**Single Window System for Trade & Port Related Procedure in Japan**

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1. **"Single Window" System: One-Stop Service for Trade & Port related Procedures**

   **1. Concept**
   - To facilitate international logistics and to improve the international competitiveness of Japan.
   - Implement interconnection and collaboration of the NACCS, Port EDI system, and Crew Landing Permit Support System etc.
   - Establish the "Single Window" system for governmental procedures as soon as possible in FY 2003.

   **2. What is the "Single Window" system?**
   - "Single Window" system enables users to complete all the necessary trade (import/export) and port related procedures in a single entry and a single transmission.

   **3. Basic aims**
   1) Improvement of user convenience  
   2) Reduction of operating costs  
   3) Adoption of the global standards  
   4) Simplification of procedures

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**Trade & Port related Procedures In Japan (1)**

- **Goods**
  - Customs
  - Food Quarantine
  - Plant Quarantine
  - Animal Quarantine
  - METI

- **People**
  - Immigration
  - Public Health Quarantine

- **Vessel**
  - Coast Guard
  - Port Management

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**AGENDA**

1. "Single Window" System: One-Stop Service for Trade & Port related Procedures
2. Trade & Port related Procedures In Japan
3. Milestone toward Single Window System
4. NEXT MOVEMENT of Single Window in Japan
5. Introduction to Port EDI system
6. Security Consideration
7. UN/ECE Recommendations
Trade & Port related Procedures In Japan (2)

- Animal/Plant Quarantine Statement
- Import Food Quarantine Statement
- Import/Export License Application
- Declaration inward and outward of vessel
- Crew List & Passenger List
- Import/Export Declaration

Milestone toward Single Window System (1)

1992 - Sea-NACCS (CUSTOMS procedures system) is in service.
1997 - Promotion of Measures under Comprehensive Program of Logistics Policies
1998 - FAINS (Import Food Quarantine system), ANIPAS & PQ-NETWORK (Animal/Plant Quarantine system) are in service.
2000 - Enhanced Sea-NACCS is in service.
2000 - Port EDI system for Port Master (JPCG) and Port Management Body is in service.

Milestone toward Single Window System (2)

2001 - e-Japan Stimulating Plan
2001 - New Promotion of Measures under Comprehensive Program of Logistics Policies (July)
2001 - Shiokawa Initiatives "International Logistics Reform Plan (August)
2003 - JETRAS & NACCS are connected.
2003 - Public Health Quarantine system is in-service.
2003 - Immigration system for Crew Landing is in-service.
2003 - NACCS, Port EDI, Public Health Quarantine system and Crew Landing Support system are connect. SINGLE WINDOW for Trade and Port related is established.
How Single Window for Trade and Port related is done

1. Harmonize the name and meaning of element
2. Reducing the duplicated element
3. Simplify the procedure
4. Adopt the Global standard
5. Align the requiring time

Single Window for Trade & Port Related Procedure

Before arrival
Berth Request
New SOLAS pre-arrival notification
Dangerous Goods Notification
Traffic-route advanced notification (JCG)

Arrival
Declaration inward of vessel
Crew Landing application (Immigration)

Before departure
Tonnage Tax (CUSTOMS)
Declaration outward of vessel

Port related Procedures in time sequence

IMO/FAL Convention was signed on 5 April 1965 and came into force on 5 March 1967. The Convention recommends the use by national authorities of six standardised forms to be filled in for ships to report when arriving in port and departing from port:

1. IMO General Declaration (Form No. 1),
2. IMO Cargo Declaration (Form No. 2),
3. IMO Ship’s Stores Declaration (Form No. 3),
4. IMO Crew’s Effects Declaration (Form No. 4),
5. IMO Crew List (Form No. 5),
6.IMO Passenger List (Form No. 6), and
7. IMO Dangerous Goods Declaration (Multimodal Dangerous Goods Form).

 Alignment toward IMO/FAL Convention

New SOLAS requires ISPS code (the International Ship and Port Facility Security Code).

Harmonise Security and Simplification

Web screen instead, machine-to-machine

Minimize application items then adopt EDI (UN/EDIFACT or ebXML)
**Port EDI system**

**Aims**
- Paperless and Single window
- Global Standard (UN/EDIFACT, UN/ECE Recommendations)
- Open network (the internet)

**Milestone**
- 2000: Declaration inward and outward of vessel, Berth requirement and other vessel related procedures in a port calling
- 2003: Public health quarantine procedures are added.
- 2003: Single window feature is in service
- 2004: New SOLAS pre-arrival notice function is in-service

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**Numbers of Users in Port EDI system**

1. Port Managing Organization: 63 Ports
2. Offices of Japan Coast Guard: 97 Offices
3. Private Sectors: 797 Shipping agents
4. Quarantine (Public Health) Inspection Offices: 83

as of end of May 2004

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**Numbers of e-Application as of end of May 2004**

