Session IV: Advancing Single Window Interoperability

Single Windows & Regional Interoperability – Trends and Considerations

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VII Meeting of the Inter-American Network of International Trade Single Windows (Red VUCE)

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Hotel Royal Tulip, Alvorada
Brasilia, Brazil

AGENDA

- New trends on Trade Facilitation and Single Windows

- New trends on Interoperability of Single Windows

- Lessons learned from Asian countries experiences and opportunities and challenges ahead

- Examples of new developments of SW in Asia

- International Regulatory framework for advancing interoperability

- How to advance interoperability: recommendations on how to structure a project and develop a Roadmap
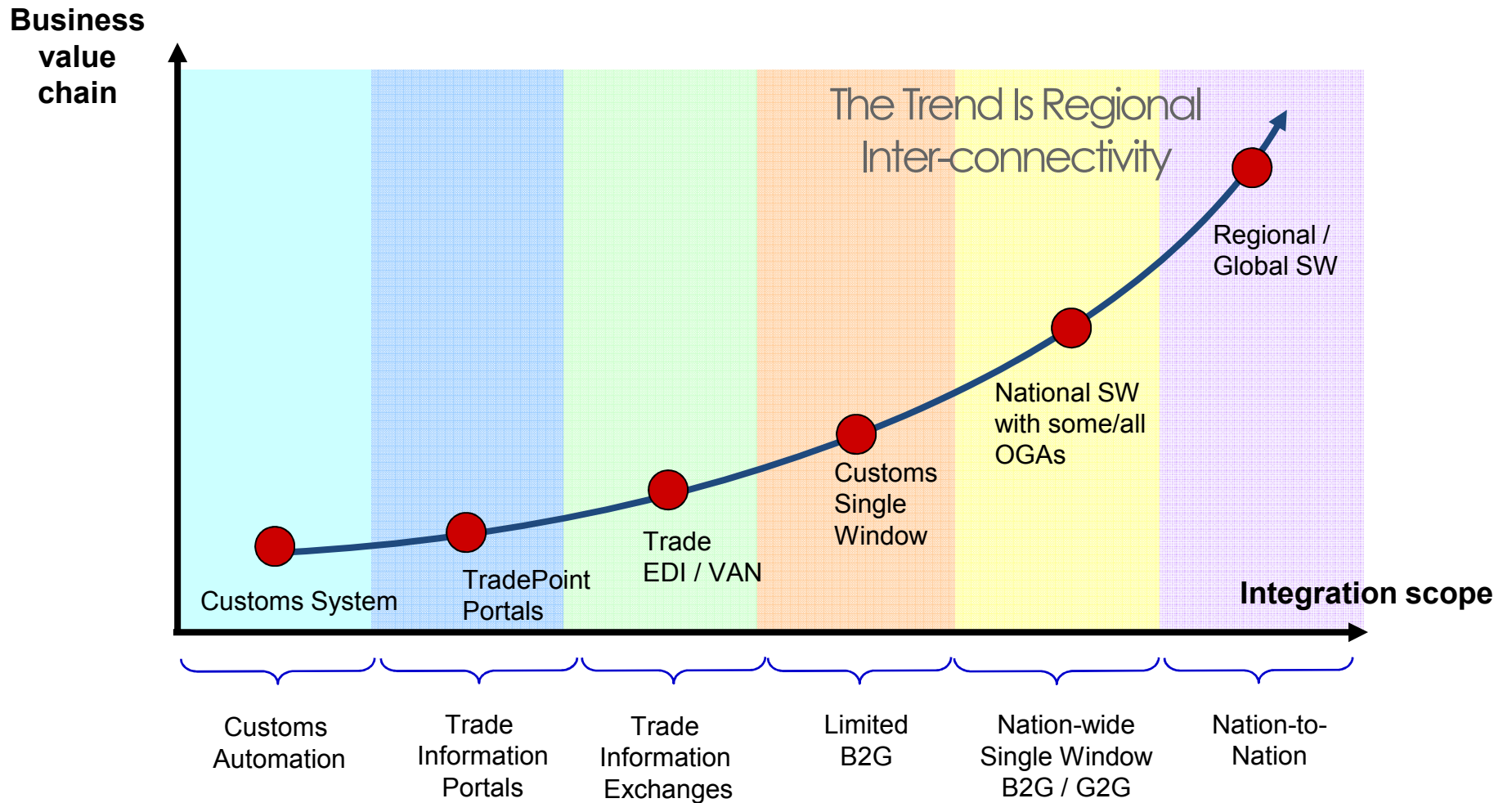
AGENDA

1. Connectivity is the Next Step

2. Examples of Regional Interoperability

3. Considerations for Red VUCE

Connectivity is the Next Step

EVOLUTION OF SINGLE WINDOW

Business value chain

The Trend Is Regional Inter-connectivity

Regional / Global SW

National SW with some/all OGAs

Customs Single Window

Trade EDI / VAN

TradePoint Portals

Customs System

Integration scope

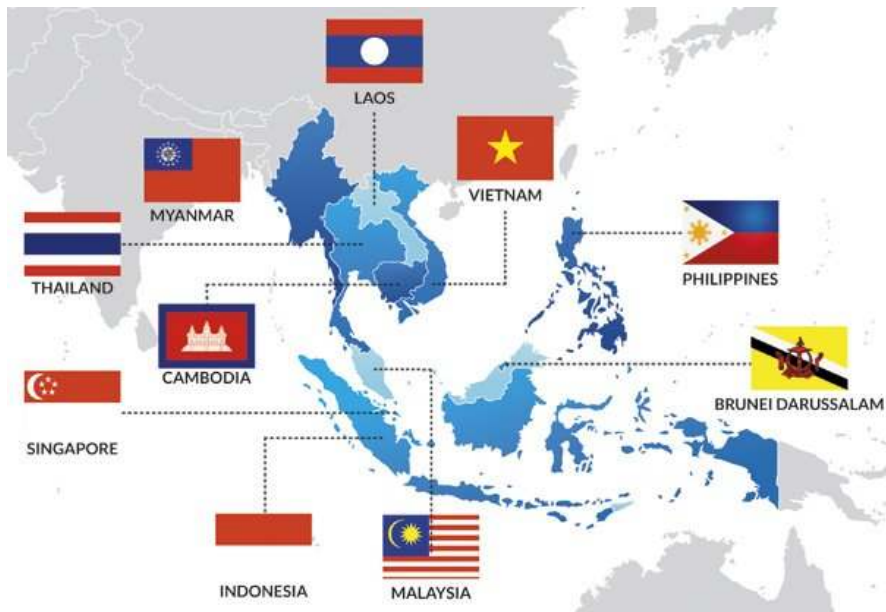Customs Automation | Trade Information Portals | Trade Information Exchanges | Limited B2G | Nation-wide Single Window B2G / G2G | Nation-to-Nation

Regional Interoperability –
ASEAN SINGLE WINDOW

ASEAN SINGLE WINDOW (ASW)

The 10 ASEAN nations – Brunei, Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.

