Thailand National Single Window

Submitted by: Thailand
Government & Business Stakeholders (National Single Window)
- Ministry of Finance (Customs as a lead agency), Ministry of Commerce, Ministry of Agriculture, Ministry of ICT, Ministry of Transport, Ministry of Public Health, Ministry of Industry, Ministry of Science and Technology, and...
- Over 60,000 traders

Key Strategies
- Establishment of the National Single Window environment related to import/export, transport procedures and document requirements including cross-border data exchange with other countries.
- Promotion of electronic transaction and data exchange between G2G, G2B and B2B related to international trade transaction towards paperless trading.
II. Customs & OGA Services (G2B, B2B)
III. e-Customs Paperless Service & OGA (G2G, G2B, B2B)
IV. National Single Window (G2G, G2B, B2B)
V. Live Data Exchange with other Countries (G2G, B2B)

Face-to-Face Services
EDI FACT XML Web service
ebXML/ XML Digital Signature Web service
ebXML/ XML Digital Signature Web service

<---- 1997
1998-2006
2006-2008
2008-2010
2010-2015

Electronic Window Services (1998-2007)

Implementation of EDI Services in Bangkok (1998)
Implementation of EDI Service Nationwide (2000)
Over 220,000,000 electronic messages exchanged (G2B & B2B) related to international trade (1998-2007)
Business stakeholders: importers, exporters, customs brokers, freight forwarders, sea carriers, air carriers, sea ports, air ports and so on.

Note: some electronic windows were not connected their systems together, users can not exchange information across different electronic windows.
NSW Model in Thailand

Cross-Border Paperless

APEC ASEAN others

Message flow of customs declaration via NSW (example)

1. Trader
2. e-Customs Services
3. Bank
4. Port OGA
5. e-Customs Services
6. Trader

National Single Window
Secure inter-operability within Single Window Environment

CA – CA Inter-operability (Thailand)

National Root Certificate Authority (GTIS)
CA – CA Inter-operability (international)

Thailand

NRCA

CA

Digital certificate

CA

Digital certificate

CA

Digital certificate

Other Country

CA – CA interoperability

CA

NRCA

CA

Digital certificate

CA

Digital certificate

CA

Digital certificate

CA

Thailand Other Country

Digital certificate

Digital certificate

Digital certificate

APEC Single Window Workshop

Future Development

National and Regional Information Exchange (G2G, B2B)

Exporting Country (Government Authority)

In-house Application

Code Conversion if necessary

Map in & Map out data format

XML Standard + e-Signature

National Single Window (via Internet)

Map in and Map out (XML Standard + e-Signature)

Exporters, Freight Forwarders, Customs Brokers, Others

Export Declaration Form D and Other Documents

Importing Country (Government Authority)

In-house Application

Code Conversion if necessary

Map in Map out

XML Standard + e-Signature

National Single Window (via Internet)

Map in and Map out (XML Standard + e-Signature)

Importers, Freight Forwarders, Customs Brokers, Others

Secured Transmission

Trade documents
Future Development

Model of ECO between 2 NSWs (Electronic Environment)

Exporting Country

Exporting Country

Importing Country

Importing Country

National Single Window

National Single Window

Control Agencies

Bank (L/C)

Bank (L/C)

Importer

Exporter

1

Option

Option

2

3

3

APEC Single Window Workshop

Future Development

Single Window Development

<table>
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<tr>
<th>Key activities (example)</th>
<th>Key actions (example)</th>
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| Establishment of Political Commitment | - Government mandate  
- Nomination of the strong leading agency  
- Clear identification of financial model |
| Establishment of Working body | Establishment of Steering Committee & Working Groups |
| Development of national roadmap (What, where, when, how, how much, who & whom) | Development & implementation phases  
Areas and participants in the pilot project  
Data harmonization & standardization  
Simplification of process & procedures  
Legal framework for paperless environment  
What, how, who and whom get involved  
Security inter-operability  
Message inter-operability  
CA-CA inter-operability  
Communication methodology  
Capacity building programs |
## Single Window Development

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| **Data harmonization and standardization** | • Nominate specific team for data harmonization and standardization  
• Identify clear direction of standard used  
• How to share resource for data harmonization and standardization exercise? |
| **Security & message interoperability** | • Use standard messages developed by international organization (WCO, UN, ..)  
• Use PKI and digital signature  
• Recommend message encryption for all financial transactions  
• Use secure Trust servers (SSL certificate)  
• Conduct CA-CA inter-operability (national)  
• Adopt policy security (ISO/IEC: 17799/27001)  
• Conduct CA-CA inter-operability (international) |
| **Development of national standard data set** | • Conduct data harmonization and standardization  
• Use of international standard & UN recommendations (WCO data model, ISO, ..) |

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| **Clarification with Legal Framework** | • Formulation of agreement / MOU (if required)  
• Revision of relevant laws and regulations  
• Enable single window in paperless environment  
• Understanding legal framework in the same standard and practice |
| **Clarification of Communication methodology** | • How to communicate in SW environment  
• Who & whom need to communicate in the normal & unexpected cases  
• How to deal with relevant stakeholders in the normal & unexpected cases  
• Implementation guideline, user manual and contingency plan |
| **Clarification of message standard and language used** | Use of international standards and UN recommendations (WCO data model, ISO, ..)  
Use of international language for future data exchange with other countries  
NSW may need to support more than one standard. |
## Single Window Development

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| Capacity building programs and Promotion | - Single Window environment  
- Data harmonization and standardization  
- Security in Single Window environment  
- Increase new participants in single window environment  
- Share experience with other stakeholders  
- Well understanding of legal framework  
- User manual and implementation guideline |
| Collaboration with International organizations and forums | - Participate in International forums (WCO, ASEAN, APEC, ...)  
- Participate in International seminar and workshop  
- Initiative the cross-border pilot project  
- Sharing resource for conducting data harmonization and standardization. |

## Ongoing and Future Development

- Development of NSW phase II (2009-2011)
- Conduct & review data harmonization and standardization
- Increase stakeholders in national single window environment
- Enable national single window in paperless environment
- Revise national legislation to enable live data exchange with other countries
- Extend CA – CA inter-operability with other countries
- Apply policy security (ISO/IEC 17799/27001) to NSW systems
Lessons Learned & Recommendations (national)

- Strong leading agency is important for success of NSW
- Political and unclear business model of single window operation impacts the delay of Single Window implementation.
- It is necessary to have a specific team responsible for data harmonization and standardization
- Utilization of modeling tools can guide and assist analysts and system designers in accuracy, acceleration and quality assurance.
- Data Harmonization and standardization of all import/export-related procedures is very important exercise to enable single window environment towards paperless trading
- Establishment of National Root CA and CA – CA inter-operability activity for mutual trust and recognition among different CAs are necessary.

Recommendations (international)

- Establishment of business model for message inter-operability among APEC economies.
- Nomination of the single window system (should be national single window if available) to enable a single point of linkage among single window systems within APEC economies.
- Security inter-operability among APEC economies is necessary.
- CA – CA inter-operability among APEC economies is needed for future data exchange among APEC economies.
- Data Harmonization and standardization is needed for future data exchange among APEC economies.
- Formulation of legal framework among APEC economies to enable cross-border data exchange towards paperless trading.
- Use of international language is needed for future data exchange among APEC Economies.
- Collaboration with other forums related to international standard, data harmonization and best practices is recommended.
Thank you

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