Automation on dry port management for customs

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Customs UNI-PASS International Agency (CUPIA)
I. DEFINITION
Roles of customs

<table>
<thead>
<tr>
<th>Directive</th>
<th>Role</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control and protect a border in international trade</td>
<td>Enforce</td>
<td>Collect duty</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Secure society</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Monitor foreign exchange</td>
</tr>
<tr>
<td></td>
<td>Service</td>
<td>Support import / export clearance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support international passengers</td>
</tr>
<tr>
<td>Supporting role</td>
<td>Produce trade statistics</td>
<td></td>
</tr>
</tbody>
</table>

Role of a customs (World Customs Organization, 2004)
### Dry port: definition and functions

| Definition | An inland location as a logistics centre connected to one or more modes of transport for the handling, storage and regulatory inspection of goods moving in international trade and the execution of applicable customs control and formalities |
| Functions | • Customs and other border controls inspection and clearance  
• Container handling and storage  
• Container stripping and stuffing  
• Breakbulk cargo handling and storage  
• Freight forwarding and cargo consolidation services  
• Banking/insurance/financial services  
• Transport booking/brokerage  
• Container light repairs  
• Value added services |

Intergovernmental Agreement on Dry Ports (UNESCAP. 2013)
Ⅱ. INSTRUMENT
Instruments for customs

WCO Revised Kyoto Convention

Promotes trade facilitation and effective control through its legal provisions that detail the application of simple yet efficient procedures of customs.

• The Appendix defines core principles of customs which is generally recognized as the minimal recommendations for practice of a customs administration which are obligatory.

• The Special Annex lists more detailed aspects of customs procedures and they are not mandatory but selective.
WTO Trade Facilitation Agreement

Provision for expediting movement, release and clearance of cargoes. It measures for effective cooperation between customs and other appropriate authorities on trade facilitation and customs compliance issues.

• Section I clarifies and improves GATT articles V, VIII and X with technical specification and provisions for customs cooperation.

• Section II contains Special and Differential Treatments for developing and least developed countries.
Instruments for customs (Cont.)

National Customs Acts

National laws and regulations that defines legal basis, detailed work scope/responsibility and business process of a customs administration.

• Customs clearance, cargo management and other related details on operation of a customs administration on dry port should be defined in detailed and precise manner as they are pillars of customs operation of a country.

• Customs acts should be constantly updated by reflecting ever changing customs environment and reflecting stake holders’ needs.
Agreements between different parties

Parties that are involved in operation of a dry port usually have agreements such as an MoU for cooperation between a customs administration and a stake holder of a dry port.

- An agreement should define roles of each party in clear manner to minimize confusion.
- Cooperation between a customs administration and a dry port stake holder is important and an agreement should reflect each parties’ needs.
- Information exchange between the parties should be reliable and swift.
Computerization and WCO DM

Computerization of dry port management automates dry port operation. WCO DM provides standardized data model for customs and other related parties.

- Customs clearance, cargo management, electronic document and other dry port operation related functions can be automated through implementation of a computerized system.

- Standardized set of data is provided by the WCO. Version 4.0 reinforces connectivity with border management and provide parties.

- Increase in productivity and transparency are the key results.
Customs management system

My Customs
- Declaration guide
- Enterprise information
- Im/export declaration
- My history information
- Notification

GSG (Global Service Gateway)
- Declaration transmission
- Error verification
- Registration/rejection
- Additional doc. Trans.
- Connection/exchange

Enterprise Service Bus

GSW (Global Single Window)
- Requirement verification
- Other related organizations
- Cross-border data exchange (GNC)

Authority Service Bus

Customs management
- Port surveillance
- Passenger Cargo
- Export clearance
- Import clearance

Virtual Customs
- Audit
- Inspection
- Duty collection/ drawback

Intelligent analysis system
- Intelligent risk management
- Compliance
- AEO
- Customer management

Integrated info. analysis
- Data Mart Analysis
- Statistics
- Data extraction
- External data

Integrated DB
- Digital library
- Classification
- Clearance
- Paperless

WCO DM 3.0

Data Domain
- ODS
- DW
- DM

System management
- Service Pool
- Standard framework
- Data standards
- EAMS /ITSM
- Security Cert./Authen.
- Performance monitoring

Real-Time Analysis

Supporting

Enhancement

External
- Public
- Owner/Broker
- Shipper/Forwarder
- Transporter
- Warehouses

Related agencies
- Cert.org.
- OGAs
- Foreign customs

Audit
Inspection
Duty collection/ drawback

FTA support
Mobile support

Audit
Inspection
Duty collection/ drawback

Authority Service Bus

Requirement verification

Other related organizations

Cross-border data exchange (GNC)
Ⅲ. PROCESS
Roles and parties

**Dry port**

**Functions**
- Carry-in / release
- Warehousing
- Bonded transportation
- Warehousing
- Consolidation

**Parties**
- Customs
- Broker / owner
- Rail service
- Transporter
- Bank

**Entry**
- Border entry
- Container yard (If needed)

**Exit**
- Transit
- Import
- Bonded area (If needed)
* Manifest Reference Number
Cargo flow

**Entry**

**Off-Dock container Yard**

**Container Freight Station** (Can be also in the dry port)

**Dry port**

**Inland Bonded area**

**Border**

- **Transit cargo**
- **Master B/L**
- **House B/L**

- **Master B/L / Container**
- **Minimal(House) BL / Container**
- **Minimal(House) BL / Container**
Inland transportation (Road)

