

Innovation for a changing world









Innovation for a changing world





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This publication has not been formally edited.

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

UNCTAD/DTL/ASYCUDA/2024/1

ISBN: 978-92-1-003368-8

elSBN: 978-92-1-106977-8

Sales No. E.24.II.D.32

Foreword



This year, UNCTAD celebrates its sixtieth anniversary. With the theme of "Charting a new development course in a changing world", the organization shows its commitment to a forward-looking agenda, to foster inclusive and sustainable development in an increasingly multipolar world.

For over 40 years, Automated System for Customs Data (ASYCUDA) technical assistance programme has demonstrated its capacity to facilitate trade and contribute to development. The programme has leveraged expertise and the latest technologies in order to develop and implement solutions that improve customs clearance processes, boost government revenues and reduce fraud. For example, customs revenues increased by 10–50 per cent in the wake of some Governments' reforms initiatives involving ASYCUDA.

The programme has continuously evolved in response to requests. In recent years, ASYCUDA has supported member States in connecting partner government agencies within an electronic single window for trade. Such systems significantly enhance a country's international trade potential by making its economy more attractive to businesses. The programme has also enabled better preparation for and response to humanitarian emergencies; improved the management of trade in endangered and protected species; enhanced transport and logistics; and boosted the collection, generation and use of higher quality trade data for the formulation of policies. The programme will continue to adapt by embracing the latest technologies, to empower countries and regional bodies.

This report, subtitled "Innovation for a Changing World", serves to showcase how ASYCUDA uses creative technical assistance approaches, strengthens cooperation and delivers services to Governments. In the report, UNCTAD provides highlights from 2023 and 2024, ranging from how the programme has led innovation in trade facilitation by exploring new technologies for the digitalization of trade, to how it is helping to reform customs, ensuring supply chain security and compliance with regulations and standards and supporting the effective management of electronic commerce.

I am convinced that with the continued guidance and support of the ASYCUDA Advisory Board, the programme will continue to deliver services that countries and regions need. On our side, I can assure you that ASYCUDA will remain at the forefront of the digital transformation and use the latest technologies in order to help member States harness the full potential of trade and logistics for sustainable development.

Mr. Pedro Manuel Moreno, Deputy Secretary-General, UNCTAD Chair, ASYCUDA Advisory Board

Abbreviations

AEO Authorized Economic Operator

AfDB African Development Bank Group

API Application Programming Interfaces

ASYCUDA Automated System for Customs Data

ASYHUB ASYCUDA Data Exchange and Data Integration Platform

ASYREC ASYCUDA Automated System for Relief Consignments

ASYSW ASYCUDA-based Electronic Single Window for Trade

CARICOM Caribbean Community

CARSC Customs Automation Regional Support Centre

CBRA Cross Border Regulatory Agencies

CDS Customs Declaration System

CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora

COMESA Common Market for Eastern and Southern Africa

eCITES ASYCUDA's Electronic Permit Management and Exchange System for Customs

Control of Trade in CITES-listed Species

ECOWAS United Nations Economic and Social Council

eSW Electronic Single Window for Trade

EU European Union

GIZ German Agency for International Cooperation

IATA International Air Transport Association

ICT Information and Communication Technology

IMPACT Improving Pacific Islands Customs and Trade project

IPPC International Plant Protection Convention

IRU International Road Transport Union

IT Information Technology

LDC Least Developed Countries

LLDC Landlocked Developing Countries

MBS Malawi Bureau of Standards

MOU Memorandum of Understanding

MRA Malawi Revenue Authority

NCTS New Computerized Transit System

PACER Plus Pacific Agreement on Closer Economic Relation

PGA Partner Government Agency

PRISE Pacific Regional Integration Support project

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P-SIDS Pacific Small Island Developing States

SDGs United Nations Sustainable Development Goals

SIDS Small Island Developing States

SIGMAT Regional Customs Network for Transit Trade [ECOWAS project]

TFA Trade Facilitation Agreement

TIR-EPD International Road Transport – Electronic Pre-Declaration

UNCTAD United Nations Conference on Trade and Development

UN/CEFACT United Nations Centre for Trade Facilitation and Electronic Business

UNDP United Nations Development Programme

UNECE United Nations Economic Commission for Europe

UNEP United Nations Environment Programme

UNOCHA United Nations Office for the Coordination of Humanitarian Affairs

UNTF UN Global Survey on Digital and Sustainable Trade Facilitation

UPU Universal Postal Union

WCO World Customs Organization

WTO World Trade Organization

XML Extensible Markup Language

Table of Contents

I. Overview	1
a. UNCTAD's 60 th Anniversary	1
b. From Customs Automation to Trade Facilitation and Digitalization	2
1. Mandate	2
2. Customs Automation	3
3. Trade Facilitation and Digitalization	3
4. ASYCUDA's Contribution to the SDGs	6
II. ASYCUDA Impact	8
III. Governance and Financing	11
a. ASYCUDA Governance	11
b. ASYCUDA Financing	11
IV. Leading Innovation in Trade Facilitation	15
a. Technological Innovation	15
1. Customs Digitalization	16
2. Regulatory Process Digitalization	16
3. Smart Logistics	17
4. Humanitarian Aid Coordination	17
5. Cross-Platform Exchange of Consignments Data	20
b. Innovation in Partnership	20
1. ASYCUDA as a Conceptual Partner	21
2. ASYCUDA as a Research and Development Partner	21
3. ASYCUDA as an Implementing Partner	22
4. ASYCUDA as a Long-Term Partner	24

Innovation for a changing world

c. Innovation for Customs Reform	25
1. Catalyst and Central Role in Digitalization	25
2. Developing and Facilitating e-Commerce	26
3. Ensuring Supply Chain Security Through Advanced Trade Data Analysis2	27
4. Supporting Green Transition and Resilient Trade	27
V. Achievements and Highlights	29
a. Electronic Single Window for Trade	29
1. Fiji and Papua New Guinea: ASYSW Blueprint and Feasibility Study	29
2. Jamaica: Engagement of Stakeholders	30
3. Turkmenistan: Simultaneous Launch of PGAs in ASYSW	30
4. Vanuatu: Empowering Data Transparency and Analysis	31
5. Zimbabwe: Knowledge Sharing	32
b. ASYCUDAWorld Customs Automation	32
1. Antigua and Barbuda: Processing Online Payments	33
2. Georgia: Regional Integration	34
3. Iraq: Tripling Revenues at Baghdad Airport	35
4. Malawi: Incorporating Government Clearance Agencies	35
5. Niger and Zambia: Simplifying Air Cargo Clearance with ASYCUDAWorld 3	36
6. Pacific Region: Harmonizing Customs in 15 P-SIDS	36
7. Central African Republic: Flexible Customs Technologies	37
8. Suriname: Improving Customs Service Performance and Delivery	38
9. Turkmenistan: Facilitating Road Transit	39
c. Specialized Platforms for Trade Digitalization	40
1. Cambodia: Pre-Arrival Processing for Increased Efficiency	40
2. Cambodia and Vanuatu: Boosting e-Commerce	41
Sri Lanka and Mozambique: Digitally Managing Protected Species Trade	41
4. Vanuatu: Prompt Release of Relief Consignments	
· · · · · · · · · · · · · · · · · · ·	
Annex I – ASYCUDA's Alignment with WTO TFA	15

38 LDCs / 24 LLDCs / 41 SIDS

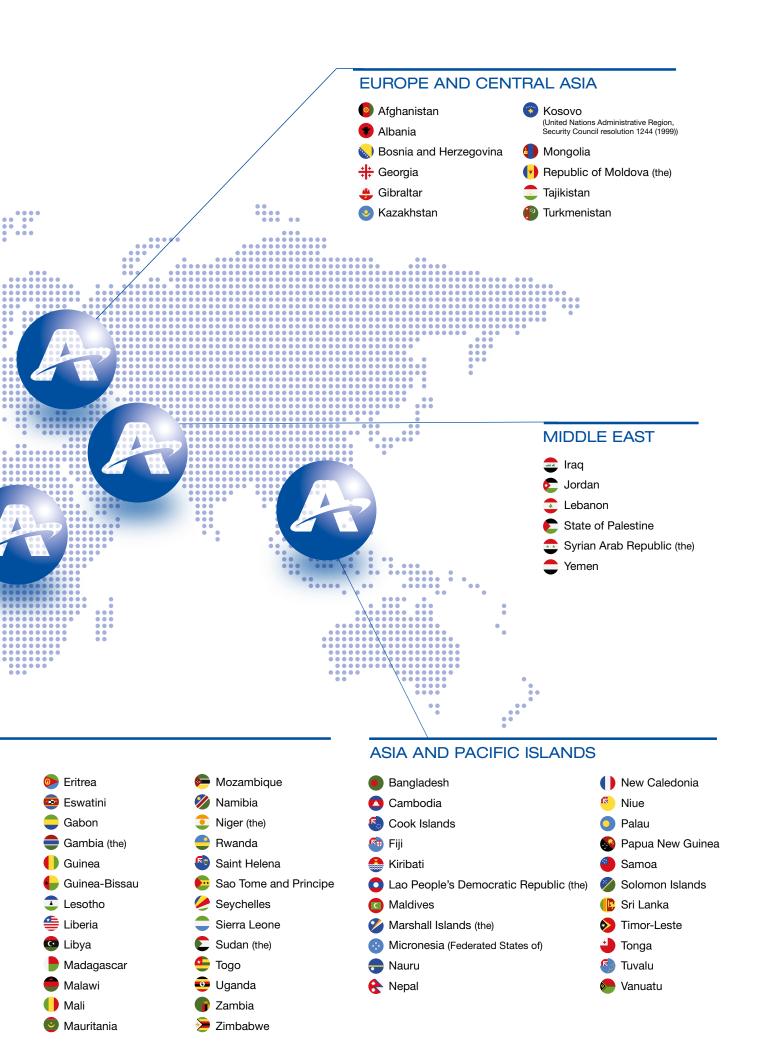


AMERICAS AND THE CARIBBEAN ISLANDS

- Anguilla
- Antigua and Barbuda
- Aruba
- Barbados
- Belize
- Bonaire, Sint Eustatius and Saba
- Bolivia (Plurinational State of)
- Curação
- 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)

- 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











I. Overview

a. UNCTAD's 60th Anniversary

In 2024, the United Nations Conference on Trade and Development (UNCTAD) celebrates its 60th anniversary by focusing on charting a new development course in a changing world. In 1964, UNCTAD was formed out of the idea that the global economy was unequal and that the rules of international trade were neither fair nor just. The organization was given the explicit goal of ensuring that globalization left no one behind. During the Global Leaders Forum in June 2024, UNCTAD Secretary-General Rebeca Grynspan acknowledged that while much has changed over the past 60 years, global inequalities remain. Today, the world economy is far larger, more interconnected and complex than in 1964, with the developing world now the engine of global trade. However, while globalization has propelled some to new heights of wealth and influence, others have been left exposed and vulnerable to the boom and the bust of capital, environmental degradation, and commodity dependence. In short, there is still work to be done to secure an equitable globalization and the Automated System for Customs Data (ASYCUDA) is working to help level the playing field.

With the digital economy being a powerful engine of development, making international trade easy to scale, the developmental community must enable fair access to the innovative, technological advancements that facilitate trade. Over the past 40 years, governments, regional entities, and other members of the international community have demonstrated that partnering with the ASYCUDA Programme can improve the digitalization of their trade processes – growing economies by boosting international trade.

Responding to member States' needs, ASYCUDA drives innovation in customs technology, accelerating clearance times, boosting global trade efficiency, and enhancing compliance with international agreements, thereby positioning countries for long-term sustainable economic growth and resilience. ASYCUDA technical assistance contributes to economic growth, ensuring the collection of correct duties owed and reducing the cost of engaging in trade, particularly for developing economies – facilitating equitable access to technological advancements and reducing global inequalities.

UNCTAD's 60th anniversary called upon the global community to move "forward together" so that all parties involved in international trade can overcome today's challenges. Global supply chain disruptions, global value chain transformations and overlapping crises require innovation in trade and development circles. These innovations should foster productive capacities, support structural transformation, and encourage partnerships and the mobilization of finance for development.

In that context, ASYCUDA continues to lead innovation in trade facilitation, with a solid reputation for developing solutions based on state-of-the-art technology to support trade facilitation. Today, it also pioneers the evolving responsibility of customs in trade, and boosts UNCTAD's expanding partnership framework. Chapter IV discusses how ASYCUDA develops cutting-edge solutions for trade facilitation; outlines the mandate of its new cooperation framework in terms of national, regional and international trade facilitation and digitalization projects; and details how it is redefining the role of customs within this context.

