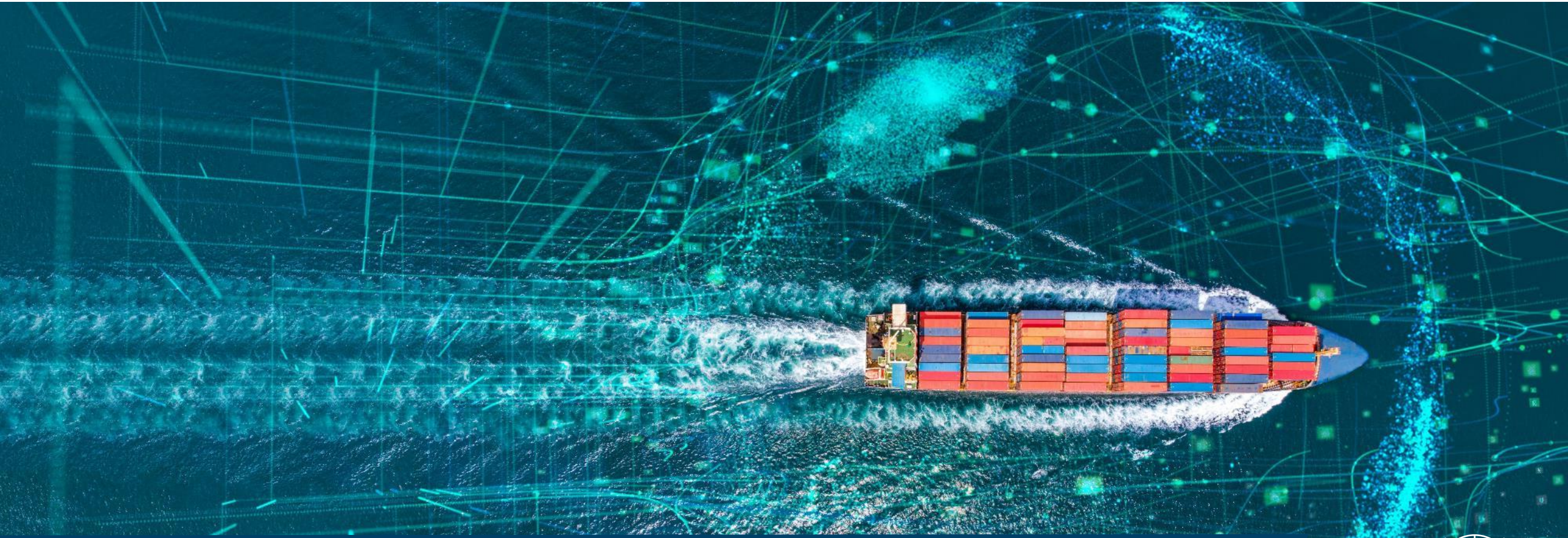
ASYCUDA 40 YEARS

Automated System for Customs Data

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

UNCTAD



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ASYCUDA (DTL), UNCTAD

# Trade Facilitation and Development through Greater Digitalization & Enhanced Connectivity

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Automated System for Customs Data

1. **From Computerization to Digital Transformation**
2. Connectivity in trade
3. Greater Digitalization & Enhanced Connectivity
4. Challenges of Digitalization
5. UNCTAD's ASYCUDA Programme
6. ASYCUDA's intervention & impact

# From Computerization to Digital Transformation

## Through Digitization & Digitalization

### Computerization

**Use of a computer to do something that was done manually**

- Availability of information
- Paperless processes

### Digitization

**Conversion of information into a digital format**

- Information easily stored, accessed and shared
- Example: scanning (copying) a text document

### Digitalization

**Use of digitization to improve processes**

- How computing systems can use digitized information (i.e., data) to improve the way things are done
- Example: Advertising based on web browsing history

### Digital Transformation

**Integration of digital technology into business resulting in fundamental changes to how it operates**

- Automation of performance management
- Chatbot for customer service

# From Computerization to Digital Transformation

## Applied to Trade & Customs

### Computerization

**Use of a computer to do something that was done manually**

- Forms are replaced by electronic visual representations
- Data is not processed

### Digitization

**Conversion of information into a digital format**

- Every information entered is converted into digital data, collected into datasets
- Data can be analyzed and processed separately and independently from the e-document

### Digitalization

**Use of digitization to improve processes**

- How IT customs systems use data to improve customs clearance
- Example: Selectivity, Valuation Control, Reporting, automatic generation of payment receipt, release order...

### Digital Transformation

**Integration of digital technology into business resulting in fundamental changes to how it operates**

- Customs become the central entity for trade facilitation
- Customs officers/ examiners' intervention and skills

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# Connectivity in trade

**Capacity for platforms, systems, applications and modules to communicate with each other by exchanging (standardized) data**

- through interfaces that allow for the exchange of data among systems
- through one system that gathers them all (Single Window)

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# Greater Digitalization & Enhanced Connectivity

## Why?

- Effects of inevitable disruptions on supply chains
- Costly and time-consuming procedures
- Scarcity of trade information
- Information asymmetry
- Errors in inspection
- Lack of compliance to international standards and national regulations
- Lack of transparency and accountability
- Lack of operational performance assessment

