



Welcome Tajikistan and ESCAP Delegations



Thailand National Single Window towards AEC 2015 and Global Connectivity

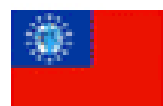


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Thai Customs Department, Ministry of Finance



Outline of Presentation

- Background
- Establishment of NSW Environment
- Progress Implementation of NSW and ASEAN Single Window Pilot Project
- The Way Forward
- Conclusion
- Q&A, Comment and Suggestion



MYANMAR



THAILAND



LAOS



PHILIPPINES



VIETNAM



CAMBODIA



SINGAPORE



MALAYSIA



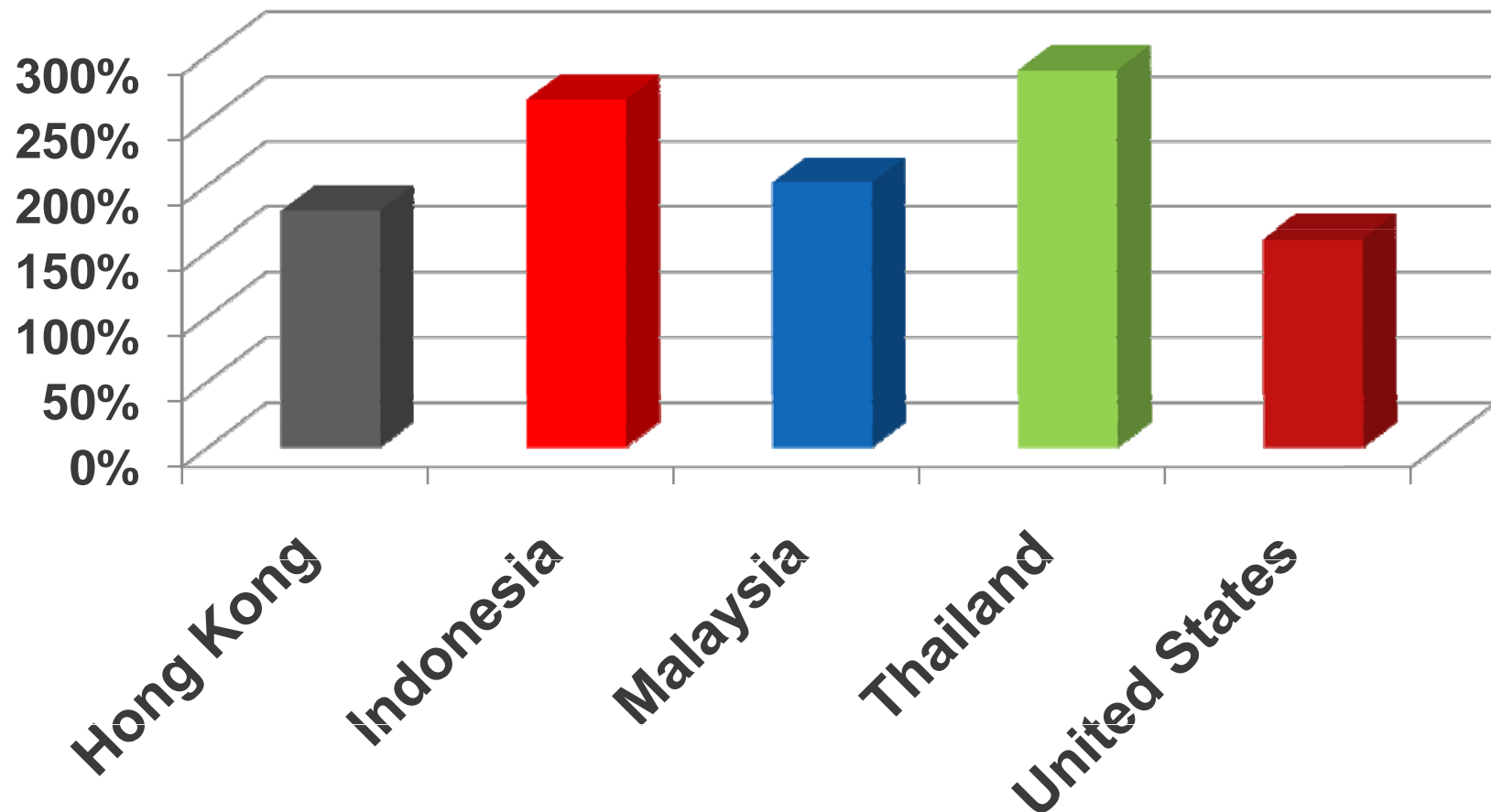
BRUNEI DARUSSALAM



INDONESIA

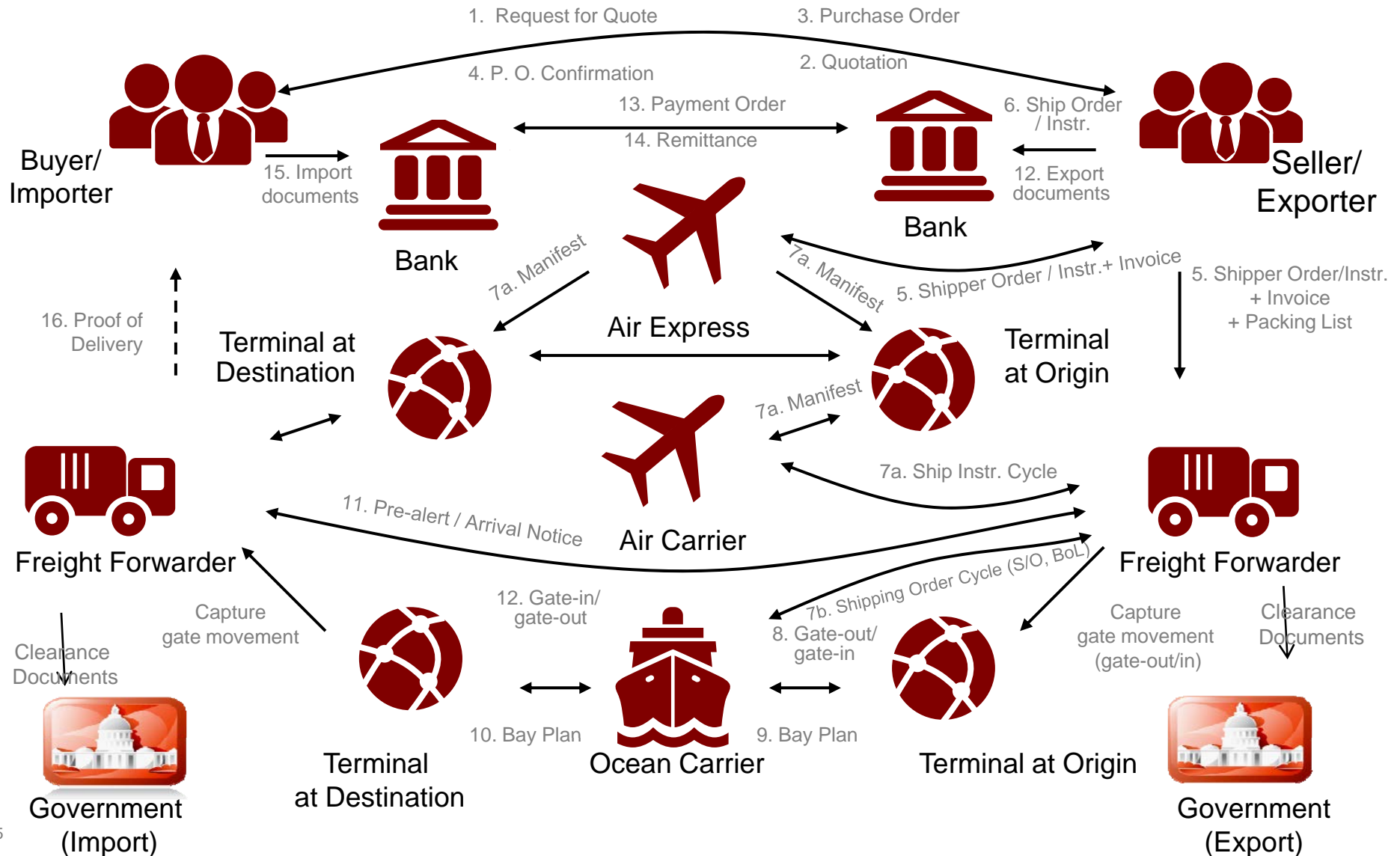


Trade Growth % *2010 over 2000*



Trade Facilitation

Streamlining Highly Complex Multi-Enterprise Supply and Distribution Chain Environments



