Korea’s National Single Window Platform for Paperless Trade and e-Logistics

Submitted by: Korea
Korea’s National Single Window Platform for paperless trade and e-logistics

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Presented by Dr. Yoon Say Jeong
Secretary General
Korea Paperless Trade Center

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1. What is National Single Window?

Single Window Definition

• **UN/CEFACT Recommendation 33**

A facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export and transit-related regulatory requirements.
The Conceptual Model of Single Window

Benefits of Single Window

- Process innovation
- Cost reduction
- Time saving/ No delay
- No worries of losing documents
- Prevention of counterfeit
- Transparency of procedures
# Global Trends of Single Window

<table>
<thead>
<tr>
<th>Countries</th>
<th>Summary</th>
</tr>
</thead>
</table>
| Singapore | • Organizer of global pathfinder projects (e-C/O)  
• TradeXchange project launched in 2007 |
| HongKong  | • DTTN Project of Tradelink and HKSAR  
* DTTN : Digital Trade and Transportation Network |
| Taiwan    | • Total trade service by TradeVan (VAS provider) covering cargo clearance, global logistics, e-Commerce and etc  
• Efforts to integrate various services into SSO window |
| Japan     | • Connection Portal linking various service providers and government agencies for total and integrated trade services |

## 2. Why Do We Need It?
**Trade - Korea’s Life Line**

**Labor-intensive Products → Hi-tech Products**

1961 (41M USD total)  
1. Iron Ores  
2. Tungsten  
3. Raw Yarns  
4. Coals  
5. Cuttlefish  
6. Live Fish  
7. Graphite  
8. Plywood  
9. Rice  
10. Swine Bristles  

2005 (284B USD total)  
1. Semiconductor  
2. Automobile  
3. Wireless com Apparatus  
4. Computer  
5. Vessel  
6. Petroleum Products  
7. Synthetic Resin  
8. Steel Flat-rolled Products  
9. Video Apparatus  
10. Automobile Parts

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**Korea’s Trade Volume**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Export</th>
<th>Total Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>119</td>
<td>50,000</td>
</tr>
<tr>
<td>1970</td>
<td>125,058</td>
<td>65,016</td>
</tr>
<tr>
<td>1980</td>
<td>22,291</td>
<td>17,505</td>
</tr>
<tr>
<td>1990</td>
<td>69,843</td>
<td>15,118</td>
</tr>
<tr>
<td>1995</td>
<td>135,118</td>
<td>65,010</td>
</tr>
<tr>
<td>2005</td>
<td>325,465</td>
<td>286,000</td>
</tr>
<tr>
<td>2006</td>
<td>325,465</td>
<td>286,000</td>
</tr>
</tbody>
</table>
International trade in Korea

Rapid growth of trade volume

$600 billion in 2005

Bottleneck in trade process

Delays in customs clearance

Tons of trade documents

Problems of Paper Based Trade

Enterprises
- High transaction cost
- Long lead time
- Incorrect processing

Government
- Complex regulation
- Lack of transparency
- Difficulty in monitoring

National Competitiveness Decreased
3. Where Are We Now?

Korea’s Status in Paperless Trade

The Development Level of APEC Economies

2005 APEC Symposium on the Assessment and Benchmark of Paperless Trading
Korea’s Single Window Model (u Trade Hub)

Korea’s Broadband Penetration
- Penetration: 80% (2005)
- Available to over 97% of population
- All Primary & Secondary Schools Connected to Broadband (Sept. 2000)

No. 1 in Broadband Internet Penetration Rate
 subscriber/100 persons
(Source: OECD, 2005)
Legal Infrastructure

In 1991, Enacted ‘Trade Automation Act’

In 2005, Enacted ‘e-Trade Facilitation Act’

Strong Leadership and PPP

A typical Working Group meeting held by KITA

Government – Bank Leaders meeting organized by KITA (JUN ’05)
4. e-Trade Korea 2007 Project