# Greater Digitalization & Enhanced Connectivity

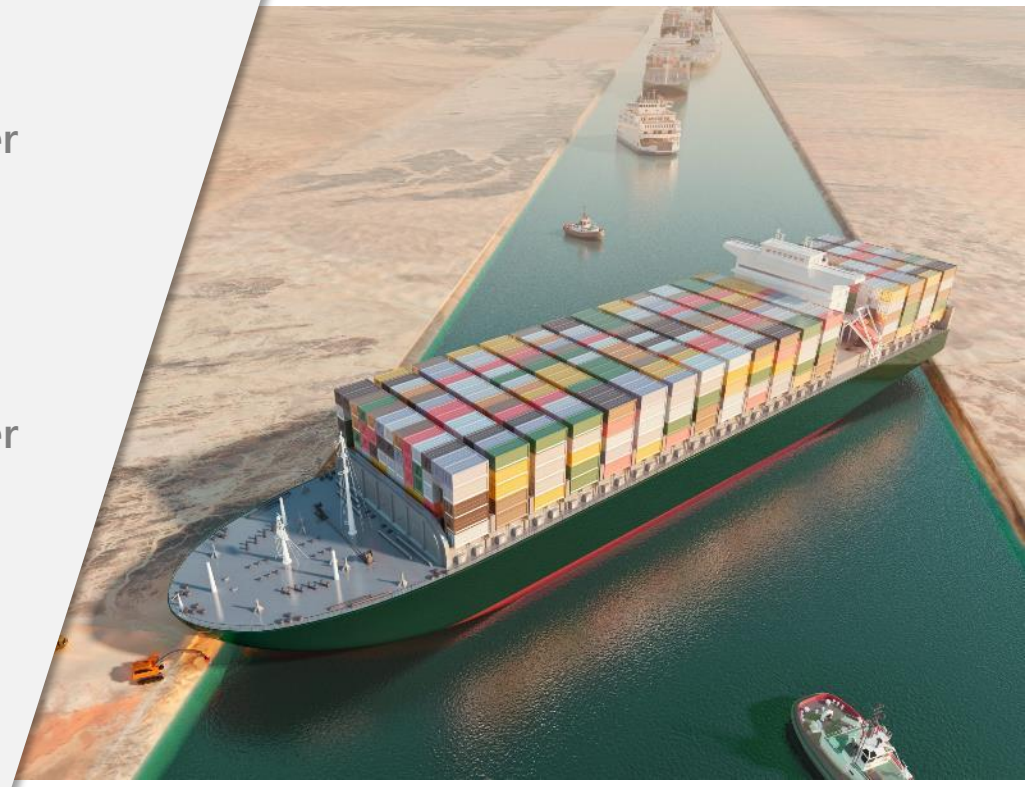
## The 2021 Suez Canal Blockage

### Situation

- Ship Ever Given ran aground in the Suez Canal
- 350+ ships queuing at both ends
- 6 days to bring queues to normal level
- Complete disruption of supply chain
- First-come, first served principle resulted in fuel wastage
- No estimation of waiting line

### Solution

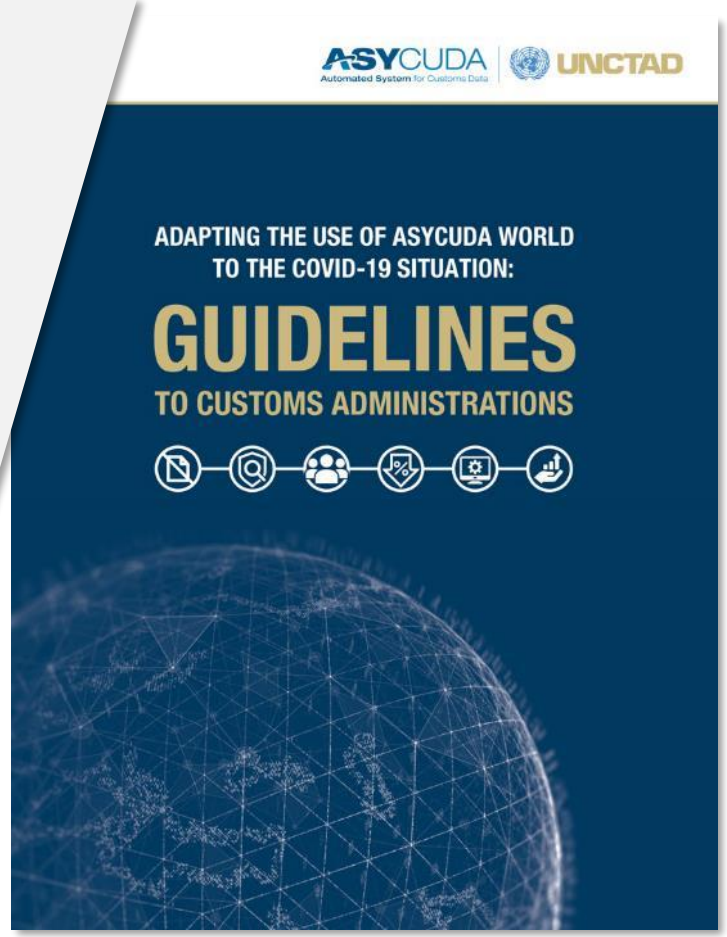
- Pre-arrival processing for better visibility in supply chain
- Queue numbers assignments before ship arrival
- Timing optimization through prediction models that consider the number of ships heading towards the Canal to calculate expected waiting time and alternative slot availability



# Greater Digitalization & Enhanced Connectivity

## The COVID-19 pandemic

- Social interaction reduction
- Expedited customs clearance of COVID-19 related medicine and medical equipment
- Multi-agency Integrated Risk Framework
- Further paperless processing, including granting legal value to scanned documents, e-payments, self-assessment
- Change in consumer behavior (e-commerce boom, more environment-oriented)
- Inflation
- Green recovery
- Enhanced CRM (trade information portal, hotline, chatbot)



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# Challenges of Digitalization

- Lack of financing
- Digital technology skills and experience have become a « must have »
- Legislative and regulatory reforms
- Non-Tariff Measures
- Lack of global standards and protocols to drive interoperability/interconnectivity
- Lack of firms' awareness of latest technologies and potential gains from digitalization
- Reluctance to change

ASYCUDA

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# UNCTAD's ASYCUDA Programme

## Background

- UNCTAD's largest technical cooperation programme
- Four decades of pioneering technological innovation for Trade Facilitation
- Demand-driven programme that support the efforts of developing countries to modernize and automate their customs clearance processes
- ASYCUDAWorld, the Programme's flagship customs system
- Mandate renewed and reaffirmed in paragraph 127 (c) of the Bridgetown Covenant
- Broadening its scope and intervention to assist PGAs in modernizing and automating their trade procedures

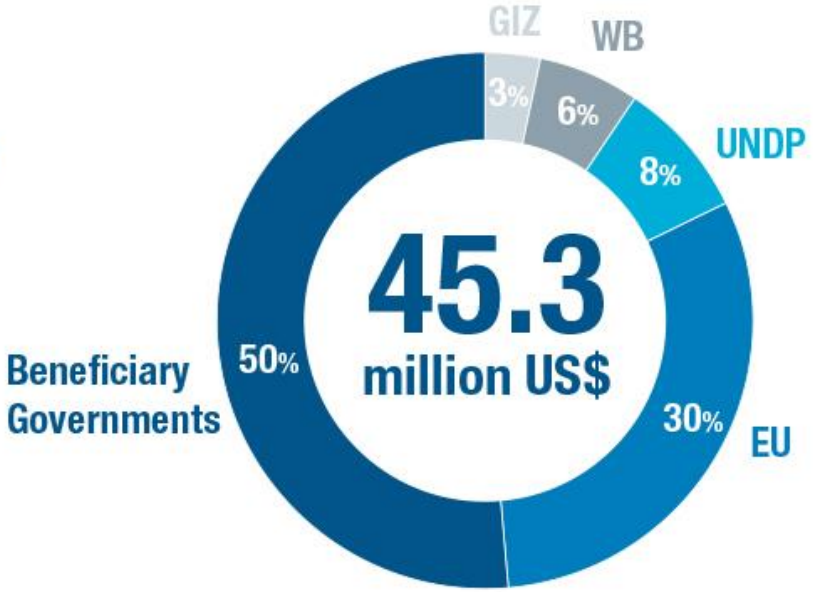
# ASYCUDA Programme

## Some numbers

**102** Countries & territories

- 38 LDCs
- 41 SIDS
- 23 LLDCs

### Project **funding** (2021)




**11** Single Window projects

- Barbados
- Burundi
- Comoros
- Jamaica
- Kazakhstan
- Rwanda
- Timor-Leste
- Turkmenistan
- Uganda
- Vanuatu
- Zimbabwe