On the 9th Dec 2005, the **Agreement to Establish and Implement the ASEAN Single Window**

ASEAN SINGLE WINDOW DEFINITION

" *The ASW is the* **secured environment where National Single Windows (NSWs) integrate and operate**. *The ASW constitutes a regional facility to enable a seamless, standardized and harmonized routing and communication of trade and customs-related information and data for customs clearance and release from and to NSWs.* **Trade and related customs data and information will stay within, and belong to respective Member States**."
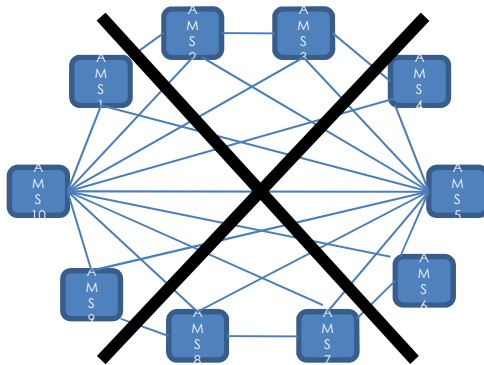
where;

"*The* **National Single Window** *is a system which enables:*

- a **single submission of data and information**;
- a **single and synchronous processing of data and information**; *and*
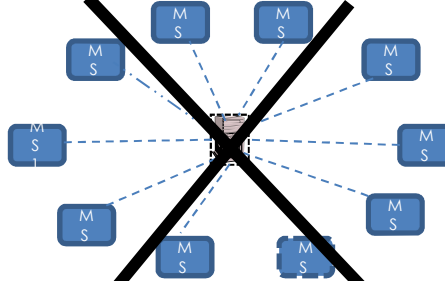- **a single decision-making for customs release and clearance**.

CONNECTIVITY OPTIONS

Virtual Network (Https, IP/VPN)

Bilateral Approach : Point-to-Point Leased Line Connectivity

Centralized system/server

Decentralized System
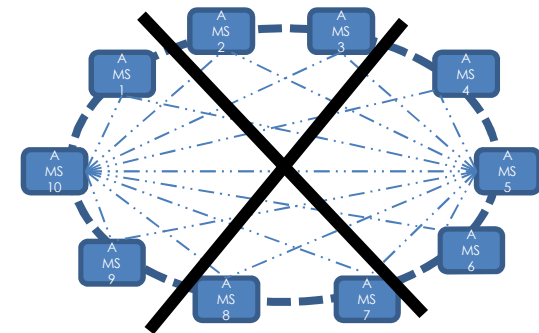
- ✓ **Data to be routed from country to country without being stored at one place**
- ✓ **IPVPN enabled secured data exchange between countries in a secured environment**
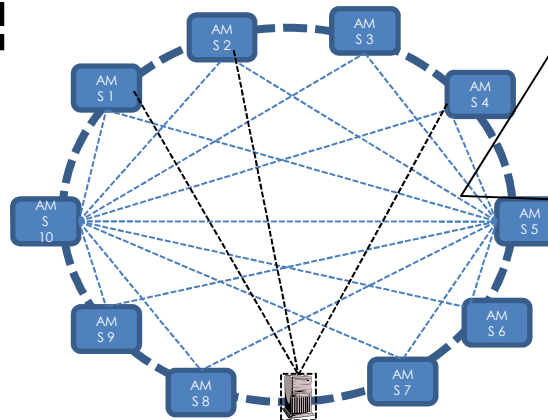
A **combination of centralization and decentralization whereby sensitive data such as trade data does not go through a centralized gateway residing in a central server .** A central server may be required for hosting non-confidential/non-sensitive data such as common reference code list, ANTH etc and some central facility for general enquiry , transaction volume monitoring etc

ASW CONNECTIVITY
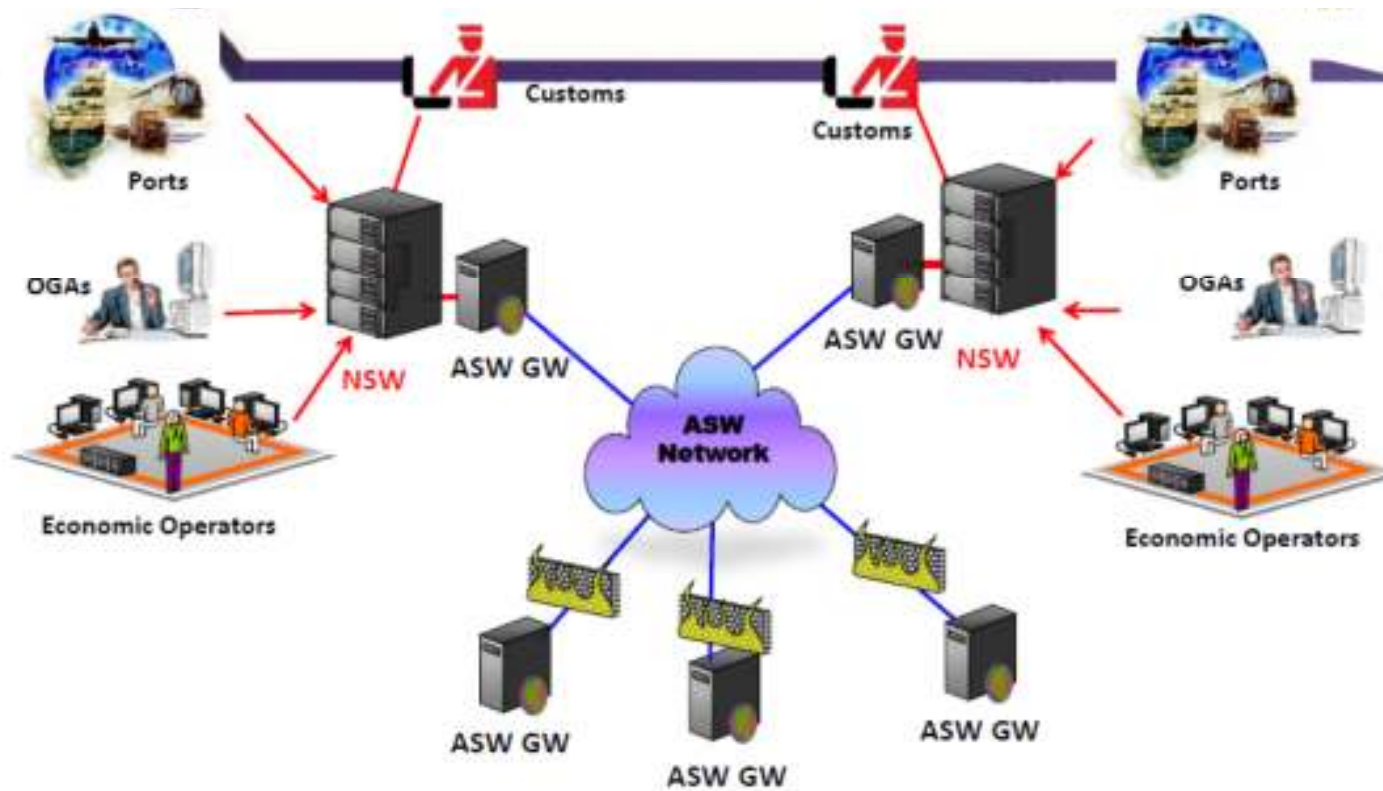
ASW DEVELOPMENT ROADMAP

Evaluation of technical prototype of ASW Pilot Project (Component 3)

Development of technical prototype for ASW Pilot Project & pilot Implementation (Component 1 and 2)

Live ASW Implementation Target: 2013

Development of overall security framework for ASW

Development of MOU for ASW Pilot Project

Development of ASEAN Data Model

ASEAN NSWs

Business value chain

ASEAN Single Window → Regional / Global SW

National Single Windows → Brunei, Indonesia, Malaysia, Philippines, Singapore, Thailand

National SW with all OGAs

Vietnam

Cambodia Myanmar
Customs System

Lao PDR
Tradepoint Portals

Trade EDI / VAN

Customs Single Window

Integration scope

| Customs Automation Era | Start of Trade Information | Start of Trade Information Exchanges | Limited B2G | Nationwide Single Window B2G / G2G | N2N |

CHALLENGES

1. Implementation strategy plan needs to take into consideration **Member States' level of readiness** in terms of IT infrastructure , national policies and procedures

2. **Trust** could be lacking and view/recommendation from independent experts tend to be more acceptable by ASEAN Member States

