UNCTAD ASYCER
Electronic Phytosanitary Certification System

Mr. Dmitry Godunov
Division on Technology and Logistics, UNCTAD

13 October 2015
STDF Working Group,
WTO, Geneva
UNCTAD ASYCUDA Programme Today

- 5 continents
- 8 regional support centers
- 19 languages and 8 alphabets
- 20 core staff and 100 working in field
- 30 years of experience
- 60 active projects
- 95 national and regional implementations
- 70,000 trained ASYCUDA users
- 15,000,000 customs operations per year
- 50,000,000 transactions annually
UNCTAD ASYCUDA Programme Today

- **Afghanistan** “Customs revenue soared from 50 million $ in 2003 to 950 million $ in 2011 - 2,000% increase. Decrease of waiting time at Torkham to 1,5 hour, down from 18 hours in 2003” (WB Evaluation Report 2011)
- “**Albania** reduced time needed for customs clearance for imports by implementing ASYCUDAWorld electronic data interchange system” (WB Doing Business 2010)
- “**Bangladesh** made trading across borders easier by implementing a fully automated computerised data management system ASYCUDA” (WB Doing Business 2015)
- “**Belize** reduced time to export and import by implementing ASYCUDAWorld” (WB Doing Business 2013)
- “**Dominica** reduced time to import by implementing ASYCUDAWorld” (WB Doing Business 2013)
- “**Gambia** made trading across borders faster by implementing ASYCUDA” (WB Doing Business 2012)
- “**Georgia** reduced the cost of trade and simplified documentation for exporting and importing” (WB DB 2010)
- “**Granada** reduced time to export and import by implementing ASYCUDAWorld” (WB Doing Business 2013)
- “**Haiti** speeded up the clearance of goods through customs by implementing ASYCUDA system” (WB DB 2010)
- “**Jordan** reduced time for exporting and importing…by fully implementing ASYCUDAWorld” (WB DB 2013)
- “**Lao DPR** reduced time to import by implementing ASYCUDAWorld system” (WB Doing Business 2013)
- “**Mali** made trading across borders easier by implementing electronic data interchange system (WB DB 2010)
- “**Rwanda** made trading across borders easier by introducing an electronic Single Window system at the border” (WB Doing Business 2014)
- “**Seychelles** made trading across borders faster by introducing electronic submission of customs documents” (WB DB 2014)
- “**Sierra Leone** made trading across borders faster by implementing ASYCUDA” (WB Doing Business 2012)
- “**Sri Lanka** reduced time to export and import by implementing ASYCUDAWorld” (WB Doing Business 2013)
- “**St.Lucia** made trading across borders easier by implementing ASYCUDA World” (WB Doing Business 2015)
- “**Trinidad and Tobago** reduced time to export and import by launching ASYCUDAWorld (WB DB 2013)
- “**Uganda** made trading across borders easier by implementing ASYCUDA World” (WB Doing Business 2015)
UNCTAD ASYCUDA Principles

- Full ownership of beneficiary countries
- Building-up human capacity
- Full advantage of new IT technologies
- International standards and best practices
- Dynamic deployment
- Low implementation cost
- Protection of previous investment
- Paving the way to Single Window and the E-government
ASYCUDAWorld 4-th Generation

- Web-based, 100% Java, Open Source
- Integrated Customs management system
- All Customs procedures and regimes
- Integrated Tariff
- Direct Traders Input
- Data re-use
- Electronic supporting documents
- Simplified declarations
- Transactional data validation
- Powerful risk management
- Document tracking utility
- Automated workload management
- Post audit
ASYCUDA from e-Customs to Single Window

• Facilitating the implementation of regulatory requirements for cross-border movement of goods
• Providing trade and transport operators with a single interface for receiving information and submission of all required documents
• Streamlining inter-agencies processes and controls
• Improving efficiency of data exchange between agencies
• Common electronic solutions for accompanying e-documents
• Moving to a fully paperless environment and e-government
• Taking on board international recommendations and best practices (UNECE, UN ESCAP, WTO, WCO, the EU)
• Goal: faster processing, more predictability and transparency, fewer delays and uncertainty, lower barriers to trade
ASYCUDA Single Window