### Transfer of know-how (2021)

300+ training sessions & 3000+ participants

**69** Ongoing projects including 13 regional & inter-regional

**30** New projects signed (2021)

# ASYCUDA COMMUNITY

## 102 Countries & Territories

### EUROPE AND CENTRAL ASIA

- Afghanistan
- Albania
- Bosnia and Herzegovina
- Georgia
- Gibraltar
- Kazakhstan
- Kosovo
- Moldova
- Tajikistan
- Turkmenistan

### MIDDLE EAST

- Iraq
- Jordan
- Lebanon
- Palestine
- Syria
- Yemen

### AMERICAS AND THE CARIBBEAN ISLANDS

- Anguilla
- Antigua and Barbuda
- Aruba
- Barbados
- Belize
- Bolivia
- Caribbean Netherlands
- Curaçao
- Dominica
- El Salvador
- Grenada
- Guyana
- Haiti
- Jamaica
- Montserrat
- Nicaragua
- Puerto Rico
- Saint Kitts and Nevis
- Saint Lucia
- Saint Pierre and Miquelon
- Saint Vincent and the Grenadines
- Suriname
- Trinidad and Tobago
- Turks and Caicos
- Venezuela

### AFRICA

- Angola
- Benin
- Burkina Faso
- Burundi
- Cabo Verde
- Central African Republic
- Chad
- Comoros
- Congo
- Côte d'Ivoire
- D.R. Congo
- Djibouti
- Equatorial Guinea
- Eritrea
- Eswatini (former Swaziland)
- Gabon
- Gambia
- Guinea
- Guinea-Bissau
- Lesotho
- Liberia
- Libya
- Madagascar
- Malawi
- Mali
- Mauritania
- Mozambique
- Namibia
- Niger
- Rwanda
- Saint Helena
- Sao Tome and Principe
- Seychelles
- Sierra Leone
- Sudan
- Togo
- Uganda
- Zambia
- Zimbabwe

### ASIA AND PACIFIC ISLANDS

- Bangladesh
- Cambodia
- Cook Islands
- Fiji
- Kiribati
- Lao PDR
- Maldives
- Marshall Islands
- Micronesia (FSM)
- Nauru
- Nepal
- New Caledonia
- Niue
- Palau
- Papua New Guinea
- Samoa
- Solomon Islands
- Sri Lanka
- Timor-Leste
- Tonga
- Tuvalu
- Vanuatu

# ASYCUDAWorld

## 4th generation of ASYCUDA Customs IT system

- Fully compatible with all forms of data exchange with any external software
- Highly secure
- An open platform to build a customs-centric electronic Single Window
- Implementation through a technical cooperation project

**Features**

Manifest processing I Declaration processing I Selectivity I Automatic calculation of taxes and duties
e-payment I Transit management I User accounts management

# Single Window

## Concept

- One-stop shop to connect PGAs and streamline trade procedures through one platform
- Aligned with TFA
- Availability of trade information to traders online
- Transparency & accountability
- Same data provided to all agencies involved
- Muti-Agency Risk Management
- Use of International Standards
- Interoperability with external systems

# Single Window

## Aligned with WTO's Trade Facilitation Agreement

WTO OMC

**Article 1**
**Publication and Availability of Information**

- 1.1 – Improve publication standards
- 1.2 – Allow information availability through internet

**Article 5**
**Other Measures to Enhance Impartiality, Non-discrimination and Transparency**

- 5.1 – Notifications for enhanced controls or inspections

**Article 6**
**Disciplines on Fees and Charges**

- 6.1 – Provide transparency on fees and charges

**Article 7**
**Release and Clearance of Goods**

- 7.1 – Pre-arrival processing
- 7.2 – Electronic payment
- 7.4 – Risk management
- 7.6 – Establishment and publication of average release times

**Article 8**
**Border Agency Cooperation**

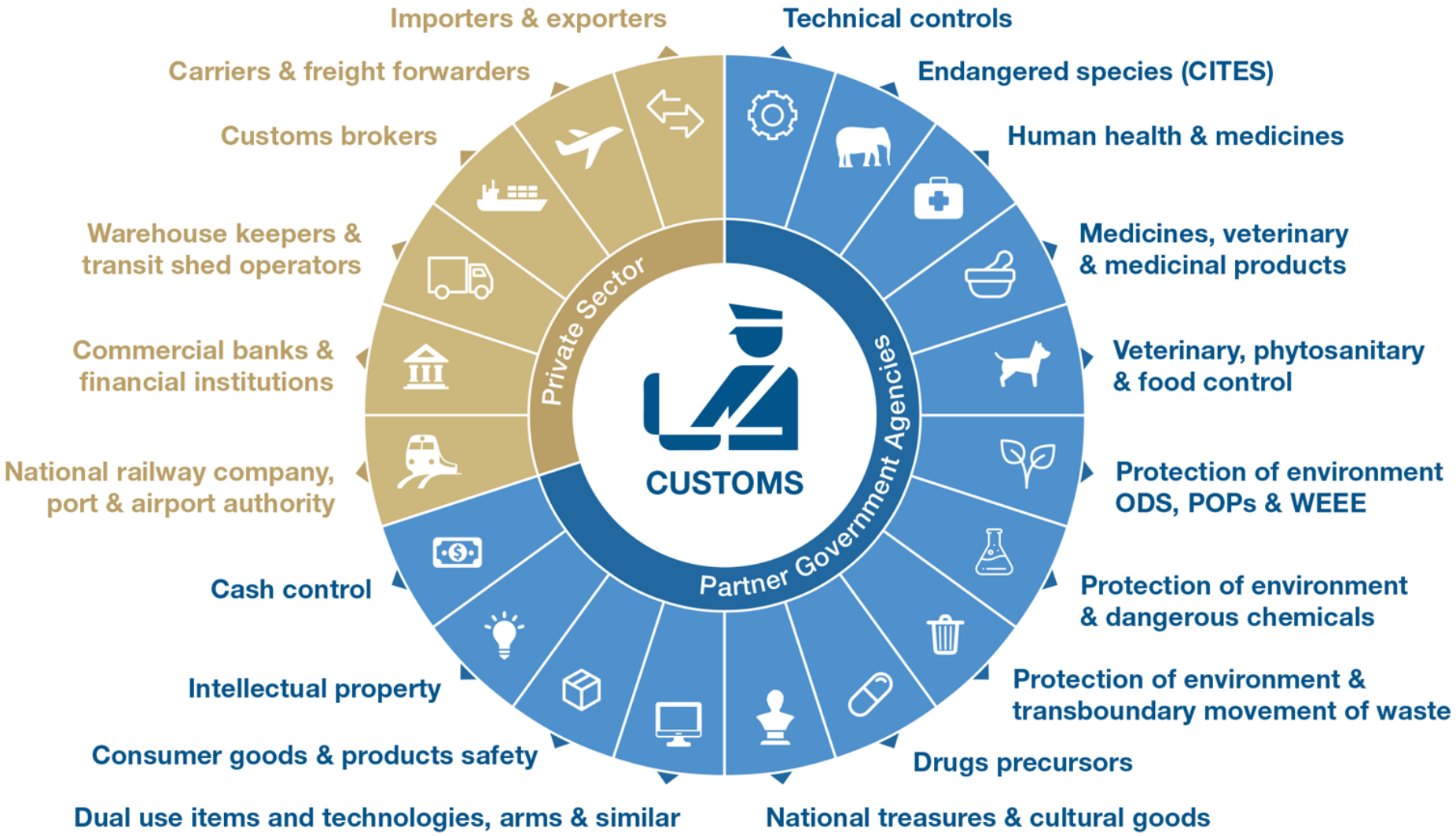
- 8.1 – Border controls and procedures
- 8.2 – Cooperate on mutually agreed terms with other members

