Roadmap and Planning Structure for Single Window Implementation

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**Planning aspects of Single Window development
in the Customs Union and Single Economic Space Member States**

Joint Seminar on Trade Facilitation and the Single Window
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UNITED NATIONS
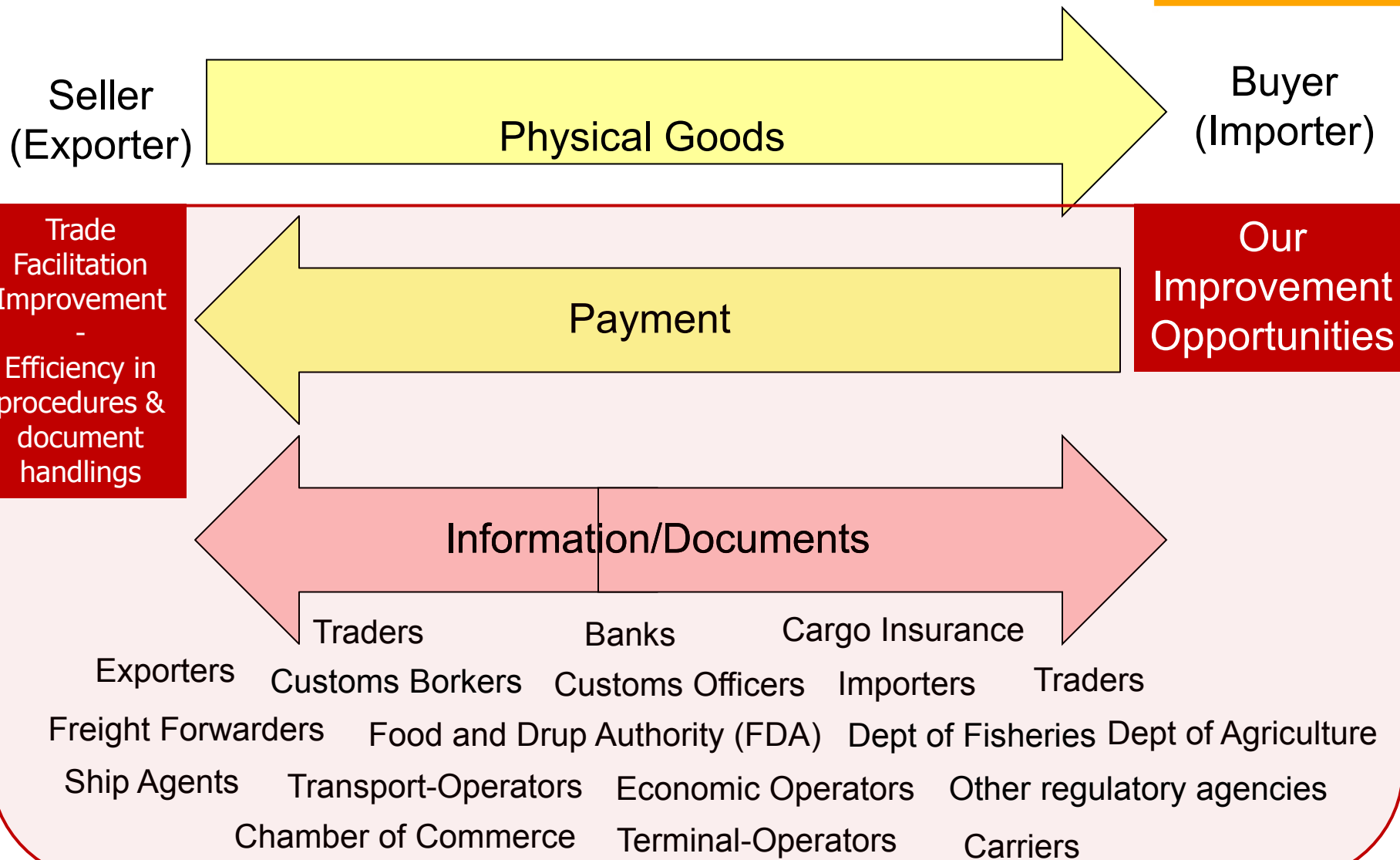ECONOMIC COMMISSION
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ECONOMIC
COMMISSION **eec**

Objectives and Contents of this presentation

1. **Trade Facilitation Improvement**
   - What are the areas of our improvement opportunities?

2. **A SW Evolutionary Long-term Roadmap** for planning and implementing **Single Window (SW)** for continuous trade facilitation improvement.

3. A **systematic framework** is proposed to guide policy managers, decision makers and relevant stakeholders in **planning** and **managing the implementation** of the SW development projects.

4. Summary & Recommendations

Trade Logistics – 3 Kinds of Flow

Seller (Exporter) → **Physical Goods** → **Buyer (Importer)**

Payment (flowing right to left)

Trade Facilitation Improvement - Efficiency in procedures & document handlings

Our Improvement Opportunities

Information/Documents

Traders   Banks   Cargo Insurance

Exporters   Customs Borkers   Customs Officers   Importers   Traders

Freight Forwarders   Food and Drup Authority (FDA)   Dept of Fisheries   Dept of Agriculture

Ship Agents   Transport-Operators   Economic Operators   Other regulatory agencies

Chamber of Commerce   Terminal-Operators   Carriers

The issue is about

Increasing
National Trade Competitiveness

by improving
Import/Export/Transit/Trade Procedures and
Documents Handlings
among Government Agencies,
Business Entities and
Logistics Service Providers

(this is called "Trade Facilitation" improvement)

Documents related to Exportation of Rice
(from purchase order until the cargo container leaving the sea port)

36 Documents involving 15 parties, and more than 1,140 data elements to be filled in

Buy/Pay Docs

1. Proforma Invoice (35)
2. Purchase Order (39)
3. Commercial Invoice (51)
4. Application for Letter of Credit (24)
5. Letter of Credit (32)
6. Packing List (25)

Transport Docs

7. Cargo Insurance Application Form (20)
8. Cover Note (23)
9. Insurance Policy (24)
10. Booking Request Form – Border Crossing (25)
11. Booking Confirmation – Border Crossing (30)
12. Booking Request Form – Inland Transport (16)
13. Booking Confirmation – Inland Transport (18)
14. Bill of Lading (42)
15. Empty Container Movement Request (TKT 305) (20)
16. Request for Port Entry (TKT 308.2) (27)
17. Equipment Interchange Report (EIR) (24)
18. **Container Loading List (28)**
19. Container List Message (32)
20. Outward Container List (34)

21. Master Sea Cargo Manifest(17)
22. House Sea Cargo Manifest (37)

Regulatory Docs

23. *Export Declaration (114)*
24. **Good Transition Control List (27)**
25. *Application for Permission to Export Rice (KP. 2) (24)*
26. Sales Report (KP 3) (21)
27. **Application for the Collection of the Permit for the Export of Rice (A. 3) (35)**
28. **Permit for the Export of Rice (A. 4) (35)**
29. **Application for Certificate of Standards of Product (MS. 13/1) (44)**
30. **Certificate of Analysis (17)**
31. **Certificate of Product Standards (MS. 24/1) (45)**
32. **Certificate of Fumigation (21)**
33. **Application for Phytosanitary Certificate (PQ. 9) (29)**
34. **Phytosanitary Certificate (33)**
35. *Application for Certificate of Origin (42)*
36. *Certificate of Origin (38)*

* Number in parenthesis is the no. of data elements

A Business Process Analysis
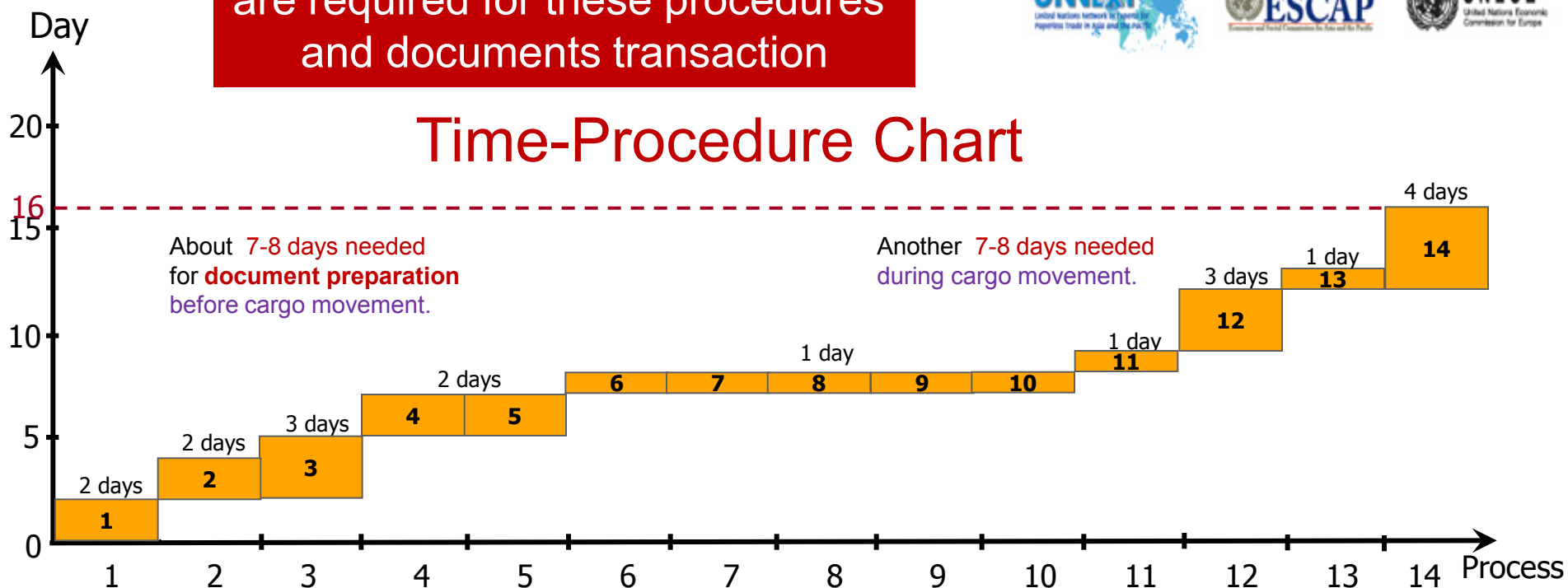## - in Exporting Jasmine Rice from Thailand -