Thailand Logistics Development Strategy (2007-2011)

Source : NESDB

Vision

World Class Logistics System to Support Thai Business and Industries

Objectives

1. Increase Cost Efficiency / Responsiveness/ Reliability & Security
2. Create economic value in Logistics service and support industries

Strategic Agendas

Business Logistics Improvement (MOI,MOA)

Transport and Logistics Network Optimization (MOT)

Logistics Service International Iization (MOC)

Trade Facilitation Enhancement (MOF)

Capacity Building (MOE,MOL, NESDB)

Logistics Action Plan

Urgent Logistics Development Action Plan 2007

Manufacturing Logistics Action Plan

Trade Logistics Action Plan

NSW National Action Plan

Logistics Human Resource Development Action Plan

**Thailand Logistics Development
Strategy (4th National Strategic Agenda :
Trade Facilitation Enhancement)**

AEC Blue Print

**Single Market and
Production Base**

**A Highly Competitive
Economic Region**

**A Region of Equitable
Economic Development**

**A region Fully Integrated
into the Global Economy**

**Thai National Single Window Promotes
AEC 2015 and Global Connectivity**

To enable free flow of goods information, vehicles information, passengers information, secure cross-border paperless trading and ...

To enhance National and ASEAN Region competitiveness, ICT development and utilization including ASEAN Free Trade Agreement and ASEAN Transit Procedures (government and private sectors)

To promote National and ASEAN growth of SMEs and reduce digital divided by utilizing ICT (application services for SMEs to deal with government agencies and their trading partners electronically)

To facilitate FTAs implementation and other Regional Agreements and collaborations (secure cross-border data exchange with other single window systems (APEC, ...))



PART III DEVELOPMENT OF THE ASEAN SINGLE WINDOW

Article 5 Obligations of Member Countries

1. Member Countries shall develop and implement their National Single Windows in a timely manner for the establishment of the ASEAN Single Window. Brunei Darussalam, Indonesia, Malaysia, Philippines, Thailand and Singapore shall operationalise their National Single Windows by 2008, at the latest. Cambodia, Lao PDR, Myanmar, and Viet Nam shall operationalise their National Single Windows no later than 2012.
2. Member Countries shall ensure that their line ministries and agencies co-operate with, and provide necessary information to their Lead agency in accordance with their national laws in the development and implementation of their National Single Windows.
3. Member Countries shall make use of information and communication technology that are in line with relevant internationally accepted standards in the development and implementation of their National Single Windows.
4. Member Countries shall work in partnership with industries and businesses to support the establishment of their National Single Windows.



Customs
Clearance

How can NSW and ASW Facilitate Cross-Border Trade Procedures ?

Customs
Clearance



Permit/Certificate
Approval



Permit/Certificate
Approval



Payment
Insurance



Payment
Insurance



Secure
Connectivity



(G2G : G2B : B2G: B2B)

Manifest/
Vessel/Flight/
Handling Info



Manifest/
Vessel/Flight/
Handling Info



Commercial
Documents



Commercial
Documents



Instruments for NSW Development

- ❑ Thailand National Logistics Committee and its Working Bodies
- ❑ ASEAN Steering Committee and its working bodies
- ❑ Recommendations & Guideline for Establishing Single Window (WCO, UN/CEFACT, ASEAN, ...)
- ❑ ASEAN Agreement and Protocol for establishing NSW & ASW
- ❑ ASEAN Data Model / Set
- ❑ WCO Data Model / Set Ver. 3.1
- ❑ WCO Revised Kyoto Convention
- ❑ UNTDED and UN/CEFACT Core Component Library (CCL)
- ❑ Data Harmonization Guideline (UN/CEFACT, WCO)
- ❑ ebXML Engine V. 2.0 ISO 15000
- ❑ Public Key Infrastructure and Digital Signature
- ❑ Message Standard (XML, ebXML, ...)
- ❑ ISO 20022 Universal financial industry message scheme





Evolution Towards NSW

- ❑ Brain storm for Thailand Single Window e-Logistics since 2003
- ❑ ASEAN Agreement for Establishing ASEAN Single Window (2005- 2006)
- ❑ Thailand Logistics Committee Strategy (2007 -2011)
- ➔ ❑ Establishment of NSW phase I (2008) : \$1 Million
- ❑ Enhancement of NSW Phase II (2010-2011) : \$14 Million (for AEC 2015 and global connectivity)
- ❑ Enhancement of NSW Phase III (2012-2013) : \$1.7 Million (for SMEs)
- ❑ Enhancement of NSW Phase IV (2014-2015) : ??

Data Linkage Complies with International Standard

Regulatory Framework of Thailand National Single Window



Customs is a Lead Agency

National Single Window

Committee on Regulatory Framework & Quality Assurance of National Single Window Service

Service Provider
(VAN / VAS)

Service Provider
(VAN / VAS)

Service Provider
(VAN / VAS)

Bank
Networks



ICT Infrastructures and Legal Frameworks





ICT and Security Framework

❑ National Single Window Systems

- Two National Single Window systems (Primary & DRC Sites in strong rooms fire protection 1000 C)
- Data Centers comply with ISO security standard
- National Single Window Systems supervised by Customs Administration
- 24 x 7 service (non-stop operation)
- Government Information Network facilitates data linkage between government agencies

❑ Certificate Authorities

- Thailand has the National Root Certificate Authority
- There are 3 recognized Certificate Authorities comprising CAT-CA, TOT-CA and Thai Digital ID

❑ Security Framework and Legal Protection

- Messages exchange within Thailand National Single Window environment utilize digital signature and encryption.
- Key Pair : RSA 1024 bits, Signature Algorithm : SHA1 with RSA, Data Encrypt Algorithm : 3DES
- Over 65 million e-documents per year exchanged amongst government and business stakeholders.
- **Electronic documents recognized by the National Electronic Transactions Act (2001)**

❑ Service charge model

- No transaction fee for G2G data exchange via Thailand National Single Window
- Transaction fee for G2B and B2B data exchange service agreed by the Committee for Regulatory Framework and Quality Assurance of Thailand National single window



Thailand National Single Window

National Single Window Environment

1. E-Registration, Single Sign on, National Standard Data Set, e-Licensing, e-Certificate, e-Declaration, e-Payment , e-Tracking and ...

2. Customs
e-Customs
(Declaration,
Payment, Manifest,
License, certificate
(G2G,G2B,B2G)

3. Controlling
Agencies
E-Licensing
E-Certificate, ...
(G2G,G2B,B2G)

4. Banking and
Insurance
E-Payment
E-Bank Guarantee
E-Insurance
(B2G,**B2B**)

5. Transportation
e-Booking
e-BL/AWB
e-Manifest
E-Port, ...
(B2G,**B2B**)

6. Trading
Community
E-PO,
E-Invoice, ...
(B2G,**B2B**)

7. NSW Exchange Gateway (national and international including ASW)

8. ICT Infrastructure. Message Standard and Security Inter-Operability
(Government Information Network ,Private Network, Internet and VPN)
(Public Key Infrastructure and Digital Signature, SSL, ebXML.XML, ...)