**Article 10**
**Formalities Connected with Import, Export and Transit**

- 10.1 – Formalities and documentation requirements
- 10.2 – Acceptance of copies
- 10.3 – Use of international standards
- 10.4 – Establish or maintain a Single Window
- 10.7 – Common border procedures and uniform documentation requirements

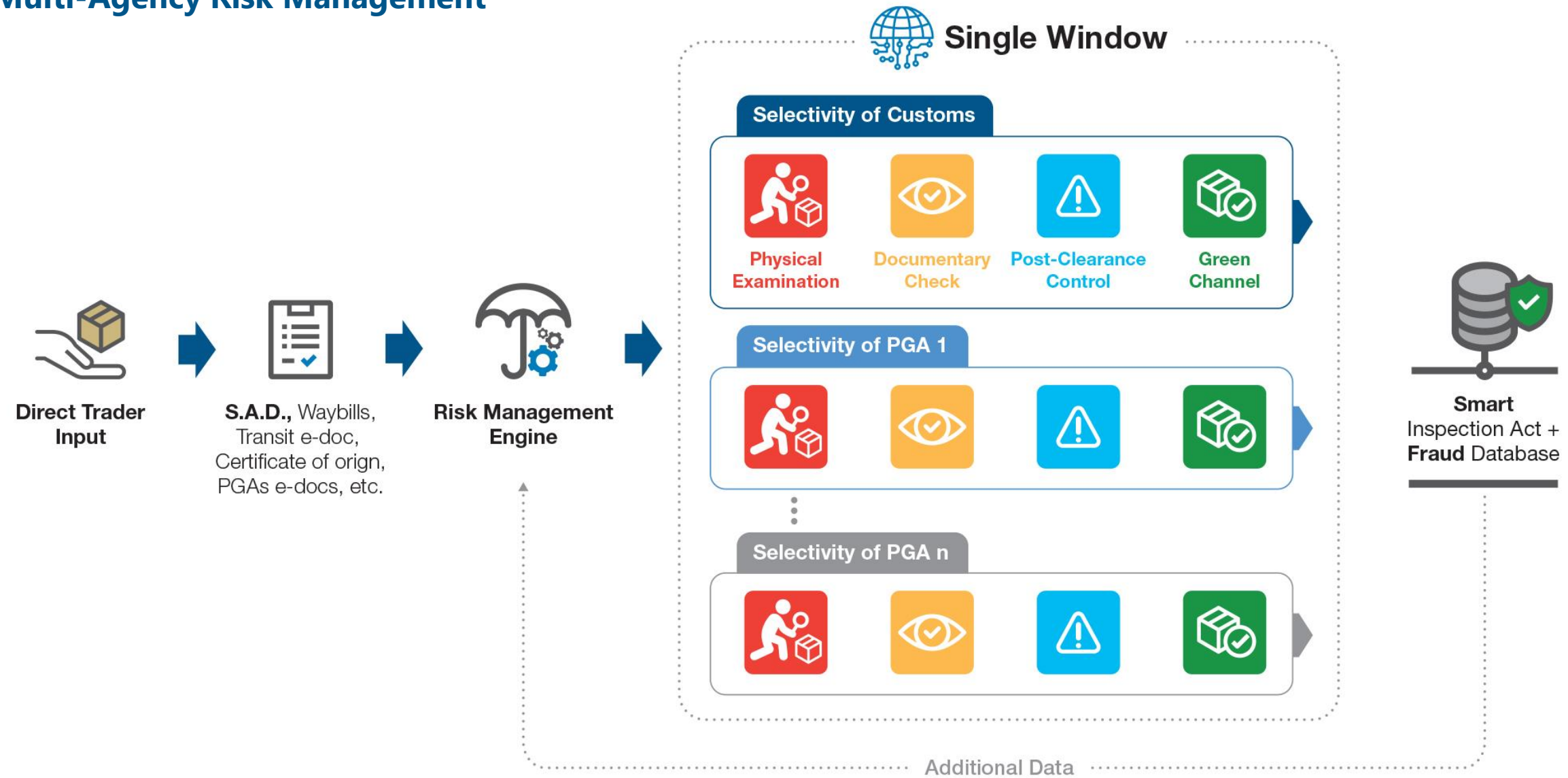
# Single Window

## Customs-centric



# Single Window

## Multi-Agency Risk Management



# ASYHUB

## Main Objective

- Data Exchange & Integration platform between ASYCUDA system and ship data provider's ICT systems to facilitate the **processing of electronic Sea Cargo Manifest pre-arrival (Entry) and pre-departure (Exit)**

## Expected Benefits

- Improved coordination of border agencies in respect of controls and information exchange: **Data pipeline to streamline border processes**
- Access to additional information beyond declaration data: **Enrichment of manifest & declaration data with external data**
- Enhanced cross-validation across datasets: **More accurate and reliable information & bigger data pool for risk analysis**
- **END-2-END supply chain visibility**

## Partners

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

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# ASYHUB Cross-border information exchange

## END-2-END Supply Chain Visibility

ASYHUB

- Goods Items
- Containers Information
- Supply Chain Actors
- Locations
- Transport Document

# ASYREC

## Automated System for Relief Consignments

ASYREC RELIEF CONSIGNMENTS

- Ensures humanitarian response to an emergency crisis proves logistically timely and effective
- Smooth and efficient coordination of humanitarian relief imports
- Ensure timely importation of necessary relief goods: Humanitarian assistance offered by the international community rapidly creates bottlenecks at borders
- Accurate application of tax exemptions for humanitarian responders
- Risk Mitigation to protect from illegal traffic