### External
- **Exporting customs**
  - Export / transportation details

### System
- **Cross-border Data exchange**
- **Manifest**
  - Arrival declaration
  - Vehicle / personal item declaration
- **Border control**
  - Declaration details
- **Vehicle / personal item management**
  - Approval / registration

### Customs
- **Auditor**
- **Auditor**

- **Exporting customs**
  - Export / transportation details

- **Transporter**
  - Arrival declaration
  - Vehicle / personal item declaration

- **Border control**
  - Declaration details
  - Approval / registration

- **Vehicle / personal item management**
  - Approval / registration
Inland transportation (Rail)

- Exporting customs
  - Export clearance / transportation details
- Cross-border Data exchange
  - Manifest
    - Receipt / error notification
    - Approval notification
  - Audit
    - Amendment
      - Amendment notification
- Rail operator
  - Manifest
  - Audit
    - Audit result
    - Receipt list
- Rail operator
  - Amendment
    - Receipt list
    - Amend
- Rail operator
  - Audit
- Auditor
  - Receipt list
  - Audit result
- Auditor
  - Amendment notification
Carry-in / release

<table>
<thead>
<tr>
<th>External</th>
<th>System</th>
<th>Customs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonded area</td>
<td>Carry-in</td>
<td>Auditor</td>
</tr>
<tr>
<td>Bonded area</td>
<td>Cargo Management (Inventory Management)</td>
<td>Customs</td>
</tr>
</tbody>
</table>

- Carry-in report
- Release report
- Carry-in verification
- Release verification

Cargo Management (Inventory Management)
Bonded transportation

- Transport declaration
- Audit on transport declaration
- Transport approval

External
Transporter

System
Transportation management

Customs
Auditor

External System Customs
Transit

External
Transporter
- Transportation declaration
- Registering security for transit
- Vehicle / personal items declaration

System
Transportation management
- Declaration details
- Approval / registration
- Set / release security

Security management
- Verifying security

Vehicle / personal item management
- Declaration details
- Approval / registration

Customs
Auditor
- Auditor
Importing

**External**
- Declarant
- Bank

**System**
- Import declaration
- Payment
- Declaration allocation

**Customs**
- Auditor

- Import declaration
- Notification on receipt / error
- Notification on duty payment
- Payment receipt
- Payment verification
- Allocate auditor
Importing (Cont.)

<table>
<thead>
<tr>
<th>External</th>
<th>System</th>
<th>Customs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declarant</td>
<td>Amendment</td>
<td>Auditor</td>
</tr>
<tr>
<td></td>
<td>• Notification for amendment</td>
<td></td>
</tr>
<tr>
<td>Declarant</td>
<td>Audit</td>
<td>Auditor</td>
</tr>
<tr>
<td></td>
<td>• Notification for amendment / rejection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inspection</td>
<td>Inspector</td>
</tr>
<tr>
<td></td>
<td>• Registering inspection result</td>
<td></td>
</tr>
</tbody>
</table>

- Amendment list
- Amendment details
- Audit list
- Audit result
IV. DIFFICULTY
# Common difficulties

<table>
<thead>
<tr>
<th>Area</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation</td>
<td>Lack clarity and details such as responsibility, procedures and requirements in dry port related regulations</td>
</tr>
<tr>
<td></td>
<td>Regulations and actual operation of a dry port differ</td>
</tr>
<tr>
<td></td>
<td>Different standards are applied in different ports under same regulation</td>
</tr>
<tr>
<td></td>
<td>No regulation on document amendment</td>
</tr>
<tr>
<td></td>
<td>No regulation on support of private parties by customs</td>
</tr>
<tr>
<td></td>
<td>Government’s support on cooperation between stake holders is limited</td>
</tr>
<tr>
<td></td>
<td>Sharing of information and public awareness is limited</td>
</tr>
<tr>
<td>Practice</td>
<td>Standardized document (application, permit etc.) format is not present</td>
</tr>
<tr>
<td></td>
<td>Lack of cooperation and connectivity between different stake holders</td>
</tr>
<tr>
<td></td>
<td>Lack operational capacity of staffs and opportunity for training</td>
</tr>
<tr>
<td></td>
<td>Excessive amount of information / document submission is required that are not essential</td>
</tr>
</tbody>
</table>
## Cargo management