BUSINESS PROCESS ANALYSIS
GUIDE
TO SIMPLIFY TRADE PROCEDURES

16 days
are required for these procedures and documents transaction

UNNExT   ESCAP   UNECE

Time-Procedure Chart

About **7-8 days needed** for **document preparation** before cargo movement.

Another **7-8 days needed** during cargo movement.

Day

20 —
16 --
15 —
10 —
5 —
0 —

2 days — **1**
2 days — **2**
3 days — **3**
2 days — **4** **5**
1 day — **6** **7** **8** **9** **10**
1 day — **11**
3 days — **12**
1 day — **13**
4 days — **14**

Process: 1 2 3 4 5 6 7 8 9 10 11 12 13 14

1. Buy - Conclude sales contract and trade terms
2. Obtain export permit
3. Arrange transport
4. Arrange the inspection and fumigation
5. Obtain cargo insurance
6. Provide customs declaration
7. Collect empty container(s) from yard

8. Stuff container(s)
9. Transfer to port of departure
10. Clear goods through customs
11. Handle container at terminal and stow on vessel
12. Prepare documents required by importer
13. Verify the accuracy/authenticity of exported cargo
14. Pay - Claim payment of goods

Trade Facilitation Performance
According to World Bank's Trading Across Borders Database (2014 Report)

World Bank's Trading Across Borders Report (comparing 188 countries)

economyName	Rank	Documents to export (number of)	Time to export (days)	Cost to export (US$ per container)	Documents to import (number of)	Time to import (days)	Cost to import (US$ per container)
Europe & Central Asia	..	7	25	2,109	8	26	2,339
Singapore	1	3	6	460	3	4	440
Korea, Rep.	3	3	8	670	3	7	695
Japan	23	3	11	890	5	11	970
Thailand	24	5	14	595	5	13	760
Switzerland	35	3	8	1,635	4	8	1,440
Belarus	149	9	15	1,510	10	30	2,315
Russian Federation	157	9	22	2,615	10	21	2,810
Kazakhstan	186	10	81	4,885	12	69	4,865

Ref: www.doingbusiness.org (March 2014)

Comparing among 188 countries, the costs and procedures involved in exporting (and importing) a standardized shipment of goods are studied. Every official procedure involved is recorded – starting from the final contractual agreement between the two parties, and ending with the delivery of the goods through the sea vessel.

Looking for opportunties for improvement
(on processes & documentation needed for exporting a standardized cargo*)

Trading Across Borders in
Russian Federation

Nature of Export Procedures	Duration (days)	US$ Cost
Documents preparation	13	200
Customs clearance and technical control	1	550
Ports and terminal handling	3	480
Inland transportation and handling	5	1,385
Totals	22	2,615

Export documents

Acceptance order (priemnii akt)

Bill of lading

Commercial Invoice

Consignment note/ CMR (tovaro-transportnaya nakladnaya)

Customs export declaration

Export/loading order (eksportnoe/pogruzochnoe poruchenie)

Packing List

Sales purchase contract

Statement of manufacturer (zayavlenie)/ Certificate of Origin

9 documents needed

Ease of Doing Business in
Thailand

Nature of Export Procedures	Duration (days)	US$ Cost
Documents preparation	8	175
Customs clearance and technical control	1	50
Ports and terminal handling	3	160
Inland transportation and handling	2	200
Totals	14	585

Export documents

Bill of Lading

Certificate of Origin

Commercial invoice

Customs export declaration

Terminal handling receipts

5 documents needed

* More documents will be needed for agriculture or dangerous goods.

Reference - World Bank's Doing Business – Trading Across Border (March 2014) www.doingbusiness.org

Trade Facilitation and Single Window Development

is about

- Business Process Analysis (Understanding the "as-is" process)

- Business Process Redesign (Desiging the better "to-be" process)

- Implementing and Adopting the Change

Which Economies made their Trading Across Border easier in 2012/13 – and what they do?

(From World Bank's Doing Business Report 2014

Feature	Economies	Some highlights
Improved customs administration	Argentina; Azerbaijan; Benin; Burundi; Republic of Congo; Swaziland; Ukraine; Uzbekistan	Uzbekistan abolished the need to register import contracts with customs.
Introduced or improved electronic submission and processing	El Salvador; Greece; Madagascar; Russian Federation; Sri Lanka; Uruguay	The Russian Federation introduced an electronic system for submitting export and import documents.
Introduced electronic single window	El Salvador; Mexico; Mozambique; Rwanda	Mexico implemented an electronic single window for trade.
Strengthened transport and port infrastructure	Benin; Central African Republic; Croatia	The Central African Republic rehabilitated the key transit road at its border with Cameroon.
Improved port procedures	Benin; Guinea; Latvia	Latvia launched a new electronic container terminal booking system at the port of Riga.
Introduced or improved risk-based inspections	Mauritania	Mauritania introduced a risk-based inspection system with scanners.

Economic Impacts
because of the delay on trading across borders

- Each *additional day of delay* (e.g. because of trade logistics procedures) *reduces trade* by at least *1%*

    Ref: **"Trading on Time,"** Simeon Djankov, Caroline Freund, and Cong S. Pham, World Bank (2007).

- "Direct and Indirect Cost from import/export-related procedures and required documents is about *1-15% of product cost."*

    Ref: **"*Quantitative Assessment of the Benefits of Trade Facilitation,"*** OECD (2003).

National Trade Improvement
because of NSW in Thailand (2009) - through reform, and applying ICT in Paperless Customs and NSW

Trading Across Borders (183 countries)	2007	2008	2009	2010	2011
World Bank Ranking of Thailand	108	50	10	12	12
No. of Documents to Export (number)	9	7	4	4	4
Time to Export (days)	24	17	14	14	14
Cost to Export (US$ per container)	848	615	625	625	625
No. of Documents to Import (number)	12	9	3	3	3
Time to Import (days)	22	14	13	13	13
Cost to Import (US$ per container)	1042	786	795	795	795

Logistics cost was being saved about $1.5 billion annually

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    managing the implementation
    of the SW development projects.

4. Summary & Recommendations

Original Definition of Single Window (2005)*

- Single Window is 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. If information is electronic, then individual data elements should only be submitted once.

  Aiming to

  1. enhance the efficient information exchange and coordination of traders, transport and government for regulatory transactions, and

  2. facilitate single submission of data or reduction of the same data/same document submissions.

Single Window contributes positively with
better Trade Facilitation Performance in many economies

- According to World Bank's Trading Across Border Database, most of the economies with the "good trading-across-borders indicators" have utilized electronic information systems for

  - Allowing traders to exchange electronic information with Customs and other regulatory agencies, and also among logistics service providers

  - Using risk-based analysis (with electronic information) to limit physical inspections to a small precentage of shipments, etc.

Most of these are the features offered by various forms of electronic Customs and SW platforms.

Practice	Economies	Examples
Allowing electronic submission and processing	149[e]	Belize; Chile; Estonia; Pakistan; Turkey
Using risk-based inspections	133	Morocco; Nigeria; Palau; Vietnam
Providing a single window	71[f]	Colombia; Ghana; Republic of Korea; Singapore
Making all judgments in commercial cases by first-instance courts publicly available in practice	121[g]	Chile; Iceland; Nigeria; Russian Federation; Uruguay

Various types of electronic systems for trade across borders
71 out of 185 economies have implemented SW systems (2013 WB Report).
Positive results from SW implementation have been reported.