40+ years of ASYCUDA supportto member States on trade and customs digitalization.

b. From Customs Automation to Trade Facilitation and Digitalization

For over four decades, UNCTAD's largest technical assistance programme, ASYCUDA, has delivered innovation in the field of customs and trade. Figure 1 is a visualization demonstrating the evolution of ASYCUDA's software over the years.

ASYCUDA has systems live in 103 countries and territories, and regional offices in Africa, the Americas, Asia and the Pacific, and Europe. It is providing trade-related technical assistance to 83 per cent of Least Developed Countries, 66 per cent of Landlocked Developing Countries and 59 per cent of Small Island Developing States, therefore fulfilling its mandate, as periodically reviewed by member States.

1. Mandate

ASYCUDA's mandate continues to be reaffirmed by member States through UNCTAD quadrennial conferences.

During UNCTAD's most recent quadrennial ministerial conference, UNCTAD15, ASYCUDA's mandate was re-affirmed 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 ASYCUDA; UNCTAD should also continue its work on taxation as it relates to investment policy."

Further, acknowledging UNCTAD's trade facilitation initiatives - of which ASYCUDA is a core component - paragraph 127 (n) of the Covenant states 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 (WTO), and enhance its support to the development and the implementation of appropriate legal and regulatory frameworks that reduce trade transaction costs."

At the fourteenth session of the Trade and Development Commission, held in April 2024, member States, specialized agencies, intergovernmental bodies and non-governmental organizations "underscored the importance of automated customs clearance and trade



Figure 1
ASYCUDA System Timeline



Innovation for a changing world

facilitation solutions such as ASYCUDA, particularly among developing countries and the least developed countries." Additionally noting that, "the digitalization of trade facilitation procedures was critical, to fully reap the benefits of cross-border electronic commerce."

2. Customs Automation

ASYCUDA was first mandated to assist ECOWAS member States to produce accurate and timely trade statics. As the first government agency receiving and processing international trade data, customs was identified as the ideal point at which to collect this information. It was also recognized that innovative, digital solutions would be needed to achieve the intended goal, which led to the development of ASYCUDA v1 – UNCTAD's first customs management system. This enabled governments to generate essential international trade data, improve processes to increase access to global markets, and better ensure the correct collection of revenues owed.

Continuously evolving and innovating technologically, to date four major versions of ASYCUDA's flagship customs management software have been released. The latest system, ASYCUDAWorld, was updated in 2024 to include new capabilities such as a dynamic selectivity tool that automatically highlights risk profiles and associated declarations, facilitating better fraud detection and targeted customs inspections (ASYCUDAWorld version 4.4 is detailed in chapter IV, section A1).

While ASYCUDA's early focus was on the modernization and automation of customs processes, the Programme has, over time, evolved to become a trade digitalization initiative.

3. Trade Facilitation and Digitalization

As well as customs, ASYCUDA now supports countries with automating the entire international trade pipeline through systems such as the electronic single window for trade, known as ASYSW. ASYCUDA has been called upon by governments to support the development of 13 ASYSW (Barbados, Burundi, Comoros, Jamaica, Kazakhstan, Rwanda, Saint Vincent and the Grenadines, Sao Tome and Principe, Timor-Leste, Turkmenistan, Uganda, Vanuatu and Zimbabwe) that enable Partner Government

ASYCUDA evolved from trade statistics and customs automation tool to trade facilitation and digitalization systems.



Agencies (PGAs) to digitalize their respective processes, further reducing trade costs and clearance times. Through tailored IT tools, ASYCUDA reduces risks such as fraud and non-compliance, thereby enhancing supply chain security and ensuring adherence to international trade standards. This fosters a more predictable and transparent trading environment, improving countries' attractiveness to foreign investors and multinational corporations.

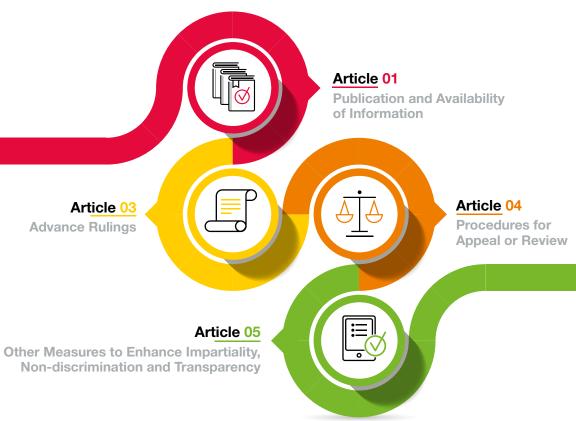
Drawing on participating countries' experience, ASYCUDA published a Roadmap for Building a Trade Single Window¹ (available in English, French and Spanish) that details the evolution of the electronic single window for trade concept; the core principles for successfully implementing an electronic single window for trade; ASYCUDA's technical and managerial approaches; and an overview of the ASYSWs implemented to date, with a special focus on Jamaica, Rwanda and Timor-Leste.

Alongside ASYCUDAWorld and ASYSW, the ASYCUDA software suite helps governments to gather accurate international trading data, digitally connect with external logistics systems, improve their emergency response processes and manage the trade of protected species. This is achieved through, for example, the pre-arrival and pre-departure communication and processing platform, ASYHUB; the automated coordination system for relief consignments, ASYREC; and the eCITES system designed to facilitate the control of trade in CITES protected species, among others.

Digitalization of trade must ensure the compliance of public and private sectors with national, regional and international regulations and standards when implementing improved trade procedures, reviewing the legal framework and integrating PGAs into

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Figure 2
ASYCUDA's Alignment with WTO TFA

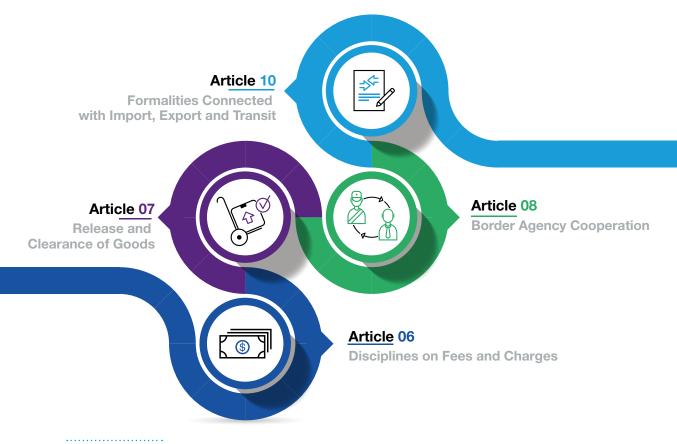


https://unctad.org/publication/roadmap-building-trade-single-window

the clearance process. ASYCUDA software complies with international standards and norms, such as those developed by the World Customs Organization (WCO) and the United Nations. ASYCUDA technical assistance projects support governments and regional entities with ensuring that their regulatory frameworks align with these standards but also with multiple international treaties, such as the WTO Trade Facilitation Agreement (TFA), Paris Agreement, CITES Convention, Montreal Protocol, and Basel, Rotterdam and Stockholm Conventions. To enable this, UNCTAD staff reviews all relevant Government legislation jointly with national project teams, identifying inconsistencies with best practice and international treaties, and subsequently support governments with understanding how best to reform and update domestic laws and processes to best adhere to these. Examples of such alignment and compliance are shown in Figure 2 and Annex I, highlighting key WTO TFA-related areas where ASYCUDA provides comprehensive multi-annual technical assistance and capacity building.

Every ASYCUDA software complies with international trade agreements and standards.

For regional standards and regulations, ASYCUDA empowers customs administrations to adapt and configure its systems accordingly during the implementation of a project. For example, the standard release of ASYCUDAWorld is aligned with international standards such as the WCO Revised Kyoto Convention and the WTO Trade Facilitation Agreement. However, for the implementation of the ASYCUDAWorld-based New Computerized Transit System (NCTS) in Georgia, UNCTAD experts customized the system to align with European Union regulations. Achieving European Union compliance is a significant and necessary milestone conditioning accession to the bloc. In June 2024, NCTS passed the first two stages of European Union testing. The third and final test stage is underway².



² https://unctad.org/news/georgia-enhancing-customs-systems-unlock-trade-potential

4. ASYCUDA's Contribution to the SDGs

Around the same time as ASYCUDA broadened the scope of its technical assistance, the Sustainable Development Goals (SDGs) were agreed. As demonstrated in Table 1, UNCTAD's ASYCUDA Programme directly and indirectly contributes to multiple SDGs.



Table 1 ASYCUDA Impact on Sustainable Development Goals





End poverty in all its forms everywhere



ASYCUDA supports customs' role in national revenue generation through collection of duties owed and the subsequent investment of funds into national development programmes.



End hunger, achieve food security and improved nutrition and promote sustainable agriculture



ASYCUDA helps to improve food security and safety by strengthening customs and inter-agency controls at the borders; automating the issuance of and monitoring the use of phytosanitary and veterinary certificates, and; integrating quota monitoring for agricultural exports and imports.

3 GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages



ASYCUDA strengthens customs and inter-agency controls at the border for trade in goods that affect human health (e.g., food, pharmaceuticals, cosmetics, and dangerous drugs) via specific software. The introduction of electronic certificates, integrated risk management and surveillance mechanisms in ASYCUDAWorld and ASYSW environment.



Ensure availability and sustainable management of water and sanitation for all



ASYCUDA provides automated support to customs with implementing controls in compliance with the Basel, Rotterdam, and Stockholm international conventions and the Montreal Protocol on substances that deplete the ozone layer. This helps to improve water quality by reducing pollution, eliminating dumping, and minimizing the release of hazardous chemicals and materials.



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



ASYCUDA supports governments by facilitating trade, enabling access to global value chains, innovation, economic growth, and employment opportunities.



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



ASYCUDA embeds the early taking of ownership and sustainability in its technical assistance approach, which combines cutting-edge technologies with proven in-the-field expertise. UNCTAD provides efficient and tailored support to countries. This contributes to the development and upgrade of ICT infrastructure, particularly on the African continent and in least developed countries, and by improving regional and trans-border infrastructure.



Make cities and human settlements inclusive, safe, resilient and sustainable



ASYCUDA supports the development of customs and trade infrastructure (ports, logistics terminals, warehouses, supply chains in cities) and contributes to the facilitation of legal cross-border movements, while combating illicit trafficking of cultural and natural heritage, including by cooperating with other Cross Border Regulatory Agencies (CBRAs) operating in the regulatory fields related to cultural and natural heritage protection.

13 CLIMATE ACTION

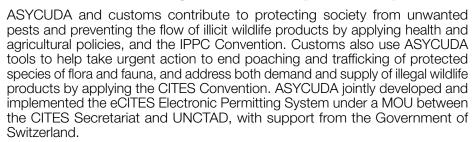
Take urgent action to combat climate change and its impacts



ASYCUDA provides tools to monitor the legal trade, and the prevention of the illegal trade, in ozone depleting substances (Montreal Protocol) and timber.

15 LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and stop biodiversity loss





Substantially reduce corruption and bribery in all their forms

ASYCUDA contributes to good governance, transparency and accountability, and supports the fight against corruption through the simplification and digitalization of customs and CBRA procedures to decrease human interaction.

17 PARTNERSHIPS FOR THE GOALS

Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development



The ASYCUDA customs management system, by applying international standards, trade-related agreements, and through collaborating with other national authorities, countries, and international agencies such as the WCO, contributes to increased efficiency and coordination, strengthened resource mobilization, and trade facilitation and statistics. In addition, the ASYCUDA Programme organizes a multitude of study tours, technical and functional training sessions for customs delegations to visit and learn from experiences in implementing new technology and/or new infrastructure in other parts of the world. Thus, directly contributing to North-South and South-South international and regional cooperation.

II. ASYCUDA Impact



Domestic Resource Mobilization

215% increase in customs revenue at Baghdad International Airport in January–May 2024 compared year-on-year with 2023.

Trade Efficiency

Republic of Moldova (the)

15 minutes to validate export of goods in ASYCUDA-NCTS.

Building Capacities

Jamaica

2,000 people, 64% women, trained in using **ASYSW** during 2023.

Fulfilling Environmental & Humanitarian Objectives

Afghanistan

50,000+ trucks promptly cleared to deliver humanitarian aid through ASYCUDAWorld.

ASYCUDA is a result-driven programme. The implementation of its systems has a measurable, direct, and positive impact upon economies in both the short and longterm. The technical assistance provided to governments has enabled them to grow their economies; increase public revenues and transparency; reduce the time and cost of international trade; build their domestic capacities; and minimize the impact of natural disasters and climate change on people and planet.



Sri Lanka

138% increase in customs revenue from 2022 to 2023.



Palau

53% increase in customs revenue during Q1 2024 compared with Q1 2023.



Zimbabwe

379% increase in fees collected by the Port Health Authority since ASYSW launch in 2023.