**Partners**

OCHA

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# ASYREC

## Phases & Actors

**Phase 1**

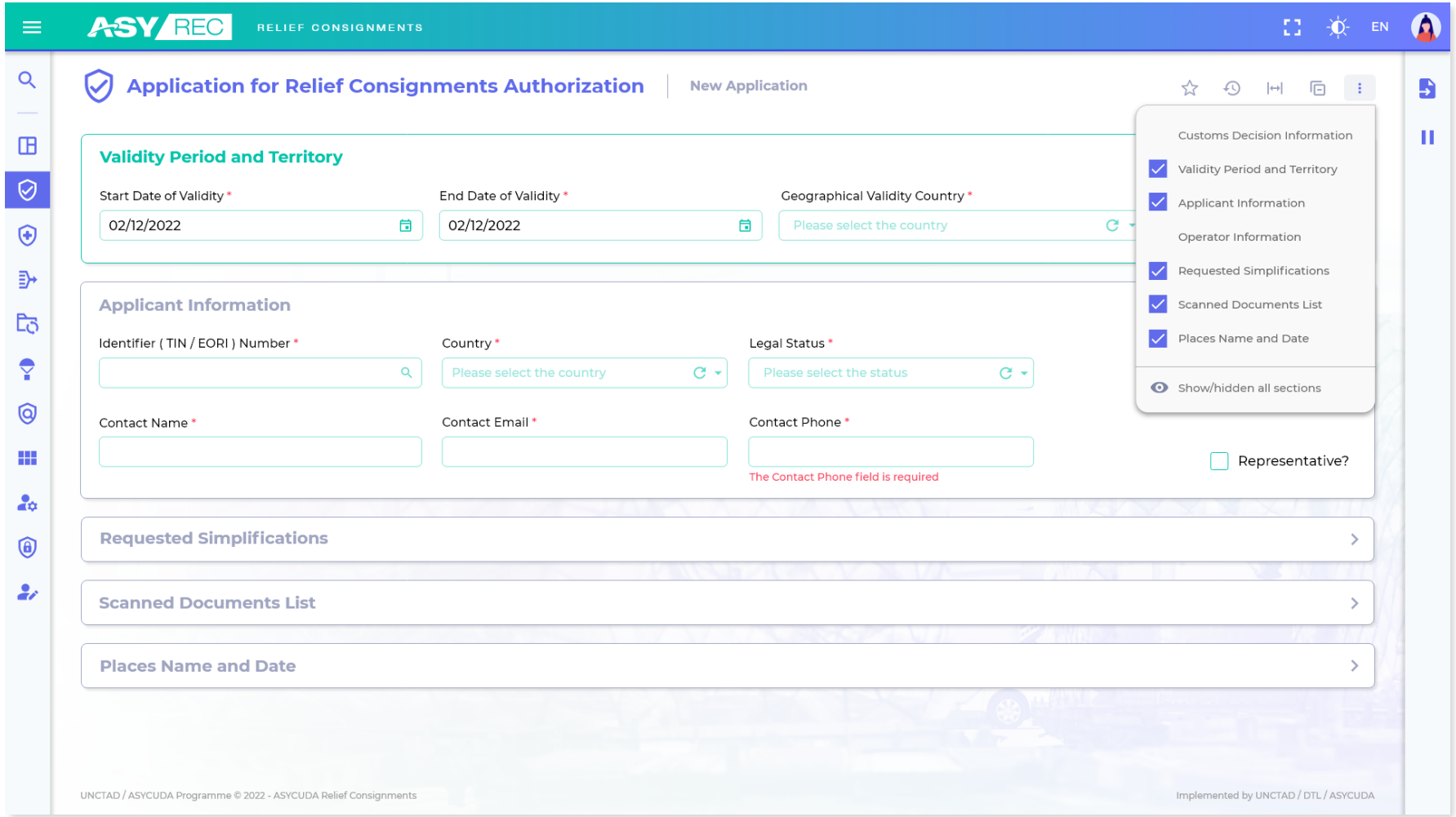
Pre-emergency and Preparatory stage

**Phase 2**

Emergency

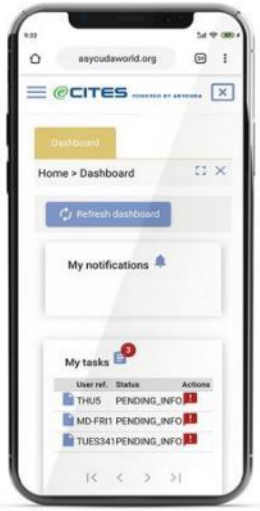
**Phase 3**

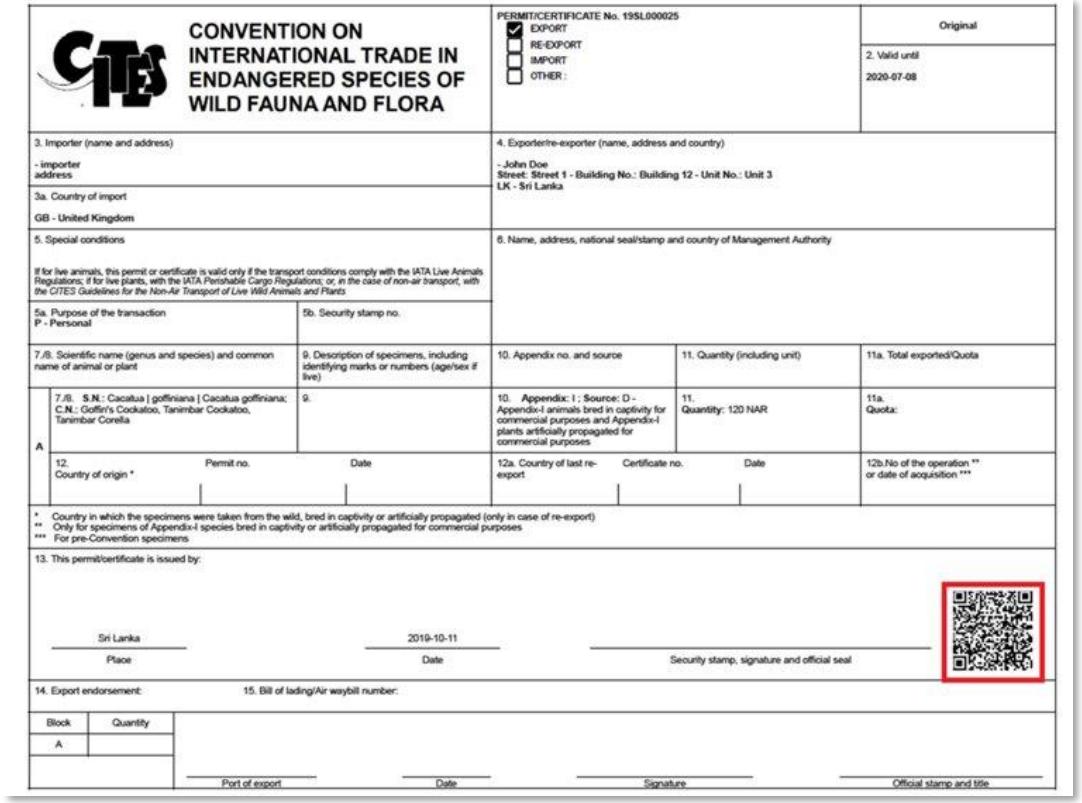
Termination of emergency and post-emergency