Different forms of Single Window

Pre-Single Window Evolution

- Basic Customs Automation

- Trade Points Portals, e.g. Lao PDR's Trade Portal

- Trade Electronic Data Interchange (EDI)/Value Added Network (VAN)

Single Window Evolution

- A limited form of SW - Customs Single Window, e.g. Pakistan Customs SW

- A limited form of SW - Port Community System, e.g. India Port Community Systems

- Trade-regulatory National Single Windows, evolving from few number of regulatory agencies, e.g. Azerbaijan NSW (with 11 agencies), Thai NSW (from 4, to 15 to 36)

- Extended Trade National Single Window, e.g. Korea uTradeHub, HK DTTN

- Transport-regulatory National Single Windows, e.g. China LOGINK (Maritime SW)

- Integrated National Single Window (all-regulation NSW+PCS), e.g. Japan NACCS

- Integrated Sub-National Single Window, e.g. Shanghai e-Port SW

- Regional/Global Single Windows, e.g. ASEAN Single Window (regional trade SW), NEAL-NET (connecting China, Japan, Korea maritime SWs)

* "Ten Years of Single Window Implementation: Lessons Learned for the Future," J. Tat Tsen - Global Trade Facilitation Conference, 2011

Some Observations
- several opportunities for improvement -

1. **One size does not fit all**
   - there are many different SW models & approaches, e.g.

   - e-Customs, Customs-Oriented Single Window

   - Trade- and Cargo-Oriented Regulatory Single Window

   - Transport-Oriented Regulatory Single Window, e.g.
     EU e-Maritime or Maritime Single Window

2. **Different models other than regulatory-oriented SWs**

   - Other types of "Inter-Organization Information Systems" (IOSs) exist and emerge for facilitating information flow among different sets of stakeholders (not just for regulatory requirements as in the original UNECE definition of SW), e.g.

   - Port Community Systems (PCSs)

   - e-Navigation

   - e-Freight

   - e-Commerce, etc.

3. **Different inter-organization collaborative platforms** are normally created based on **some closely-related processes,** and consequently they establish **different Inter-Organization Information Systems (IOSs),** e.g.

   - those related to port operations, e.g. Port Community Systems

   - those related to transport services, e.g. e-Freight

   - those related to transportation regulations, e.g. maritime and clearance of ships like e-Maritime

   - those related to trade- and cargo-oriented regulations, e.g. NSW for Customs and import/export-related procedures of OGAs

4. **Interoperability among those different IOSs** has potential benefits, especially those involved with overlapping information among different IOSs along the international Supply Chain.

Layers of Business Process Areas
in the international supply chain

#	Layer			
1.	International Supply Chain	**Buy**	**Ship**	**Pay**
2.	Transport Supply Chain	**Prepare for Export** / **Export**	**Transport**	**Prepare for Import** / **Import**
3.	Transport Infrastructure Management	**Load/ Unload**	**Warehouse Operations**	**Port Operations**
4.	Transport Regulations	**Permits & Certificates for Vessels**	**Traffic Control**	**Vessel Piloting**
5.	Trade/Cargo Regulations	**Customs Clearance**	**Agriculture Control**	**Control by Other Regulatory Agencies**

Layers of business process areas and related IOS systems

1.	International Supply Chain	Buy	Ship	Pay	**e-Commerce (e.g. Alibaba)**
2.	Transport Supply Chain	Prepare for Export	Export · Transport · Prepare for Import	Import	**e-Freight (e.g IATA e-Freight), Track & Trace Systems**
3.	Transport Infrastructure Management	Load/Unload	Warehouse Operations	Port Operations	**Port Community System (PCS)**
4.	Transport Regulations	Permit & Certificates for Vessels	Traffic Control	Vessel Piloting	**Maritime SW, e-Navigation, SafeSeaNet**
5.	Trade/Cargo Regulations	Customs Clearance	Agriculture Control	Control by Other Regulatory Agencies	**Trade SW, e-Customs, NCTS***

*NCTS: New Computerized Transit System

Recommendation 1:
A Staged Approach be adopted to develop SW.

- **A long-term & continuously-improved** development **roadmap** but **a bite size SW project(s)** should be implemented iteratively.

  - [Customs SW] – Economies with traditional customs automation systems should upgrade them to paperless Customs SW.

  - [Port Community System] - Economies with Customs SW should then electronically link with business/transport stakeholders in their major ports.

  - [Regulatory NSW] - Economies with Customs SW can extend their systems to a small set of selected OGAs in the 1st phase, then involving more OGAs gradually, e.g. Thailand NSW now extends interconnection to all 36 agencies.

  - [Integrated NSW] – Few economies now combining PCS & Regulatory NSW into an integrated logistics NSW environment, e.g. Japan's NACCS

  - [Integrated Sub-national SW] – For some economies, they can decide to establish a sub-national or provincial-level Integrated SW.

  - [Regional or cross-border SW] – Electronic information exchange between economies shall be implemented incrementally based on business cases.

An Evolutionary Long-term Roadmap for SW Development
## (but not necessary in a sequential fashion)

Stage A: [Customs SW] Paperless Customs + e-Payment for Customs Duty + e-Manifest + and electronic risk-based inspection

Stage B: [Regulatory SW] Connecting Other Government Back-end IT systems, and e-Permit/e-Certificate Exchange with Paperless Customs System

Stage C: [PCS] e-Document/Data Exchange among Stakeholders within the (air, sea) port community

Stage D: [Integrated SW] An integrated national logistics platform also with traders, regulators and logistics-service providers information exchange

Stage E: A regional information-exchange environment
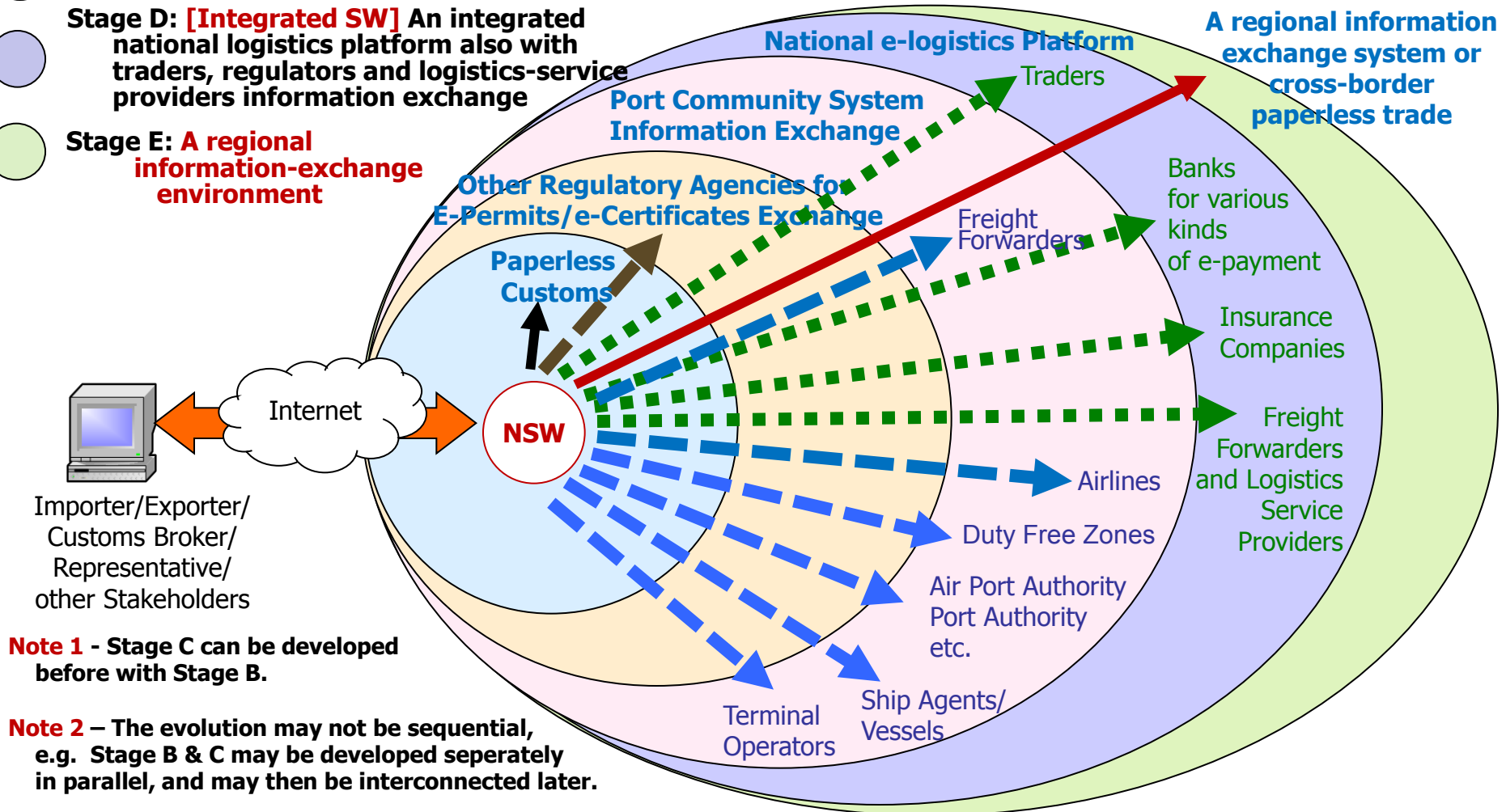
Note 1 - Stage C can be developed before with Stage B.

Note 2 – The evolution may not be sequential, e.g. Stage B & C may be developed seperately in parallel, and may then be interconnected later.