- E-portal (Single Electronic Access Point)
- E-signature (e-declaration and electronic accompanying documents)
- Pre-arrival information (Customs, immigration/port authorities, border police)
- Multi-agency risk management (Customs and other controlling agencies)
- E-certification (phytosanitary/veterinary services)
- E-payment (Central Bank, Treasury, authorized banks)
- E-excise (tax administration)
- Quota management (Ministry of economy/trade)
- E-vehicle registration (Customs and road police)
- Web-services (interoperability with external systems at national, regional or international level)
UNCTAD ASYCUDA and WTO TFA

- Extensive Customs reform experience and unique expertise, 60 active ASYCUDA projects in developing countries, LDCS, SIDS etc.
- Existing collaboration with the WTO, WCO, regional organizations
- ASYCUDA can contribute to implementation 33 TF measures of the WTO TFA, Already available ICT tools for:
  - Information availability through Internet
  - Pre-arrival processing
  - E-declaration for Export, Import, special procedures and regimes
  - Electronic payment
  - Electronic accompanying documents
  - Control and monitoring of transit
  - Risk management
  - Post-clearance audit
  - Single Window/border agencies cooperation
  - Performance measurement
- Continuous development of ASYCUDA products (ASYCER etc.)
- Non-commercial technical assistance projects, quick and guaranteed results
- Trustful relationships with Customs and trading community, ASYCuda field experts, national ASYCUDA focal points, regional centers of excellence
Common challenges for ICT in trade facilitation

- Lack of political will, frequent changes of management and strategies;
- Lack of result-oriented approach, prevalence of conceptual exercises;
- Lack of legal instruments;
- Lack of inter-agency coordination;
- Lack of financial resources, need for donors support;
- Lack of expertise, infrastructure and human capacity;
- Lack of coordination in ICT developments;
- Lack of interoperability between IT systems;
- Lack of free-of-charge applications for trade, particularly SME;
- Lack of transparency, vested interests, etc.
ASYCER - new product of ASYCUDA family

- ASYCUDA Programme implementations in over 95 countries;
- International standards (IPPC FAO/ISPM 12 etc., e-Phyto Working Group) and best practices (Netherlands, China, Switzerland);
- WTO TFA context (streamlined and transparent procedures, expedient goods release, border agencies cooperation, perishable goods, disciplines on fees and charges etc.);
- WTO SPS context (transparency, non-discriminatory decision making, assisting developing countries in implementing SPS Agreement);
- Single Window context (electronic supporting documents, border controlling agencies interaction, B2G, G2G data exchange);
- ICT context (accessibility of Internet for traders/SME, development of ICT infrastructure, automation of ministries of agriculture/PPS);
- Food security & supply chain security (exporters, importers, consumers);
- Development context (agricultural market access for commodity-dependant developing countries, support to entrepreneurs/SME, strengthening of trade infrastructure, new investment opportunities)
Phase I - Electronic Phytosanitary Certificate (Export)

The Kingdom of the Netherlands and UNCTAD:

- Financial support of the Dutch Government
- Knowledge transfer (NL CLIENT export control system)
- High level expertise (Dutch experience in Kenia and China)
- UNCTAD ASYCUDAWorld state-of-art technology
- Dedicated joint ASYCER Team
- Commitment of the piloting country (Ethiopia)

The Project was aimed to provide two main services:

(i) B2G – submission, processing and issuance of e-Phytosanitary Certificate application at the national level;

(ii) G2G – Transfer of the E-Phytosanitary Certificate data across borders from the exporting country to the importing country
Electronic Phytosanitary Certificate (Export)

Export component

✓ **ASYCER Phytosanitary Export Certificate** – Submission, Evaluation, Processing, issuance and use of a valid Certificate

✓ **Third Countries Phytosanitary Requirements** – Country and commodity specific requirements

