South Asia Sub - Regional Economic Cooperation (SASEC)

Presented By: Shri Ananth R – Deputy Director (Indian Customs)

Agenda

A. Automation in Indian Customs – An Overview
B. SASEC Data Exchange – Possible solutions & Challenges
C. Qns & General Discussion
Automation in Indian Customs

Automation – State of Play
Automation – Multiple Applications and Linkages

- Multiple Applications with Inter-linkages between applications

- Integration with Stakeholders – Importers / Exporters, Custom House Agents (CHAs), Shipping Agents, Banks, Ports, DGFT etc.

- Infrastructure support – Thin Clients, LAN/WAN, Servers, Printers, Security of applications, Data and infrastructure

- Three basic infrastructure hosting sites:
  - Primary, Business Continuity and Disaster Recovery

- CBEC offices and Field Formations connected over a nation wide network:
  - 539 locations (WAN), 1210 buildings (LAN)

Customs – Partner Integration

and More to go…
Automation Components (Part 1/2)

1. ICES1.5
   - Customs Work flow application
   - Working in 128 locations
   - Facility to capture data of manual documents

2. RMS
   - Risk Management application
   - Working in 106 Import locations and 116 Export locations
   - Upgraded version integrated with ICES 1.5

3. ICEGATE
   - Gateway between Customs and other stakeholders
   - Handling 98% of the import / export declarations
   - Enhanced features like document tracking
   - Tight integration with Banks and DGFT

Automation Components (Part 2/2)

4. ACES
   - Central Excise Registration Applications 27,376
   - Central Excise Returns 14,66,627
   - Service Tax Registration Applications 3,40,224
   - Service Tax Returns 2,4,17,653

5. EASIEST - e-payment - 97% of the revenue in Central Excise
   - 78% of revenue in Service tax
   - Authentic source to know revenue collections details by next day

6. DATA WAREHOUSE
   - Cumulative view of the Customs, Central Excise and Service Tax data sourced from ICES 1.5, ACES, and EASIEST
Indian Customs EDI System (ICES) 1.5 - Features

- Filing and amendment of import and export declarations and manifests
- Admission and acknowledgement
- Processing (Integrated to RMS)
- Queries to and responses of the trade
- Payment of duty online/Physical payment
- Bond and License management
- RMS facilitation and risk assessment
- Online messages exchange
- Status enquiry at any point of time - 17 different types
- Post Clearance Audit

Processing of Shipping Bill (SB) Customs in ICES 1.5
Processing of Bill of Entry (BE) in Customs in ICES 1.5

Indian Customs EDI System (ICES) 1.5 - Benefits

- Uniform application
- Transparent processing
- Reduced physical interface
- Reduced dwell time
- Efficient cargo clearance
- Efficient monitoring and control by senior management
**Risk Management System**

- Conceptualized in 2005
- New version for ICES in 2010
  - Focus on high risk consignments / entities
  - Facilitate low risk consignments / entities
- 106 locations covering 99.6% of EDI import cargo
- 116 export locations covering 99% of EDI export cargo
- National Average Facilitation: 64%
- Extra Revenue Realized: USD 375 Mn in 2013-14
- Reduction in Customs related dwell time
- Improved compliance; Efficient allocation of resources

**Accredited Clients Program**

- ACP: Low risk entities with proven credentials
- Transparent criteria for accreditation
  - Willingness to comply
  - Capacity to comply
- Scrutiny of track record & Turnover etc
- No. of Accredited Clients: 299
- Assured facilitation in customs clearance
- Random checks to verify compliance
- Intervention where necessary
Indian Customs EDI Gateway (ICEGATE)

**Transaction**
- Document Filing
- Acknowledgement
- Customs Duty Payment
- e-payment
- Disbursement of Incentives
- Messages
- Cargo handling/Carrier operations
- Licensing Authority
- IPR Registration
- Other Department

**Tracking**
- Real time tracking
  - ICEGATE
  - Customs EDI
  - Trade Partner end

**15 Types**
- Help Desk (24X7)
  - Toll Free
  - E-mail

**Regulatory & Reporting**
- Seamless Data
- Exchange across Ministries
- Ministry of Commerce
  - DGFT
  - DGCIS
  - SEZ
- Central Bank - RBI
- Ministry of Steel
- Customs Department
  - DGOV
  - DRI

**ICEGATE – Key Indicators (2014-15)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locations covered</td>
<td>128</td>
</tr>
<tr>
<td>Number of documents handled</td>
<td>11.07 Mn</td>
</tr>
<tr>
<td>Customs operations in EDI</td>
<td>98%</td>
</tr>
<tr>
<td>ICEGATE e-Filing</td>
<td>83%</td>
</tr>
<tr>
<td>Number of messages operating</td>
<td>127</td>
</tr>
<tr>
<td>Categories of Trade Partners covered</td>
<td>19</td>
</tr>
<tr>
<td>Number of Bank challans for epayment</td>
<td>1,59,195 per day</td>
</tr>
<tr>
<td>Customs Duty Collection</td>
<td>18,54,935 Mn (Indian Rs.)</td>
</tr>
<tr>
<td>Export Incentive Disbursement in EDI</td>
<td>2,66,159 Mn (Indian Rs.)</td>
</tr>
<tr>
<td>Website No of Hits</td>
<td>28,862 per day</td>
</tr>
</tbody>
</table>
Benefits of Enterprise Data Warehouse

Empowers Users
Empowers users to take timely decisions at strategic and/or operational level based on the reports and analytical functionalities that have been provided.