9. Integrated Change Management Collaboration

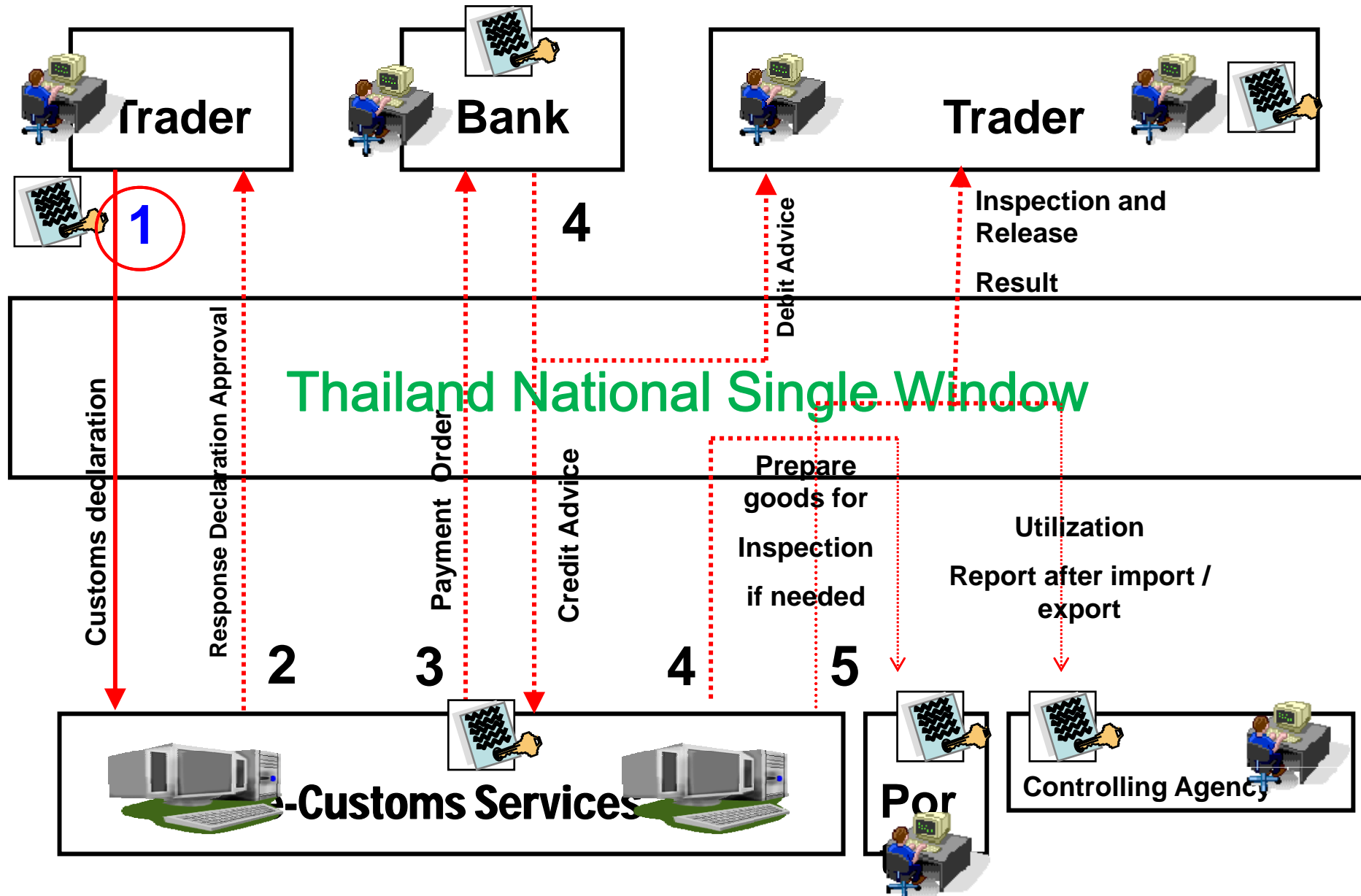
Policy Driver and
Resources Support

Business Model
and Management

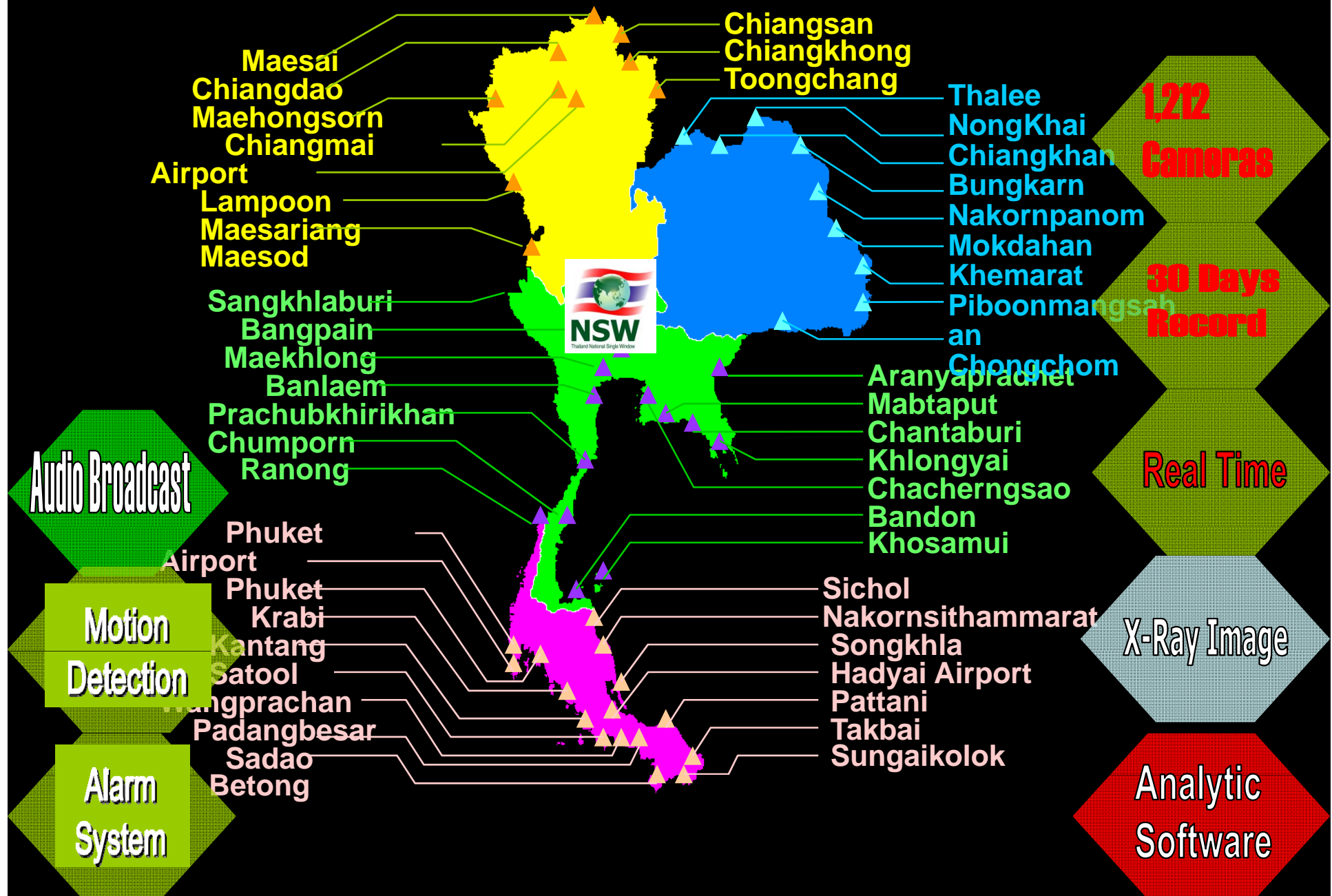
Business Process
Analysis and Reform

Legal Framework for
Cross-border
paperless trading

NSW Enables a Single Submission of e-Document



NSW Enhances Cargo Clearance (2008)



What is RFID?

RFID stands for **Radio-Frequency Identification**. The acronym refers to small electronic devices that consist of a small chip and an antenna. The RFID device serves the same purpose as a bar code or a magnetic strip on the back of a credit card or ATM card; it provides a unique identifier for that object. And, just as a bar code or magnetic strip must be scanned to get the information, the RFID device must be scanned to retrieve the identifying information.