National e-logistics Platform

A regional information exchange system or cross-border paperless trade

Port Community System Information Exchange

Traders

Other Regulatory Agencies for E-Permits/e-Certificates Exchange

Banks for various kinds of e-payment

Paperless Customs

Freight Forwarders

Insurance Companies

Internet

NSW

Freight Forwarders and Logistics Service Providers

Importer/Exporter/ Customs Broker/ Representative/ other Stakeholders

Airlines

Duty Free Zones

Air Port Authority Port Authority etc.

Ship Agents/ Vessels

Terminal Operators

A. Customs Single Window

Preferred Features/Functions for Paperless Customs Single Window —
Electronic Customs Declaration Submission with electronic signature +
e-Payment for Customs Duty +
e-Manifest + and electronic risk analysis
for speeding up customs clearance and reducing # of physical inspections
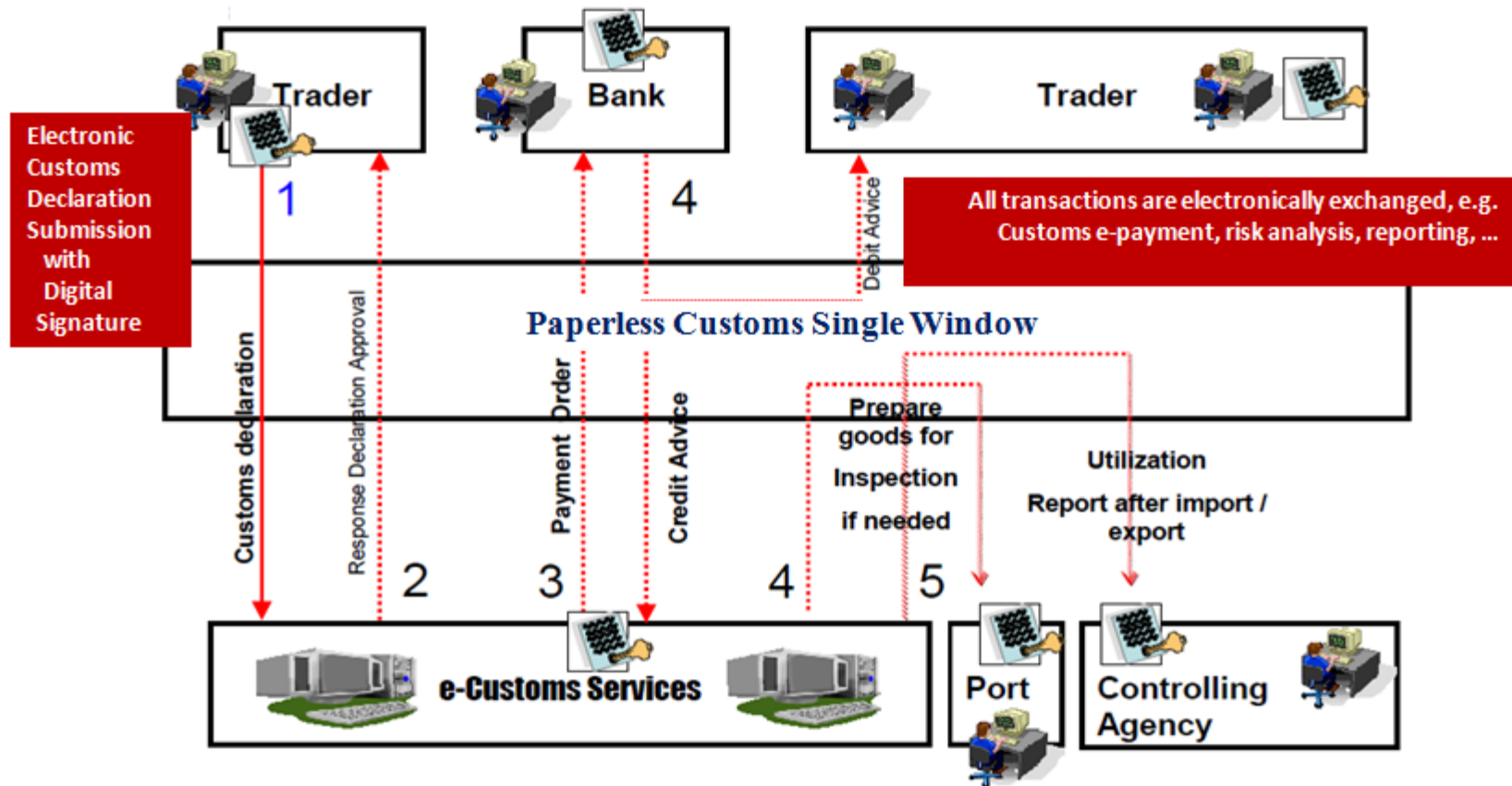
B. Regulatory Single Window

- Gradually linking Customs SW to few selected OGAs first (based upon key strategic goods, economic gains, willingness and readiness etc.)

  - Thailand NSW (1st Phase) connecting electronically only to 4 other government agencies (with high volumes of electronic permits issuing),
    then later to all 36 trade/transport regulatory agencies (in the 2nd Phase)

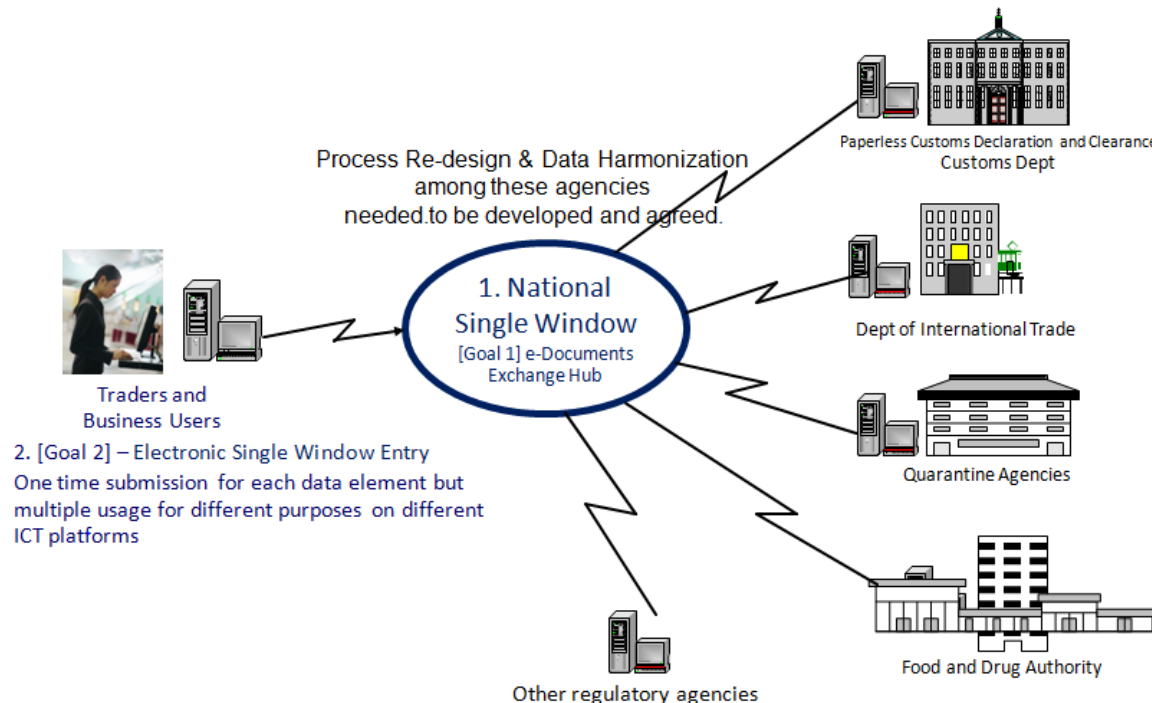 - Azerbaijan NSW in operation with firstly 4 gov agencies (now to 11 agencies)

Process Re-design & Data Harmonization among these agencies needed to be developed and agreed.

Paperless Customs Declaration and Clearance
Customs Dept

1. National Single Window [Goal 1] e-Documents Exchange Hub

Traders and Business Users

2. [Goal 2] – Electronic Single Window Entry
One time submission for each data element but multiple usage for different purposes on different ICT platforms

Dept of International Trade

Quarantine Agencies

Other regulatory agencies

Food and Drug Authority

Goal 1- Electronic information exchange for better Customs clearance coordination and other import/export permits, licences and certificates.

Goal 2 – Single Window Entry for different regulatory agencies is more difficult to achieve (e.g. data harminization exercise must be implemented)

Thailand (Regulatory) NSW Environment
(single data submissions for all agencies have not been achieved yet)

Single Window exchange among 32 regulatory agencies has been established.

