**APEC Symposium On Paperless Trading Capacity
Building And Intellectual Property Protection
People's Republic of China
September 2007**

Paper
Korea's National Single Window Platform for paperless trade and e-logistics

U tradeHub

Korea's National Single Window Platform for paperless trade and e-logistics

August 14, 2007

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MOCIE | KFTC | The Korea Federation of Banks | KTNET

KITA
KOREA INTERNATIONAL TRADE ASSOCIATION

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1. What is National Single Window?

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Asia-Pacific Economic Cooperation

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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.

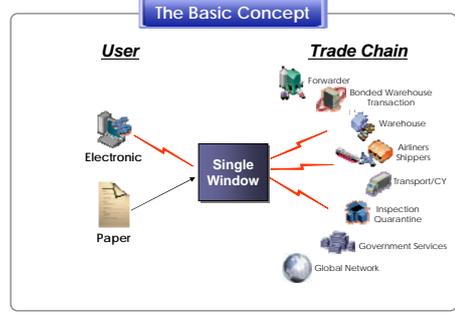KITA   6   U tradeHub

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3. **Where Are We Now?**

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The Conceptual Model of Single Window

The Basic Concept

User   *Trade Chain*

Forwarder
Bonded Warehouse Transaction
Electronic
Warehouse
Airliners Shippers
Single Window
Transport/CY
Inspection Quarantine
Paper
Government Services
Global Network

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Benefits of Single Window

- **Process innovation**
- **Cost reduction**
- **Time saving/ No delay**
- **No worries of losing documents**
- **Prevention of counterfeit**
- **Transparency of procedures**

Trade - Korea's Life Line

Labor-intensive Products → Hi-tech Products

1961 (41M USD total)	2005 (284B USD total)
1. Iron Ores	1. Semiconductor
2. Tungsten	2. Automobile
3. Raw Yarns	3. Wireless com Apparatus
4. Coals	4. Computer
5. Cuttlefish	5. Vessel
6. Live Fish	6. Petroleum Products
7. Graphite	7. Synthetic Resin
8. Plywood	8. Steel Flat-rolled Products
9. Rice	9. Video Apparatus
10.Swine Bristles	10.Automobile Parts

## Global Trends of Single Window

Countries	Summary
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

Korea's Trade Volume
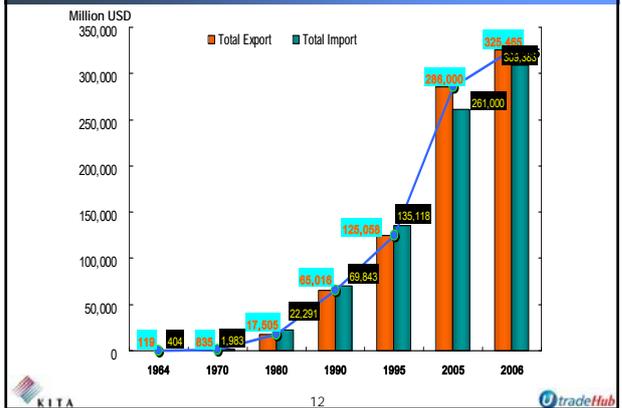
Million USD

2. Why Do We Need It?

International trade in Korea
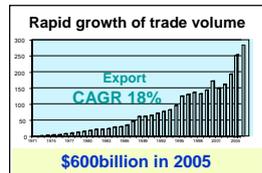
Rapid growth of trade volume

Export
CAGR 18%

$600billion in 2005

Bottleneck in trade process

Delays in customs clearance

Tons of trade documents

Problems of Paper Based Trade

Enterprises	Government
▪ High transaction cost ▪ Long lead time ▪ Incorrect processing	▪ Complex regulation ▪ Lack of transparency ▪ Difficulty in monitoring

National Competitiveness Decreased
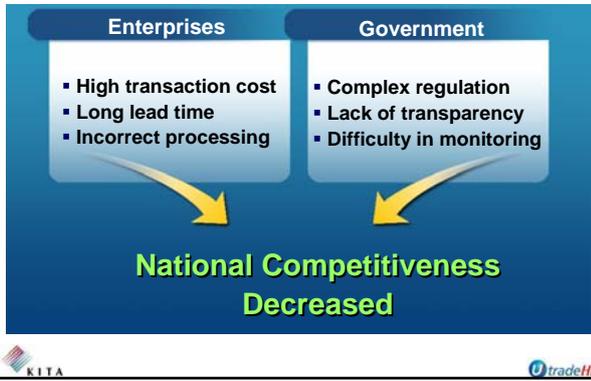
Korea's Single Window Model (u Trade Hub)

Owner / Trading Co.