RFID Works Better Than Barcodes

A significant advantage of RFID devices over the others mentioned above is that the RFID device does not need to be positioned precisely relative to the scanner. We're all familiar with the difficulty that store checkout clerks sometimes have in making sure that a barcode can be read. And obviously, credit cards and ATM cards must be swiped through a special reader. In contrast, RFID devices will work within a few feet (up to 20 feet for high-frequency devices) of the scanner. For example, you could just put all of your groceries or purchases in a bag, and set the bag on the scanner. It would be able to query all of the RFID devices and total your purchase immediately.



RFID (Electronic Seal) for Transport & Logistics (Public-Private Collaboration Project)

- RFID (Radio Frequency Identification) Container Seal allows process of Automation at check points.
- Reusable RFID Container Seal is Environmental Friendly. (Life Span up to 3 years, depending on usage).
- Facilitate Paperless Customs Service
- Active RFID tag at 2.45Ghz, read/write, 32k memory
- Made up of a Seal and Active RFID Reusable, with life span of 3 years
- It meets the requirements of industrial environment





RFID (Electronic Seal) For Transport & Logistics (Public-Private Collaboration Project)

- **Reduce long queuing time** at the Customs Check Points.
- Improve **efficiency of container clearance** using paperless RFID automation.
- **Detection of compromised/open container** automatically. (Prevent Smuggling and terrorism) and **improve security**.
- **Real time information and visibility** of container entering / leaving certain zone or check points.
- **Optimize the usage of human resources** for better services.
- **Improve country economy** with better trade facilitation.

NSW and RFID enables faster cargo clearance and movement

- ❑ NSW enables RFID message exchange to monitor the whole route of cargo movement (transport and transit procedures).
- ❑ If containers are found to be suspicious and had to be inspected by the Customs officer, the RFID Seal can be legally opened by using authorized handset.
- ❑ After inspection, it can lock RFID Seal again. The RFID Seal will automatically record the opening date & time of the inspection

RFID Reader



CASE 2 : LATE

สะพาน
SADA0



คลังสินค้าสุวรรณภูมิ
CARGO SBIA



Date : 06/07/2553

First Time Stamp

17:00:00

Last Time Stamp

15:00:00

Time Status :

LATE

CASE 2 : TAMPER

สะเดา
SADAO Customs House

← Warehouse
CARGO SBIA



Date : 06/07/2553
First Time Stamp
17:00:00
Last Time Stamp
11:00:00
Time Status : **TAMPER**



Benefits of Using eSeal (RFID) for the Import

Procedures	Before	Present
Submit Car Manifest	Manually Upon the Arrival of Truck	Submit Car Manifest in Advance to e-Customs before the truck arrives
Customs Procedure at the Border	Manually Inspection Against the Documents	No Customs Inspection Required
Processing Time at the Border for the Import	6 Hours	5 Minutes for Locking e-Seal
At the Destination in Thailand	Manually Inspection Against the Documents	No Customs Inspection Required IF the e-Seal is not Tampered and the Traveling Time is Within the Limit
Processing Time at the Destination	1 Hour	Less Than a Minute

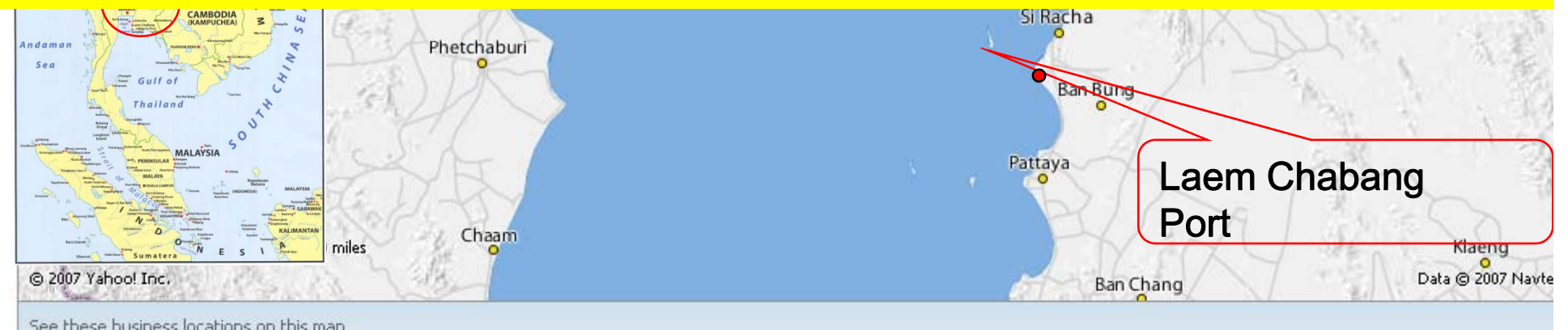


Benefits of Using eSeal (RFID) for the Export

Procedures	Before	Present
Customs Procedure at the Source	Manually Inspection Against the Documents	No Customs Inspection Required
Processing Time at the Source	Hour	5 Minutes for Locking e-Seal
Customs Procedure at the Border	Manually Submit Car Manifest and Customs Inspection	Submit Car Manifest in Advance to e-Customs Before the Truck Arrives
Processing Time at the Border	2-3 Hours	Less Than a Minute



RFID (Electronic Seal) For Transport & Logistics (Public-Private Collaboration Project)



How did it all begin before 2006?

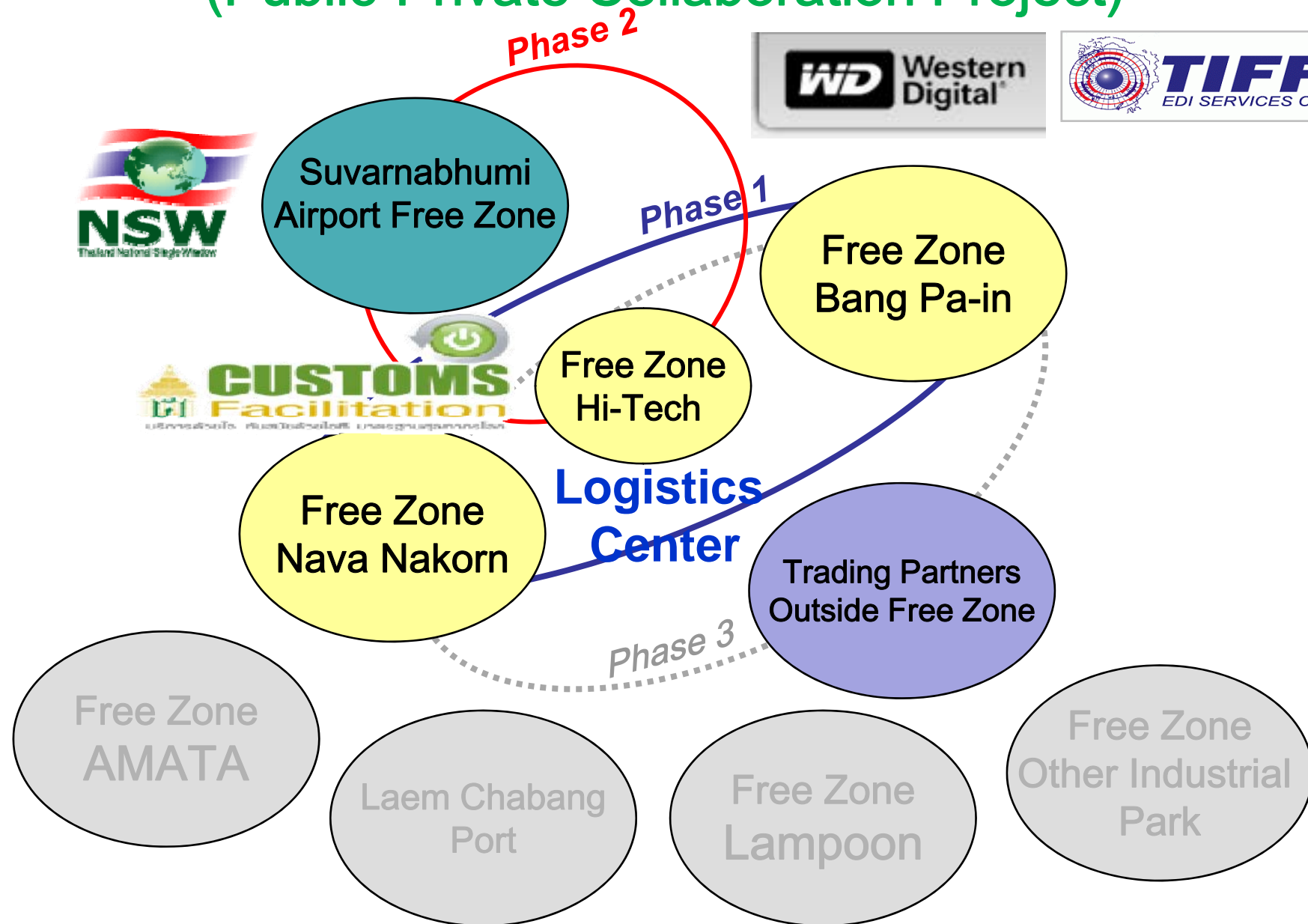
Being the Customs free zone resident, WD-TH is obligated to the following:

Filing (paper base) Customs declaration and perform Customs procedure on every shipment in/out of the free zones *<hence, cost associated>*

Nearly all shipments must go through randomize Customs inspection *<hence, time associated>*

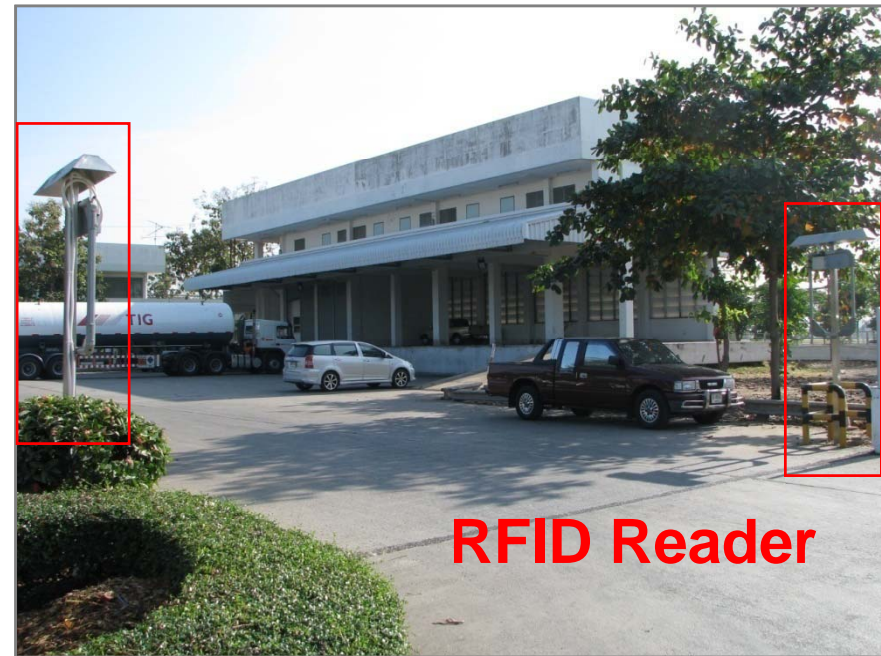
Every 6 months, WD must file stock report on every shipment for all of their free zone locations *<hence, cost/time/accuracy associated>*

RFID (Electronic Seal) for Transport and Logistics (Public-Private Collaboration Project)





RFID Reader



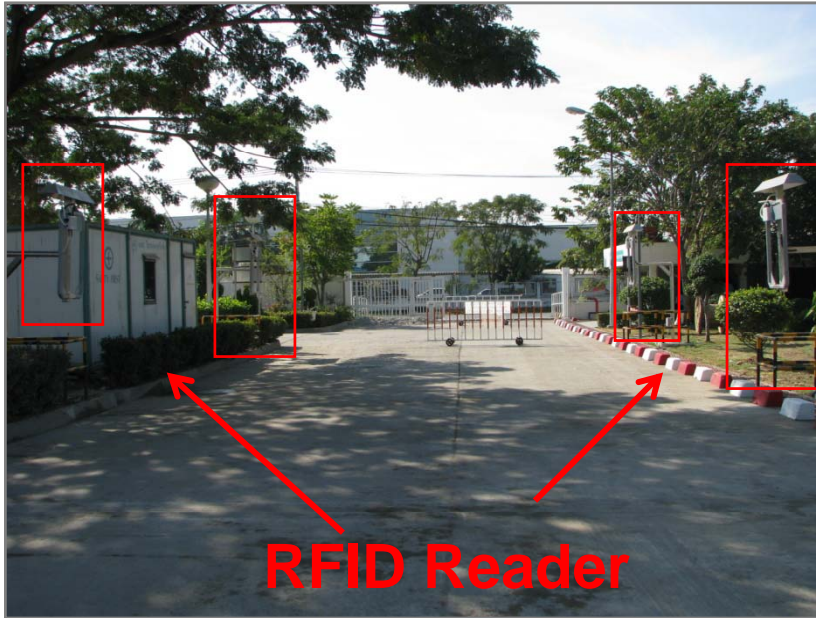
RFID Reader



RFID Reader



Manufacturing Plant
Bangpa-In Industrial Estate
(Finish Product)



*Logistics Center
High Tech Industrial Estate*





Electronic Seal (eSeal)
1st generation



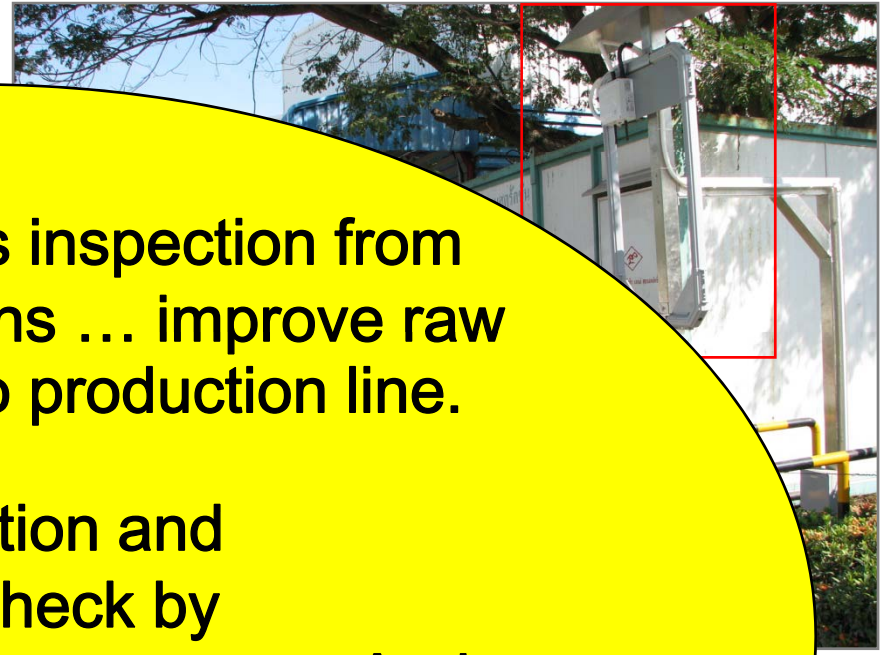
Electronic Seal (eSeal) 2nd generation



eSeal
3rd generation



eSeal
3rd generation



**Reduce Customs inspection from
45 Mins to 15 Mins ... improve raw
material feed into production line.**

**Reduce time for report creation and
Customs Free Zone stock check by
The Customs...**

And more...