Milestones of Korea’s Paperless Trade

- In 1989, Korean government initiated "Comprehensive Trade Automation Plan"
- In 1991, Korea enacted “Trade Automation Act”
- In 1991, Korea Trade Network (KINET) was established by KITA
- In 1992, Korea Customs Service designated KINET as sole customs automation service provider
- In 1996, KINET provided logistics service through MFCS
  - Korea realized a 100% electronic customs clearance system (VAN/EDI)
- In 2003, National e-Trade Committee was established (Chair: PM)
- In 2004, BPR/ISP for e-Trade Process Innovation
- In 2005, enacted ‘e-Trade Facilitation Act’
  - ‘e-LC service’ launched for the 1st time in the world
- In 2006, e-Trade Service Project, 2nd Stage
- In 2007, ‘uTradeHub™’ Launched
Vision

- Every company can trade in the most economic and efficient way via the internet
- Simplify the process, higher productivity, deregulation
- Economic effects: Cut trade cost by US$14.5 billion
  Increase exports by US$7.9 billion

3 Phases Plan

- Phase 1: Building Core Infrastructure (2005)
- Phase 2: Enhancing Infrastructure (2006)

Organization (Korea Paperless Trade Center)

- Foundation
- Role: Project Management Office
  - Implementation of 33 tasks from ‘e-Trade Korea 2007’ roadmap
  - Secretariat of National e-Trade Committee

- National e-Trade Committee
  Chair: Vice Minister of MOCIE
  Administrative Committee
  Chair: Vice Minister of MOCIE

- Private e-Trade Committee
  Chair: Dr. Jung Uck, Seo

Korea Paperless Trade Center

- Platform WG
- Law WG
- Finance WG
- Logistics WG
- Marketing WG
- Global WG

e-TPM
e-TDR
Law Reform
e-U/C
e-Nego
R&D
e-D/G
e-Q/O
e-MP
e-Cataloging Solutions
e-C/O
e-QL
APEC, ASEM
Bilateral Networking
Principles of uTrade Hub

Trade Automation (Trade Network)

AS-IS

- License/Certificate Authority
- Customs Service
- Trading Company
- KTNET
- 2nd Wholly Responsible Company
- Bank

TO-BE

- u Trade Hub
  - u-Trade Service
    - Marketing
    - Financial Settlement
    - License/Certificate
    - Declaration
    - Logistics
- Trading Company
- e-Trade Infrastructure
- e-Standard Registry
- e-Doc Repository
- Global Network
- uTradeHub

1:1 Networking by Wholly Responsible Company, Breaking Online Process Flow
Submission of Same Document Repeatedly to Several Parties
Exchange of Online Document between Trading Partners, but Submission of Offline Paper Document to Third Party

Seamless e-Trade Service on Single-Window
One Submission, No Multiple Submission for Same Online Document
Guarantee of Online Document Originality Exchanged on Central e-Trade Repository under the law
Global Networking on National e-Trade Infrastructure

The uTradeHub Portal Site

Background and Goals
Since the enactment of the Trade Automation Act in 1994, the Ministry of Commerce, Industry... Promotion Strategy
In July 2003, the nationwide council for the efficient promotion of the national electronic trade... Actions Taken
Jul. 2003: Organized the National Electronic Trade Commission jointly with private and government...

Export Market
Considering the needs of the mid-to-long-term promotion of the national electronic trade industry...

Expected Effects
Level of work improvement following the introduction of electronic trade, providing a simple window...
Managing the Order of Export Contract Process

- **Task Urgently needed to handle**
  - [Ex] Export Contract Menu

- **Task No need to process**

- **Task For the next step**

- **Task already done**

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5. Korea’s e-Logistics Services
eLogistics Service > Concept