Single Window

Portal / Gateway

u Trade Hub

Marketing | Foreign Exchange | G4C e-Service | Logistics Customs | Settlement

Data Warehouse

e-Trade Document Repository

Messaging Hub

Trade Leads & Overseas Ads
▪e-Market Place
▪e-Biz Site
▪Trade Information Site

Credit Evaluation
▪Credit Evaluation Co.
▪Korea Export Insurance Corporation

License & Certificate
▪Union / Association
▪KCCI
▪Quarantine Station
▪Insurance Company
▪Private Institution

Financial Institution
▪KFTC
▪SWIFTNet
▪The Bank of Korea
▪Banks
▪Foreign Exchange Network

Logistics
▪Shipper / Airliner
▪Forwarder
▪CY,Bonded Warehouse
▪KLNET
▪KGL C
▪National BPR/ISP

Customs
▪Korea Customs Service
▪Customs Broker

Global Networking
Overseas Branch
Foreign Chamber of Commerce
Foreign Supplier — Global — Foreign Customs
Foreign Buyer
Bilateral Connection

Int'l Financial Settlement

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3. Where Are We Now?

IT Infrastructure of Korea

Broadband Network

No. 1 in Broadband Internet Penetration Rate

※subscriber/100 persons (Source: OECD, 2005)

	Korea	Netherlands	Canada	Japan	U.S.
	24.9	19	17.8	15	12.8

No. of broadband subscribing households: 11.8 million (77%)

Korea's Broadband Penetration

House-holds
☺ **Penetration : 80%(2005)**
- Available to over 97% of population

Schools
☺ **All Primary & Secondary Schools Connected to Broadband (Sept. 2000)**

Korea's Status in Paperless Trade

The Development Level of APEC Economies

Development Level

Advanced — Singapore, HongKong, Korea
Medium — Chinese Taipei, Australia, USA
Primary — Japan, New Zealnad, Canada
Growing — Chile, Malaysia, Mexico, China, Thailand, Indonesia
Start — Philippines, Russia, Vietnam, Peru

Development Procedure

2005 APEC Symposium on the Assessment and Benchmark of Paperless Trading

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Legal Infrastructure

Foreign Trade Act
Electronic Transactions Act
Digital Signature Act
e-Trade Facilitation Act
Trade Transactions Facilitation Act
Customs Law
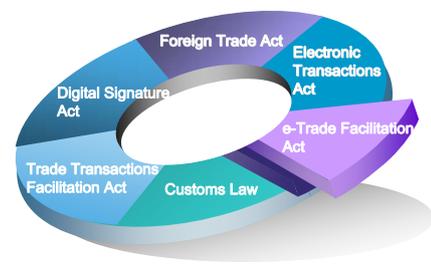
In 1991, Enacted 'Trade Automation Act'

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)

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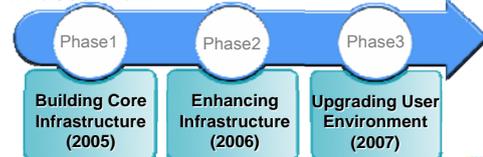

Vision

Vision

e-Trade KOREA, Innovation 2007
A leading e-Trade nation in the 21st century

- 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

Phase1   Phase2   Phase3

| Building Core Infrastructure (2005) | Enhancing Infrastructure (2006) | Upgrading User Environment (2007) |

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4. e-Trade Korea 2007 Project

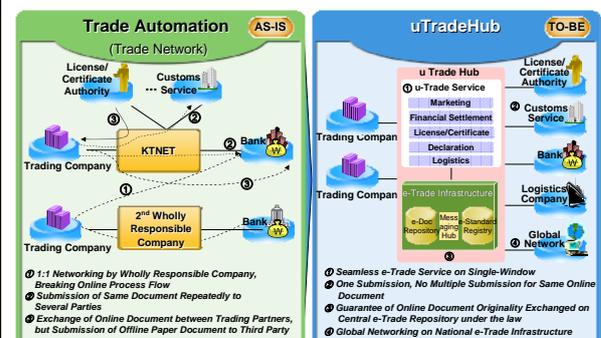## Organization(Korea Paperless Trade Center)

- **Foundation**
  - Founded in Jan. 2005 in KITA after **BPR/ISP Project**(Jun. 2004)
- **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 : Prime Minister

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

Administrative Committee — Chair : Vice Minister of MOCIE

MOCIE MINISTRY OF COMMERCE, INDUSTRY AND ENERGY
KOREA CUSTOMS SERVICE
KITA
KFTC
The Korea Federation of Banks

Korea Paperless Trade Center

Platform W/G	Law W/G	Finance W/G	Logistics W/G	Marketing W/G	Global W/G
e-TP PM e-TDR	Law Reform	e-L/C e-Nego	RFID e-L/G e-D/O	e-MP e-Catalog Solutions	e-C/O e-B/L APEC,ASEM Bilateral Networking

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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 (KTNET) was established by KITA**
- **In 1992, Korea Customs Service designated KTNET as sole customs automation service provider**
- **In 1996, KTNET 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, 'uTradeHubTM' Launched**