3. **Financial constraint** remains an issue and implementation of projects is very much dependent on external funding

Regional Interoperability –

UN Economic and Social Commission for Asia and the Pacific (UN ESCAP) Resolution 68/3

UNITED NATION
ESCAP
Economic and Social Commission for Asia and the Pacific

OVERVIEW OF ESCAP RESOLUTION 68/3

❖ **Invites member States to work towards the development of regional arrangements on the facilitation of cross-border paperless trade**

❖ **And, request the Executive Secretary to:**

1) support and facilitate the process for the development of regional arrangements on the facilitation of cross-border paperless trade, including by conducting studies, developing potential options, and and in this regard to present its results to the Committee on Trade and Investment at its third session

2) ensure that the regional arrangements take into account and are consistent with the existing international and regional agreements, mechanisms, and undertakings…

3) continue and further strengthen the secretariat's support for capacity-building activities

UN/ESCAP RESOLUTION 68/3

ESCAP Resolution 68/3: **Enabling paperless trade and the cross-border recognition** of electronic data and documents for inclusive and sustainable intraregional trade facilitation

- Adopted at the 68th ESCAP Commission Session: May 2012

- ESCAP develops a **Regional Arrangement** for the facilitation of cross-border paperless trade, and further strengthens its capacity building support to member states in paperless trade, in cooperation with other development partners.

- The objective of this Arrangement/Agreement is to promote cross-border paperless trade by enabling exchange and mutual recognition of trade-related data and documents in electronic form and facilitating interoperability among national and subregional Single Windows and other paperless trade systems.

- This Arrangement/Agreement applies to paperless trade between the Parties.

UN/ESCAP RESOLUTION 68/3

Key Features of the Regional Arrangement

- A set of Principles on which to base future cross-border paperless trade implementation efforts.

- A multi-layered institutional arrangement as an operating platform.

- A comprehensive action plan (to be developed jointly by the signatories):

- The collective implementation of the action plan is expected to result in the emergence of **practical standardized solutions and protocols for cross-border paperless trade**.

- Action plan would include development of:

  – technical and legal measures,

  – detailed actions for designing pilot projects and subsequent actual projects,

  – capacity building support and information and

  – experience sharing activities among members, etc.

Regional Interoperability –

Private Sector Efforts by

Pan Asia E-Commerce Alliance

PAN ASIA E-COMMERCE ALLIANCE (PAA)

PAA.net
Pan Asian e-commerce Alliance

- The first regional cross border paperless trading and customs clearance facilitation alliance in Asia

- Established in July 2000 by Trade-Van of Taiwan, Tradelink of Hong Kong SAR and Crimsonlogic of Singapore

- Currently 11 members

Current Members
1. CAT – Thailand
2. CIECC – China
3. CrimsonLogic – Singapore
4. Dagang Net –Malaysia
5. KTNET – Korea
6. InterCommerce - Philippines
7. NACCS – Japan
8. PT EDI - Indonesia
9. TEDMEV - Macao SAR
10. TradeVan - Chinese Taipei
11. TradeLink - Hong Kong SAR

PAN ASIA E-COMMERCE ALLIANCE (PAA)

PAA Mission

- To enable secure and reliable transmission of trade and logistics documents.
- To allow inter-connection of network services to provide e-Commerce transaction application services for the business community.
- To create a Pan-Asian portal to enable global B2B connection and communication.

PAA Members' Common Strengths

- PAA members are local market leaders in e-commerce
- Strong & close relationship with local government
- Mass customer base
- Long years of experiences on electronic document exchange
- Cross border document exchange can go through PAA network and be input into domestic government system

PAA MILESTONES

2000 Founding

2002 – 2003 PAA Legal Framework & Standards Established

2003 & Beyond PAA Projects APEC ECSG (2004)

Pan-Asian E-Commerce Alliance, was established in July 2000 by Trade-Van of Chinese Taipei, Tradelink of Hong Kong and Crimsonlogic of Singapore.

- **Establishment of PAA Legal Framework**
- **Establishment of PKI mutual recognition framework and secure cross border transaction service**
- **Establishment of PAA Ltd. Co and business model**

- **Launching of various pilot projects**
- **Recognized by APEC ECSG as official guest**

PAA LEGAL FRAMEWORK

PKI Mutual Recognition

CA Service

Secure Cross-Border Transaction Services

Region A

Region B

Certificate Policy

PAA Policy Authority

Recognition Agreement

Certification Authority A

Certification Authority B

CPS-A

CPS-B

Trader A

Club Agreement

Trader B

Subscriber Agreement - A

Subscriber Agreement - B

Service Provider A

Service Provider B

Interconnect Agreement
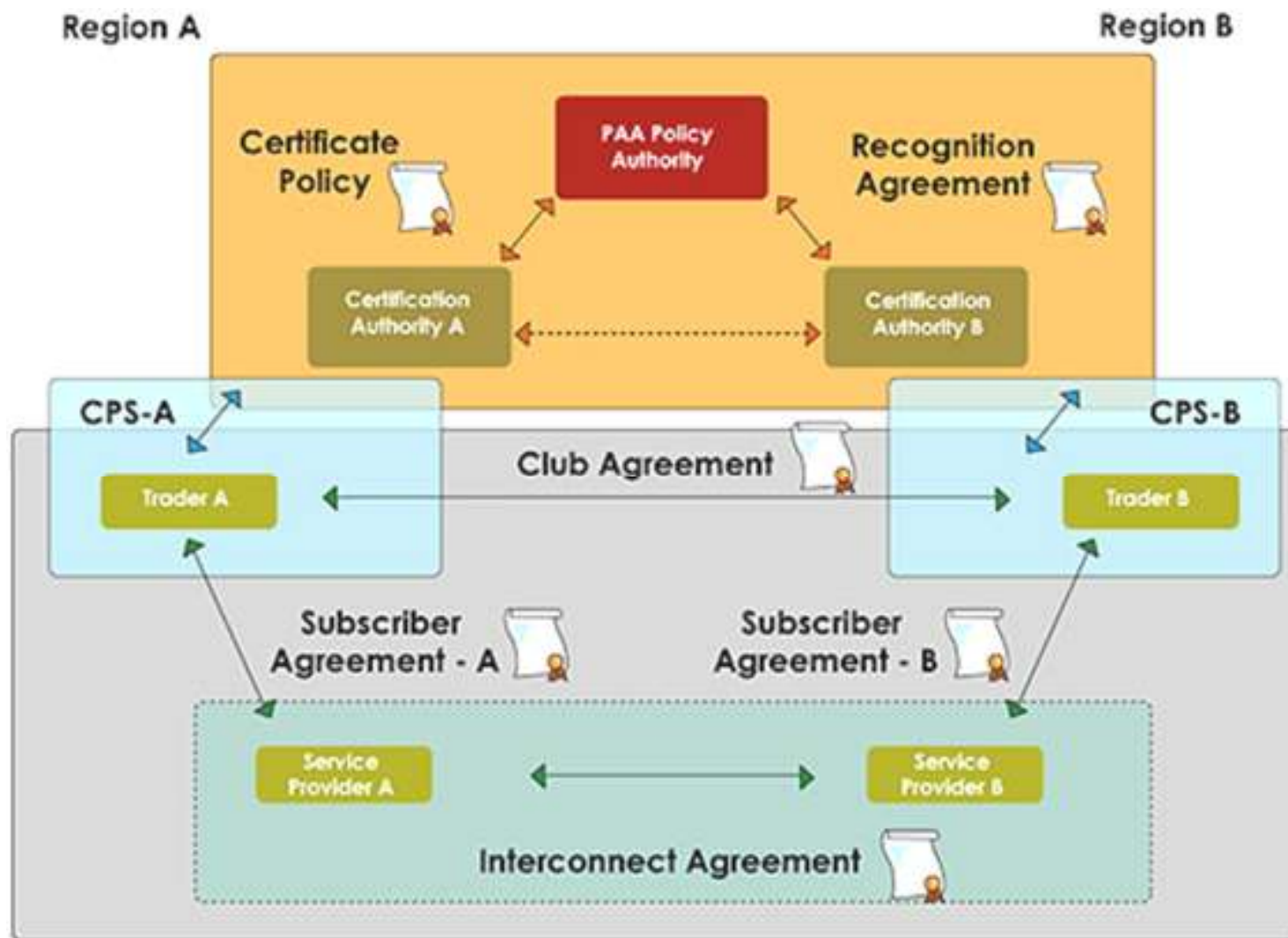
PAA LEGAL FRAMEWORK