✓ **Accounting and Payments** – Fees and charges Processing

✓ **SAD – ExCert** – Automatic verification & acceptance of Certificates
Electronic Phytosanitary Certificate (Export)

**IPPC Model Paper Phytosanitary Certificate ISPM12**

<table>
<thead>
<tr>
<th><strong>I. Description of Consignment</strong></th>
<th><strong>TO: Plant Protection Organization(s) of ________________________</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and address of exporter:</td>
<td></td>
</tr>
<tr>
<td>Declared name and address of consignee:</td>
<td></td>
</tr>
<tr>
<td>Number and description of packages:</td>
<td></td>
</tr>
<tr>
<td>Distinguishing marks:</td>
<td></td>
</tr>
<tr>
<td>Place of origin:</td>
<td></td>
</tr>
<tr>
<td>Declared means of conveyance:</td>
<td></td>
</tr>
<tr>
<td>Declared point of entry:</td>
<td></td>
</tr>
<tr>
<td>Name of produce and quantity declared:</td>
<td></td>
</tr>
<tr>
<td>Botanical name of plants:</td>
<td></td>
</tr>
</tbody>
</table>

**III. Disinfestation and/or Disinfection Treatment**

<table>
<thead>
<tr>
<th>Date ______</th>
<th>Treatment ______</th>
<th>Chemical (active ingredient) ______</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration and temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concentration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**II. Additional Declaration**

<table>
<thead>
<tr>
<th>Place of issue</th>
<th>Name of authorized officer</th>
<th>Date ______ ______</th>
</tr>
</thead>
</table>

(Stamp of Organization)  
(Signature)

This is to certify that the plants, plant products or other regulated articles described herein have been inspected and/or tested according to appropriate official procedures and are considered to be free from the quarantine pests specified by the importing contracting party and to conform with the current phytosanitary requirements of the importing contracting party, including those for regulated non-quarantine pests. They are deemed to be practically free from other pests.*
# Electronic Phytosanitary Certificate (Export)

## ASYNCER Standardized e-Application Form

**Phytosanitary Certificate**

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Description</th>
<th>Quantity declared</th>
<th>Unit of measurement</th>
<th>Net weight (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rose cuttings</td>
<td>24</td>
<td>UM</td>
<td>24.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Chrysanthemum cuttings</td>
<td>35</td>
<td>UM</td>
<td>15.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Rose cuttings</td>
<td>60</td>
<td>UM</td>
<td>28.00</td>
</tr>
</tbody>
</table>

10. This is to certify that the plant plants products or other regulated articles described herein have been inspected and/or tested according to appropriate official procedures and are considered to be free from the quarantine pests specified by the importing contracting party and in confirm with the current regulatory requirements of the importing contracting party, including those for regulated non-quarantine pests. They are deemed to be practically free from other pests.

11. Additional declaring:

*Foreign, crop, Annex, V.I.A., point 5.2.3 2008/24.*
Electronic Phytosanitary Certificate (Export)

ASYCER e-Portal
Electronic Phytosanitary Certificate (Export)

Exporter's database
Electronic Phytosanitary Certificate (Export)

User account management
Electronic Phytosanitary Certificate (Export)

Reference tables (Importing country criteria)
Electronic Phytosanitary Certificate (Export)

Creation of e-application
Electronic Phytosanitary Certificate (Export)

Creation of e-application
Electronic Phytosanitary Certificate (Export)

Data re-use, XML
Electronic Phytosanitary Certificate (Export)

Verification and submission
Electronic Phytosanitary Certificate

Document tracking
Electronic Phytosanitary Certificate (Export)

Processing of e-application by Plant Protection Services
Electronic Phytosanitary Certificate (Export)

Execution of criteria by PPS
Electronic Phytosanitary Certificate (Export)

Execution of criteria (fumigation)
Payment processing
Electronic Phytosanitary Certificate (Export)

Issuance of electronic Phytosanitary Certificate
Electronic Phytosanitary Certificate (Export)

Issuance of electronic Phytosanitary Certificate
## Electronic Phytosanitary Certificate (Export)