# eCITES

## Concept



CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

PERMIT/CERTIFICATE No. 19SL000025
☑ EXPORT
☐ RE-EXPORT
☐ IMPORT
☐ OTHER :

Original

2. Valid until
2020-07-08

3. Importer (name and address)
- importer address

3a. Country of import
GB - United Kingdom

4. Exporter/re-exporter (name, address and country)
- John Doe
Street: Street 1 - Building No.: Building 12 - Unit No.: Unit 3
LK - Sri Lanka

5. Special conditions
If for live animals, this permit or certificate is valid only if the transport conditions comply with the IATA Live Animals Regulations; if for live plants, with the IATA Perishable Cargo Regulations; or, in the case of non-air transport, with the CITES Guidelines for the Non-Air Transport of Live Wild Animals and Plants

6. Name, address, national seal/stamp and country of Management Authority

5a. Purpose of the transaction
P - Personal

5b. Security stamp no.

| 7./8. Scientific name (genus and species) and common name of animal or plant | 9. Description of specimens, including identifying marks or numbers (age/sex if live) | 10. Appendix no. and source | 11. Quantity (including unit) | 11a. Total exported/Quota |
|---|---|---|---|---|
| A 7./8. S.N.: Cacatua \| goffiniana \| Cacatua goffiniana; C.N.: Goffin's Cockatoo, Tanimbar Cockatoo, Tanimbar Corella | 9. | 10. Appendix: I ; Source: D - Appendix-I animals bred in captivity for commercial purposes and Appendix-I plants artificially propagated for commercial purposes | 11. Quantity: 120 NAR | 11a. Quota: |

12. Country of origin * | Permit no. | Date
12a. Country of last re-export | Certificate no. | Date
12b.No of the operation ** or date of acquisition ***

* Country in which the specimens were taken from the wild, bred in captivity or artificially propagated (only in case of re-export)
** Only for specimens of Appendix-I species bred in captivity or artificially propagated for commercial purposes
*** For pre-Convention specimens

13. This permit/certificate is issued by:

Sri Lanka — Place
2019-10-11 — Date
Security stamp, signature and official seal

14. Export endorsement:
15. Bill of lading/Air waybill number:

| Block | Quantity |
|---|---|
| A | |

Port of export | Date | Signature | Official stamp and title

- Cloud-based electronic permit system offering automated support for permit application, processing, issuance and reporting for the international trade of endangered species of fauna and flora

## Partners

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# ASYCUDA's intervention & impact

## Impact of ASYCUDAWorld

### Bangladesh

- 50% increase in customs revenue from 2017 to 2021

### Bosnia and Herzegovina

- 32% increase in value of import transactions from 2020 to 2021

### Burundi

- 39% customs revenue increase in 2019-2021

### Djibouti

- 80% of goods transiting to Ethiopia cleared in less than 4 hours in 2021

### Gambia

- 50% reduction in average release times in 2017 to 2021

### Montserrat

- 25% reduction in release times in 2021

### Syria

- 98% of imports and exports processed through ASYCUDAWorld

### Papua New Guinea

- 2 hours average application processing time in 2021 compared to 7 days

### Turkmenistan

- Reduction of cargo clearance by 14 times following the implementation of ASYCUDAWorld