Tonga

12 hours before arrival. manifest data available in ASYCUDAWorld.



Vanuatu

67% reduction in postal clearance times since 2022.



Venezuela

(Bolivarian Republic of)

78% increase in **export** transactions from 2022 to 2023.



Malawi

600 workers, 40% women, in clearing and forwarding industry trained on ASYCUDAWorld.



Pacific

13 Pacific SIDS participated in two **ASYREC** regional workshops in 2024.



Republic of Moldova (the)

1,200 customs officers and traders trained in using ASYCUDA-NCTS.



됻 Mozambique

73% reduction in time taken to process eCITES permits, Jul-Dec 2023 compared with Jan-Jun 2023.



Timor-Leste

86% reduction in processing time for animal and plant permits in 2023.



Vanuatu

90+% reduction in paper applications since ASYSW launch.



III. Governance and Financing

a. ASYCUDA Governance

The ASYCUDA Advisory Board (AAB) was created to provide expertise and assistance to UNCTAD as it seeks to continuously improve the operations and future impact of its ASYCUDA Programme. The board helps the Programme with shaping its vision and better aligning with future trends and the needs of member States.

It first met in June 2022, and since then has met five times, with the latest AAB meeting taking place in September 2024. UNCTAD's Deputy Secretary-General is chair of the board and is joined on the AAB by representatives of the governments of selected member States and international organization partners. The current



From left to right, back row: Jan Hoffmann (UNCTAD), Matthew Wilson (Permanent Mission of Barbados), Pedro Manuel Moreno (UNCTAD), Shamika Sirimanne (UNCTAD), Daniel Holz (Permanent Mission of the Federal Republic of Germany). Front row: Mailin Fauchon (WFP), Carolyn MacLeod (Permanent Mission of Canada), Davaasuren Gerelmaa (Permanent Mission of Mongolia), Elisabeth Türk (UNECE), Renaud Massenet (UNCTAD)

AAB includes the participation of the governments of Barbados, Canada, Germany and Mongolia alongside the International Chamber of Commerce, the UN Economic Commission for Europe and the World Food Programme's LogCluster.

b. ASYCUDA Financing

ASYCUDA remains UNCTAD's largest technical assistance programme, accounting for 44 per cent of its technical cooperation delivery in 2023. During 2023, ASYCUDA spent \$26.1 million in staff and consultancy costs at headquarters and in the field (65 per cent), official travel (10 per cent), programme support costs (10 per cent) and other costs such as hardware and equipment (15 per cent). In 2023, ASYCUDA generated \$29.7 million through 39 new technical assistance projects and extensions.

The majority of this work covers the maintenance, upgrade or enhancement of ASYCUDAWorld in countries and territories such as Afghanistan, Albania, Aruba, Bangladesh, Cabo Verde, Chad, Democratic Republic of the Congo, El Salvador, Jamaica, Kazakhstan, Kosovo³, Lebanon, Mauritania, Nepal, State of Palestine, Republic of Moldova, Sri Lanka, Sudan, Venezuela (Bolivarian Republic of), Zambia and Zimbabwe. One project in Guinea-Bissau deals with the migration from ASYCUDA++ to ASYCUDAWorld.

The remaining projects aim to develop and implement an ASYSW in Saint Vincent and the Grenadines; enhance and integrate additional PGAs into operational ASYSW in Uganda and Vanuatu; implement and improve ASYHUB in Albania, Cambodia, Sri Lanka, Togo and Venezuela (Bolivarian Republic of), and; further develop eCITES.

Funding stems from beneficiary governments (25 projects or extensions), GIZ (3), African Development Bank (2), COMESA (2), the European Union (2), UNDP (2), CITES (1), Swisscontact (1) and the World Bank (1). 64 per cent of new projects and extensions signed in 2023 are self-funded by beneficiary governments.

3 This designation is without prejudice to positions on status and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence. **44%** of UNCTAD **technical cooperation** delivery in 2023.



For the first half of 2024, ASYCUDA raised \$9.3 million through 16 new projects and extensions which included the national launch of ASYCUDAWorld in Equatorial Guinea, the improvement of ASYCUDAWorld in Afghanistan, Eswatini, Gibraltar, Guinea, Madagascar, New Caledonia, Niger and Sao Tome and Principe. Funding stems from beneficiary countries (8 projects or extensions), AfDB, COMESA, Expertise France, GIZ and UNDP.

All 2023/24 projects and extensions are listed in the table below.



Table 2 Projects and Extensions 2023–2024

Country/ Territory	Project Title	Donor	Categorya
Afghanistan	STFA Joint Programme for the South-Eastern Region of Afghanistan	UNDP	N
	Support of ASYCUDA Exemptions System for Humanitarian Agencies	UNDP	E
	Cross-sectoral Cluster Survey of Afghanistan's Micro, Small, and Medium-sized Enterprises (MSMEs)	UNDP	N
	UNDP-UNCTAD UN to UN Agreement for Emergency Assistance to Support ASYCUDA Exemptions System in Afghanistan	UNDP	Е
Albania	ASYHUB & ASYCUDAWorld Systems in the Albanian Customs Administration	Government	N
	Maintenance of Operational ASYCUDAWorld System of Albanian Customs Administration	Government	N
	Maintenance of Operational ASYCUDAWorld System of Albania Customs Administration in 2024-2026	Government	E
Aruba	ASYCUDAWorld Consolidation at the Aruba Customs and Excise Department	Government	E
Bangladesh	ASYCUDAWorld - ASYCUDA Support Mechanism for Asia (Addendum 3)	Government	Е
	ASYCUDAWorld - ASYCUDA Support Mechanism for Asia (Addendum 4)	Government	Е
Cabo Verde	Digital Cabo Verde ASYCUDA Project	World Bank	Ν
Cambodia	Integration of UNCTAD/ASYCUDA and UPU/CDS for a Fully Operational Electronic Advance Data Exchange Between the Cambodia Post and the General Department of Customs and Excise	SwissContact	E
	For Customization Deployment & Piloting of a Solution for Pre-Arrival/Departure Processing for Express Consignments	GIZ	N
Chad	Strengthening ASYCUDAWorld in Chad	Government	Ν
Djibouti	Facilitating Trade in Djibouti Through the Implementation of a National Trade Information Portal	COMESA	N
Democratic Rep. of the Congo	Strengthening the IT Environment of the General Directorate of Customs and Excise	Government	N
El Salvador	ASYCUDAWorld Support to the DGA-El Salvador New Version 4.3.3	Government	E
Equatorial Guinea	Phase II of ASYCUDAWorld Implementation in Malabo, Equatorial Guinea	AfDB	N
Eswatini	Upgrading of ASYCUDAWorld Eswatini	Government	Ν
Gibraltar	Upgrade of ASYCUDAWorld System Operational at HM Customs Gibraltar	Government	N

Country/ Territory	Project Title	Donor	Categorya
Guinea	Automation of the Time Release Study in ASYCUDAWorld	Expertise France	N
Guinea-Bissau	ASYCUDAWorld Project for Guinea Bissau	AfDB	Ν
International	Enhancement of the ASYCUDA eCITES Base Solution	CITES	Е
	Enabling PaP and PdP of Ocean Cargo Through Digital B2B Exchange Between ASYCUDA-GIZ	GIZ	E
Jamaica	ASYCUDAWorld Upgrade Project at the Jamaica Customs Agency	Government	N
Jordan	Implementation of the "Expander" - an Extraction Tool	Government	Ν
	Customization and Deployment of ASYHUB Maritime & Piloting of ASYHUB Express, a Solution for Pre-Arrival/Pre-Departure Processing for Maritime & Express Consignments	GIZ	Ν
	JORDAN Implementation of ASYCUDAWorld Authorized Economic Operators Module	Government	N
Kazakhstan	Technical Support and Upgrade of IS ASTANA-1 Rep. of Kazakhstan	Government	Е
	Technical Support of ASTANA-1 System of State Customs Committee of the Ministry of Finance of Kazakhstan	Government	E
Lebanon	Implementation of ASYCUDAWorld in Lebanon	Government	E
Madagascar	Support of the Customs of Madagascar	UNDP	Ν
Mauritania	ASYCUDA Project in Mauritania	Government	E
Nepal	ASYCUDA Support Mechanism for Asia - Nepal	Government	Е
New Caledonia	ASYCUDAWorld Support in New Caledonia	Government	Е
Niger	ASYCUDAWorld Upgrade and Training	Government	Е
Pacific	ASYCUDA Support Mechanism for the Pacific	Government	Е
Republic of Moldova	Development & Implementation of the National Transit System (NTS) of the Customs	EU	N
	Addendum to Development & Implementation of the National Transit System (NTS) of the Customs Service of the Republic of Moldova	EU	E
State of Palestine	Strengthen the use of ASYCUDAWorld in Palestine	Government	Е
Saint Vincent and the Grenadines	Electronic Single Window for International Trade in Saint Vincent & the Grenadines	Government	N
Sao Tome e Principe	ASYCUDAWorld Upgrade in São Tome and Principe	AfDB	N
Sri Lanka	ASYCUDA Support Mechanism for Asia	Government	Е
Sudan	MOA on ASYCUDAWorld Support Mechanism	Government	R
The Americas	ASYCUDA Regional Support Centre for the Americas	Government	R
Togo	ASYCUDA UPU Project in Togo	AfDB	Ν
Uganda	Uganda Electronic Single Window - Phase II	Government	Е
Vanuatu	Technical Consulting Services Agreement (Vanuatu ESWS)	Government	Е
Venezuela (Bolivarian Republic of)	ASYCUDAWorld Support to the SENIAT - Venezuela New Version 4.3.3	Government	N
	ASYHUB Agreement Integration Ports-Customs in Venezuela	Government	N
Zambia	Enhancement of ASYCUDAWorld Zambia	COMESA	N
Zimbabwe	Upgrading ASYCUDAWorld	COMESA	Е

 $^{^{\}rm a}$ N = New Project, E = Extension, R = Renewal



IV. Leading Innovation in Trade Facilitation

During the Summit of the Future in September 2024, UN Secretary-General acknowledged the multipolar world we are living in and the inherent risks faced in the absence of strong multilateral institutions which deliver greater representation in governance and fairer rules in trade. With its 60th anniversary theme of charting a new development course in a changing world, UNCTAD is leading the way in reimagining trade for development. The ASYCUDA Programme is an important contributor to these efforts, as it continues to provide innovative assistance, cooperation and services to member States in the constantly evolving world of international trade and digital technologies. This chapter details how ASYCUDA responds to the requests of member States and other partners to develop and deliver innovations that expand the Programme's purpose, interventions in the field, and means of cooperation. It also facilitates the development of new concepts and technologies as well as supporting the role of customs.

It outlines how ASYCUDA conceptualizes solutions with partners and undertakes research and development that leads to the creation of the systems that it implements in countries and territories around the world, supporting economies for the long-term. This chapter also highlights the three main components of UNCTAD's ASYCUDA technical assistance projects which are business process reform, automation, and capacity building, describing how ASYCUDA uses innovative approaches in each of these areas.

a. Technological Innovation

ASYCUDA is internationally recognized for its demand-driven technological innovation, delivered to governments through technical assistance projects. It pioneers the harnessing of advanced, state-of-the-art technologies when and where it can further facilitate trade. ASYCUDA continuously seeks to identify the latest available IT technologies and use these to improve its software components. In recent years, ASYCUDA experts have made technical decisions for software development by evaluating available open-source solutions to verify their compatibility with large volume, Government critical systems; seeking the best combinations of IT components to avoiding complex and heavy architecture, and; using programming languages which can be found in educational establishments and on the employment market, for example. Following this way of working has contributed to establishing a standard framework which is at the core of past and future ASYCUDA systems.

This section describes the innovative solutions developed by the Programme and examines its recent technological advancements in the fields of customs digitalization, trade digitalization, smart logistics, humanitarian aid coordination, and cross-platform exchange of trade data.

1. Customs Digitalization

ASYCUDAWorld

v.4.4 is the most recent release with the latest available features, including dynamic selectivity. ASYCUDAWorld, the Programme's flagship system, is the most widely used of all ASYCUDA tools and a cornerstone of UNCTAD's technical assistance.

At the end of 2023, UNCTAD rolled out ASYCUDAWorld version 4.4 which includes a number of innovative new features to address requests from user countries. It includes dynamic selectivity, which highlights risk profiles and associated declarations, prompting more efficient fraud detection and targeted customs inspections. Dynamic selectivity also supports the automatic management of traders' risk profiles, enabling faster clearance of consignments for Authorized Economic Operators (AEOs), namely trusted traders. It can be plugged in automatically by any country using selectivity in ASYCUDAWorld to assist customs intelligence in achieving efficient and fully automated risk management at different stages of the clearance process. With Dynamic Selectivity (see Figure 3), the system automatically identifies targets and manages risk profiles based on history of examinations, inspection acts and frauds found in the database. Based on a Machine Learning Model, the system extracts and analyzes data elements (declarant, importer, country of origin etc.) from processed e-documents to evaluate the risk level that determines the level of customs inspection (i.e. selectivity lane). As of the end of June 2024, countries in Africa, Asia, the Caribbean and the Pacific have taken steps to upgrade to ASYCUDAWorld 4.4.