<table>
<thead>
<tr>
<th>Month</th>
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<tr>
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<td>May</td>
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**Port EDI system Configuration**

- Declaration inward and outward of vessel
- Berth management
- Night time notification of inward of vessel
- berth usage report
- Dangerous goods notification
- Declaration inward and outward of vessel
- Tonnage tax application
- Port's schedule report
- Crew list/Passengers list
- Crew's effect declaration
- SOLAS pre-arrival notice

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**For JCG and Port management body**

- Declaration inward and outward of vessel
- Tonnage tax application
- Declaration inward and outward of vessel
- Pre-arrival notification

**For Quarantine**

- Declaration inward and outward of vessel
- Pre-arrival notification

**For Immigration**

- Declaration inward and outward of vessel
- Declaration inward and outward of vessel
- Declaration inward and outward of vessel

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**VPN**

**S/MIME**

**HTTP/HTTPS**
PORT EDI System Application Methods

Three options:

1. Web Browser Screen
2. Application Software on PC
   - Distribute by the Port EDI System center (Free of charge)
   - Input through GUI Screen, then send it to the Port EDI system
3. UN/EDIFACT Message

UN/EDIFACT Message for Application (1)

Applying rules

1. UN/EDIFACT messages for application are sent to the PORT EDI system by SMTP.
2. Instruction for application is sent to the PORT EDI system to instruct the agent name and a kind of applications by SMTP.
3. PORT EDI system builds an application and send to the target agent.
4. Applicant retrieves the result in her or his mailbox in the PORT EDI system by POP3 protocol. The result is mapped into APERAK (UN/EDIFACT message).

*: UN/EDIFACT message must be in MIME (or S/MIME) capsule.

UN/EDIFACT Message for Application (2)

BERMAN: Vessel’s particular information and short term schedule (Berth Management Message)
IFTSAI: Vessel’s long term schedule and previous called ports information (Forwarding and transport schedule and availability information message)
IFTDGN: Dangerous goods information (Dangerous Goods Notification message)
PAXLIST: Passengers’ and Crews’ information (Passenger List message)
APERAK: Result information (Application Error and Acknowledge message)
CONTRL: Syntax error (Syntax and Service Report message)

MIG (Message Implementation Guideline) for UN/EDIFACT messages are aligned with ITIGG’s rule. *ITIGG: International Transport Implementation Guideline Group

UN/EDIFACT Message for Application Process
Do business in the internet

PORT EDI Security Policy

1st priority is Privacy
SSL for Web interface (HTTPS)
S/MIME for e-mail

2nd priority is Authenticate and Non reputation
SSL for Web interface (HTTPS)
1st step is only for the Server side.
S/MIME for e-mail
Both side are guaranteed.

SSL (Secure Socket Layer) and S/MIME
(Secure/Multipurpose Internet Mail Extensions) use a "private key and public key" pair for asymmetric cryptography.

To issue a "private key and public key" pair to PORT EDI community, PKI is established in PORT EDI.

PKI (Public key Infrastructure)
1) register users and issue their public-key certificates
2) revoke certificates when required
3) archive data needed to validate certificates at a much later time

**SSL Connection**
- Web applicant
- PORT EDI
- TCP/IP
- HTTP
- FTP
- Telnet
- SSL

**Mechanism of S/MIME**
- Encryption
- Digital Signature
- Application Data
- Encrypted Mail
- Digital Signature
- Compare Hash-values
- Data
- Calculate Hash
- Applicant's Private Key
- Applicant
- Applicant's Private Key
- PORT EDI
- Application Data
- Encrypted Mail
- Digital Signature
- Revealed
- Calculate Hash
## UN/ECE/FAL Recommendation - Standard Codes

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<thead>
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<th>Description</th>
<th>Date</th>
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<tbody>
<tr>
<td>No. 3</td>
<td>ISO Country Code (ISO 3166)</td>
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<td>Abbreviations of INCOTERMS</td>
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<td>No. 20</td>
<td>Codes for Units of Measure</td>
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## UN/ECE/FAL Recommendation - Standard Codes

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<td>Codes for Passengers, Types of Cargo, Packages and Packaging Materials</td>
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<td>No. 23</td>
<td>Freight Cost Code</td>
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<td>Codes for Types of Means of Transport</td>
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## UN/ECE Recommendations in Single window in Japan

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<th>UN/LOCODE (Rec. 16)</th>
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<td>Bussan KBPUS</td>
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## UN/ECE Recommendation No. 20 Unit of Measure

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<tr>
<th>Unit of measure</th>
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<td>KILOGRAM</td>
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## UN/ECE Recommendation No. 21 Package Type Code