←——→ Signed Agreement

PAA Certificate Policy

CA*2 Export Side — Recognition Agreement — PAA CA Policy Authority — Recognition Agreement — CA*2 Import Side

Registration (Optional) — CPS*3 — Registration — Registration — CPS*3 — Registration (Optional)

User Export Side — Subscriber Agreement * — PAA Member Service Provider — Charter / Interconnection Agreement — PAA Member Service Provider — Subscriber Agreement * — User Import Side

PAA Privacy Policy
Message Processing Specification
Interconnection Specification

*2 Certification Authority

*3 Certification Practice Statement

P A A   C l u b   A g r e e m e n t

*Note : Through the specific subscriber agreement between users and their PAA Service Provider, the users are regarded to have consented to PAA Club Agreement where rights and obligations of users and providers are clarified.
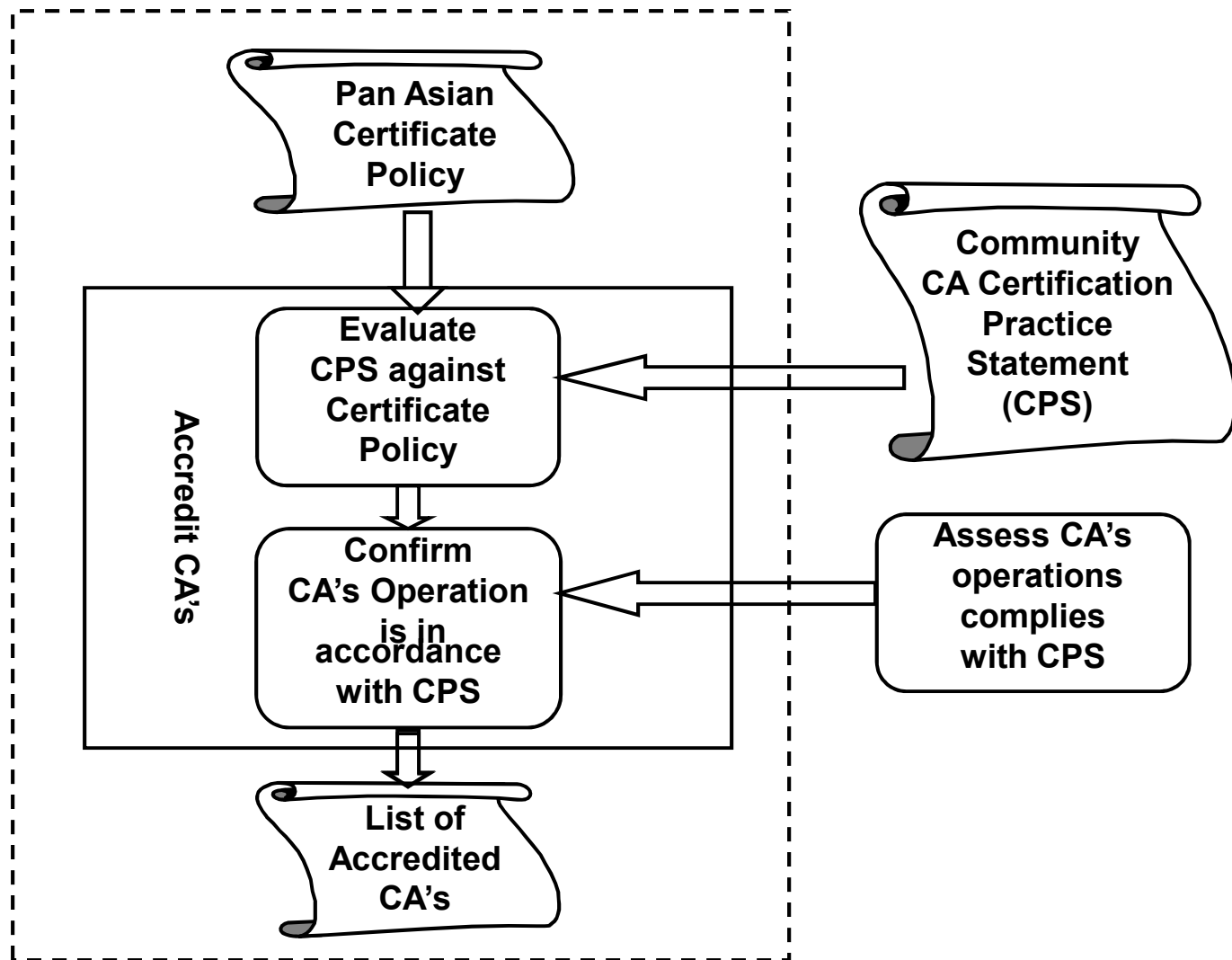
PAA LEGAL FRAMEWORK

Topics covers by **PAA Club Agreements are** as below:

- Ownership of Data Messages or Electronic Records
- Translation and Conversion of Data Messages and Electronic Records
- Data Messages and Electronic Records
- Standard Document Templates
- PAA Club Member Register
- Subscriber's Obligation & Indemnity
- Confidentiality
- Security
- Data Privacy