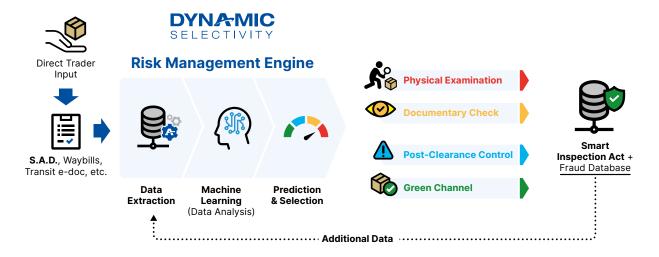
2. Regulatory Process Digitalization

Given its demand-driven approach, the ASYCUDA Programme does not have a one-size-fits-all approach to implementation of the single window concept. Rather, ASYCUDA has developed a collection of methods, principles and ICT systems discussed in the 'Roadmap for Building a Trade Single Window', which are put together in such a way that they address member States' specific needs and requirements for their respective national ASYSW implementations. The ASYSW implementation proposal reflects and mobilizes the relevant and specific systems or tools mix that addresses the requirements of the country's trade community, and the services that will enable this mix to work seamlessly over time.



Figure 3

Dynamic Selectivity Risk Management Engine



The Single Entry Point approach is integrated at the technology level to facilitate systems integration and inter-systems data exchange to provide each PGA with its own independent automated working environment. The integrated nature of the technology platform underlying all systems developed by the Programme facilitates the "submitted once, re-use as required" approach, which is fundamental to the single window approach.

Figure 4 outlines the key steps involved in an ASYSW implementation and for more information, on ASYSW please see the overview section of this report.

Another technological innovation in digitization is eCITES, developed in cooperation with UN Environment Programme's (UNEP) CITES Secretariat, for the management of the international trade of endangered species. This harnesses the latest open source and cloud-based technologies to provide flexibility in deployment strategies, and the responsive design most CITES Management Authorities need. eCITES v2, an enhanced version, was successfully launched in Mozambique in late 2022. Chapter V, section C3 describes the benefits that eCITES is delivering in Sri Lanka and Mozambique.

3. Smart Logistics

For logistics hubs (e.g., ports and airports), customs, PGAs and the trading community to effectively plan and manage resources, the availability of processing of pre-arrival and pre-departure consignment data is required to provide transparency and increase the efficiency of supply chains. Enhancing logistics efficiency translates to reduced operational costs, decreased lead times, and improved trade flows, which are crucial for maintaining competitive export markets, mitigating economic losses during disruptions and reducing climate impact. ASYCUDA developed ASYHUB⁴, a pre-arrival/pre-departure processing platform that integrates consignment data from ship data providers and other logistics actors in ASYCUDAWorld. ASYHUB is designed to be cloud-native using micro service-centred principles and open-source technologies. It also provides an API for authorized entities to access customs data and documents. It is a multi-connectors, extendable platform that integrates with ship data providers. ASYHUB enhances user experience and facilitates access to information using modern web browsers and mobile devices. Chapter V, section C1 and chapter V, section C2 details the implementation of ASYHUB in Cambodia and Vanuatu.

4. Humanitarian Aid Coordination

Weaknesses in humanitarian aid coordination during disaster response are a primary cause of bottlenecks at the border, leading to delays in the distribution of aid. ASYCUDA developed ASYREC, an automated platform that provides automated support for the coordination of humanitarian actors and Government, contributing to more effective emergency response management and control of aid, including unsolicited donations. ASYREC can be used as a standalone system or in conjunction with any customs management system. It is based on open-source technologies, is secure but also flexible, while aligning with international standards (e.g., the Revised Kyoto Convention, the WCO SAFE Framework of Standards and the WCO Guidelines on disaster management and supply chain continuity among others). ASYREC's implementation in Vanuatu is elaborated upon in chapter V, section C4.

4 https://asyhub.org/

ASYHUB improves connectivity and efficiency within the logistics supply chain.





Figure 4

Key Steps in ASYSW Implementation



1 | Undertake Initial Assessment and Confirm Project Approach

- Undertake initial assessment and planning to confirm Single Window project implementation objectives and strategy in the country
- Establish the lead agency
- · Decide on which PGAs to consult

2 Confirm Project Scope

- Determine which agencies will be selected for onboarding and which processes to follow
- · Establish priorities and scheduling

3 Engage Key Stakeholders

- Identify key stakeholders and hold project meetings, consultations, presentations, etc
- Establish project Steering Committee with representatives of all key stakeholders, chaired by lead agency

4 Ensure Political Support

• Ensure political will is secured from top management and political leaders in all key agencies selected (Head of Customs, PGA Ministers, private sector, etc)





- Establish a National Project Support Unit
- Appoint a Technical Implementation Team
- Appoint an Application Development Team
- · Establish an End User Team

6 Establish Communications Strategy

 Develop and implement a plan to communicate the project intention, progress and outcomes to the key stakeholders

7 | Business Process Analysis

- Analyse the exchange of data and documents between customs and the selected key agencies [and between the selected agencies if necessary]
- Prepare the "as is" and "to be" scenarios for the selected processes
- · Consult with key stakeholders throughout this process

9 ICT and Infrastructure Needs Analysis

- Undertake a full analysis of the technical ICT requirements to implement the "to be" scenario and arrange for purchase, installation and training for all necessary equipment and support services such as Internet connection and sustainable power supply
- Consider the need for additional offices and other support infrastructure required for project delivery

8 Legal Review

 Review the selected processes to determine what changes would be required to accommodate the new re-engineered "to be" scenario







	10	Develop Initial Prototype Based on Above Analysis
	_	 Undertake the technical development of a prototype to support the agreed "to be" scenario
		 Determine if a tailored bespoke approach will be followed – or if an existing model from a different ASYCUDA Single Window country will be adopted (or a combination thereof)
		Decide if an interface or integrated approach will be taken for specific agencies
200		Decide on what specific ASYSW modules will be implemented
250		Decide on approach regarding the single submission of documents and data
Development	11	Develop and Implement Training Programme
		 Roll-out of training programme for all key stakeholders, following the core ASYCUDA Programme approach of national empowerment and sustainability
	12	Develop and Implement Change Management Strategy
		 Prepare a comprehensive change management programme to anticipate, assess and address all concerns and potential resistance to project implementation
	13	Pilot Implementation of the Prototype
		 Undertake the pilot implementation of the prototype to implement the revised processes
(\$)	14	Make Any Necessary Adjustments and Undertake Full Implementation
Implementation		 Adjust or redesign the prototype and fully implement the system to deliver the revised processes
	15	Evaluate Project Performance Against Agreed Benchmarks
		 Establish benchmarks at the start of the project by which the success of the project will be evaluated (time and cost of existing procedures, etc)
		 Undertake a review of the performance of the Single Window project against the agreed benchmarks and other factors
		Undertake a customer satisfaction surveys
		Communicate project results to all stakeholders
		Organise a meeting of all stakeholders to present the results
	16	Get Project Completion Sign off by Country
Evaluation		 Project successfully signed off as completed by the country
	17	Consider Next Steps for Project Enhancements and Further Development (Continuous Improvement)
		 Decide on the process for selecting enhancement and expansion of the Single Window, in consultation with all key stakeholders
		Consider how such enhancements will be funded
		Decide on how the work will be undertaken

5. Cross-Platform Exchange of Consignments Data

ASYCUDA
develops new
concepts such
as the ASYSW,
ASYREC and
eCITES to digitalize
trade processes.

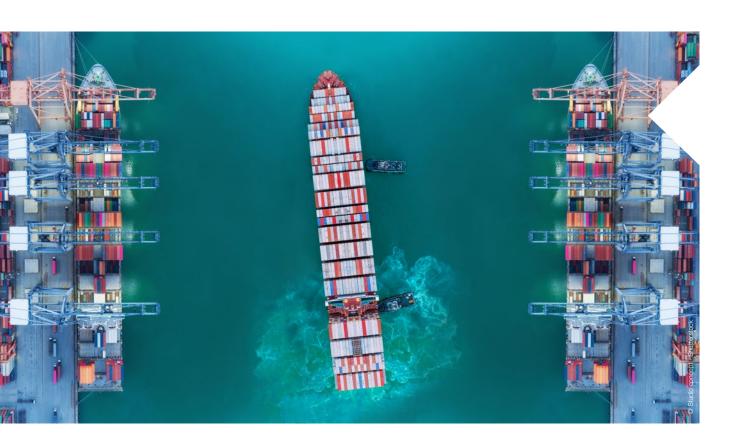
All of the aforementioned ASYCUDA solutions and technologies are based on the timely exchange of data with external systems from the public and private sectors. The more that data are exchanged between different sources, rather than being duplicated, the more efficient the international trade processes. ASYCUDA has recently implemented web services in user-countries to ensure real-time, secure and viable exchange of information and data between its systems and the ones of commercial banks, ministries, port authorities and trade agencies.

Web services offer a standardized approach to application-to-application communication and interoperability. They provide a way for applications to be accessible via the web, regardless of the programming language or platform used. This allows application developers to master and manage the heterogeneity of information systems.

One example is the development of web services for the implementation of e-payments on ASYCUDAWorld through the interfacing of the system with those of commercial banks (please refer to Chapter V, section B1). ASYCUDAWorld also implements web services to exchange advanced cargo data with IATA (please refer to Chapter V, section B).

b. Innovation in Partnership

International organizations, governments, PGAs, regional entities, trade agencies and universities have sought to partner with ASYCUDA in developing and implementing trade facilitation-related IT solutions. Four types of partnership are detailed below, illustrating how ASYCUDA works as a conceptual, research and development, implementing and long-term partner.



1. ASYCUDA as a Conceptual Partner

United Nations agencies and other international organizations have turned to UNCTAD to design and develop tools supporting the digitalization of trade processes.

For instance, ASYREC for the automated coordination of humanitarian actors towards the expedited clearance of relief consignments is a concept developed by ASYCUDA following a technical assistance request from the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA).

eCITES is another example of a new concept, developed in partnership with UNEP CITES Secretariat for the effective management of CITES permits applicable to the international trade in endangered species. eCITES v2, an enhanced version, was successfully launched in Mozambique in late 2022. Chapter V, section C3 describes the benefits that eCITES is delivering in Sri Lanka and Mozambique.

In the last decade, ASYCUDA has also developed new concepts for trade facilitation including streamlining and accelerating customs clearances while reducing costs and human intervention. The programme has conceived and designed cutting-edge applications and systems that automate previously manual trade services and extended the use of its technology to other trade facilitation stakeholders. In that context, partners such as international organizations and trade agencies have requested ASYCUDA's collaboration to create new concepts to automate their processes.

For instance, ASYSW, the ASYCUDA single window for trade, is a concept where the programme amplified the use of ASYCUDAWorld technology, initially developed for customs clearance digitalization, to a single window that integrates PGAs (see below for further information about how these products were conceptualized).

To design and build an ASYSW, a national implementation plan is developed as part of a detailed feasibility study which involves the documentation of the process followed by customs and PGAs for the release of consignments. This includes considering prerequisites determination, the identification of stakeholders to mobilize, a review of the legal framework, clearance procedures assessment and streamlining, and process reengineering. This national implementation plan is used to guide Government with the creation of an ASYSW. All 13 countries that are currently running or implementing an ASYSW benefited from such studies.

Two such feasibility studies were conducted in the reporting period by ASYCUDA in partnership with the governments of Fiji⁵ and Papua New Guinea⁶ which led to the delivery of ASYSW blueprint documents for both countries. The Fiji blueprint was handed to the Deputy Prime Minister on 25 October 2023 and the Papua New Guinea blueprint was handed to the Minister of International Trade and Investment on 3 May 2024. Detailed discussions about implementation and project funding are ongoing with donors and the respective governments.

2. ASYCUDA as a Research and Development Partner

ASYCUDA's research and development work is focused on improving both trade processes for Government and business, as well as exploring how the latest technologies can facilitate international commerce. In the current era such technologies include

When operating as an implementing partner, ASYCUDA is the main party responsible for successfully delivering project outcomes.