### Issuance of electronic Phytosanitary Certificate

<table>
<thead>
<tr>
<th>1. Name and address of exporter</th>
</tr>
</thead>
<tbody>
<tr>
<td>0024238328AA02</td>
</tr>
<tr>
<td>MICHAEL ABATE YESIGATE</td>
</tr>
<tr>
<td>14/658/44330/2004</td>
</tr>
<tr>
<td>ADDIS ABABA</td>
</tr>
<tr>
<td>ZN-GULLELE WR-NO WOREDA-148</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Serial number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Declared name and address of consignee</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
</tr>
<tr>
<td>aa</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Plant protection service of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Place of origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDIS ABABA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Declared name of conveyance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Declared point of entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAMIAN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. Name of produce</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAMIAN</td>
</tr>
<tr>
<td>9. Quantity declared</td>
</tr>
<tr>
<td>----------------------------------------</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. Total items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. Total packages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12. Total net weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>100.0</td>
</tr>
</tbody>
</table>
Electronic Phytosanitary Certificate (Export)

Generation of IPPC - XML Format

<?xml version="1.0" encoding="UTF-8" ?>
<ns2:SPSCertificate xmlns="urn:un:unece:uncefact:data:standard:ReusableAggregateBusinessInformationEntity:8"
xmlns:ns2="urn:un:unece:uncefact:data:standard:SPSCertificate:4">
<ns2:SPSExchangedDocument>
<Name>Phytosanitary Certificate</Name>
<ID>657</ID>
<Description>Document/message issued by the competent body in the exporting country evidencing that plants, fruit, or vegetables are free from disease and fit for consumption and giving details on fumigation or other treatment to which they may have been subjected</Description>
<TypeCode>851</TypeCode>
<StatusCode>70</StatusCode>
Phase 2 - Electronic Phytosanitary Certificate for Import

Import component

✓ **ASYCER Phytosanitary Import Permit** – Submission, Processing, issuance and use of a Plant Import Permit (PIP)

✓ **National Phytosanitary Import Requirements** – Commodity class and commodity specific requirements

✓ **Accounting and Payments** – Permit fees and Inspection charges

✓ **SAD – PIP** – Automatic verification and acceptance of Permits, Authorized Quantity management

✓ **Risk Analysis and Sampling** – Approved Traders Scheme, Sampling plans
Electronic Phytosanitary Certificate (Import)

**Plant Import Permit (PIP) General requirements**

- **PIP-AW-GR-VALIDITY** - PIP is a long term document and it is valid for a specified period
  - 6 months, 1 year, etc.
- **PIP-AW-GR-SHIPMENTS** - PIP can be valid for
  - single shipment or multiple shipments
- **PIP-AW-GR-QUANTITIES** - PIP can be valid for
  - multiple shipments and limited quantities or
  - multiple shipments and unlimited quantities
- **PIP-AW-GR-APPLICANTS** - PIP can be issued to
  - importers (companies) or travellers (individuals)
  - travellers (private individuals)
- **PIP-AW-GR-CATEGORIES** - There are 3 categories of plants and plant produce:
  - Prohibited,
  - Controlled (Regulated),
  - Unrestricted
- **PIP-AW-GR-POINTS OF ENTRY** - PIP should allow for multiple points of entry
- **PIP-AW-GR-EXPORTINGCOUNTRY** - PIP should allow for multiple countries of export
- **PIP-AW-GR-REQUIREMENTS** - PIP should allow for multiple categories of import requirements
  - Packaging requirements,
  - Documentation requirements, e.g.
    - Import Permit,
    - Phytosanitary Export Certificate,
  - Post entry/End use conditions
  - Phytosanitary inspection
  - Additional declaration, Treatment etc.
# Electronic Phytosanitary Certificate (Import)

## National importation requirements

### Phytosanitary requirement

<table>
<thead>
<tr>
<th>Category</th>
<th>Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>NARCISSUS SPP BULBS CONTROLLED</td>
</tr>
<tr>
<td>Name</td>
<td>Narcissus spp list of species that are permitted</td>
</tr>
</tbody>
</table>