<table>
<thead>
<tr>
<th>Area</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation</td>
<td>Regulation to obligate carry-in / release declaration is not present</td>
</tr>
<tr>
<td></td>
<td>Regulation to obligate advanced submission of manifest is not present</td>
</tr>
<tr>
<td></td>
<td>Absence of a standard manifest format</td>
</tr>
<tr>
<td></td>
<td>No regulatory base for sharing of cargo information to stake holders</td>
</tr>
<tr>
<td></td>
<td>Regulatory restrictions on change of means of transportation for bonded cargoes</td>
</tr>
<tr>
<td>Practice</td>
<td>Freedom of cargo movement is not guaranteed</td>
</tr>
<tr>
<td></td>
<td>Freedom on choosing means of transportation is not guaranteed</td>
</tr>
<tr>
<td></td>
<td>Lack of details in a manifest for cargo management</td>
</tr>
<tr>
<td></td>
<td>Lack of information on movement of a cargo</td>
</tr>
<tr>
<td></td>
<td>Restriction for a forwarder to send a house B/L</td>
</tr>
<tr>
<td></td>
<td>Difficulty in accessing progress information by an external user</td>
</tr>
</tbody>
</table>
## Customs clearance

<table>
<thead>
<tr>
<th>Area</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation</td>
<td>Regulation on withhold of duty on a transit cargo is not present</td>
</tr>
<tr>
<td></td>
<td>Amount of security on a cargo is not clearly defined</td>
</tr>
<tr>
<td></td>
<td>No separate regulation for a transit cargo</td>
</tr>
<tr>
<td></td>
<td>No detailed regulation for differentiated treatment of different types,</td>
</tr>
<tr>
<td></td>
<td>characteristics, transportations, risk factor and others factors of</td>
</tr>
<tr>
<td></td>
<td>a cargo</td>
</tr>
<tr>
<td>Practice</td>
<td>Lack of sharing clearance information between different ports and</td>
</tr>
<tr>
<td></td>
<td>customs offices</td>
</tr>
<tr>
<td></td>
<td>Cost minimization (transportation, commission and other costs) is not</td>
</tr>
<tr>
<td></td>
<td>guaranteed</td>
</tr>
<tr>
<td></td>
<td>Clearance regime is not controlled properly</td>
</tr>
<tr>
<td></td>
<td>Carry-in / release of cargoes only allowed during customs working</td>
</tr>
<tr>
<td></td>
<td>hours</td>
</tr>
<tr>
<td></td>
<td>Physical visit to a customs office is unavoidable</td>
</tr>
<tr>
<td></td>
<td>Information on a company is not utilized by customs</td>
</tr>
</tbody>
</table>
## Computerization

<table>
<thead>
<tr>
<th>Area</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation</td>
<td>Lack of development plan and governance for computerization</td>
</tr>
<tr>
<td></td>
<td>Regulation on recognition of electronic document is often absent</td>
</tr>
<tr>
<td></td>
<td>Lack of detailed regulation on operation / maintenance of a system</td>
</tr>
<tr>
<td></td>
<td>Lack of governance on security of data handling and control</td>
</tr>
<tr>
<td></td>
<td>Lack of regulation for opening and sharing of information</td>
</tr>
<tr>
<td>Practice</td>
<td>Paper document submission is often mandatory despite presence of</td>
</tr>
<tr>
<td></td>
<td>electronic document or digital data</td>
</tr>
<tr>
<td></td>
<td>Lack of staff capacity on operation / maintenance of a system</td>
</tr>
<tr>
<td></td>
<td>Lack of data exchange with other stake holders in a dry port</td>
</tr>
</tbody>
</table>
### Computerization (Cont.)

<table>
<thead>
<tr>
<th>Area</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice</td>
<td>No provision of progress data to stakeholders</td>
</tr>
<tr>
<td></td>
<td>Lack of interconnectivity with customs and other stakeholders in entry/exit border and other parts of a country for operation of a dry port</td>
</tr>
<tr>
<td></td>
<td>User friendliness is often omitted when designing a system</td>
</tr>
<tr>
<td></td>
<td>Back-up system and data security is often ignored</td>
</tr>
<tr>
<td></td>
<td>Online payment is not supported including connection with a bank</td>
</tr>
</tbody>
</table>
V. SUCCESS FACTOR
Computerization process

**Environment assessment**
- Feasibility study is carried out to see plausibility of a project and obtain rough estimate on effect of the system implementation
- BPR/ISP is performed to analyze current status of a customs administration and draw a new business model including a computerization plan

**Preparations**
- Comprehensive implementation plan is drawn
- Laws and regulations, customs procedures and process are changed
- Necessary changes on infrastructure are made

**Pilot and full operation**
- Pilot operation of the system and various information is collected such as operation parameter and system improvement
- After the evaluation and improvement are made based on the data from the pilot operation, full operation of the system starts

**Support**
- Comprehensive system capacity building programs are provided to customs officers, system operators and external users
- Supervision on system operation and maintenance is provided upon request
Success factors

- **Political will**
  - Force cooperation between different government authorities
  - Provide support to change laws and regulations

- **Internal capacity building**
  - Provide user training for better utilization of the system
  - Organize training programs for internal and external users

- **Providing user-oriented service**
  - Reflect user requests on the system and provide incentives
  - Operate technical support center

- **Following international standards**
  - Follow intl. standards such as Revised Kyoto Convention
  - Adopt standards such as the WCO Data Model
Thank you

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