⁵ https://unctad.org/news/fiji-new-plan-electronic-single-window-boost-trade

⁶ https://unctad.org/news/papua-new-guinea-electronic-single-window-plan-set-boost-trade

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ASYCUDA

supports governments

with process and institutional reform to facilitate trade. artificial intelligence, blockchain and cloud computing. ASYCUDA's approach generally consists of assessment and proof of concept design and has led to the creation of every ASYCUDA customs management system from ASYCUDA v1 to ASYCUDAWorld, as well as more recently ASYHUB, ASYREC, ASYSW and eCITES.

Such an approach was also applied in the Centre of Excellence at the University of Gibraltar, established in cooperation with H.M. Customs. Acting as a hub for sharing knowledge on international standards and best practices and as a research centre focused on the development of innovative ICT solutions for customs and trade.

Five such ICT solutions were designed by ASYCUDA at the Centre of Excellence, including an electronic postal declaration facility; express courier tool; simplified clearance procedure; phytosanitary certification module, and; clearance of cultural goods tool. Through the Centre, ASYCUDA also participated in the research and development of trade-related recommendations including the UN/CEFACT Recommendations No. 44 (Cross-border Facilitation Measures for Disaster Relief) and No. 47 (Pandemic Crisis Trade-Related Response), as well as WCO's Revised Kyoto Convention Annex J5.

In the Caribbean, CARICOM member States researched and developed a regional advanced cargo information system that is hosted by the Implementing Agency for Crime and Security (IMPACS), known as the Electronic Management Manifest ASYCUDA (EMMA). It uses a centralized portal to electronically receive cargo manifest submissions that are seamlessly relayed to ASYCUDAWorld or other customs IT systems with a risk assessment report.

In Eastern and Southern Africa, the COMESA-ASYCUDA Regional Support Centre (CARSC) designed and developed a proof of concept for the implementation of a Regional Trade Information Portal for all member States. In late 2023, it was made available to member States for their input.

3. ASYCUDA as an Implementing Partner

In recent years, ASYCUDA's assistance has increasingly been sought as an implementing partner rather than a sub-contractor. As an implementing partner, ASYCUDA is involved in the early stages of a project development and is accountable for its management and efficient execution. Project components, objectives, outputs and outcomes are all defined and aligned in accordance with beneficiary parties and donors. This is so that the use of resources - human and technical - are coordinated and cost effectively managed, while also ensuring that IT objectives are aligned with the overall business strategy. By project completion, ASYCUDA, as the main stakeholder, is responsible for delivering on these outcomes. This approach allows for efficient management of large, complex customs and trade facilitation projects, sometimes multi-country and regional in focus, driving tangible economic benefits. The paragraphs below show examples of regional and national projects where ASYCUDA is the implementing partner.

The Pacific Regional Integration Support Programme (PRISE) exemplifies ASYCUDA's role as an implementing partner, supporting 15 Pacific islands. The PRISE project contains six main outputs that include the enhancement of trade facilitation and customs procedures; improvement of sanitary and phytosanitary services; strengthening of capacity for regional aid-for-trade projects; support of measures to strengthen the business enabling environment and investment climate; improvement of the climatesmart business support services, and; strengthening of competitiveness of sustainable



agricultural value-chains in the Pacific. UNCTAD was involved from the early drafting of the project agreement and achieved consensus on the objectives, expected outcomes, detailed intervention activities and budget with all parties. Some of the activities managed by UNCTAD under the PRISE project are related to legal revisions required to align with the Revised Kyoto Convention General Annex and WTO TFA priority measures; the implementation of ASYCUDAWorld; and institutional capacity development.

By end of June 2024, customs procedures had been streamlined at the national and regional levels based on a review of the legal framework and all 15 islands have successfully implemented ASYCUDAWorld, with the system being maintained by national customs teams (refer to chapter V, section B6). ASYCUDA also shared two blueprints for ASYSW implementations in Fiji and Papua New Guinea with their respective governments (refer to section chapter V, section A1).

Another example of ASYCUDA's work as an implementing partner is the delivery of a solution for the management and monitoring of transit in the ECOWAS region. ECOWAS launched a regional customs interconnection project, 'SIGMAT', to enhance regional integration through the automation of transit procedures in the region. With ASYCUDAWorld operational in the majority of West African countries, the Programme was acknowledged as having extensive experience in trade digitalization within the region and a physical presence of national and international experts in multiple ECOWAS member States. These were essential requirements, and UNCTAD was thus selected to develop and implement SIGMAT. In 2024, the ASYCUDA SIGMAT solution is saving traders time and money along five corridors, reducing paper usage by 88 per cent and transit times by more than 45 per cent.

The SIGMAT project demonstrates how partnering with ASYCUDA means being able to draw upon its experience gained by having systems live in 103 countries and territories,

Innovation for a changing world

a regional office for the African continent, and the physical presence of its highly skilled 100+ national and international on-site experts. For more remote countries or those not benefitting from the presence of a national or international expert, ASYCUDA Regional Centres in Fiji, Gibraltar, Malaysia, Trinidad and Tobago, Venezuela (Bolivarian Republic of) and Zambia provide support and share know-how.

Additionally, in Tajikistan, as the implementing partner of Phase Four of the Central Asia Regional Links Programme (CARS-4), ASYCUDA is working to streamline processes and procedures at the border and provide a platform for the application of a range of internationally agreed norms and standards. ASYCUDAWorld was piloted at the end of 2023 in Dushanbe and Sughd provinces, and has already seen an 11 per cent import value increase in 2023 compared to 2022. Over 100 customs officers and brokers were trained to ensure the efficient use of the system.

4. ASYCUDA as a Long-Term Partner

ASYCUDA is a demand-driven programme, mandated by UNCTAD's member States to respond to governments' requests for technical assistance in the areas of customs and trade. Member States benefit from ASYCUDA 's experience of engagement, providing technical assistance that has included updating customs IT systems through the different generations of software (from ASYCUDA v1 to ASYCUDAWorld), the adapting of software to national requirements, upgrading user government's hardware and raising the capacities of customs and Government staff.

In fast-changing environments such as international trade and information technology, country ownership – which is a key tenet of UNCTAD technical assistance – requires recurrent capacity building for staff in user administrations. When required, ASYCUDA provides support, particularly following changes in regulatory or IT environments. ASYCUDA delivers over 300 capacity building sessions for more than 3,000 participants every year on technical and functional aspects of its solutions, to ensure users have the latest available knowledge. Training is delivered at ASYCUDA's headquarters in Geneva, its regional centers and customs premises. Raising local capacities is a prerequisite to ensuring source code and data are only owned and accessible by countries.

UNCTAD maintains close and lasting working relationships with major international standard setting organizations and agencies, national trade agencies, regional groups and donors. UNCTAD and ASYCUDA connect member States with trade agencies and organizations such as the WCO and WTO for the implementation of the Harmonized System Tariff, AEO programmes and post-clearance control and audit. Moreover, ASYCUDA ensures that its tools and solutions align with international and regional standards and conventions (such as the WTO TFA, European Union regulations, WCO's Revised Kyoto Convention, UNECE trade facilitation recommendations), helping user countries and territories maintain compliance with the latest international trade norms.

The trust that member States have placed with UNCTAD over the last 60 years – and with ASYCUDA for more than 40 of those years – underscores the relevance and positive impact of this technical assistance in trade-related fields. This makes ASYCUDA a long-term, privileged partner for developing countries, especially least developed countries (LDCs), landlocked developing countries (LLDCs) and small island developing states (SIDS), who can readily benefit from this long-term shared experience.



c. Innovation for Customs Reform

The three main components making up the majority of UNCTAD's ASYCUDA technical assistance projects are business process reform, automation, and capacity building. ASYCUDA leverages innovative approaches in these three areas to bring value, improved control and increased levels of trade facilitation. This is achieved in partnership with donors, other United Nations entities, international standards setting organizations, and industry. ASYCUDA supports customs and PGAs with reviewing their ways of working and adapting their technologies to the changes that reform brings. This section details how ASYCUDA has helped customs play a central role in digitalization, e-Commerce facilitation, environmental preservation, compliance with regulations and standards, supply chain security and trade data analysis.

1. Catalyst and Central Role in Digitalization

Due to the volume of communication and data exchanged between customs and the trading community, customs are often early adopters of digitalization and the most technologically advanced government agency. Many countries start their trade facilitation reforms by modernizing customs. Consequently, customs regularly become the pilot agency for the modernization of PGAs. Its experience in reviewing the legal framework, procuring and configuring hardware and software equipment, streamlining procedures and reengineering processes – including but not limited to the implementation of paperless procedures – and the increased capacities of its personnel make customs a privileged national partner for the digitalization of trade.

For example, all 13 countries that have implemented ASYSW systems to integrate PGAs had previously modernized customs and digitalized procedures. For ASYSW projects, ASYCUDA leverages customs personnel skills, its role in mobilizing PGAs and ensures its involvement throughout the project - a key success factor for implementing an ASYSW. Customs also help organize and deliver ASYSW trainings to PGA staff.

While often the case, this does not necessarily make customs the lead agency for trade single window implementation. For example, in Barbados, following the successful

ASYHUB boosts e-Commerce

potential by ensuring that the logistics chain functions efficiently. implementation of ASYCUDAWorld in customs, the Government and ASYCUDA are currently building an ASYSW with the Ministry of Energy and Business being the lead implementing agency. As another example, despite the Government of Mozambique not using ASYCUDA for its customs management software, it successfully partnered with ASYCUDA on the implementation of eCITES in 2022. In both projects, customs still have a central role as it facilitates cross-border trade, processes payments and manages trade risks.



2. Developing and Facilitating e-Commerce

The growth in e-Commerce has brought many changes to the international trade environment with the clearance and efficient delivery of low-value, small parcels increasingly important. Customs administrations need to help facilitate trade; manage risk and data quality; enforce compliance with trade rules and regulations, and; ensure efficient collection of duties and taxes. Additionally, the e-Commerce business model requires the prompt delivery of consignments, which is only possible if every component in the logistics chain – including customs – functions efficiently.

To help with this, ASYCUDA developed ASYHUB Maritime – an open, standardized platform that processes and integrates data between ship data providers' systems and customs management systems, such as ASYCUDAWorld.

The concept was then built upon to create ASYHUB Post, a platform that connects UPU's Customs Declaration System (CDS) with ASYCUDAWorld. It facilitates the efficient customs clearance of postal consignments by exchanging pre-arrival and pre-departure information between the postal service and customs. Following this, ASYHUB Express was developed to connect customs systems with express consignment data providers' ICT systems, facilitating the pre-arrival processing of express goods. Chapter V, section C2 details ASYCUDA's intervention and impact for the implementation of the ASYHUB solution in Cambodia and Vanuatu.

As another example, to better equip governments to accelerate the clearance of air cargo, which often includes e-Commerce parcels, ASYCUDA developed a mechanism to seamlessly integrate IATA XML files directly from airlines, straight into the process flow

of customs. This facility, an integrated part of ASYCUDAWorld, helps airlines to exchange data with customs in an IATA-compliant manner. Chapter V, section B5 describes how Niger and Zambia have used this module to simplify air cargo clearance.

3. Ensuring Supply Chain Security Through Advanced Trade Data Analysis

Supply chain security can be further improved through the effective management of the risks associated with trade, transport and logistics. This and more efficient international trade can be achieved by making real-time trade data available to customs, transporters, freight forwarders, and economic operators for processing at an early stage. This data-driven risk management strategy allows for the tracking of goods; security; allocating resources (such as human, IT, energy, transport, port, for example); pre-arrival processing; shorter clearance times; and reduced trade costs. Customs play a key role in delivering this service to the trading community as it is involved in all processes from a consignment's point of departure to its arrival. This realization led to the development of ASYHUB Maritime, an open, standardized platform for processing and integrating maritime cargo data between ASYCUDAWorld and ship data providers prior to the arrival of goods. Chapter V, section C1 details its implementation in Cambodia and the benefits it brought. With the consolidation and analysis of data from external systems, customs' trade data analysis role is strengthened.

4. Supporting Green Transition and Resilient Trade

Customs has a critical role in ensuring the green transition. ASYCUDA works to support climate-smart trade facilitation in four main areas: paperless and contactless customs clearance; green transport and logistics; improving trade efficiency to reduce emissions, and; through the enforcement of environmental regulations.

For example, ASYCUDA helps governments to digitally share data, saving paper in the customs clearance process and the emissions associated with traders travelling to customs and PGAs to manually process the release of consignments. In the area of green transport and logistics, ASYCUDA is working to improve regional cooperation and pre-arrival processing that leads to better planning and fuel efficiency in transportation.

Further, through the implementation of systems such as the ASYSW and the ability to tag trusted traders in ASYCUDAWorld, the Programme helps customs to improve operational efficiencies that contribute to the lowering of emissions associated with the import, export and transit of consignments.

Collaboration with partners and the international community has also led to the creation of systems that facilitate adherence to international treaties and obligations, such as eCITES that facilitates the management of the trade in CITES protected species and the ASYODS module that prevents the trade of Ozone Depleting Substances, banned under the Montreal Protocol.