Topics covered by the **PAA Interconnection Agreements** are :
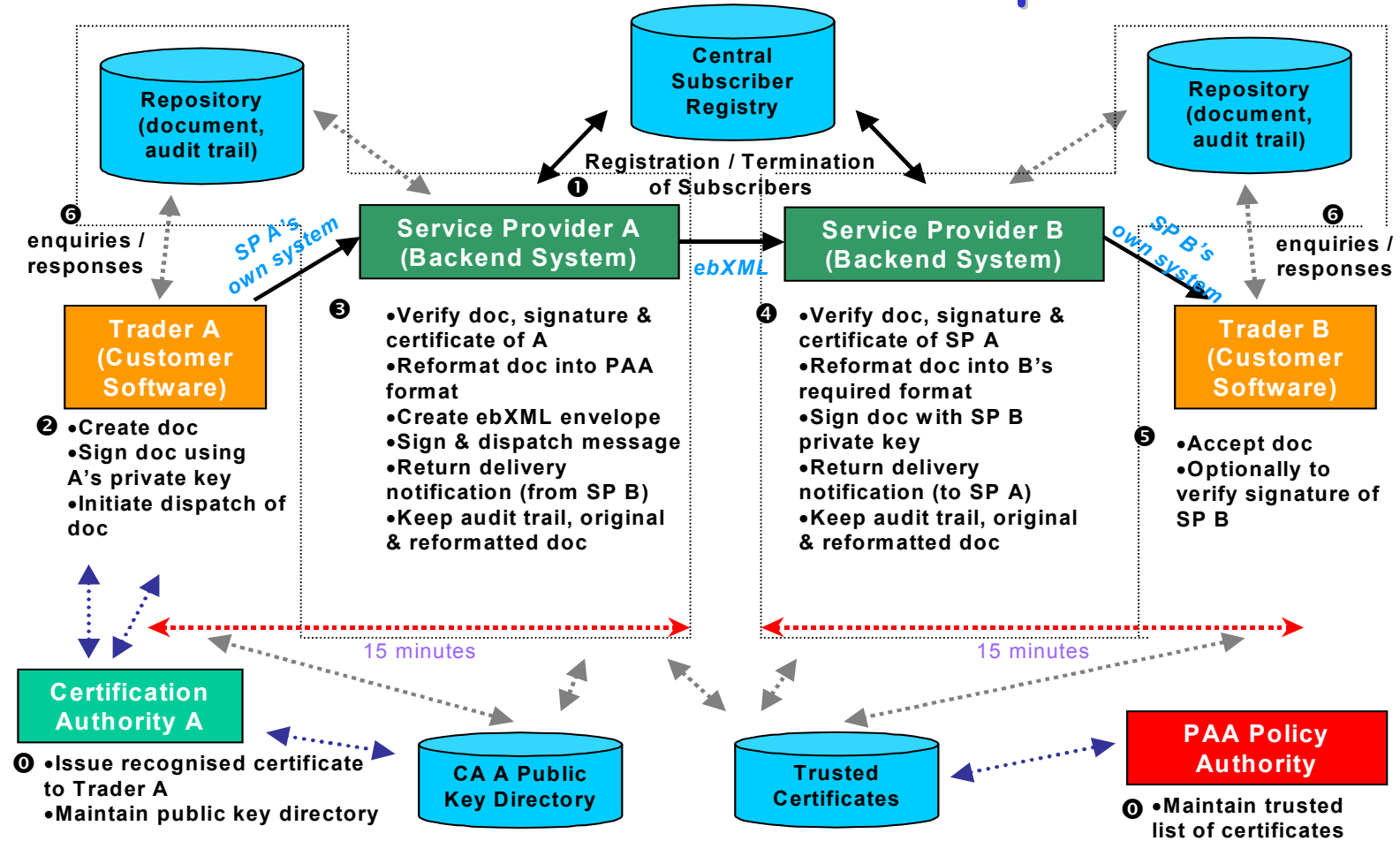
- Security of Data
- Transmission and Authenticity of Message
- Integrity of messages
- Confirmation of Receipt of Messages
- Storage and Retrieval of Data
- Data Ownership
- Revenue Sharing and Payment
- Liability
- Audit
- Technical specification and requirements
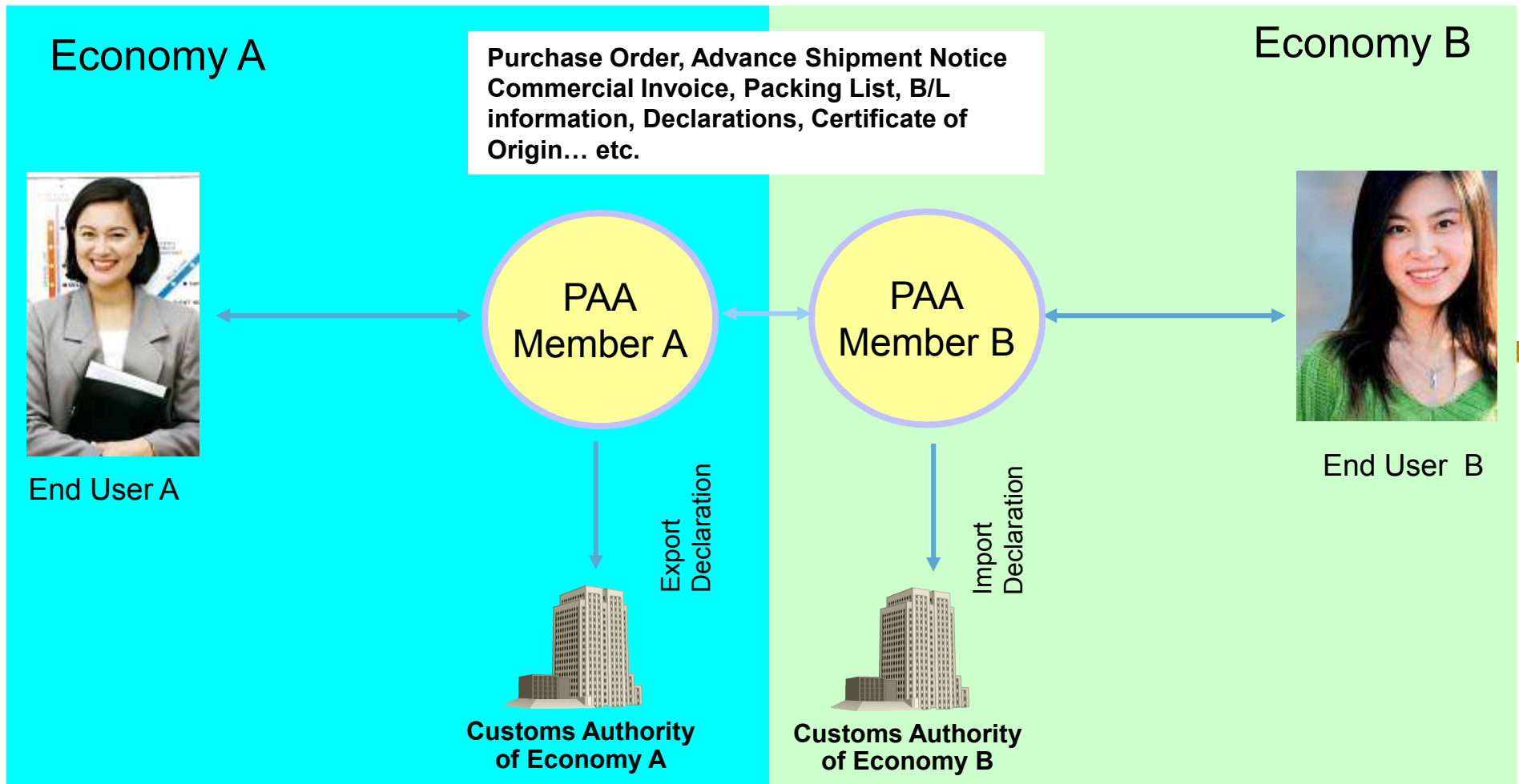
PAA MUTUAL PKI RECOGNITION – CERTIFICATE POLICY AUTHORITY

PAA Transaction Services Operation

PAA CROSS BORDER TRANSACTIONS

Economy A

Economy B

Purchase Order, Advance Shipment Notice Commercial Invoice, Packing List, B/L information, Declarations, Certificate of Origin… etc.