User-Friendly Tools
EDW uses advanced user-friendly tools enabling to create reports, charts and analysis without the need to write queries through simple, easy keyboard/mouse operations.

Dashboarding
Interactive Dashboards designed in order to enable visual analysis of the indirect tax data. Gives a snapshot of the key performance parameters for informed policy decisions.

Single System
All required information from different sources (ACES, ICES and EASIEST) is provided in one single system. In the data warehouse the data is automatically updated from ACES, ICES and EASIEST.

Statistical/Analytical Reports
Statistical reports from Data Warehouse serves analytical & reporting requirements of internal and external agencies like other Ministries, Parliament etc. for purpose of policy formulation, intelligence, enforcement and monitoring of revenue collection.

Smart EDW Business Intelligence Dashboard

Monitoring & Macro Analysis
Revenue Targets & Collection Dashboard
- Strategic Analysis of Import Dependence
  - Daily/ Monthly
    - Country - Commodity Matrix
  - National, Zonal

Drill Down Dashboards
- Commodity Level Analysis
- Assessee Level Analysis
Exchange of information pertaining to Customs, Central Excise, Service Tax, Income Tax, Value Added Tax for PAN-based tax payer profiling

Collaboration between central and state tax systems to combat fraud & tax evasion

Future Activities

- Extension of ICES/ RMS to more Customs locations
- Roll-out in Land Customs Stations – Customized application
- Single Window Clearance
- Introduction of Goods and Services Tax (GST)
- ICES 2.0 (Integrated System comprising ICES, ICEGATE & RMS)
- Data Exchange projects (real-time for facilitation)
- Globally Networked Customs
- Green Customs
- Nepal Cargo Transit Module
SASEC Data Exchange
Solutions & Challenges

<table>
<thead>
<tr>
<th>#</th>
<th>Layer</th>
<th>Requirements</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Business Rules</td>
<td>IT Readiness</td>
<td>Political willingness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Legal Authority</td>
<td>Use of such data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Purpose of Such data Exchange</td>
<td>IT Capability to handle such exchange</td>
</tr>
<tr>
<td>2</td>
<td>Data Cluster Layer</td>
<td>Utility Block - defining Scope - E.g. Declaration, Transit, Guarantee</td>
<td>Alignment/Mapping of data fields – Business Process Re Engineering</td>
</tr>
<tr>
<td>3</td>
<td>Trigger Layer</td>
<td>Trigger Event - Pre Arrival; Exit; Arrival; Post Arrival</td>
<td>Both needs to have same trigger</td>
</tr>
<tr>
<td>5</td>
<td>Integration Layer</td>
<td>Technology used for such interface</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recognition of Digital Sigatures</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equipments – supporting standards</td>
</tr>
<tr>
<td>7</td>
<td>Capacity Building</td>
<td>Training of Officers Establishing such system</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Lessons learnt in pilot</td>
<td></td>
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<td></td>
<td></td>
<td>Third party technical expertise</td>
<td></td>
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Data Exchange – An Example

Basic objective is to develop the mechanism and application for the message exchange among countries to exchange the data for Trade Facilitation and Enforcement purposes.

- Export Declaration
- Import Declaration

Capture information for Export & Import under 3 broad categories:
1. General information
2. Item details
3. Container/Voyage details

Proposed Flow of Documents: 2 way message exchange

Data Exchange Methods – Technical aspects

<table>
<thead>
<tr>
<th>#</th>
<th>Components</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Communication</td>
<td>Following communication protocols can be used:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Secure VPN over internet using IPSEC protocol in tunnelling mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- User authentication details to be shared by both sides to access Message Exchange server</td>
</tr>
<tr>
<td></td>
<td>Authentication Methods</td>
<td>Digital signature based authentication using Class III digital certificates</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital signature at message level</td>
</tr>
<tr>
<td>2</td>
<td>Algorithms &amp; Encryption</td>
<td>AES-256</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SHA-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ISAKMP (Internet Security Association and Key Management Protocol)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Encryption and Hashing shall be implemented to check the integrity of the files exchanged</td>
</tr>
<tr>
<td>3</td>
<td>Message Format</td>
<td>File formats can be used:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Excel Spreadsheet file</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Text file</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- XML file</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XML is universal in nature - simple yet powerful</td>
</tr>
<tr>
<td>4</td>
<td>Frequency of exchange</td>
<td>Frequency of exchange to be predefined</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Predefined threshold time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Defined escalation matrix</td>
</tr>
</tbody>
</table>
Thank You