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Principles of u Trade Hub

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The uTradeHub Portal Site

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eLogistics Service> Concept

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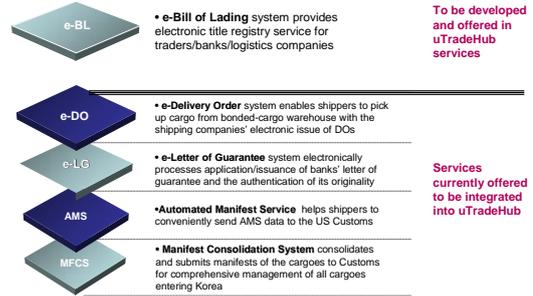 agencies, transportation companies, warehouses and forwarders

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Ex) Export Contract Menu

Managing the Order of Export Contract Process

- Task Urgently needed to handle
- Task No need to process
- Task For the next step
- Task already done

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eLogistics Service > Services Offered

- e-Logistics Services

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

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5. Korea's e-Logistics Services

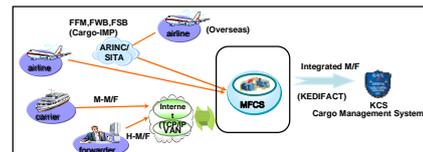## eLogistics Service>MFCS

□ ***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

eLogistics Service>e-DO/e-LG

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

Bank
② Issuance of e-LG
④access and authentication of e-L/G
Shipping Companies/ Forwarders
① application for e-LG ②
E-DO and e-LG Mgt system
⑥ Notification of e-DO
③ Submission of e-LG
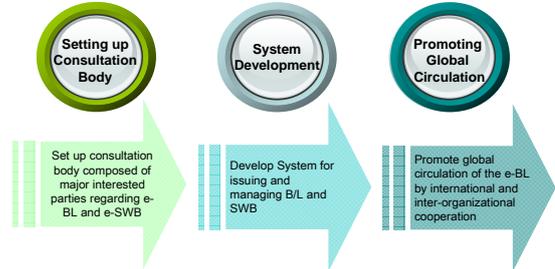⑤ Issuance of e-DO
Traders
Warehouses

▪ **Benefits**
- Saving time and cost by electronic application/issuance/notification of LG and DO
- Safe and transparent transactions free from forgery documents

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eLogistics Service>e-BL (Cont'd)

• Steps to Implement e-Bill of Lading System

Setting up Consultation Body
System Development
Promoting Global Circulation

Set up consultation body composed of major interested parties regarding e-BL and e-SWB

Develop System for issuing and managing B/L and SWB

Promote global circulation of the e-BL by international and inter-organizational cooperation
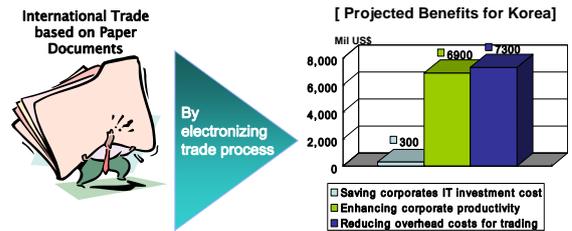
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eLogistics Service>e-BL

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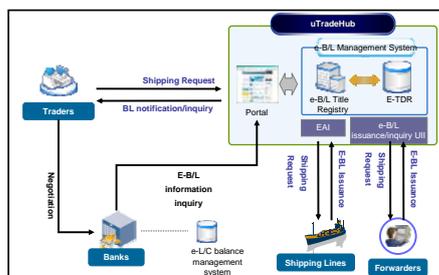• It will pave the way for e-Negotiation.

International Circulation

e-B/L

BL Information
- Shipping
- Cargo information

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

Projected Benefits of Paperless Trade

International Trade based on Paper Documents

By electronizing trade process

[Projected Benefits for Korea]

Mil US$
8,000
6,000
4,000
2,000
0
6900
7300
300

☐ Saving corporates IT investment cost
☐ Enhancing corporate productivity
☐ Reducing overhead costs for trading

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eLogistics Service>e-BL (Cont'd)

• e-BL System Workflow

uTradeHub
e-B/L Management System
e-B/L Title Registry
E-TDR
EAI
e-B/L Issuance/Inquiry UI
Portal

Traders
Shipping Request
BL notification/inquiry
E-B/L information inquiry
Negotiation
Banks
e-L/C balance management system
Shipping Request
E-BL Issuance
Shipping Request
E-BL Issuance
Shipping Lines
Forwarders

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) My Trade™ 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-

Multilateral Cooperation

APEC 2005 PPP Dialog

UN/CEFACT TBG Meeting

UN/CEFACT 2006 Forum

APEC 2005 Busan Summit

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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

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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

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Expansion and proliferation of u-Trade

Thailand

Vietnam

Canada

China

Japan

Chinese-Taipei

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Thank you !

Q&A