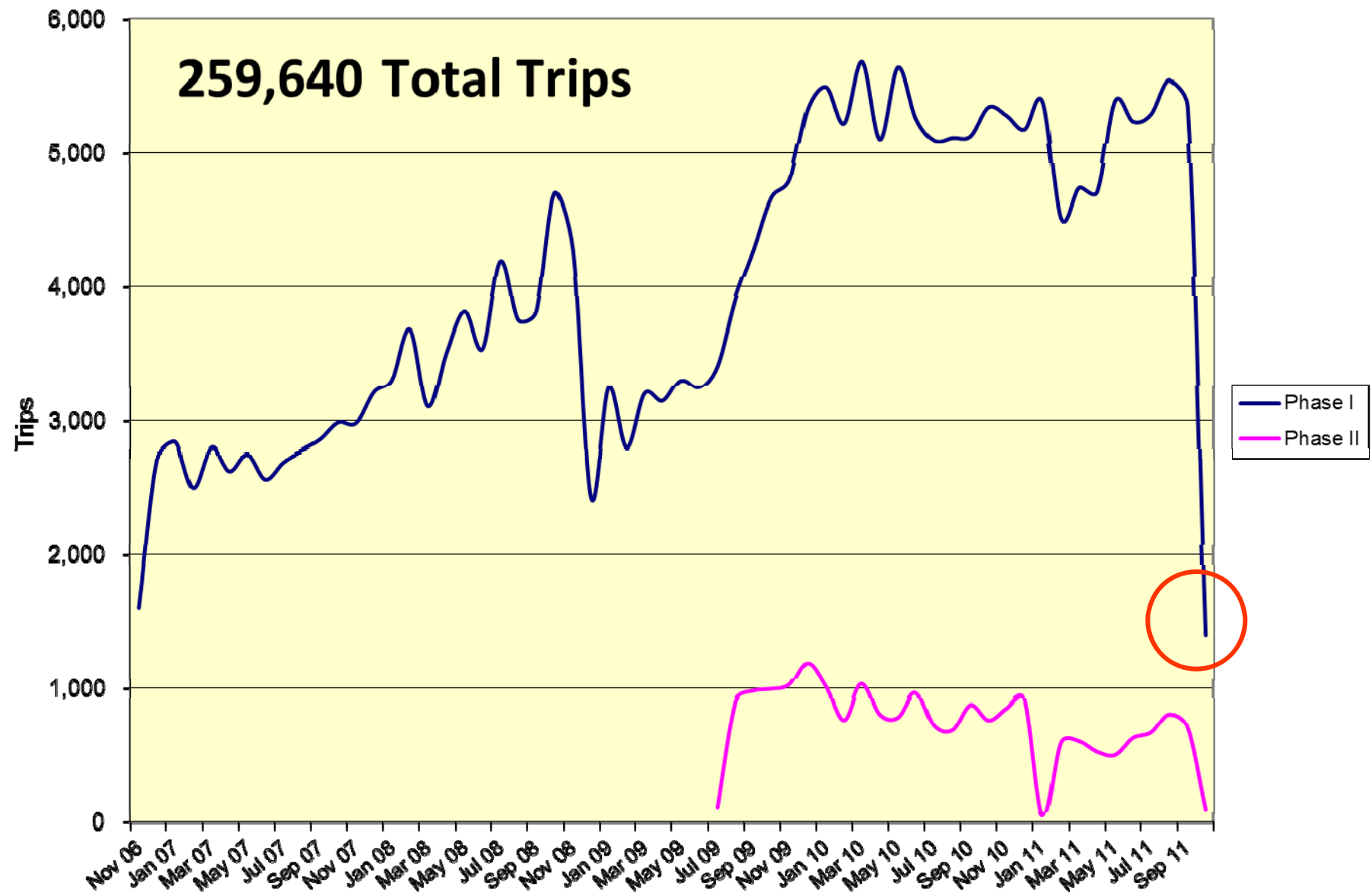
Eliminate Customs Procedure!

**Do away with visual seal inspection by the
Customs...**



2006 - 2011

Track Record from 2006 – Oct 2011



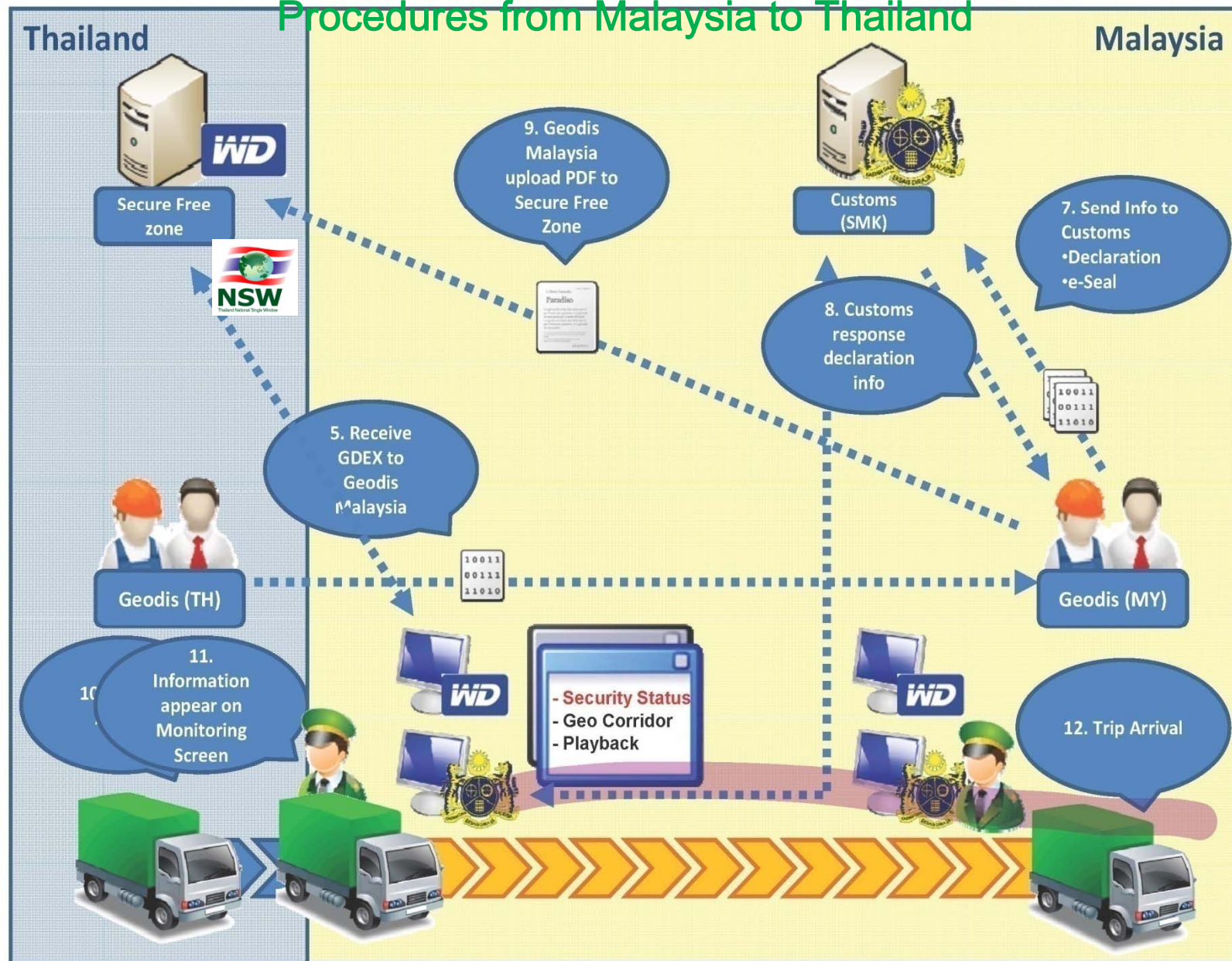
Result from Major Flooding in Thailand 2011 ...



October 12th, 2011 Bang Pa-in Industrial Estate Park ...