Electronic Document Exchange Falcilitator for import, export and logistics services

Ref: UNNExT Brief No. 08, August 2012.
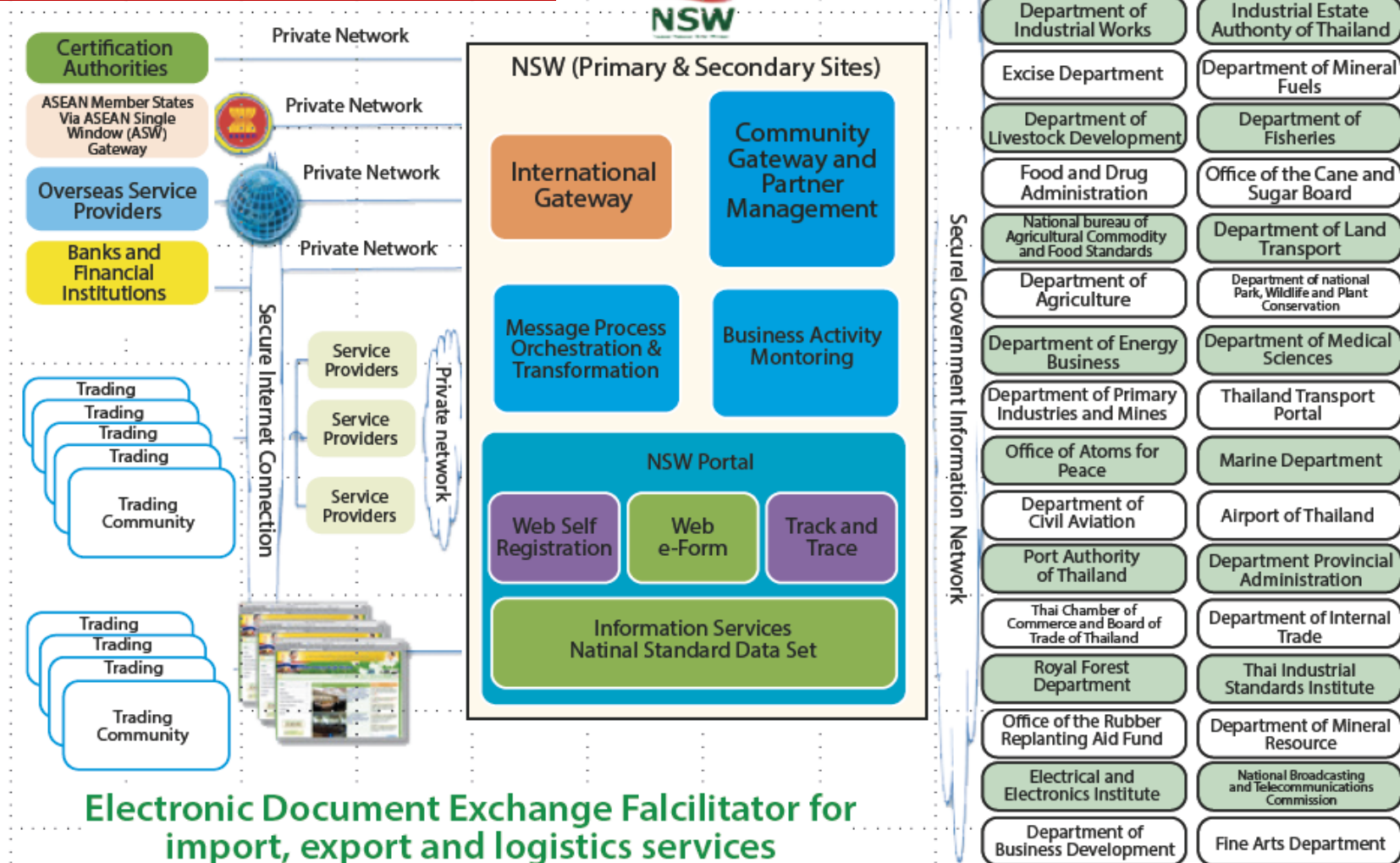
C. Port Community System (PCS)

For port coordination and efficiency

- PCS is an electronic platform which connects several systems operated by a variety of organizations that make up a sea port, air port or inland ports, e.g. freight forwarders, transporters, terminal operators, ship agents, vessels, etc.

  – Normally, connecting also with some regulatory agencies including Customs and transport-related agencies, e.g. Maritime department, and Port Authority.

- PCSs are very advanced in many EU countries, but poorly developed in many Asia-Pacific countries, except some major ports in China, Hong Kong, Singapore, India and Malaysia, etc.

- Recommendations: PCSs should be the national development agenda for Asia-Pacific countries (all major airports, seaports).

D. Integrated NSW

- Integration of regulatory SW and PCS to streamlining all regulatory, transport and payment procedures and documentations in a SW environment, e.g. Japan's NACCS
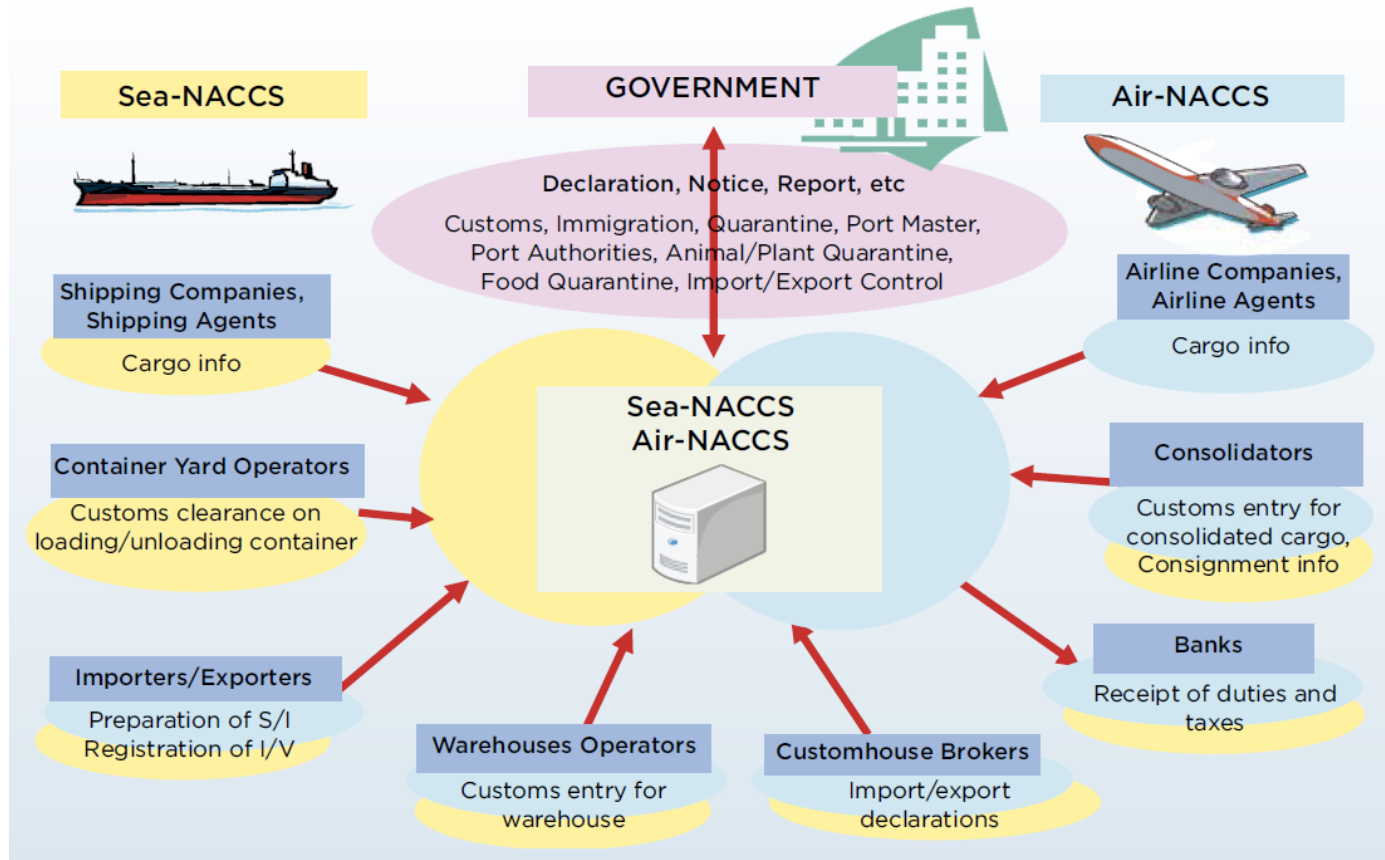
Sea-NACCS

GOVERNMENT

Air-NACCS

Declaration, Notice, Report, etc
Customs, Immigration, Quarantine, Port Master,
Port Authorities, Animal/Plant Quarantine,
Food Quarantine, Import/Export Control

Shipping Companies, Shipping Agents
Cargo info

Airline Companies, Airline Agents
Cargo info

Container Yard Operators
Customs clearance on loading/unloading container

Sea-NACCS
Air-NACCS

Consolidators
Customs entry for consolidated cargo, Consignment info

Importers/Exporters
Preparation of S/I Registration of I/V

Warehouses Operators
Customs entry for warehouse

Customhouse Brokers
Import/export declarations

Banks
Receipt of duties and taxes

Ref: http://www.naccs.jp/e/aboutnaccs/aboutnaccs.html

Abbreviation	Ministry
(MOJ)	Ministry of Justice
(MOF)	Ministry of Finance
(MHLW)	Ministry of Health, Labour and Welfare
(MAFF)	Ministry of Agriculture, Forestry and Fisheries
(METI)	Ministry of Economy, Trade and Industry
(MLIT)	Ministry of Land, Infrastructure, Transport and Tourism

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4. Summary & Recommendations

Why a systematic approach is needed?