PAA Member A

PAA Member B

End User A

End User B

Export Declaration

Import Declaration

Customs Authority of Economy A

Customs Authority of Economy B

PAA CROSS BORDER TRANSACTIONS – B2B TRANSACTIONS

PAA Network

PAA.net

Pan Asian e-commerce Alliance

Taiwan Sellers

(1) Purchase Order

(2) Invoice

(3) Advance Shipment Notice

TRADE-VAN
安全 品質 服務 效益

貿易通
TRADELINK

XML standard

HK Buyer

(1) Purchase Order

(2) Invoice

(3) Advance Shipment Notice

(4) ASN, Invoice

(5) Declaration

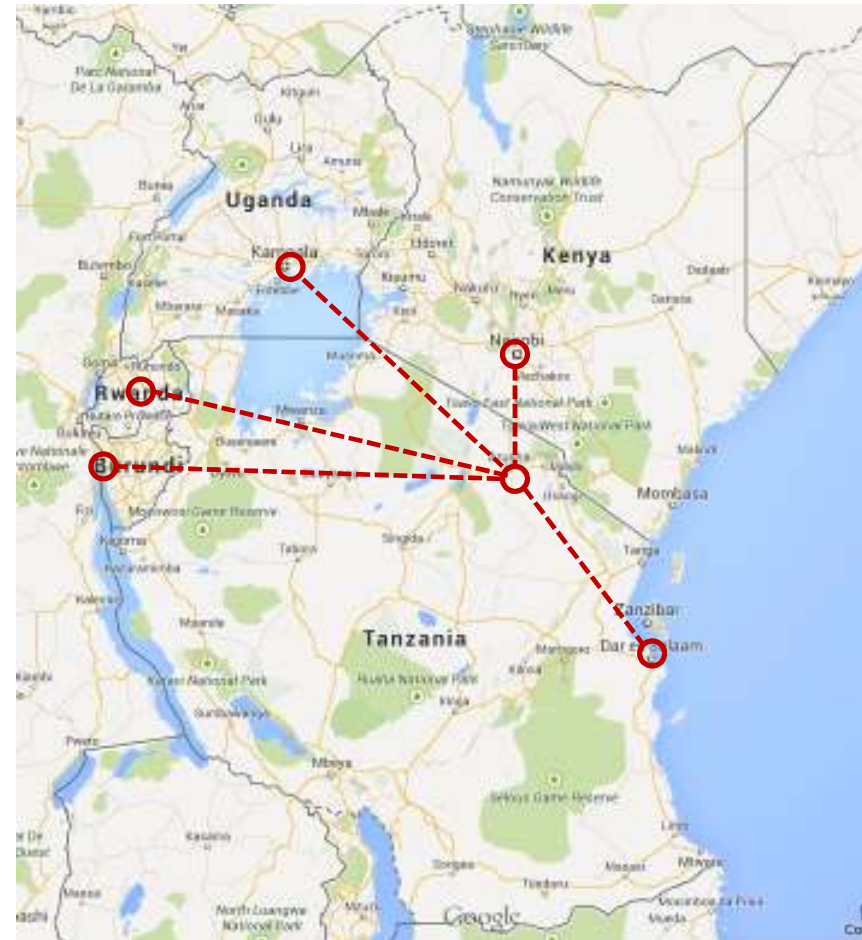(6) Declaration

Chinese Taipei Customs

Hong Kong Customs
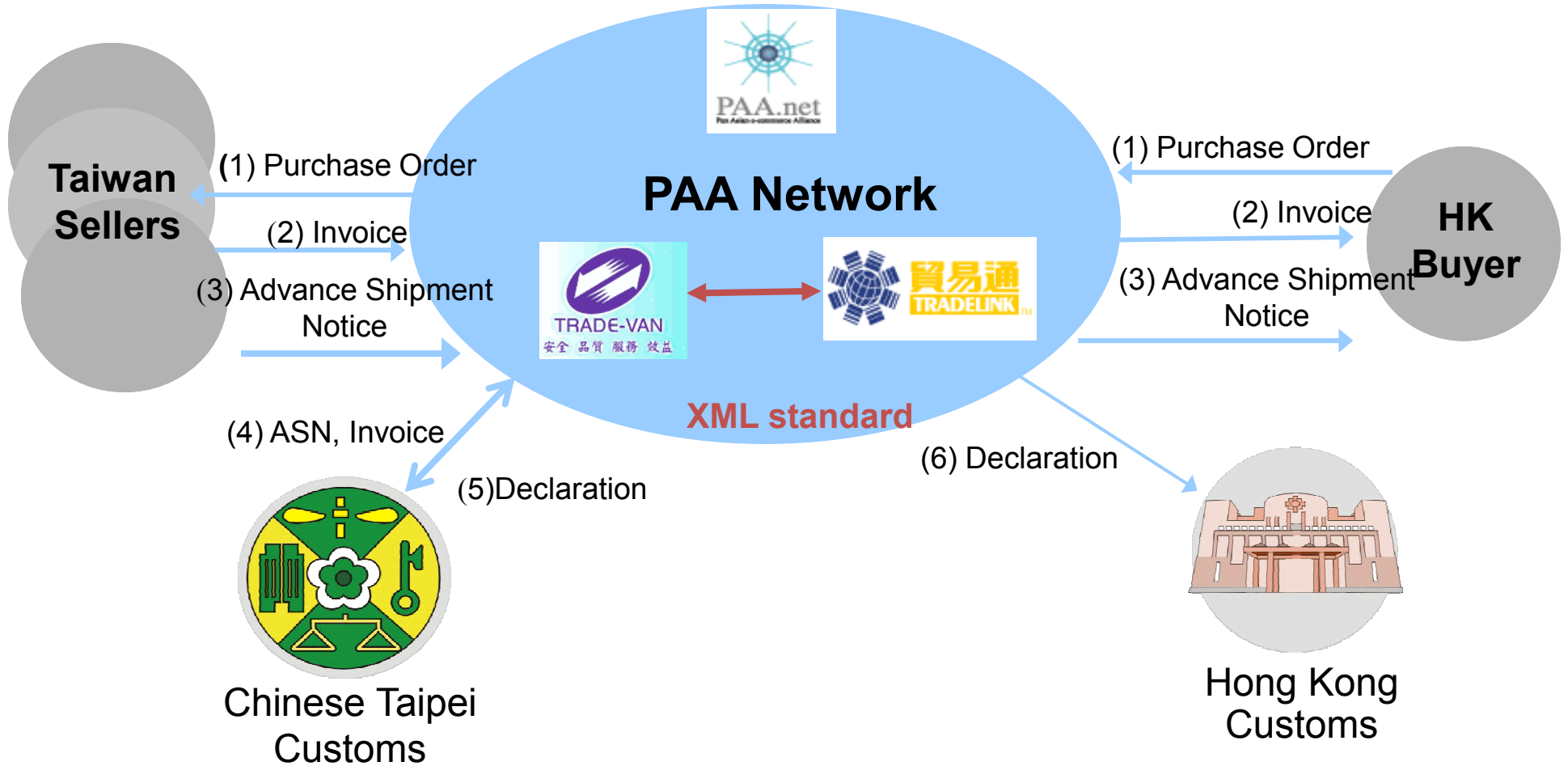
Regional Interoperability –

Examples of Customs to Customs Connectivity

REVENUE AUTHORITIES DIGITAL DATA EXCHANGE (RADDEX)

Who are involved:

1. The 5 countries of East African Community – Burundi, Kenya, Rwanda, Tanzania, and Uganda.
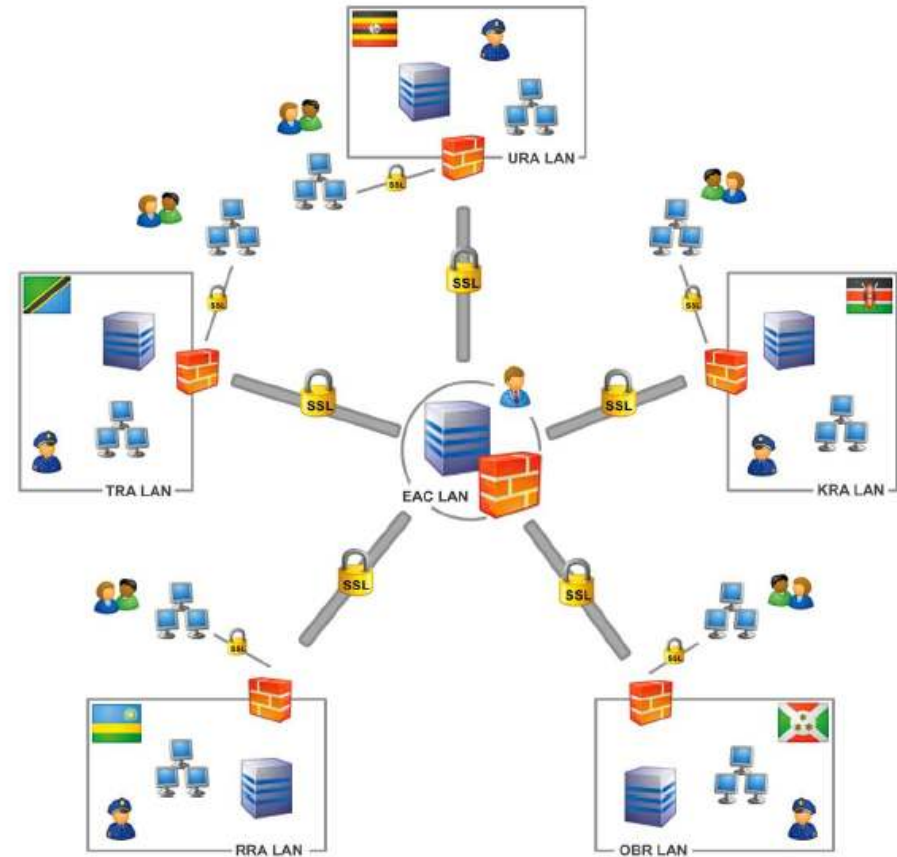
REVENUE AUTHORITIES DIGITAL DATA EXCHANGE