In terms of resilience, for countries that are prone to natural disasters, customs must ensure the efficient clearance of relief consignments in addition to business continuity and the resilience of trade during emergencies. Much of ASYCUDA's work in this area is detailed in the ASYCUDA Report 2022/23⁷ that presents the Programme's work through a green developmental lens.

ASYCUDA's reforms reduce paper usage and carbon emissions associated with international trade.

⁷ https://unctad.org/system/files/official-document/dtlasycuda2023d1_en.pdf



V. Achievements and **Highlights**

a. Electronic Single Window for Trade

1. Fiji and Papua New Guinea: ASYSW Blueprint and Feasibility Study

Based on the successful implementation of ASYCUDAWorld in Fiji (2015) and Papua New Guinea (2017), and under the European Union-funded 'Improving Pacific Islands Customs and Trade' (IMPACT) project, ASYCUDA was requested to prepare feasibility studies and blueprints for the design and development of electronic single window for trade systems in Fiji and Papua New Guinea (PNG). Optimizing existing capacities and complying with regional and national requirements and agreements (such as in Fiji with the national customs act, food safety act and environment management act, and the regional Pacific Agreement on Closer Economic Relation (PACER Plus) agreement for example). These systems will enable the electronic exchange of trade data among government agencies to further reduce clearance times and trade costs.

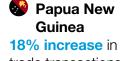
The ASYSW blueprint was handed to Mr. Manoa Kamikamica, Deputy Prime Minister of Fiji, in October 2023 and to Mr. Richard Maru, Papua New Guinea Minister of International Trade and Investment in May 2024.

Speaking at the handover ceremony in Fiji, Mr. Kamikamica said, "The blueprint is a road map to developing the system which recognizes the need for different agencies involved in the trade clearance process and outlines their roles and responsibilities in the interconnectedness approach through this platform." He was joined at the event by Ms. Erja Askola, Deputy Head of the European Union delegation for the Pacific, who noted that, "when implemented, this blueprint of an electronic single window system, designed by UNCTAD, will tremendously facilitate Fiji's trade with the world."8

At the handover ceremony to the Government of PNG, Customs Chief Commissioner Mr. David Towe recognized the potential value in implementing a single window for trade, highlighting that, "the PNG electronic single window blueprint is a report that describes the current international trade practices across 32 different government agencies [which] constitutes 56 processes that relate to the import or export of a particular product or commodity."9

ASYCUDA single window blueprints help governments to better understand which stakeholders need to participate in such a project, the scope of activities involved and how an ASYSW would be implemented. The blueprints are structured to guide the acquisition, installation, configuration and operationalization of a single window system. They present solutions from several perspectives that reflect the different components required. The blueprints also describe facilities to allow each agency to modernize its services through process reengineering and capacity building, and deployment of the relevant ICT infrastructure.





trade transactions 2017-2023 following **ASYCUDAWorld** launch.



https://www.fijitimes.com.fj/national-single-window-system-to-improve-ease-of-doing-business/

https://shorturl.at/KBltN

2. Jamaica: Engagement of Stakeholders

Jamaica
67% reduction
in permit processing
times since 2020.

Any system that brings together multiple government departments and the private sector requires strong commitment, motivation and cooperation. Hence, a key factor in the successful implementation of an electronic single window for trade is the effective engagement of the stakeholders involved in it. A fundamental aspect of the 'Jamaica Single Window for Trade' (JSWIFT) project is the implementation team's training and awareness raising efforts that target end-users from both cross-border agencies and their clients from the trading community. Project staff use virtual means to engage end-users through the sharing of numerous video tutorials on e-Learning platforms and via social media.

Monitoring and evaluation activities involve documenting baseline information to be used to analyze efficiency gains. Further, the use of electronic survey instruments to garner meaningful feedback from participants helps improve training effectiveness. Such feedback is valuable when implementing remedial actions that foster stakeholder mobilization.

By end-2023, the training team delivered sessions to approximately 2,000 participants, 64 per cent of which were female and 36 per cent male. Further, the total number of YouTube video tutorials stands at 36 and there are a further 9 infomercials and tutorials available via the e-Learning platform.

3. Turkmenistan: Simultaneous Launch of PGAs in ASYSW

Turkmenistan
7% increase in import transactions
2022–2023.

73% transparency of trade in UNTF Survey 2023.

As a requirement of the ASYSW implementation in Turkmenistan, the Government specified that no piloting of the solution should take place and that the 22 PGAs involved in the project should start using it at the same time so that all stakeholders and external parties benefit from its services on day one.

From the very start of the project, all PGAs were mobilized to link customs clearance with all other regulatory procedures, including the request, delivery and monitoring of certificates, licences and supporting documents.

Customs and ASYCUDA analyzed legislation, interagency business processes and assessed the IT equipment requirements for all PGAs at the project's start. The modules for each PGA were developed sequentially and the ASYSW portal customized to answer all requirements and regulations. Extensive training sessions were delivered to over 200 participants across the 22 PGAs.

The Turkmenistan ASYSW was launched in December 2023, playing an essential coordination role among the 22 PGAs in Turkmenistan's cross-border trade. 99 per cent of import and export transactions and declarations are covered by ASYCUDAWorld and ASYSW, demonstrating acceptance and compliance by the users and leading to reduced clearance delays and trade costs. Early mobilization of all stakeholders has considerably reduced resistance to change, an obstacle frequently encountered when implementing such complex systems. The ASYSW has allowed entrepreneurs carrying out cross-border trade operations to provide all the necessary data for customs clearance of goods into a single structure. In April 2024, the Interdepartmental Commission for the Coordination of the Single Window Project acknowledged that the system "creates conditions for accelerated customs control, minimization of paper documents, improvement of services provided, saving time for customs clearance, and expanding existing opportunities." 10

¹⁰ https://en.trend.az/casia/turkmenistan/3892919.html



4. Vanuatu: Empowering Data Transparency and Analysis

The Government of Vanuatu strove to boost its adherence to the WTO TFA and commitment to the PACER Plus through the implementation of the Vanuatu electronic Single Window (VeSW) for trade.

By bringing together PGAs into a single, online system, the VeSW facilitates the goods clearance process and boosts growth in international trade. The VeSW implements international and regional agreements while helping the Government to embrace globally recognized methods and tools to enhance data exchange. The system also helps the Government of Vanuatu to access the data within the system in a transparent manner, which is needed to better analyze and improve the quality of its services. Prior to the VeSW being launched, these processes were manual and did not allow for the efficient collection and processing of data.

To meet the transparency and notification obligations of the WTO TFA and the PACER Plus agreement, the customs authority and UNCTAD established a Trade Information Portal¹¹. This portal consolidates and shares all trade-related requirements and procedures online in one location.

In 2023, Vanuatu Customs and Inland Revenue, supported by UNCTAD, conducted its first Time Release Study (TRS) - a tool created by the WCO to measure the time taken to clear goods - with the objective of finding and solving bottlenecks in the trade flow process. The use of a TRS is specifically referenced in Article 7 of the WTO TFA.

In line with Government efforts to facilitate trade and accelerate clearance processes, a systems interface between VeSW and Transam, a major shipping agency, was implemented to allow their manifests to be automatically uploaded into VeSW without manually capturing data.

To date, 65 per cent of WTO TFA provisions are already implemented, while 25 per cent are scheduled for implementation in 2024. Transam no longer manually enters manifests



90+% reduction in paper applications since ASYSW launch.



into VeSW. With manifests sometimes being over 100 bills in size, the automation has resulted in less human error and saved significant time. Further, the average application processing time in VeSW is now less than 10 minutes.

5. Zimbabwe: Knowledge Sharing

Zimbabwe 7.9% increase in trade transactions 2022-2023.

27% higher than target customs revenues for Jan-Jun 2023.

As part of the Zimbabwe electronic Single Window (ZeSW) implementation, ASYCUDA provided training and organized study tours to improve the capacities of national staff. In 2021, technical and functional trainings were delivered both virtually and in-person to customs staff, sharing how to install, configure, use and maintain the system. In 2022, high-level delegations from the Zimbabwe Revenue Authority (ZIMRA), the lead agency for the ZeSW implementation, undertook two study tours in Jamaica and Uganda to better understand similar ASYSW systems, learn from other governments' experiences and define a clear, tailored, ZeSW implementation roadmap. The recommendations and experience shared dealt with the identification of PGAs and their prioritization for integration into the single window, the training strategy, the mobilization of stakeholders, business processes re-engineering and the ownership of the technical and technological environment.

The Ministry of Health's Port Health Authority was identified as the first PGA to be integrated into the ZeSW with a workshop held to determine their specifications in May 2023. Following development of the Port Health Authority module, train-the-trainer sessions were organized and delivered by ZIMRA and ASYCUDA to Port Health Authority staff and economic operators. ZeSW was successfully launched in September 2023 with the Port Health Authority delivering its first trade permits.

Both the public and private sectors have benefitted from ASYCUDA's unique position as a knowledge and experience sharing hub. Since the inception of the project, over 600 customs clearing, shipping and forwarding agents, as well as importers and exporters were trained on the efficient use of the platform.

Mr. Samasuwo, Charge d'Affaires a.i., Permanent Mission of Zimbabwe in Geneva, Switzerland said, "Zimbabwe has witnessed a 379 per cent increase in monthly fees collected by the Port Health Authority since onboarding into the ZeSW."

b. ASYCUDAWorld Customs Automation

ASYCUDAWorld, UNCTAD's fourth and current customs management system, is live in around 100 countries, enabling customs administrations and the business community to process hundreds of thousands of electronic documents every day. ASYCUDAWorld is easily customizable and new or advanced components can be added when requested by user governments. Such add-on modules cover a full range of customs business features that are defined according to specific national and regional priorities. Further, the international trade data that it gathers helps user governments to better understand their economic performance, supporting well-informed decision-making. In 2024, the Programme released ASYCUDAWorld v 4.4, an updated version that enhances risk management, customs data gathering and compatibility with external systems, while further reducing paper consumption.

This section details case studies from ASYCUDAWorld user countries outlining its broad impact and the latest capabilities that have been developed to cater to specific country needs.



1. Antigua and Barbuda: Processing Online Payments

Antigua and Barbuda first launched an ASYCUDA customs management software, ASYCUDA v2, back in 2003 and migrated to the latest system, ASYCUDAWorld, in 2018. However, they were unable to process payments online with the version of ASYCUDAWorld being used.

In March 2023, the Government upgraded to the latest available version of ASYCUDAWorld which was enhanced with an online payment facility for the collection of duties. The work was carried out under the European Union's 11th European Development Fund (EDF) - the main instrument for European Union aid for development cooperation with the African, Caribbean and Pacific (ACP) Group of States – and in cooperation with commercial banks for the electronic exchange of data between ASYCUDAWorld and their respective systems. This implementation required close collaboration and dedicated focus on the streamlining and alignment of the e-payment procedure and technology used in both ASYCUDAWorld and by commercial banks.

The ASYCUDA e-Payment facility is helping support the government's transition towards paperless transactions – cutting down on associated costs and making it more convenient for traders to pay taxes online and on time, 24/7 using credit and debit cards. Further, online payments also limit in-person transactions, ensure traders can fulfil most customs formalities from their offices, increase revenues through improved cash flow, and accelerate customs clearance times.

Speaking at the launch, the ASYCUDA Regional Coordinator for the Americas, Mr. Jaime Mendoza, noted that, "the launch of the upgraded ASYCUDAWorld and introduction of the e-Payment facility will allow all individual and commercial traders to expedite transactions and pay customs obligations at their convenience, thus helping them ease their business with the Customs and Excise Division. It will definitely speed up the release of goods and improve the government's revenue cash flow."

Antigua and Barbuda
22% increase in export transactions 2022–2023.

21% customs revenue increase Jan-May 2024 compared to Jan-May 2023.

2. Georgia: Regional Integration

Georgia

1,125 customs officers trained on NCTS.

15% increase in import transactions 2022-2023.

Georgia is a strategic transportation hub between Western Europe, the Caucasus, and Central Asia. The Government of Georgia is seeking to boost free trade relations with the European Union and the country is a candidate to join the bloc, which requires compliance with all European Union transit regulations.

The Government, in partnership with the European Union, have put in place an ASYCUDA-developed NCTS, which paves the way for Georgia to join the European Union Common Transit Convention, an international treaty that facilitates trade among the European Union and a group of other economies. One of the major accomplishments of this project was the successful alignment of NCTS with complex European standards, data elements and design documents. For example, the Design Document for National Transit Application (DDNTA) and the Design Document for Common Operations and Methods (DDCOM)) as well as the exchange of data with external systems such as the EU Common Communication Network / Common Systems Interface (CCN/CSI).