Because there are so many complicated challenges to be managed such that the SW Vision could be transformed into reality.

Vision
e.g.

25% better, faster, cheaper trading across border* within 5 years (2013-2018)**

Political Will

Complicated Trade Procedures

Many Document Requirements

Laws and Regulations

Connectivity within the country

Many Stakeholders

Conflict of Interest

Standards

Many different ICT systems

Compliance

Governance

Difficulty in trade data exchange

Regional Connectivity

Change Management

Lack of Understanding

People and Business In-Readiness

Inadequacy in Technology Infrastructure

System Development

Barriers in interoperability

Security

Data Privacy

Reality
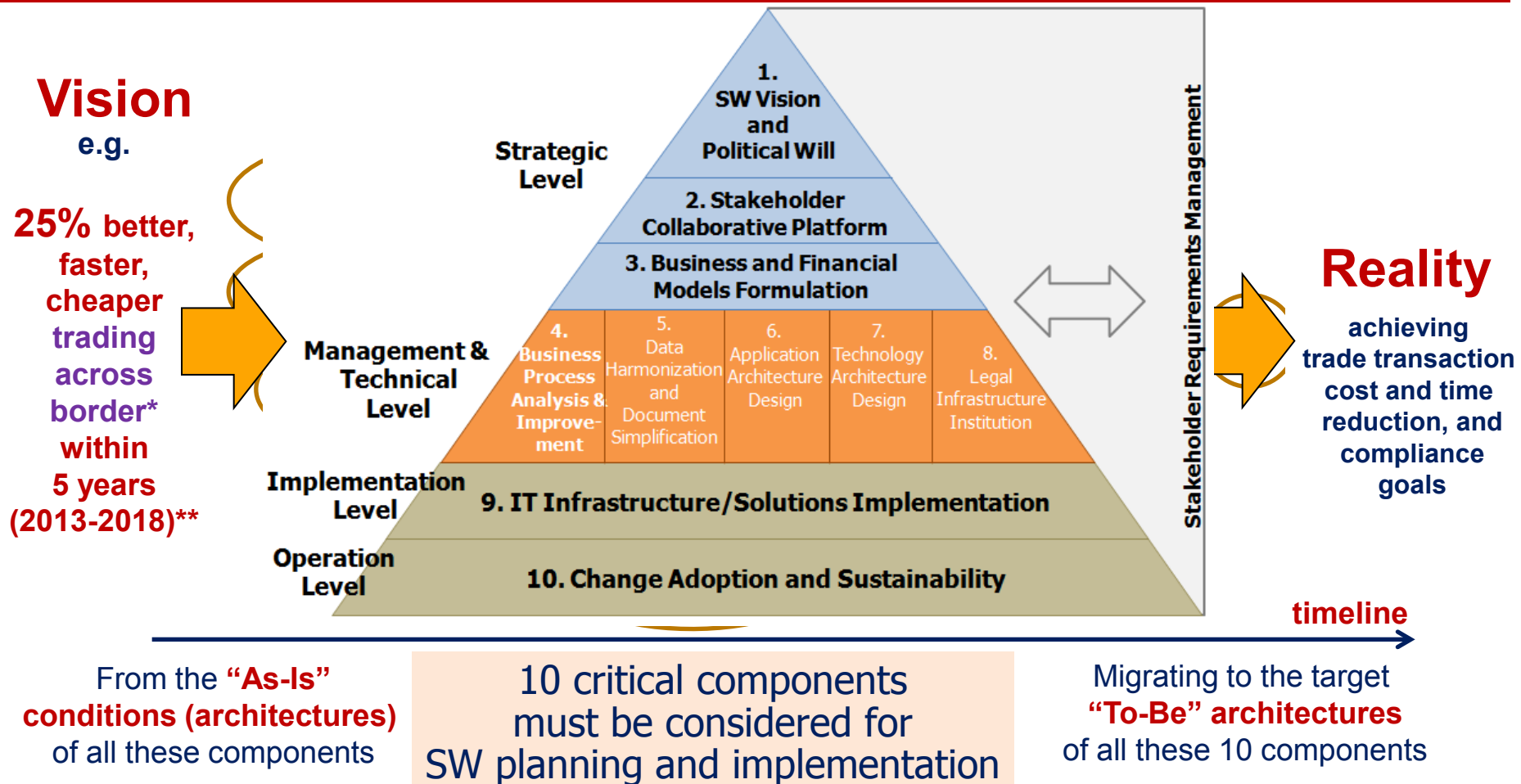**achieving trade transaction cost and time reduction, and compliance goals**

* Referring to World Bank's Trading Across Border Indicators (www.doingbusiness.org)

**Within an economy or a regional economic cooperation, measurable goals should be mandated by its Leaders.

Applying Enterprise Architecture Concept*
for strategic planning, detailed design, implementation & operations

Complexity of Single Window can be handled by decomposing its challenges into smaller and more manageable sub-components.

Vision
e.g.

25% better, faster, cheaper trading across border* within 5 years (2013-2018)**

Reality
achieving trade transaction cost and time reduction, and compliance goals

Stakeholder Requirements Management

Strategic Level
1. SW Vision and Political Will
2. Stakeholder Collaborative Platform
3. Business and Financial Models Formulation

Management & Technical Level
4. Business Process Analysis & Improvement
5. Data Harmonization and Document Simplification
6. Application Architecture Design
7. Technology Architecture Design
8. Legal Infrastructure Institution

Implementation Level
9. IT Infrastructure/Solutions Implementation

Operation Level
10. Change Adoption and Sustainability

timeline

From the **"As-Is"** conditions (architectures) of all these components

10 critical components must be considered for SW planning and implementation

Migrating to the target **"To-Be" architectures** of all these 10 components

For large-scale e-government projects, EA frameworks are recommended in many literatures and in practices, e.g. TOGAF, and US FEA. Refer to UNNExT SW Planning and Implementation Guide, 2012.

Recommendation 2:
Ten Critical Success Components
must be analyzed to understand the "as-is" and its bottlenecks, propose the "to-be", reconcile and agree.

1. SW Vision Articulation and Political Will Creation

2. Stakeholder Collaborative Platform Establishment

3. Governance & Finance Model

Strategic

4. Business process analysis and improvement

5. Data Harmonization and document simplification

6. Application architecture design

7. Technology architecture design including standards & technical interoperability

8. Legal Infrastructure

Management & Technical

9. IT infrastructure & solutions design

IT Systems Implementation

10. Change adoption, operations, and sustainability

Operations

The First Three (3) Critical Challenges cited in several SW case studies*

❖ **Creating Political Will,** e.g.

- ❏ Establishing it as the national commitment (by developing national strategic plan, and obtaining endorsement by the highest political institution, e.g. the Prime Minister, the Cabinet, the President, ….).
- ❏ Establishing it as a regional commitment, e.g. MOU signing among the Head of States to develop the National SW and the Regional SW.

❖ **Institutionalizing the Policy**, i.e. transforming the policy mandates into normal routine management, e.g.

- ❏ Institutionalize the National High-level Committee, and Project Management Group for steering and overseeing the SW implementation, by the Cabinet's mandates and by laws (with the support from several working groups, governments, business sectors and academia)
- ❏ Securing the necessary budgets to finance the project.

❖ **Establishing an effective inter-agency collaboration platform**

* As cited by case studies of Singapore's TradeNet, Korea's uTradeHub, Malaysia NSW, Japan's NACCS, and Thailand NSW
in the UNNExT Policy Brief No. 02, 03, 04, 06 and 08 respectively, and
also in the UNECE Single Window Repository.

Other critical success factors*
that have also been cited in many SW case studies

❖ Conductive legal framework

❖ Other planning and implementation challenges

❖ Sustainability and Business/Financial Models, e.g.

❑ In several economies,
"Special Corporate Vehicles(SCV)" have been established,
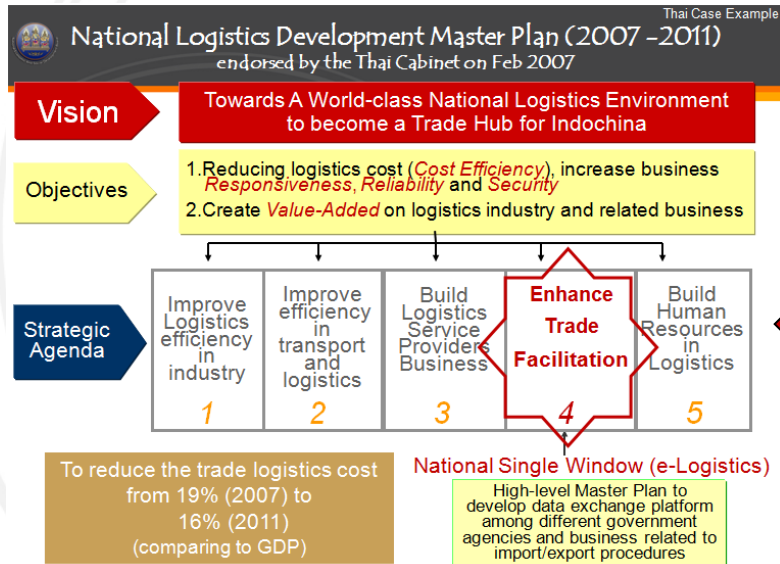e.g. Japan's NACCS, Inc.,
Korea's KTNet,