1. The Revenue Authorities Digital Data Exchange (RADDEx) 2.0 is a regional customs information exchange platform. It allows near real-time transmission of customs documentation to authorized public and private sector users that are working at key transit border posts and cities across the five countries of the East African Community (EAC).

2. This regional connectivity in customs greatly contributes to more efficient and paper free processes at borders as well as creating a transparent trading environment. As a result of increased efficiencies in customs clearing processes through the use of this system, private sector shippers are anticipated to save over US $ 50 million per year in reduced transit times at borders.

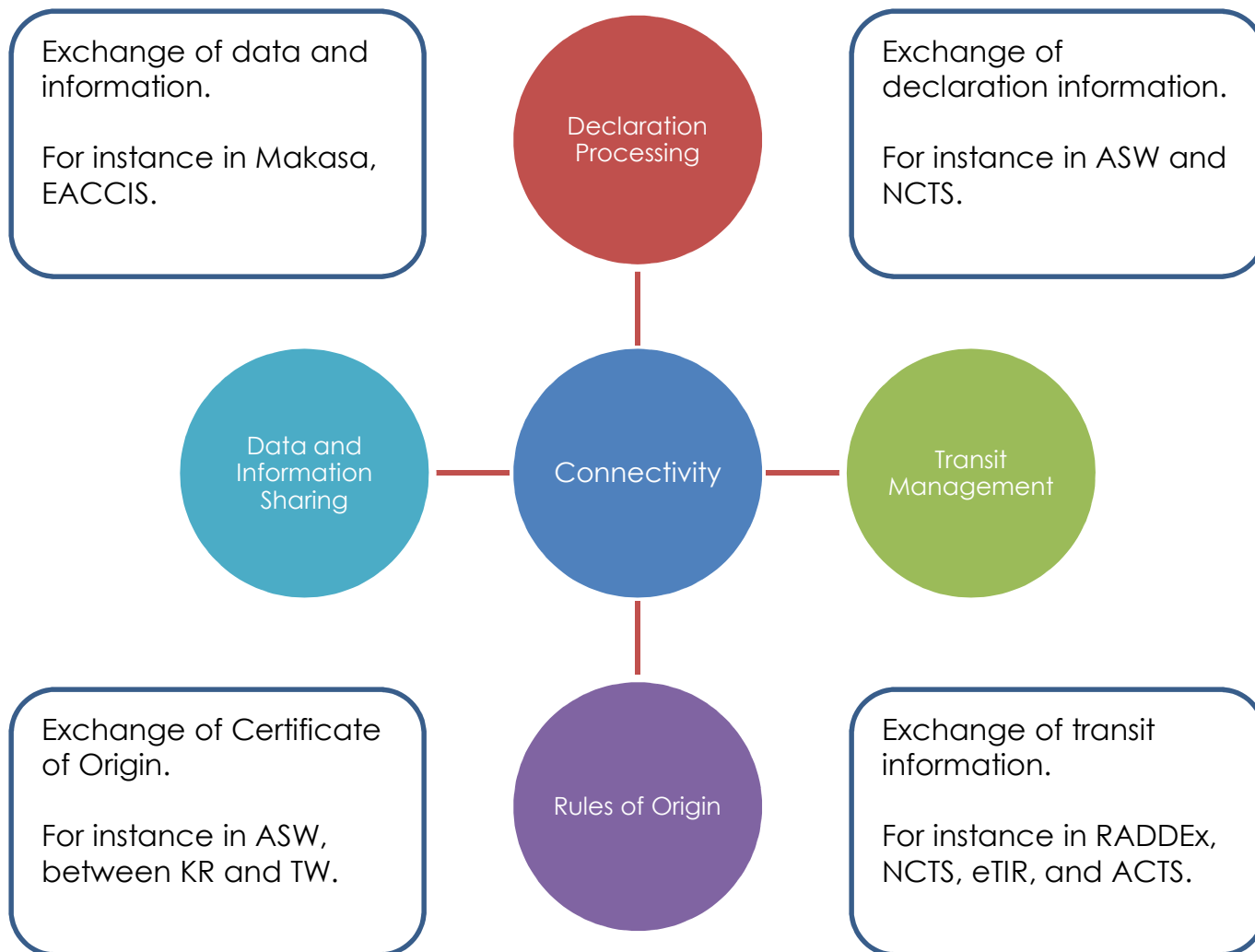# REVENUE AUTHORITIES DIGITAL DATA EXCHANGE

What is exchanged:

1. Goods declaration information for goods that are in transit between the EAC member countries.

The Way Forward
- Considerations / Suggestions for
Red VUCE

KEY AREAS OF CONNECTIVITY

Exchange of data and information.

For instance in Makasa, EACCIS.

Declaration Processing

Exchange of declaration information.

For instance in ASW and NCTS.

Data and Information Sharing

Connectivity

Transit Management

Exchange of Certificate of Origin.

For instance in ASW, between KR and TW.

Rules of Origin

Exchange of transit information.

For instance in RADDEx, NCTS, eTIR, and ACTS.