The system was first used to process trades within Georgia before being expanded to cover goods moving across international borders. NCTS is expected to make it cheaper and faster to transport goods between Georgia and the European Union market - with goods being assigned one shared customs declaration and guarantee for use by any of the 36 states currently using it.

Achieving compliance with European Union standards requires passing through a complex four-stage assessment - Georgia's NCTS has already passed the first two stages of testing by the European Union which has validated the system's national compliance, with the remaining regional and international compliance testing expected to be completed in 2024.

"The [NCTS] project significantly increases the predictability and transparency of transit process," said Ms. Nino Jincharadze, Head of Service Quality Monitoring at the Georgian Revenue Service. "This will contribute to better supply chain planning and allows businesses to improve and manage their operations more efficiently."



3. Iraq: Tripling Revenues at Baghdad Airport

In May 2021, the Government of Iraq and UNCTAD signed an agreement that would revolutionize the country's ability to trade internationally. The agreement aimed to replace the existing manual, paper-based customs clearance process with a secure, digital solution, based around UNCTAD's ASYCUDAWorld customs management system. Once implemented, the second phase of the project would build upon the ASYCUDAWorld implementation by connecting multiple PGAs involved in the customs clearance process into one electronic single window system. Speaking at the project signing ceremony, Iraq's Minister of Finance, Mr. Ali Abdul Ameer Allawi, highlighted ASYCUDAWorld's potential to reduce corruption and fraud, as well as improve the country's international trading potential.

In October 2023, Iraq's Minister of Finance, Ms. Taif Sami, officially launched ASYCUDAWorld at Baghdad International Airport. Over the following months, the system was rigorously tested in Baghdad and rolled out to key customs offices at Umm Qasr Port and the Port of Basra in March 2024.

Recent data has shown that import transactions values increased by 120 per cent in January to March 2024 compared with January to March 2023 following the implementation of ASYCUDAWorld. The Government of Iraq aims to have ASYCUDAWorld operational in 50 per cent of customs offices by the end of 2024 and in all customs sites by the middle of 2025.

Mr. Hassan Al-Ugaili, Head of the General Authority of Customs, said, "the system is distinguished by unifying the procedures of the customs authority and at all its crossings and ports, while unifying the methods of collecting fees and providing precise and accurate data for the entire Iraqi state about the volume of imports and the amount of trade exchange between them," he added that, "it also provides information to the decision-maker about import and export, control over currency movement, and the exchange of dollars between Iraq and other nations."

4. Malawi: Incorporating Government Clearance Agencies

Importing goods into Malawi requires clearances from both the Malawi Revenue Authority (MRA) and the Malawi Bureau of Standards (MBS) which ensures product quality and safety. Since ASYCUDAWorld was only being used to automate customs clearances with the MRA, clearing agents had to physically take documents to MBS offices to be manually cleared, leading to delays and additional costs.

In January 2023, the World Bank, Government of Malawi, and UNCTAD agreed a project to upgrade to the latest version of ASYCUDAWorld. Speaking at the project signing ceremony, Commissioner General of the Malawi Revenue Authority, Mr. John S. Biziwick, said, "The upgrade will improve efficiency in facilitating legitimate trade in all our borders. We are geared up for the successful delivery of the project."

The new system went live in October of the same year. The upgrade has enabled the MRA and MBS to merge their systems so that they can share information and process declarations within ASYCUDAWorld. Importers now only need to declare their goods once and pay monies due to both MRA and MBS in one transaction. One clearing agent from Dynamic Freight said, "We welcome the development. This is because it will reduce congestion and delays because the system will speed up the movement of



215% increase in customs revenue at Baghdad International Airport in Jan-May 2024 compared yearon-year with 2023.

28% increase in import transactions 2022-2023.



300 (45% women) customs staff trained on ASYCUDAWorld.



goods." MBS Deputy Director General, Thomas Senganimalunje, said this has improved speed as, in the past, documents had to physically move from one office to another whereas, in the current system, information reaches MRA and MBS at the same time, thereby reducing clearance time.

The new version of ASYCUDAWorld also allows the MRA to use a bespoke selectivity and economic operator profiling module for better identification of consignments warranting closest inspection. Further, the updated ASYCUDAWorld system has also been adapted to interface with banks, PGAs and COMESA's regional cargo tracking system.

5. Niger and Zambia: Simplifying Air Cargo Clearance with **ASYCUDAWorld**

ASYCUDA user countries requested support with better adhering to the standards prescribed by the International Air Transport Association (IATA), particularly for facilitating the clearance of express consignments.

To support this, the IATA Cargo-XML solution modernizes data exchange for air cargo clearance by using IATA standards in combination with the ASYCUDAWorld customs management system. Developed in collaboration with IATA, the module helps courier operators and customs to better manage simplified and express declarations, facilitating stronger compliance. In 2023, the module was launched in both Niger and Zambia.

The system makes it easier for airlines, freight forwarders, express operators, and shippers to ensure that the information being provided to customs before the arrival of air cargo shipments in country is correct and in line with the security standards set by the WCO. It reduces message duplication, simplifies communication across the supply chain, facilitates customs risk assessments for air cargo shipments and improves compliance with security regulations.



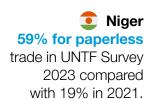
- Airlines, freight forwarders, shippers and border agencies can now use the same digital language
- Message duplication is reduced
- Data integrity is maintained
- Communication across the supply chain is simplified
- Error and acknowledgement handling is improved

Benefits for customs include:

- · Customs operations are modernized and no longer paper-based
- Security is enhanced through improved risk assessment
- Full compliance with customs regulations is facilitated

6. Pacific Region: Harmonizing Customs in 15 P-SIDS

ASYCUDA's recent work in the Pacific is largely focused around two projects, specifically the PACER Plus and PRISE. Through both projects, combined with other initiatives funded directly by beneficiary governments, UNCTAD was called upon to roll out ASYCUDAWorld in every Pacific country that was yet to digitalize its customs processes –









equating to 15 Pacific small island developing states (P-SIDS). More information about these two projects can be found in the ASYCUDA Report 2022/23¹², the ASYCUDA Report 2021/22¹³ and in ASYCUDA case studies¹⁴

Since 2019, ASYCUDA has been collaborating with Pacific governments to ascertain their digital customs needs and deliver customized ASYCUDAWorld software across the region. ASYCUDAWorld was tested and made live in Palau (January), combined with Niue in 2023 (February), the Federated States of Micronesia (March), and the Marshall Islands (May) in 2024.

15 P-SIDS are now running ASYCUDAWorld (Cook Islands, Fiji, Kiribati, Micronesia (Federated States of), Marshall Islands, Nauru, New Caledonia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu) and the system is yielding positive results for their respective governments.

7. Central African Republic: Flexible Customs Technologies

The Central African Republic requested ASYCUDA technical assistance to migrate its customs data to a new database management software and upgrade ASYCUDA++ to ASYCUDAWorld.

The Government obtained funding from the European Union to help migrate to ASYCUDAWorld but also to enable the development and integration of tailored additional modules and features into the system; the setting up of data exchanges between customs partners and other administrations; the procurement of hardware and establishment of a new technical environment; and the delivery of capacity building activities to support customs with managing the new system.

- 12 https://unctad.org/system/files/official-document/dtlasycuda2023d1_en.pdf
- 13 https://unctad.org/system/files/official-document/tcsdtlinf2022d5_en.pdf
- 14 https://asycuda.org/en/case-studies/









15% increase in customs revenue 2022-2023. The project started in June 2022, with the successful installation of the ASYCUDAWorld prototype at customs headquarters in Bangui. Experts then delivered ASYCUDAWorld training to the national customs team. Further, a delegation from customs undertook a study tour to Niger to learn from their experiences of migrating to ASYCUDAWorld.

The database management software migration from Oracle to the open-source PostgreSQL was conducted by ASYCUDA and the local IT team. ASYCUDA delivered advanced technical training to ensure the successful migration of data and the smooth management of the new software. The installation of new servers and database management software was followed by the migration of data from ASYCUDA++ to ASYCUDAWorld servers. This included selecting, preparing and extracting data from the previous environment and transforming it to be compliant with the new setup prior to transfer.

In February 2023, the selected pilot site, Bangui Airport, successfully launched ASYCUDAWorld. Over the following months the software was rolled out to every customs office in the country, including the newly computerized ones. Further, in June 2023, the Central African Republic customs office for transit located in Douala, Cameroon also successfully migrated to ASYCUDAWorld. Since then, Cameroon and Central African Republic customs have been able to exchange transit data and track goods up until the point that a consignment reaches its destination. To control the value of imported goods, an interface for the electronic exchange of data between ASYCUDAWorld and the tax department's application, e-Douanes, was implemented.

8. Suriname: Improving Customs Service Performance and **Delivery**

Suriname **ASYCUDAWorld** available 24/7 and resilient to disasters and failures.

89% increase in customs revenues 2022-2023. To further boost economic growth and improve the service provided to the trading community, the Government of the Republic of Suriname sought to increase customs service efficiency and effectiveness through maximizing the country's use of ASYCUDAWorld.

In December 2022, the Government of the Republic of Suriname brought in ASYCUDA to improve risk management and the control of trade across borders; enhance Government revenue collection; simplify business processes; support the government's decisionmaking process when formulating economic and fiscal policies, and; better manage trade data for statistical analysis. It was recognized that these objectives could be achieved through the implementation of a more recent version of ASYCUDAWorld and the development of additional features and functionalities, such as the AEO capability. Further, the optimization of the hardware, software and overall IT environment, such as via the relocation to a new data centre with updated ICT infrastructure, would be beneficial.

A national project team (NPT) was established in June 2023 to help with managing the system. NPT members received multiple ASYCUDA technical and functional trainings, including learning how to configure, test and manage user profiles, as well as manage the customs declaration, cargo management, selectivity module, and the new exemption module.

ASYCUDAWorld's core technical infrastructure was upgraded, which included the configuration of disaster recovery and stand-by, relocation to the Ministry of Finance's new data centre and the migration of its database. ASYCUDAWorld is now available 24/7 to all users and is resilient to disasters and failures.



The upgrade of ASYCUDAWorld took place in September 2023 with the web-based system deployed to all customs offices by the end of October 2023. In the first half of 2024, the ASYCUDAWorld system was configured to interface with external systems, such as the Marine Authority to help them view manifests, and the Police to access vehicle registration details, with Suriname customs staff able to more effectively manage and use the system.

In 2023, customs collected SRD\$8 billion representing an 89 per cent increase on the 2022 figure. Immediately following the upgrade, a record SRD \$1.9 billion in total customs revenue was collected in November 2023.

9. Turkmenistan: Facilitating Road Transit

Recognizing Turkmenistan as a significant transit hub, the Government requested ASYCUDA's assistance in enhancing the country's transport and transit potential by obtaining preliminary electronic information about goods transported by foreign cargo carriers.

The International Road Transport Union (IRU), the State Customs Service and ASYCUDA collaborated to integrate IRU's TIR-EPD information system with ASYCUDAWorld's transit module, ensuring compliance with SafeTIR requirements. The TIR-EPD system electronically provides customs authorities with preliminary information about goods transported by road. In June 2023, the first cargo transported between Turkmenistan and Uzbekistan using the electronic TIR carnet were processed by customs in ASYCUDAWorld. The same process will also facilitate transit with Afghanistan, Iran and Kazakhstan. With the integration of TIR-EPD into ASYCUDAWorld, Turkmenistan can now quickly and securely clear consignments transiting through the country.

Turkmenistan
75% of declarations
are transit
declarations.

100% for transit pre-arrival processing in UNTF Survey 2023.





c. Specialized Platforms for Trade Digitalization

1. Cambodia: Pre-Arrival Processing for Increased Efficiency

Cambodia 1,000+ **ASYHUB** users in 2024.

200,000+ containers processed since ASYHUB launch.

The Cambodian business community identified delays in customs clearance as being a significant barrier to international trade efficiency. These delays are primarily attributed to complex clearance procedures, but also to the submission of customs declarations after the arrival of goods.

ASYCUDA developed ASYHUB Maritime under the 'Digitizing Global Maritime Trade' project funded by the German Ministry of Development. It is an open, standardized platform that brings together public and private trade stakeholders, processing and sharing customs data between ASYCUDAWorld and ship data providers prior to the arrival of goods at their destination. It provides customs with end-to-end supply chain visibility for pre-arrival processing and improves overall clearance times.

It was successfully piloted in Cambodia at Sihanoukville Port in March 2024 and Phnom Penh Port in April 2024. It is currently being implemented in Albania, Jordan, Sri Lanka and Venezuela (Bolivarian Republic of). The integration of data from multiple stakeholders facilitates the filing and processing of customs declarations; the sharing of status notifications to customs officers and traders; and the submission of supporting documents prior to the presentation of goods. It also equips customs with enhanced risk management capabilities through the provision of access to real-time data and comprehensive information for better informed targeting of inspections.