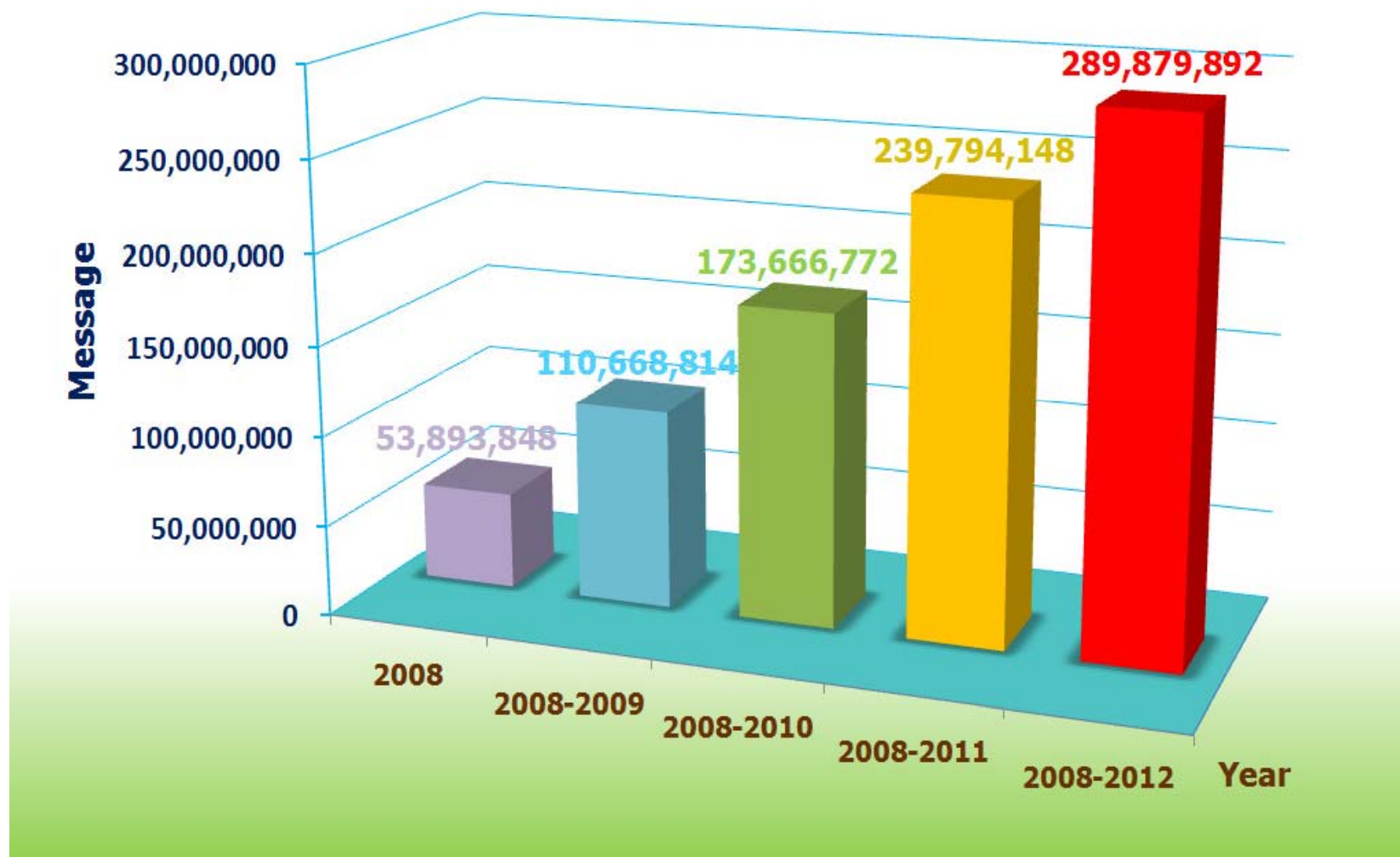
NSW Facilitates National and Regional Data Exchange of Goods in-Transit

Procedures from Malaysia to Thailand





NSW Message Statistics (September 2012)





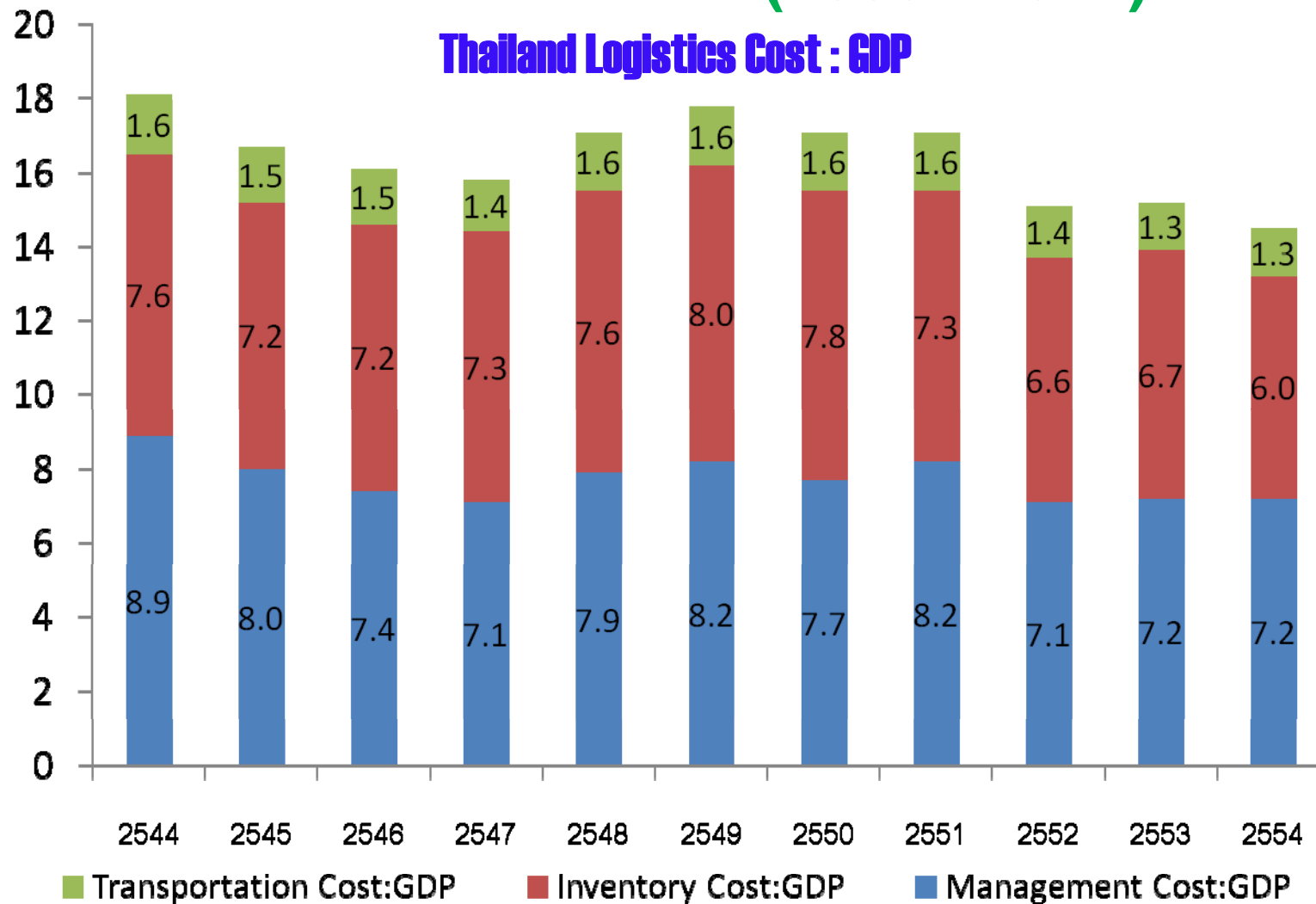
Enhancement of Cargo Clearance Efficiency

Customs Services	Before 1998	1998-2007	2008-Present
Human Intervention	6-8 steps	2-4 steps	0-1 step (green-red)
Document (Copies)	5	1-3	0-1 (green-red)
Intervention Time	3-7 Days	½ - 1 Day	0 - 1 hour (physical inspection)
Turn around Time	3-7 Days	10- 30 Minutes	95% < 5 Minutes



Potential Benefits (2008 - 2012)