AREAS FOR CONSIDERATIONS

Process	**Platform**
Policy Framework	**People and Organization**

Connectivity Considerations
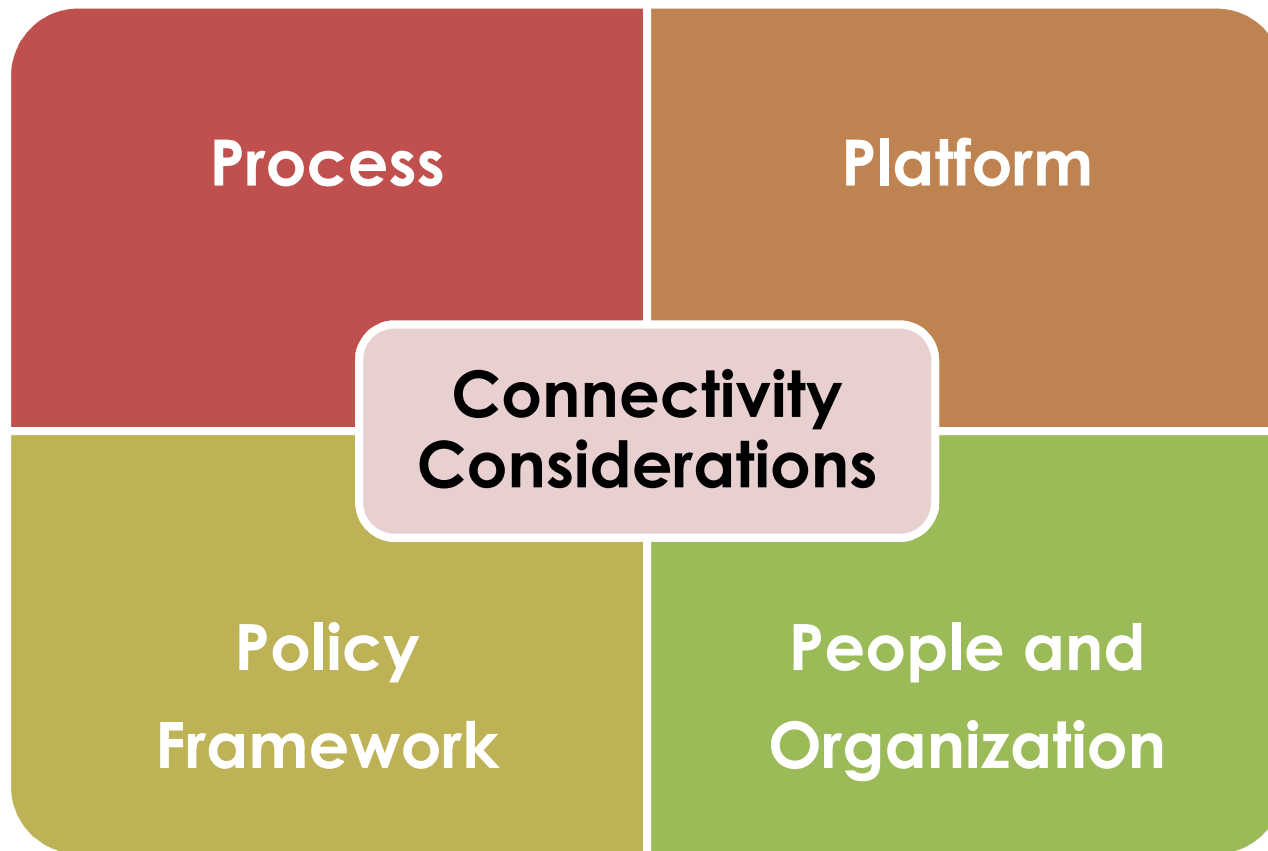
PROCESSES
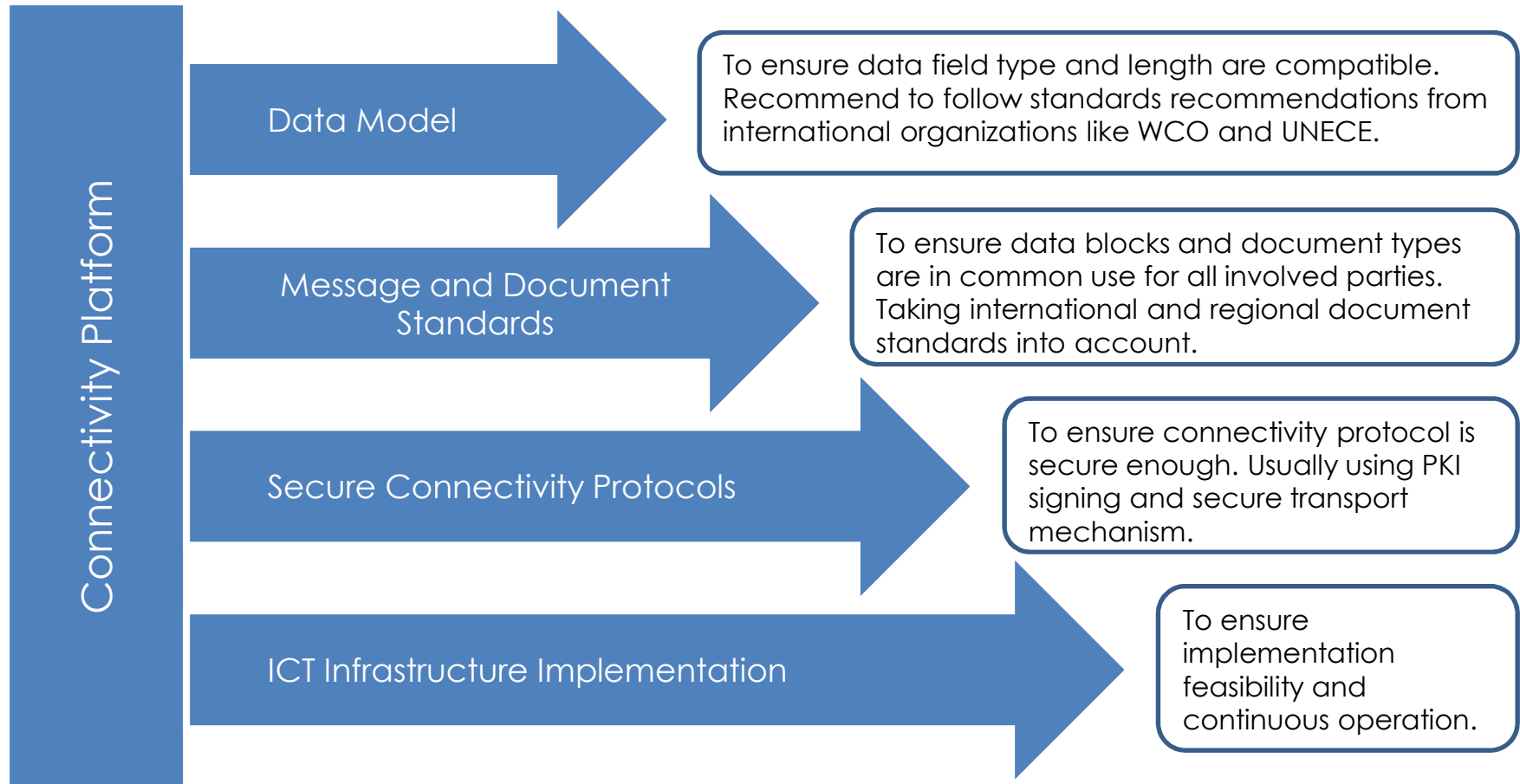
Considerations	
What data or document to exchange?	In ASEAN Single Window (ASW), although a number of documents was considered for cross border exchange, only the Preferential Cert of Origin Form D was put in pilot trials.
How does the connectivity take place?	Centralised (Federated) or (Decentralised) Peer-to-Peer? In ASW, connectivity is between National Single Windows.
How will connectivity fit into the existing trade process for traders and for authorities on all sides?	Facilitate the cross border trade, and leverage ASEAN Free Trade Area (AFTA)
Goals - How will this benefit traders and authorities? What is the cost, time and process savings?	Reduces cost and time. One of the goals is to reduce average time to import to ASEAN to 14 days by 2017 (was 17.5 days in 2013)

PLATFORM

Connectivity Platform

Data Model → To ensure data field type and length are compatible. Recommend to follow standards recommendations from international organizations like WCO and UNECE.

Message and Document Standards → To ensure data blocks and document types are in common use for all involved parties. Taking international and regional document standards into account.

Secure Connectivity Protocols → To ensure connectivity protocol is secure enough. Usually using PKI signing and secure transport mechanism.

ICT Infrastructure Implementation → To ensure implementation feasibility and continuous operation.

POLICY FRAMEWORK

Considerations	
How to ensure connectivity is in line with the law among the parties of the exchange?	ASEAN member states agreed to develop an ASW Legal Framework Agreement (LFA) A Working Group on legal and regulatory matters was formed that reports to the ASW Steering Committee. One of the goals is to identify the legal framework gap in ASW vs each NSW.
What is the legal framework of cross-border connectivity?	Example : PAA Legal Framework Inter-operabilty Security – Mutual PKI Recognition

Thank you

for further information, contact:

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