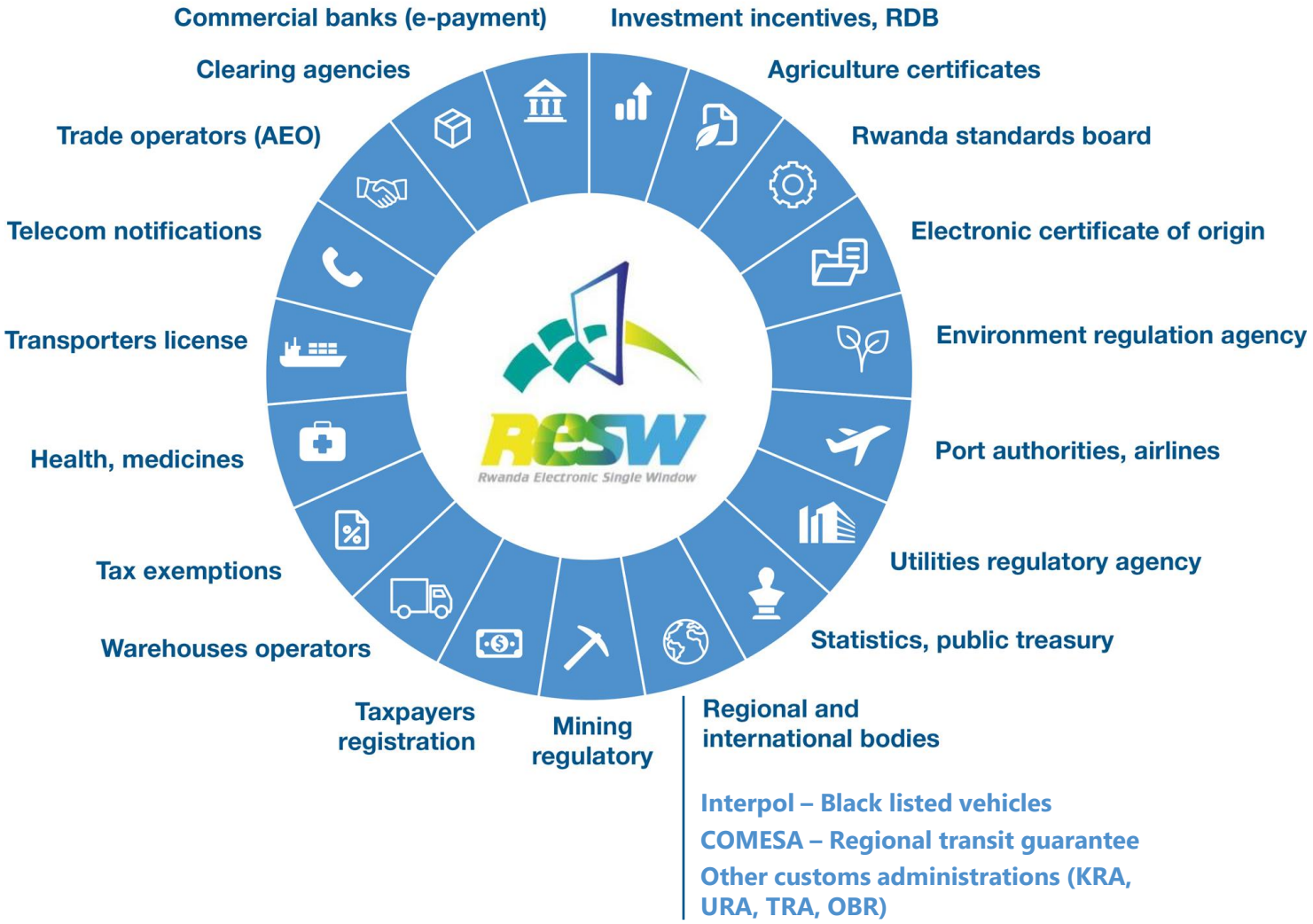
# Single Window in Rwanda

## Description

- ASYCUDAWorld launched in 2011
- SW launched in 2012 with 4 PGAs

**In 2022:**

- 28 PGAs and 520 clearance agencies
- 1,544 declarants and 2,369 total users




**Partner**

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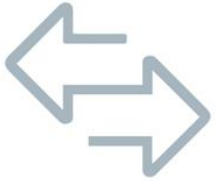
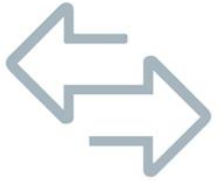
*Growing Prosperity Through Trade*

# Single Window in Rwanda

## Description

Operators submit their trade documents to a single point of entry through the ReSW





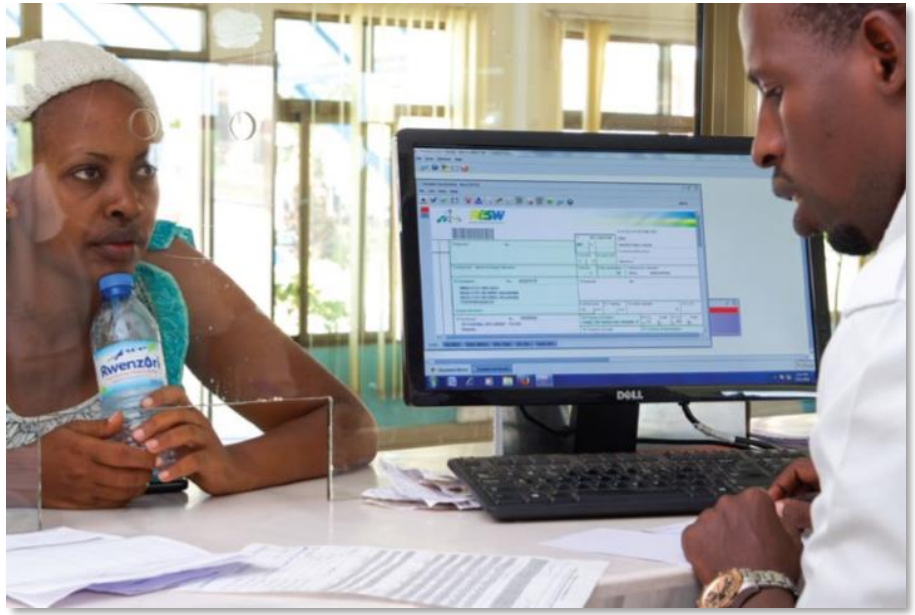
Operators get feedback from relevant agencies

Sorting, selection and filtering of information and sending back information to relevant agencies

# Single Window in Rwanda

## Impact

- Consistent increase of customs revenue
- Reduced customs clearance times from 11 days in 2010 to under a day now
- Cost of clearance reduced from approx. 35 USD to approx. 5 USD in just one year period
- Generated net savings of about $18 million after 3 years of implementation
- 71 places improvement in the Trading Across Borders topic of the World Bank Doing Business Ranking in 2011–2019



### Customs annual revenue evolution

(Fiscal year in percentage)

**Partner**

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# eCITES in Sri Lanka

## Impact

**March 2010**

MOU signed between UNCTAD and its ASYCUDA Programme and the CITES Secretariat

**December 2018**

Signing of a project with the CITES Secretariat to develop the eCITES@ASYCUDA BaseSolution

**April 2019**

Signing of a project with the Sri Lanka Department of Wildlife Conservation (DWC) to deploy the eCITES@ASYCUDA in Sri Lanka

**February 2020**

Launch of UNCTAD's ASYCUDA eCITES system at the Department of Wildlife Conservation in Sri Lanka - live operations