* As cited by case studies of Singapore's TradeNet, Korea's uTradeHub, Malaysia NSW, Japan's NACCS, and Thailand NSW
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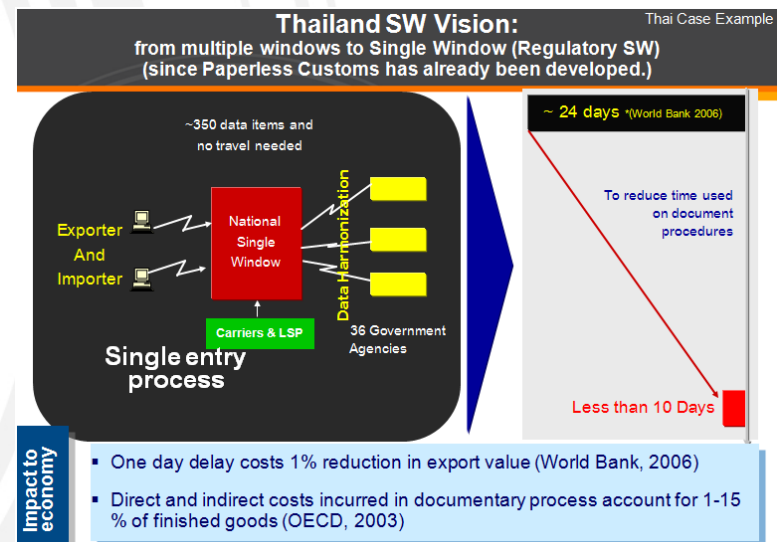
Recommendation 3:
SW Vision & Goals Alignment

National SW Vision, measureable Goals and its Planning should be aligned and integrated as a part of the related national/regional development agenda (quantitative goals with a time frame should be defined and mandated)
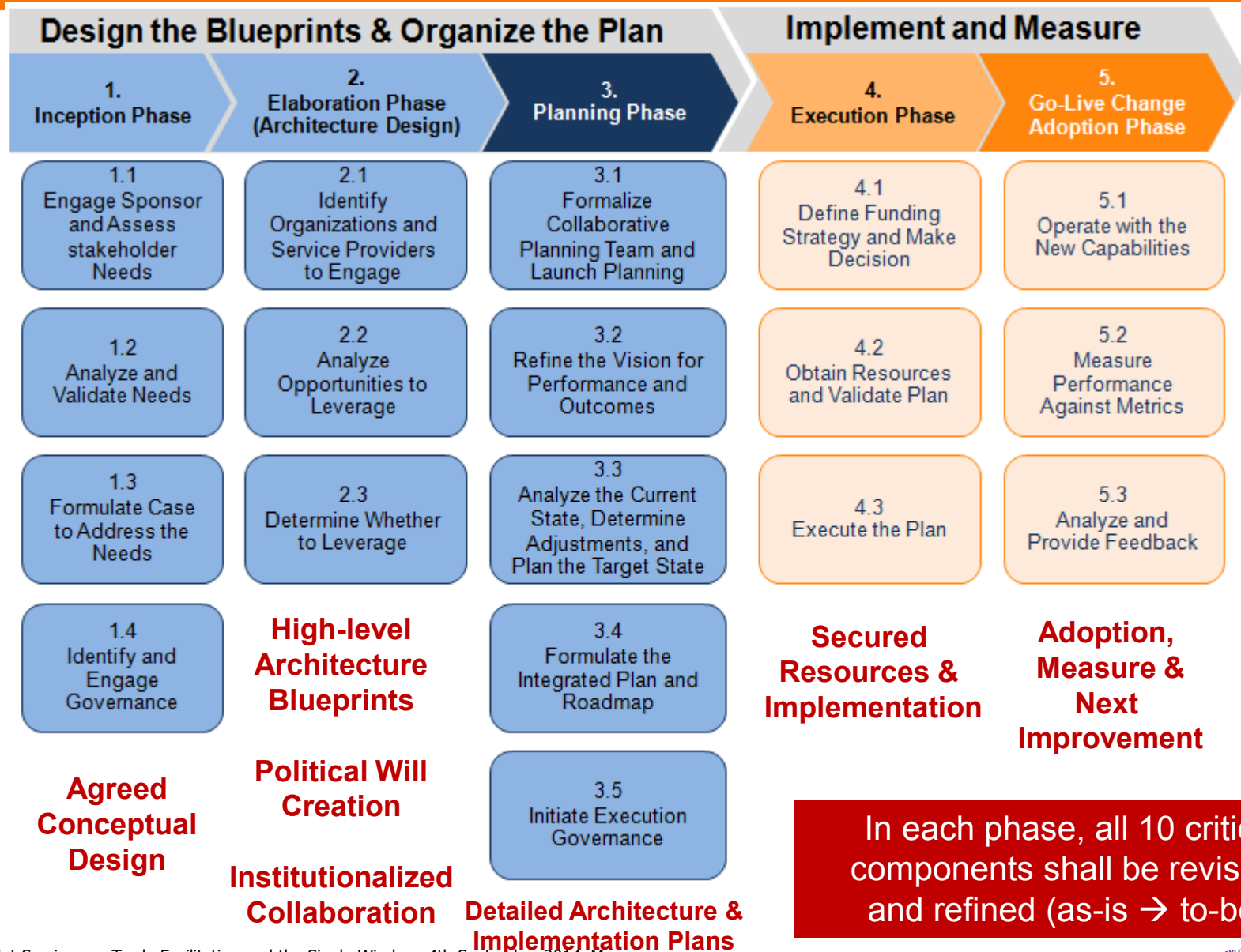
Thailand Case – Trade Facilitation & SW agenda is holistically integrated within the National Logistics Development Plan

Thai Case Example

National Logistics Development Master Plan (2007 –2011)
endorsed by the Thai Cabinet on Feb 2007

Vision — Towards A World-class National Logistics Environment to become a Trade Hub for Indochina

Objectives —
1. Reducing logistics cost (*Cost Efficiency*), increase business *Responsiveness*, *Reliability* and *Security*
2. Create *Value-Added* on logistics industry and related business

Strategic Agenda —
Improve Logistics efficiency in industry	Improve efficiency in transport and logistics	Build Logistics Service Providers Business	Enhance Trade Facilitation	Build Human Resources in Logistics
1	2	3	4	5

To reduce the trade logistics cost from 19% (2007) to 16% (2011) (comparing to GDP)

National Single Window (e-Logistics)
High-level Master Plan to develop data exchange platform among different government agencies and business related to import/export procedures

NSW Vision & Goals are aligned with National and Regional Agenda

Thai Case Example

Thailand SW Vision:
from multiple windows to Single Window (Regulatory SW) (since Paperless Customs has already been developed.)

~350 data items and no travel needed

Exporter And Importer → National Single Window → 36 Government Agencies

Carriers & LSP

Single entry process

Data Harmonization

~ 24 days *(World Bank 2006)

To reduce time used on document procedures

Less than 10 Days

Impact to economy
- One day delay costs 1% reduction in export value (World Bank, 2006)
- Direct and indirect costs incurred in documentary process account for 1-15 % of finished goods (OECD, 2003)

Recommendation 4:
Systematically managing NSW projects with
Collaborative Project Management Methodology (5 phases)

Design the Blueprints & Organize the Plan

1. Inception Phase	2. Elaboration Phase (Architecture Design)	3. Planning Phase

Implement and Measure

4. Execution Phase	5. Go-Live Change Adoption Phase

1.1 Engage Sponsor and Assess stakeholder Needs

2.1 Identify Organizations and Service Providers to Engage

3.1 Formalize Collaborative Planning Team and Launch Planning

4.1 Define Funding Strategy and Make Decision

5.1 Operate with the New Capabilities

1.2 Analyze and Validate Needs

2.2 Analyze Opportunities to Leverage

3.2 Refine the Vision for Performance and Outcomes

4.2 Obtain Resources and Validate Plan

5.2 Measure Performance Against Metrics

1.3 Formulate Case to Address the Needs

2.3 Determine Whether to Leverage

3.3 Analyze the Current State, Determine Adjustments, and Plan the Target State

4.3 Execute the Plan

5.3 Analyze and Provide Feedback

1.4 Identify and Engage Governance

High-level Architecture Blueprints

3.4 Formulate the Integrated Plan and Roadmap

Secured Resources & Implementation

Adoption, Measure & Next Improvement

Political Will Creation

3.5 Initiate Execution Governance

Agreed Conceptual Design

Institutionalized Collaboration

Detailed Architecture & Implementation Plans

In each phase, all 10 critical components shall be revisited and refined (as-is → to-be).

Objectives and Contents of this presentation

1. **Trade Facilitation Improvement**
   - What are the areas of our improvement opportunities?

2. **A SW Evolutionary long-term Roadmap** for planning and implementing **Single Window (SW)** for trade facilitation improvement.

3. A **systematic framework** is proposed to guide policy managers, decision makers and relevant stakeholders in **planning** and **managing the implementation** of the SW development projects.