Thailand Logistics Cost : GDP



Source : NESDB

Screen Display on Web e-Tracking

e-Tracking Thailand National Single Window

หน้าแรก



สำหรับสมาชิก

Logout

ยินดีต้อนรับ
คุณ สุรศักดิ์ สีมารธรรมรัตน์
เข้าสู่บริการ Tracking แบบออนไลน์

NSW e-tracking

ติดตามข้อมูล ภายในประเทศ

ติดตามข้อมูล ต่างประเทศ

ข้อมูลพื้นฐาน

Admin

NSW Call Center

FAQ

เกี่ยวกับเรา

NSW e-Tracking

ระบบติดตามสถานะการรับส่งข้อมูลผ่าน NSW แบบออนไลน์ เป็นบริการเพื่อให้ผู้ใช้บริการสามารถตรวจสอบและติดตามสถานะของข้อมูลที่ได้รับส่งผ่านทาง Thailand National Single Window เช่น ข้อมูลส่งถึงหน่วยงานผู้รับแล้ว หรือหน่วยงานผู้รับ ส่งแจ้งข้อมูลตอบกลับมาให้ผู้ประกอบการแล้ว เป็นต้น โดยผู้ใช้บริการสามารถตรวจสอบสถานะการรับส่งข้อมูลได้ด้วยตัวเองเพื่ออำนวยความสะดวกแก่ผู้ใช้บริการ



ASEAN Single Window Pilot Project for ASEAN Customs Declaration Document (ACDD) (1 August - 11 November 2012)

Country	Thailand National Single Window			Remark
	Send to	Receive from	ACDD (Record)	
Brunei	✓	-	39	Failed
Cambodia	✓	-	786	Observer
Indonesia	✓	✓	3,552	Delivered
Laos	✓	-	941	Observer
Malaysia	✓	-	5,099	Delivered
Myanmar	✓	-	1,445	Observer
Philippines	✓	-	737	Delivered
Vietnam	✓	-	1,800	Delivered
Singapore	✓	-	3,407	Delivered
Total			17,806	

ASEAN Single Window Pilot Project for ASEAN Preferential Certificate of Origin (ATIGA Form D) (1 August – 11 November 2012)

Country	Thailand National Single Window			Remark
	Send to	Receive from	ATIGA Form D (Record)	
Brunei	✓	-	1,726	Failed
Cambodia	✓	-	1334	Observer
Indonesia	✓	✓	38,958	Delivered
Laos	✓	-	1,001	Observer
Malaysia	✓	✓	6,630	Delivered
Myanmar	✓	-	1,502	Observer
Philippines	✓	-	2,001	Delivered
Vietnam	✓	-	1,510	Delivered
Singapore	✓	✓	5,540	Delivered
Total			60,202	

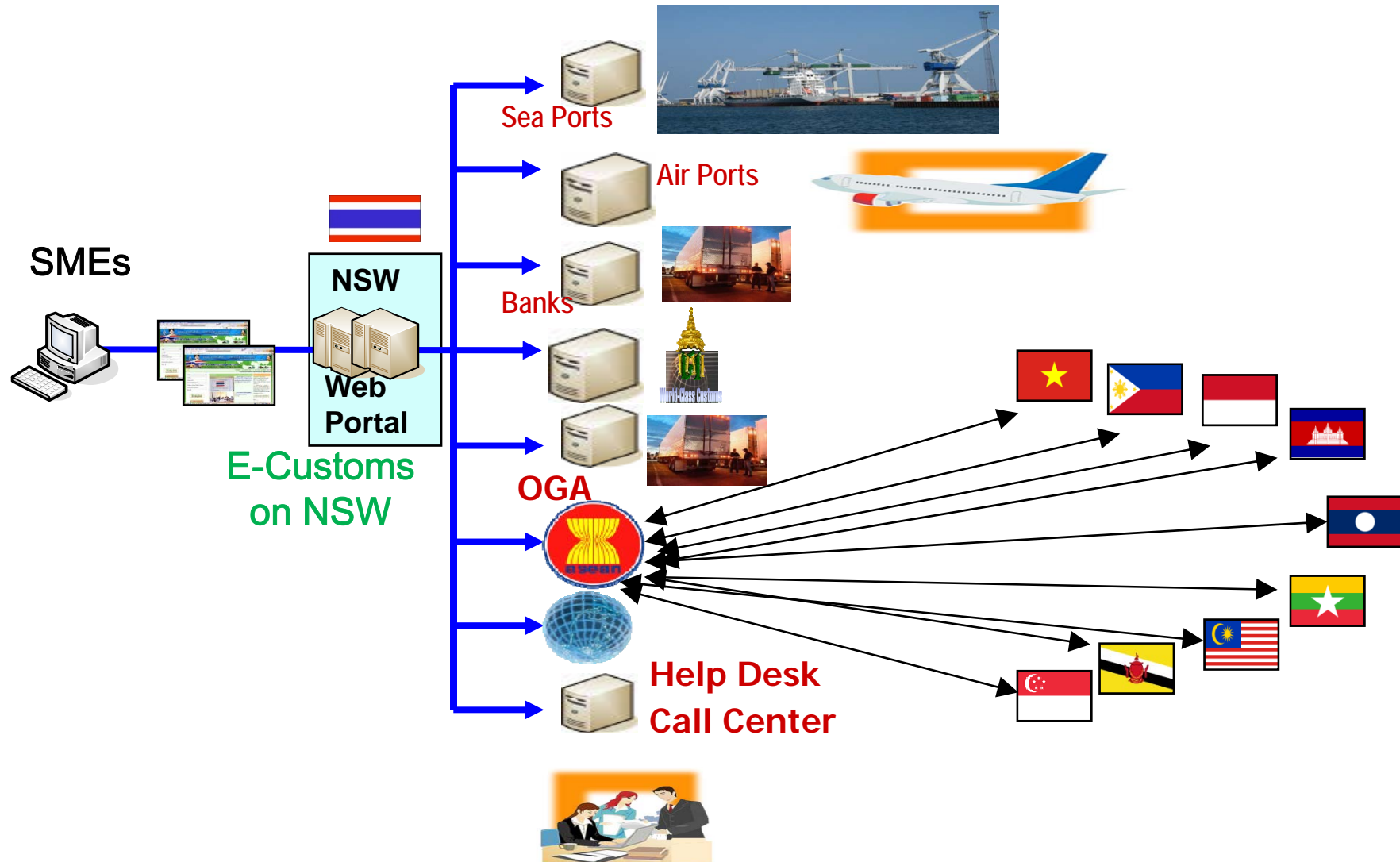


Way Forward (2013-2015)

- ☐ Enhance ASW Pilot project for ACDD and ATIGA Form D (10 ASEAN countries)
- ☐ Continue the Pilot Project for ECO between Thailand and Taiwan
- ☐ Enhance NSW services for some government and trading communities particularly SMEs (improve Direct Trader Input service)
- ☐ Facilitate GMS Project regarding "single window and single stop inspection / one stop service" according to the Cross-Border Transport Agreement (CBTA)
- ☐ Integrate single window application services for B2B transactions (including e-Insurance and e-Booking)
- ☐ Facilitate ASEAN Framework Agreement on the Facilitation of Goods in Transit (ASEAN Customs Transit System)



Direct Trader Input on NSW Web Portal (2013)





Conclusion : NSW Environment

- **Political Commitment (National Policy, A Lead Agency, Resources Allocation, ...)**
- **Business / Financial Model** (investment and service charge models, scope of NSW service (e-Customs, e-Logistics, e-Commerce,...), Service Level Agreement, Interchange Agreement,)
- **ICT Infrastructure** (NSW environment including relevant agencies, ...)
- **Reform (Single Window paperless environment)**
- **Legal Frameworks** (MOU, Agreement, Regulations, Laws, Acts,...)
- **Awareness** (Policy, Business Model, ICT, Legal Framework, Reform including SW paperless environment, ...)

Thailand National Single Window



www.thainsw.net

NSW Call Center 02-289-9500