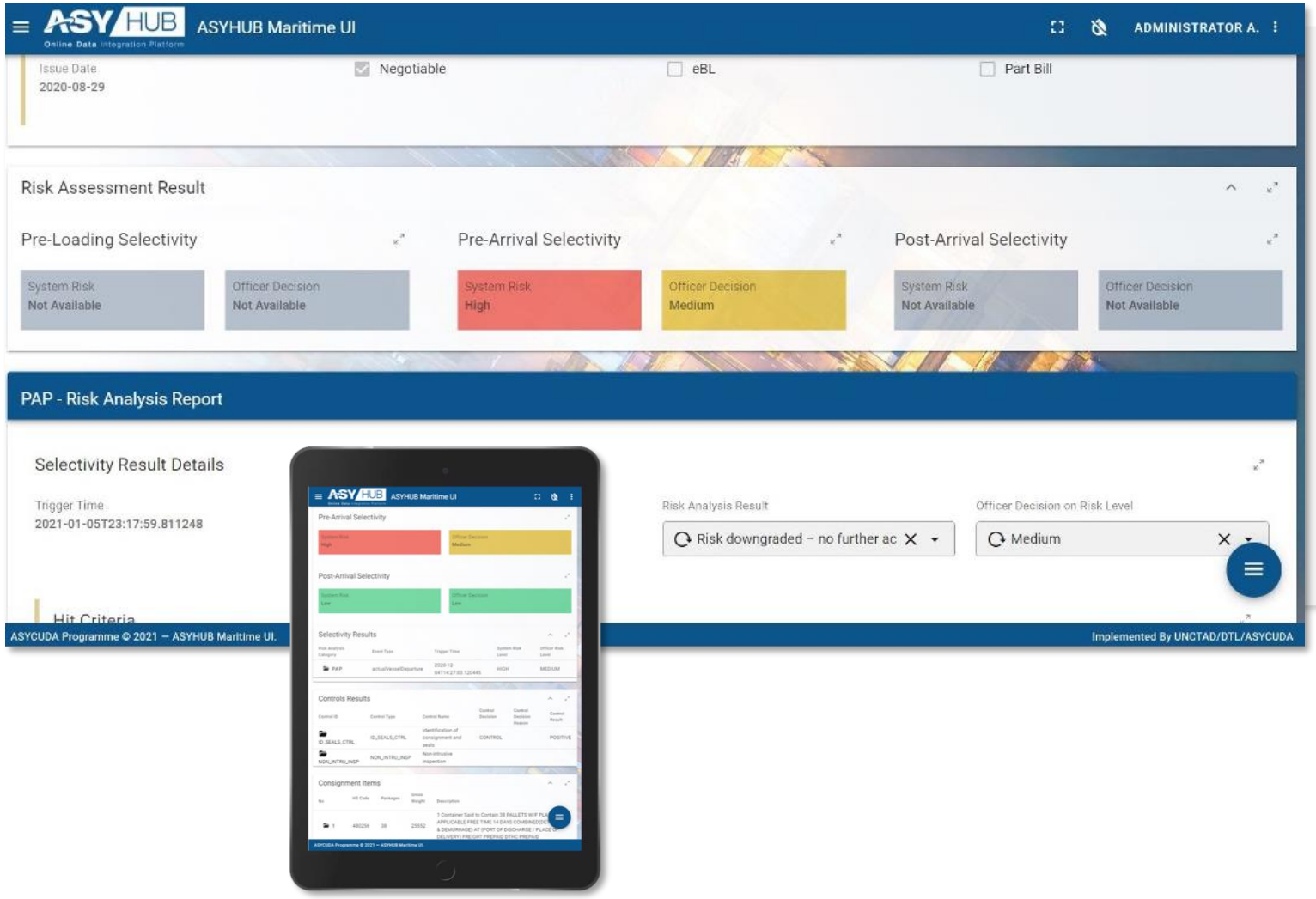
**Sep-Oct 2022**

- eCITES v2
- EPIX readiness
- Implementation & launch in Mozambique

- Decrease in average processing time: from 120 hours in 2020 to 39 hours in 2022
- System acceptance by users: +17% permits requests from 2020 to 2021 & +24% from 2021 to 2022
- Improved compliance of traders: rejected requests decreasing from 8.8% in 2020 to 4.3% in 2022

# ASYHUB

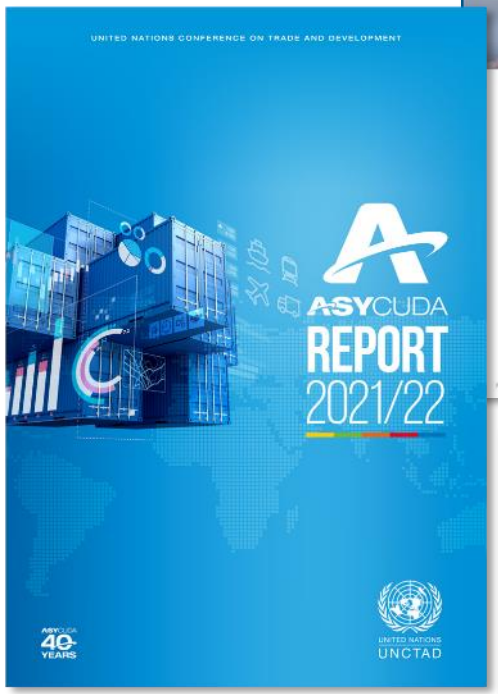
## Implementation in Cambodia & Sri Lanka

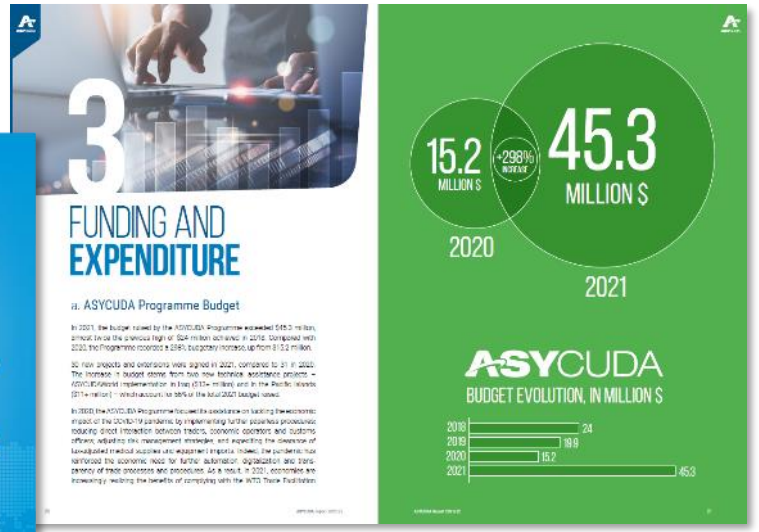


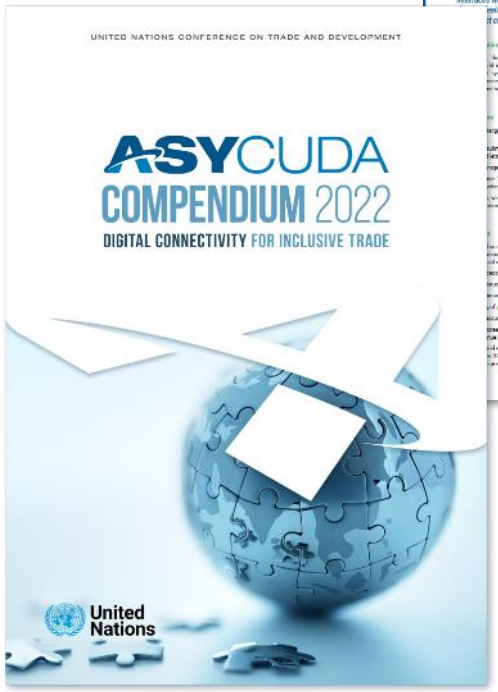

- Secure exchange of data between AW and a shipping information platform
- Pre-arrival Processing with the pre-lodgment of customs declaration on AW based on ASYHUB waybill
- Risk analysis triggered before and after arrival
- Notification upon arrival of goods

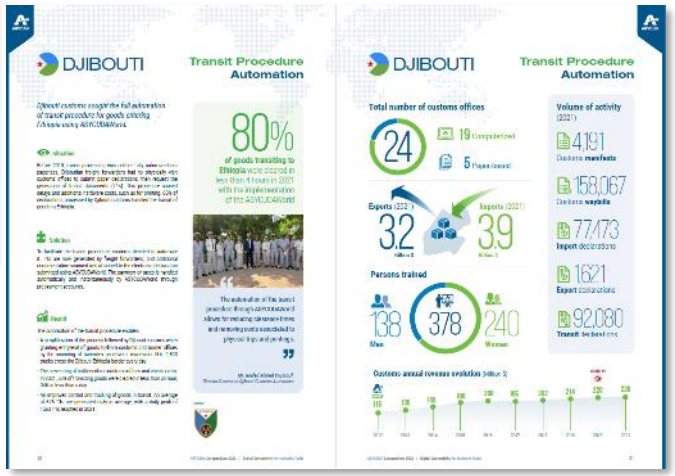
# ASYCUDA Publications & Analytical Work

## Compendium of Case Studies & Activity Report







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# THANK YOU!

## QUESTIONS & ANSWERS

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