- Web-based import /export related logistics management system
- Electronic data submission/sharing among traders, Customs, government agencies, transportation companies, warehouses and forwarders

eLogistics Service > Services Offered

- **e-Logistics Services**
  - **e-Bill of Lading** system provides electronic title registry service for traders/banks/logistics companies
  - **e-Delivery Order** system enables shippers to pick up cargo from bonded-cargo warehouse with the shipping companies' electronic issue of DOs
  - **e-Letter of Guarantee** system electronically processes application/issuance of banks' letter of guarantee and the authentication of its originality
  - **Automated Manifest Service** helps shippers to conveniently send AMS data to the US Customs
  - **Manifest Consolidation System** consolidates and submits manifests of the cargoes to Customs for comprehensive management of all cargoes entering Korea

To be developed and offered in uTradeHub services

Services currently offered to be integrated into uTradeHub
**Manifest Consolidation System (MFCS)** collects manifest information from air lines/ocean carriers/forwarders to consolidate and submit data to the Customs.

- **Functions:** automatic collection of manifest information, conversion of data into EDI documents, automating cargo allocation operation, offering cargo tracking/arrival notice/APIS (Advanced Passenger Information System)
- **Benefits:**
  - Reducing cost of managing/distributing documents related to arrival and departure of ships, loading/unloading of cargo
  - Increasing effectiveness/correctness of cargo related information

**e-DO and e-LG service** provide traders with time and cost savings in pick-up imported cargo.

- **Benefits:**
  - Saving time and cost by electronic application/issuance/notification of LG and DO
  - Safe and transparent transactions free from forgery documents
**e-Logistics Service > e-BL**

- **e-Bill of Lading System** will be a final step of paperless trade and logistics services.
- It will pave the way for e-Negotiation.

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International Circulation

e-B/L

- **Title**
  - Ownership of the goods
  - Endorsement
    (title transfer)

- **BL Information**
  - Shipping
  - Cargo information
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**e-Logistics Service > e-BL (Cont’d)**

- **e-BL System Workflow**
eLogistics Service > e-BL (Cont’d)

- Steps to Implement e-Bill of Lading System

  **Setting up Consultation Body**
  - Set up consultation body composed of major interested parties regarding e-BL and e-SWB

  **System Development**
  - Develop System for issuing and managing B/L and SWB

  **Promoting Global Circulation**
  - Promote global circulation of the e-BL by international and inter-organizational cooperation

Projected Benefits of Paperless Trade

International Trade based on Paper Documents

- By electronizing trade process

[Projected Benefits for Korea]

- Saving corporates IT investment cost
- Enhancing corporate productivity
- Reducing overhead costs for trading
Critical Success Factors

- Legal Framework readiness
- Strong leadership by government
- Public & Private cooperation
  - Covers not only B2B but B2G, G2G
- Enough Budget
- IT infrastructure (Network, Hardware, Software)
- Adopting International standards and trends
- User-friendly system (Easy, Simple and Intuitive interface)
  - ex) MyTrade™ at uTradeHub™
- Adopting State-of-the-Art Technology
  - BPM (Business Process Management)
  - Trusted Platform of reinforced security technology
  - Supporting industry SCM with Global visibility and RFID

6. Challenges Ahead
   - Global Proliferation
Connectivity to the global trade

- **Best Practices & International Standard**
  - ebXML
  - the UN Trade Data Elements Directory (UNTDED)
  - UN EDIFACT
  - WCO Data Model etc.
- **Hub to Hub connection among National SWs**
  - Mutual Authentication
  - Pilot Projects for e-C/O, e-B/L etc
- **Multilateral cooperation**
  - APEC, UN, ASEM
  - Public and Private Cooperation

Expansion and proliferation of u-Trade

Thailand, Vietnam, China, Canada, Japan, Chinese-Taipei
Korea’s Initiatives as e-Trade Leader

On-Going Agenda
- **e-C/O Pathfinder Project**
  - Korea-Chinese Taipei
  - Korea-Singapore Customs

Upcoming Issues
- **e-B/L Project**
  - Connecting national SWs for title documents
  - APEC Initiative by Korea
  - Singapore’s TradeXchange as a potential partner
  - Projected to share experience and system with CIECC
- **E-Nego Project**
  - China-Korea cooperation project to realize paperless trade
Thank you!

Q&A