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<tr>
<th>Package type name</th>
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<td>TIGHTENED</td>
<td>TK</td>
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## UN/ECE Recommendation No. 28 CODES FOR TYPES OF MEANS OF TRANSPORT

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<th>Type of means transport</th>
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<tr>
<td>Cargo &amp; passenger vessel</td>
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<tr>
<td>General cargo vessel</td>
<td>1-50</td>
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<tr>
<td>Crude oil tanker</td>
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<tr>
<td>Grain vessel</td>
<td>1-50-1</td>
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<td>Full container ship</td>
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<td>RoRo vessel</td>
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<td>Ferry</td>
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<td>Fishing boat</td>
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<td>Chemical tanker, deep sea</td>
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<td>Timber/log carrier</td>
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<td>LNG tanker</td>
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<td>Steel products vessel</td>
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Any Question!

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Thailand e-Customs and ASEAN Single Window Initiative

Ubon Chuensupanrat
Deputy Director General, Royal Thai Customs, Ministry of Finance

Limitations of Current System

1. Inadequate capacity of hardware
2. Lack of flexibility for application development
3. The systems are not fully automated resulting in redundant business processes.
4. The security system has not fully implemented.
Next Step Ahead

Future e-Customs
The modern Customs administration rendering the best services in South-East-Asia

- Paperless office
- Virtual Customs
- Intelligence office

Import/Export Data     External Data

- Self Service
- One Stop Service
- Non Stop Service

Future e-Customs
- e-Declaration
- e-Manifest
- e-Payment
- Duty
- e-Licensing
A “Single Window Entry” concept is the application of an import/export license.

- The issuing authority redesigns business processes.
- Issuing an e-license.
- The issuing authority and Customs are connected; hence, a status report can be viewed.

### ASEAN Customs Single Window

- **What is the ASEAN Customs Single Window?**
  - "A single submission of data, single data processing and single decision making for Customs release and Clearance of goods".

- **Key Objectives:**
  - To establish the viable, simplified and standardized environment for Customs clearance.
  - Reduction of clearance time and resources.
Current Import/Export Environment

Exporting Country
- Manifest
- Invoice
- Bill of Lading
- Packing List
- C/O
- L/C
- Declaration Form
- Health Certificate
- Insurance Document

Importing Country
- Manifest
- Invoice
- Bill of Lading
- Packing List
- C/O
- L/C
- Declaration Form
- Health Certificate
- Insurance Document

Transport

30 parties
40 documents
200 data elements
60-70% data re-keying

Cost Savings
7-10%

Single Window Environment
- Standardize Customs data elements
- Standardize data related to Customs valuation
- Synchronize Customs automated system with the business sector
- Synchronize Customs automated system with the other government agencies
- Political commitments

Thailand-Malaysia Co-operation
- MOU on Facilitation of Procedures on Movement of Goods
- Focus Single Declaration and Single Inspection
- Present situation detailed study to implement common practices
- Co-operation on the issuance of C/O
Chinese Taipei’s Experience in Developing and Adopting ebXML Towards e-Logistics

GCOM Information Service Co., Ltd.
Frank Lin
21st, July-May, 2004

Outline

1. Progress status of e-Logistics
2. Adopting the ebXML standard
3. Development of New Business Collaboration Model

Pricing

- Value Added Service
- Physical Service (D2D, VMI)

Leading LSP
- FedEx, UPS, DHL

Integrators
- Expeditors, Baxglobal-East, Airborne, TNT, K&L, DHL

LSP
- Dimerco, Pacificstar, UT Freight, YesLogistics, Scanwell, Speedmark, Rical, Hecny, T.V.L

Position and Scale

Goal

- Reduce the cost of transportation and logistics service
- Avoid expensive changes today and tomorrow
- Enhanced Customer Satisfaction
- Faster access to time-sensitive information
- Increased productivity for entire logistic service providers
- Provide the global visibility of goods movement
Development of New Business Collaboration Model

Logistics process model

- Local
- Integration
- Consolidation
- Customs
- Pressure
- Local
- Efficiency

LOGISTICS Transparent

Initiate the Feasibility Study

Suppliers → Manufacturing → Distribution → Finished Product Distribution → Customers

PRE-SHIPMENT
- Assign Gross & Net Weight
- Select Carrier

IN-TRANSIT
- Transport
- Release
- Signage

POST-SHIPMENT
- Pay Invoice
- Advance

Concept of Virtual Integrator

Leading LSP
The Importance of Business Collaboration

VI Speeds the Development & Movement of Goods Through the Value-Chain

In Conclusion

- If we have been able to:
  - drive costs from our logistics service
  - operate most efficiently with customers
  - be profitable with lower costs and higher service levels
  - and collaborate with our business partners through ebXML transactions

- Then we will have dramatically improved customer service in the Global e-Logistics Service