There are three methods to submit manifests and bills of lading in ASYHUB. Through the automated reception of information received from external shipping data providers systems; the upload of structured files such as XML and excel files; and the manual capture of data directly in ASYHUB. These methods allow for the early submission of goods declarations (before arrival) and their subsequent processing and clearing.

2. Cambodia and Vanuatu: Boosting e-Commerce

The governments of both Cambodia and Vanuatu sought to expedite postal consignments clearance to help firms to better engage in e-Commerce. They recognized that to enhance the overall postal supply chain they would need to streamline clearance processes and improve coordination between customs and the postal service.

ASYCUDA developed ASYHUB, a standardizing data exchange and integration platform that operates between ASYCUDAWorld and other systems to simplify the customs clearance process. ASYHUB Post is an interface that connects the Universal Postal Union (UPU) CDS with ASYCUDAWorld. It facilitates the efficient customs clearance of postal consignments by exchanging pre-arrival and pre-departure information between the postal service and customs, while ensuring efficient revenue collection and statistical analysis. Categorization of postal consignments, early risk management and automatic notification can be carried out using ASYHUB and ASYCUDAWorld.

As part of the project, ASYCUDA procured computers and barcode readers, delivered training to country staff, fine-tuned the solution to meet individual national requirements, and installed the software at customs. ASYHUB Post was deployed in Vanuatu in 2022 as part of the country's ASYSW project. In Cambodia, ASYHUB Post was rolled out in 2024.

With the customs declaration automatically generated in the system, senders and recipients no longer require broker services, which lowers the cost of using the postal network. Customs declarations are now assessed prior to arrival, in accordance with WTO's TFA Article 7.1, and clearance times are quicker, with goods released within the day of arrival. Through these improvements, ASYHUB Post has helped user-governments to boost their traders' e-Commerce capabilities.

3. Sri Lanka and Mozambique: Digitally Managing Protected Species Trade

UN Environment's CITES Secretariat recognized that member governments could better use digital permitting systems to improve the implementation of the CITES Convention – an agreement designed to protect endangered species of fauna and flora. CITES Secretariat decided to collaborate with UNCTAD to simplify the process of managing the permitted trade and combat the illegal trade of endangered species.

In partnership with CITES, ASYCUDA developed the eCITES software¹⁵ – a cloud-based permitting system that facilitates the monitoring and control of the international trade of endangered species. eCITES was launched in Sri Lanka in February 2020 and in Mozambique in October 2022.



in postal clearance time following ASYHUB launch in 2022.

26% increase in value of import and export transactions 2022–2023.

Sri Lanka
91% decrease
in trade of most
endangered species
2020–2023.

65% reduction in permit processing times 2020–2023.





Mozambique 73% reduction in permit processing times Jul-Dec 2023. In both countries, eCITES has enabled the streamlining of trade procedures and improved coordination among stakeholders (including customs and the CITES National Management Authority). It has also helped governments to monitor and limit the trade of endangered species and enhance reporting by using accurate, digital data.

In Sri Lanka, eCITES is helping the Government to not only curb the illicit trade in endangered species but some of these species are considered among the most endangered with extinction. Further, for the permitted trade of CITES protected species, Sri Lanka has seen the request rejection rate decrease since the launch of eCITES, demonstrating improved compliance by traders to the necessary rules and regulations. eCITES has also been used to issue permits for the trade of species that are not listed nor regulated by CITES, showing extension of the system's purpose and acceptance by users.

The software is helping CITES Secretariat to achieve all five goals identified in its strategic vision for 2021–2030, including helping governments to achieve full compliance with the Convention; using technology to support decision-making and regulation formulation; increasing the capacity of national staff through training; helping governments to achieve progress towards the Sustainable Development Goals; and improving collaboration among Parties to the CITES Convention, including international agencies and donors. Since using eCITES, Sri Lanka and Mozambique are now candidates for joining category 1 of countries that meet all requirements for the effective implementation of the CITES Convention.

4. Vanuatu: Prompt Release of Relief Consignments

Countries prone to natural disasters have witnessed the build-up of relief consignments and donations at the border, often until a good's shelf life has expired or usefulness past. This can be caused by a gap in coordination among key actors, complex customs procedures and a lack of stocktaking.

66

[ASYREC] will be launched [...] to enable the smooth facilitation of humanitarian disaster relief supplies coming into Vanuatu," said Vanuatu's Minister of Finance and Economic Management, Hon. Johnny Koanapo Rasou.

ASYCUDA and UNOCHA developed the Automated System for Relief Consignments (ASYREC), an open-source solution that digitalizes the entire relief clearance procedure in line with international standards (such as the Resolution of the Customs Co-operation Council on the Role of Customs in Natural Disaster Relief, and SAFE Framework of Standards). It allows countries to automatically request or accept international assistance as soon as an emergency starts. Through ASYREC, the National Disaster Management Authority records the initiation of an emergency, its expected duration and the relief items required by the Government as priority needs, including requested volumes. The system then allows aid agencies and donors to lodge electronic pre-arrival customs declarations and prioritize the treatment of these consignments by automatically identifying humanitarian donors logged as trustworthy and recognize their shipments, ensuring a fully automated processing of customs declarations and the timely release of goods.

To complement the ASYREC system, ASYCUDA developed an e-Learning course to improve understanding of disaster management concepts and how to use the solution efficiently.

In Vanuatu, the ASYREC implementation project kicked-off in 2022 during a virtual event that was attended by the National Disaster Management Office, customs, NGOs involved in delivering humanitarian relief supplies, and UNCTAD staff.

The project included adapting the solution and the simplified declaration to national requirements, followed by ASYREC's installation in-country and the training of all users. The system was successfully launched in April 2023, using a natural disaster simulation to demonstrate its capabilities. This simulation allowed for the assessment and adjustment of the processes and procedures used as well as the clear definition of the roles to be played by each stakeholder in the event of an emergency.



13 Pacific SIDS participated in two ASYREC regional workshops in 2024.





Annex I – ASYCUDA's Alignment with WTO TFA

a. Areas of Expertise:

- Providing expert advice on drafting multi-annual ICT strategy programmes for implementing TFA by customs and other cross-border regulatory agencies
- Supporting the definition of performance indicators for each measure in the TFA and developing ICT tools to monitor implementation progress
- Assisting in the implementation of a complex ecosystem and a wide range of specialized ICT tools (e.g. ASYHUB, eCITES, etc.), along with highly trained experts to ensure efficient and effective deployment

The key WTO TFA-related areas where the ASYCUDA Programme can offer comprehensive multi-annual technical assistance and capacity building can be seen in Annex Table 1.



Annex Table 1 ASYCUDA's Alignment with WTO TFA

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Description	Examples of Contributions
Article 1 Publication and Availability of Information	 Publication on ASYCUDA and/or ASYSW of all customs and trade-related legislation (tariffs, fees, import-export procedures, etc.), news, and customs contact information and office working hours ASYCUDA Integrated WCO's Harmonized System Tariff and Duty Simulator
Article 3 Advance Rulings	 Facilitating the treatment of advance rulings, notably concerning tariff classification, origin and valuation. ASYCUDA sub-system of binding advance rulings providing advance and predictable cargo release to the traders through ASYHUB Pre- or upon arrival automated verification of advance rulings during customs declaration processing
Article 4 Procedures for Appeal and Review	 Management of disputes arising from administrative decision-making by customs, through an appeal or review of procedures such as the ASYCUDA Customs Decision Management System (CDMS) in which traders have the right to appeal if the decision is unfavourable, and/or no decision is obtained within the time limit

Description

Examples of Contributions



Article 5 Measures to Enhance Impartiality, NonDiscrimination, and Transparency

Art. 5.1 – Notifications for Enhanced Controls or Inspections

- ASYCUDA enables automatic notifications to traders (via email, SMS) on mandatory documents, relevant PGAs involved, and status of controls in real time
- ASYCUDA enables automatic notifications of AEOs on controls or inspections prior to arrival and presentation
- Improved customs and PGAs cooperation through electronic notifications on enhanced controls and inspections, jointly conducted by customs and other border controlling agencies using mobile devices to report control results
- ASYHUB facilitates the exchange of customs decisions (CUSRSP messages) between ASYCUDA and CDS (UPU/Postal Service) to hold goods on arrival

Art. 5.2 - Detention

 Communicates control decisions, type of controls (e.g. full/partial physical examination, sampling, etc.) and control results to traders, including detention of goods declared for importation, for inspection by customs or any other competent authority

Art. 5.3 - Test Procedures

 Through enhanced multi-agency, risk management features, indicates when partial physical examinations/ sampling are taking place (including the use of sampling plans) and records test results/findings



Article 6

Disciplines on Fees and Charges

- Provides information on all fees and charges, automated (non-discretionary) computation of duties and taxes, fees and charges
- Provides for automated calculation of duties and taxes under Free Trade Agreements, including quota management
- Enables integration of e-Payment solutions
- Collects non-declaration related fees and charges
- Collects all taxes and implements tools based on the severity of infractions and past contraventions
- Records penalties in the Inspection Act database and facilitates their collection based on the severity of infractions and past contraventions

Description

Examples of Contributions



Article 7 Release and Clearance

of Goods

Art. 7.1 - Pre-Arrival Processing

- ASYCUDA facilitates submission of advanced cargo information (e.g. cargo declarations/manifests, bill of ladings, container status messages, eCN22/23, etc.) as well as goods declarations and supporting documents in order to begin processing prior to the arrival and presentation of goods with a view to expediting the release of goods upon arrival
- Pre-arrival notifications on vessels, passengers, and crews enable multi-agency controls on arriving boats or aircrafts
- ASYHUB data exchange and data integration (maritime, post, express) enables system-to-system information exchange to support pre-arrival/predeparture processing

Art. 7.2 - Electronic Payment

 ASYCUDAWorld/ASYSW enables electronic payment for customs declarations, LPCOs, etc. through interfacing with commercial banks

Art. 7.3 - Separation of Release from Final Determination of Customs Duties, Taxes, Fees and Charges

 ASYCUDAWorld/ASYSW enables the use of deferred payment, prepaid accounts and guarantee management, allowing for the release of goods prior to the final determination of customs duties, taxes, fees and charges (e.g. disputes over tariff classification or valuation)

Art. 7.4 – Risk Management

ASYCUDA and ASYHUB offer:

- Selection by complex criteria (customs or other agencies)
- Multi-agency risk management
- Dynamic selectivity (Al and ML)
- Valuation control selection
- Built-in anti-corruption functions (automated allocation of officers)
- Random and targeted selection of declarations for control
- Early warning notifications
- Inspection act/selectivity control page

Description Examples of Contributions Pre-loading/pre-arrival risk management Offence database · EO ranking for all stakeholders (e.g., importers, brokers, carriers) Art. 7.5 - Post-Clearance Audit · Provides post-clearance audit capabilities, including defining annual audit plans, selecting companies based on PCA risk indicators, sampling transactions for review, recording irregularities, penalties, and recovered duty/tax amounts, monitoring resource allocation, and tracking audit progress Art. 7.6 - Establishment and Publication of Average Release Times Measures processing times for major clearance steps · Collects information on end-to-end timestamped events from ASYHUB ASYPM system provides performance indicators focusing on customs and traders Art. 7.7 - Trade Facilitation Measures for Authorized Economic Operators (AEO) · Allows operators to apply for AEO status • Implements specific selection procedures and facilitated procedures for AEOs Manages authorizations for deferred payments and credit accounts Manages global guarantees (including use of reduced guarantee levels), credits, and rankings for companies, declarants, and carriers Art. 7.8 & 7.9 - Expedited Shipments and Perishable Goods Facilitated procedures for specific shipments under certain circumstances Adapted examination processes for quicker release of perishable goods Expedited shipments for post, express, and maritime consignments via ASYHUB, ASYREC and AEO implementation

Description	Examples of Contributions
Article 8 Border Agency Cooperation	 Supports data exchange with other information systems Sends messages (SMS, emails) to operators, other agencies, and customs brokers Coordinates border controls with PGAs using a single automated system
Article 10 Formalities Connected with Importation, Exportation, and Transit	 Art. 10.1, 10.2, 10.3 Supports both electronic transmission (system-to-system) and manual capture of data by operators Allows attachment of scanned documents Assists user-countries in reforming customs, simplifying and streamlining its procedures and formalities and reviewing the legal framework prior to digitalization Facilitates data reuse, application of international standards, electronic signatures, and barcodes







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ISBN 978-92-1-003368-8



Printed at United Nations, Geneva 2422739 **(E)** – December 2024 – 150

UNCTAD/DTL/ASYCUDA/2024/1

United Nations publication Sales No. E.24.II.D.32