### Packaging information

<table>
<thead>
<tr>
<th>Package</th>
<th>Code</th>
<th>Description</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>All / Any</td>
</tr>
</tbody>
</table>

### Intended use

<table>
<thead>
<tr>
<th>Intended use</th>
<th>Code</th>
<th>Description</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>All / Any</td>
</tr>
</tbody>
</table>

### Validity

<table>
<thead>
<tr>
<th>Valid from</th>
<th>31/03/2015</th>
<th>Valid to</th>
</tr>
</thead>
</table>

### Export country or geographical area

<table>
<thead>
<tr>
<th>Area</th>
<th>Code</th>
<th>Description</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td></td>
<td>European Union</td>
<td>Include</td>
</tr>
</tbody>
</table>

### Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AD100</td>
<td>ADSpecies listing for Narcissus spp</td>
</tr>
<tr>
<td></td>
<td>D100</td>
<td>Documentary req. Import Permit</td>
</tr>
<tr>
<td></td>
<td>D900</td>
<td>Doc. req. Phytosanitary certificate</td>
</tr>
<tr>
<td></td>
<td>NC10</td>
<td>Non-Commercial - Bulbs Dried</td>
</tr>
<tr>
<td></td>
<td>T100</td>
<td>Methyl Bromide fumigation</td>
</tr>
</tbody>
</table>
Electronic Phytosanitary Certificate

E-Application for Plant Import Permit
Electronic Phytosanitary Certificate (Import)

E-Application for Plant Import Permit
Electronic Phytosanitary Certificate

Risk Management

- Due regard to specifics of the pest risk assessment;
- International standards and best practices (IPPC, EU, Netherlands);
- Non-discriminatory approach in risk management (Art.3 of WTO SPS);
- Real-time processing, minimum delay for traders;
- Feedback to Customs risk management

WTO SPS Agreement (Annex A p.4)
Risk assessment - The evaluation of the likelihood of entry, establishment or spread of a pest or disease within the territory of an importing Member according to the sanitary or phytosanitary measures which might be applied, and of the associated potential biological and economic consequences; or the evaluation of the potential for adverse effects on human or animal health arising from the presence of additives, contaminants, toxins or disease-causing organisms in food, beverages or feedstuffs
Electronic Phytosanitary Certificate

Risk Management

- Risk profiles based on country of origin and product
- Automatic selection of goods to be inspected, sample size and the type of intervention
Electronic Phytosanitary Certificate

Risk Management

- Interface with Customs Declarations Processing System
- Multi-agency Risk Management
Electronic Phytosanitary Certificate

Authorized Quantity Management Wright-off
Electronic Phytosanitary Certificate (Export)

Attached documents management (Single Window)
Electronic Phytosanitary Certificate

Attached documents management (Single Window)
Lessons learned

• Good political will at a top level vs resistance of mid-level management;
• Inter-agency competition, need for a collaboration framework (e.g. MoU);
• Weak ICT infrastructure in agricultural ministries and PPS;
• Good expert level of staff and management;
• No uniform standards;
• Support of trading community is the key;
• Donors assistance is essential;
• Prolonged piloting phase;
• Real reduction of time;
• Supply chain security remains the concern of traders;
• Challenges of the system's sustainability
Way Forward

• ASYCER implementation in other pilot countries (Uganda)
• Extending the scope of coverage of agricultural products;
• Extending risk management features;
• Achieving a fuller interoperability with Customs IT systems;
• Moving towards a fully paperless environment;
• Practical implementation of IPPC XML messaging;
• Further ASYCER extension to cover veterinary certificates;
• Continuing the dialogue with international partners (WTO, IPPC/FAO, WB/IFC, UNECE, UN ESCAP, the EU);
• Development of innovative solutions based on ASYCER (UNCTAD-CITES/UNEP);
• Experience sharing at a national, regional and international level;
• Promoting the dialogue between government and business (e.g. through trade facilitation committees);
Thank you