4. Summary & Recommendations

Summary

❑ Trade Facilitation (TF) improvement is about the improvement of import/export/transit/trade processes, document handlings and better coordinatiion among government agencies, business entities and logistics service providers.

❑ Simplification and automation of TF is a very important development strategy for national trade competitiveness.

❑ Different forms of electronic Single Window have been adopted worldwide for TF improvement with signifiant positive results.

❑ SW development typically follows an evolutionary/staged pathway.

Recommendation #1

1. A simplified Evolutionary Long-term Roadmap for SW Development is proposed such that policymakers/managers can use this model to

   a)   assess their current status in the country by comparing with different stages and their preferred functions in this model, and

   b)   determine the next stage for their phased SW development.
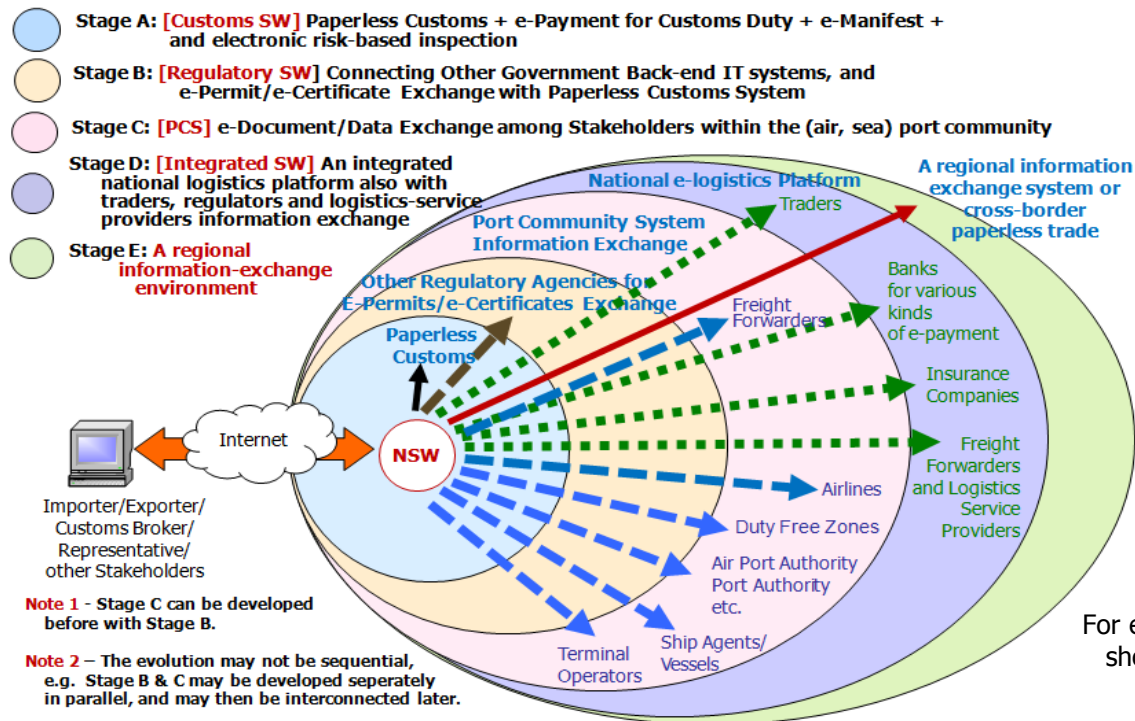
For example, not just regulatory SW that should be developed, but the countries with major sea/air ports should also develop PCS platforms.

Recommendation #2

2. A systematic approach based on Enterprise Architecture concept is proposed such that policymakers/managers can manage the complexity of project initiation, SW feasibility study, strategic and detailed planning and overseeing the SW implementation, e.g.

    ☐ Decompositing complicated challenges into smaller sub-components.

    ☐ Ten (10) critical components are proposed.

    ☐ And each of these ten (10) critical components must be systematically analyzed to understand the "as-is" conditions and its bottlenecks, propose better "to-be" conditions (architectures), collaboratively refine and agree before escalating them into actual implementation.

        ☐ For example, the "as-is" business processes & bottlenecks must be analyzed, then propose "to-be" business process, refine and agree among key stakeholders before IT systems implementation.

Recommendation #3

3. **SW Vision & Goals Alignment:**
National SW Vision, measureable Goals and its planning should be clearly articulated, aligned and integrated as a part of the related national (and regional) economic development agenda.

a) quantitative goals with a time frame should be defined and mandated by the highest-possible policy decision makers, e.g. by the Cabinets or Leaders of the State.

b) Institutionalizing the policy agenda, i.e. transforming those policy mandates into normal routine management, e.g.

❑ Institutionalize the National High-level Committee, and Project Management Group for steering and overseeing the SW implementation, by the Cabinet's mandates and by laws (with the support from several working groups, governments, business sectors and academia)

Recommendation #4

4. An effective Collaborative Project Management Approach is needed to systematically manage and drive the SW vision into reality.

- ❑ 5-phase collaborative project management approach is proposed.
  (Inception, Elaboration, Planning, Execution/Implementation, Change Adoption)

- ❑ In each phase, the ten (10) critical components will be analyzed
  (as-is & bottlenecks analyzed, and the to-be are proposed), refined and agreed iteratively from the strategic level, to management and implementation levels with different depths.
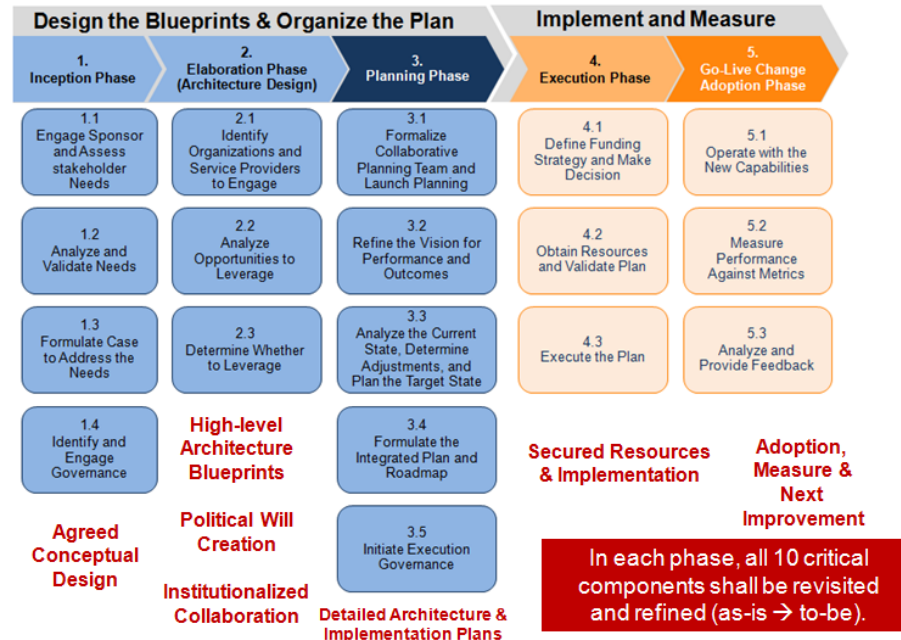
Reference

UNNExT Single Window Planning and Implementation Guide, 2012.
http://unnext.unescap.org

Q &A
Thank you.

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**Planning aspects of Single Window development
in the Customs Union and Single Economic Space Member States**

Joint Seminar on Trade Facilitation and the Single Window
4th September 2014, Moscow

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Speaker - Somnuk Keretho, PhD

Somnuk Keretho is an assistant professor of Computer Engineering Department, and the founding Director of Institute for IT Innovation (INOVA), a research and development institute of Kasetsart University, Thailand, specializing in ICT-enabled innovation, trade facilitation and e-logistics initiatives including National Single Window strategic planning and implementation, enterprise architecture for e-government and e-business, business process analysis and redesign, data harmonization and modeling, ICT-related standards and interoperability, e-transaction related laws, and process-oriented quality software engineering.

He has leaded several ICT strategic projects at organizational, national and regional levels. For the past nine years, he has assisted Ministry of Information and Communication Technology, National Economic and Social Development Board, Ministry of Transport, Port Authority of Thailand, and Ministry of Agriculture in architecting "Thailand Single-Window e-Logistics" related projects including its national e-logistics strategy, implementation plans, interoperability and standards, harmonization and simplification of trade and transport-related documents and procedures, automatic electronic-gate systems development for the Bangkok Port and the Leamchabang Sea Port, and related software development projects.

Several of those projects are being aligned with some regional and international collaborations, in which Dr. Somnuk has actively engaged related to trade facilitation, single window and paperless trading initiatives through UNESCAP, UNECE, APEC, ASEAN and GMS. He has played several roles in catalyzing the creation of and actively contributing to the United Nations Network of Experts for Paperless Trade in Asia and the Pacific (http://unnext.unescap.org), and providing several technical supports to the APEC Paperless Trading and ASEAN Single Window Initiatives. He is the main author of the UNNExT Business Process Analysis Guide, the UNNExT Data Harmonization Guide and the UNNExT Guide for Single Window Planning and Implementation as jointly published by UNECE and UNESCAP.