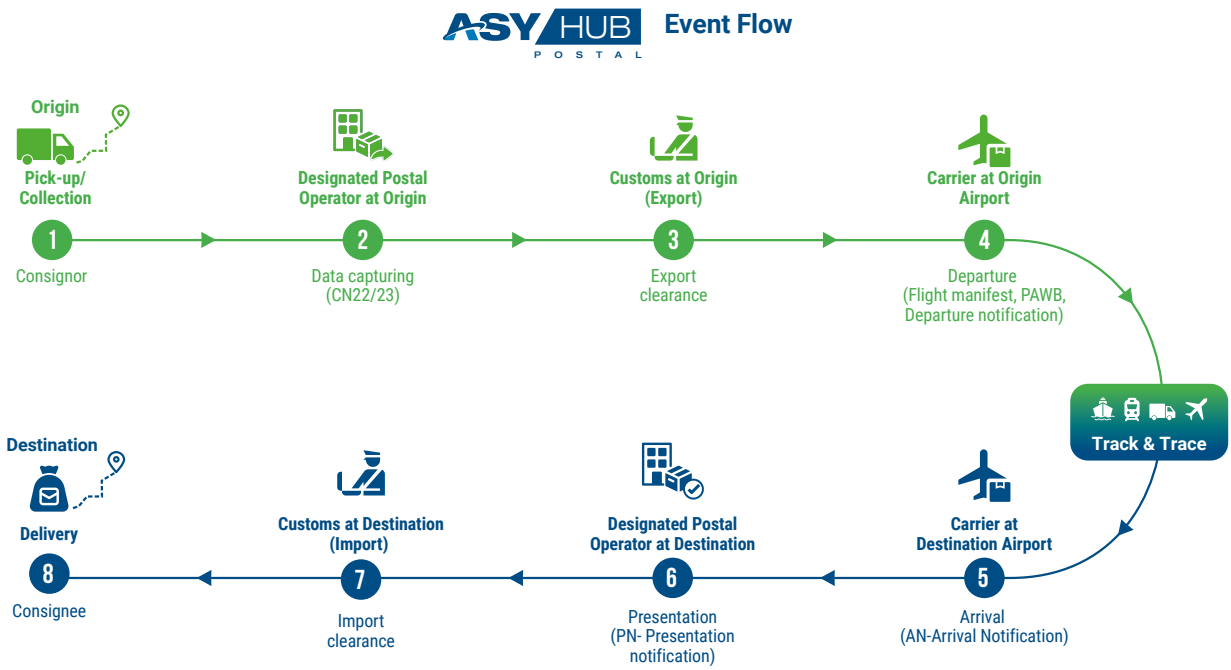
The ASYHUB cloud native platform referred to in 5.2 was developed by ASYCUDA, in partnership with the maritime and postal industry (UPU), to connect customs and cross-border regulatory authorities. It allows for data exchange between ASYCUDA software and logistics ICT systems to facilitate the pre-arrival and pre-departure processing of electronic cargo manifests.

ASYHUB pilot projects started in Cambodia and Sri Lanka in 2022. Improvements to the system include a new e-document and related operations to cover vessel sufferance; a new channel for shipping lines so that cargo declarations can be submitted using MS Excel; high and low-level risk analysis for pre-arrival and pre-departure processing; and the implementation of a user interface to complete declarations directly in ASYHUB, if needed [29].

Up until now, customs clearance of postal inbound and outbound items in Cambodia has been delayed by the lack of an electronic advanced data exchange between Cambodia Post and the Cambodia General Department of Customs and Excise.

ASYCUDA and the customs authority decided to collaborate with Cambodia Post to connect ASYHUB Post with the Universal Postal Union's (UPU) Customs Declaration System (CDS), to facilitate the country's participation in e-commerce by improving the risk management and customs clearance of small parcels, thereby achieving environmental efficiencies in the transportation of such goods.

Figure 3. ASYHUB End-2-End Supply Chain Visibility



The project kicked-off in early April 2022 and enabled the automatic reception of postal advanced data within ASYHUB, early risk management, and automatic generation of simplified customs declarations, among others.

Pre-arrival and pre-departure processing will enable us to eliminate some of current practices of using hard copies and save time, leading to a faster clearance [...] it will also reduce costs"

Mr. Chrishantha Fernando, Ceylon Association of Shipping Agents [30]

ENDNOTES

1 ASYCUDA v1, ASYCUDA v2, ASYCUDA++, ASYCUDAWorld.

2 https://unctad.org/system/files/official-document/wpd325_en.pdf

3 https://asycuda.org/wp-content/uploads/2020/ASYCUDA%20Compendium%202020%20-%20ECOWAS.pdf

4 https://sarajevotimes.com/in-bih-the-number-of-hybrid-and-electric-cars-increased-by-50-percent/

5 https://www.wcoomd.org/-/media/wco/public/global/pdf/topics/research/report/wco_green-customs-global-conference_executive-summary_en.pdf

6 For the 2021/2022 Financial Year, HSRA conducted 140 inspections and added 155 radiation sources to the National Registry it manages. Please see https://jis.gov.jm/media/2022/05/HMOS-Sectoral-Presentation-MIIC-Full-1.pdf

7 Source: https://jis.gov.jm/jamaica-launches-hazardous-substances-regulatory-authority/

8 https://tilesw.asycuda.org/en/node/193

9 Source: https://asycuda.org/en/launch-of-asycuda/

10 Source: https://www.iru.org/news-resources/newsroom/transport-leaders-meet-turkmenistan-boost-resilient-connectivity

11 https://www.untfsurvey.org/economy?id=VUT

12 The first modules of the Zimbabwe Single Window deal with the inspection of certificates of origin, vaccination certificates, imported foodstuffs and chemicals.

13 Source: https://businesstimes.co.zw/digital-transformation-of-zim-ports-a-game-changer/#:~:text="The%20launch%20of%20the%20Zimbabwe,processed%20in%20the%20back%20end

14 Source: https://businesstimes.co.zw/digital-transformation-of-zim-ports-a-game-changer/#:~:text="The%20launch%20of%20the%20Zimbabwe,processed%20in%20the%20back%20end

15 Source: https://tchadinfos.com/le-ministre-des-finances-lance-la-migration-du-systeme-sydonia-vers-sydonia-world-pour-les-services-des-douanes/

16 Source: https://unctad.org/news/unctad-customs-automation-programme-bolster-trade-tajikistan

17 Source: https://unctad.org/news/unctad-customs-automation-programme-bolster-trade-tajikistan

18 Source: https://pacific.asycuda.org/?p=2706

19 Source: https://www.youtube.com/watch?v=esRMNKqxrGM

20 Source: https://asycuda.org/wp-content/uploads/ASYCUDA-Compendium-2022-Tonga.pdf

21 Source: https://asycuda.org/en/asycudaworld-to-help-federated-states-of-micronesia-boost-international-trade/

22 Source: https://pacific.asycuda.org/?p=2691

23 Source: https://pacific.asycuda.org/?p=2691

24 Source: https://unctad.org/system/files/official-document/dtlasycuda2021d1_en.pdf

25 Source: https://unctad.org/news/unctad-and-world-customs-organization-enhance-cooperation

26 Source: https://unctad.org/news/unctad-and-world-customs-organization-enhance-cooperation

27 eCITES v2 was also enriched with an interface for Electronic Permit Information eXchange (EPIX), accelerating the sharing of CITES permits and certificates among management authorities.

28 Source: https://cites.org/eng/news/sg-statements/eCITES-transforming-global-wildlife-trade-management

29 Efficient maritime logistics reduces fuel wastage and unnecessary CO2 emissions in one of the hardest to abate sectors. "A seagoing container vessel is just as polluting as up to 50 million cars". Please see https://cedelft.eu/publications/the-basic-facts-how-do-the-emissions-of-ships-and-cars-really-compare/

30 Source: https://www.youtube.com/watch?v=Uq9AtPNrv3o

ASYCUDA

Automated System for Customs Data

Palais des Nations, CH-1211 Geneva 10, Switzerland

@asycudaprogram asycuda@unctad.org www.asycuda.org

Printed at United Nations, Geneva – 2323563 (E) – December 2023 – 200 – UNCTAD/DTL/ASYCUDA/2023/1