

Recent Trend in Single Windows Development

WCO-UNESCAP

**5th UNNExT Masterclass: Facilitating Cross-border
Paperless Trade using emerging technologies**

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Seoul, Korea

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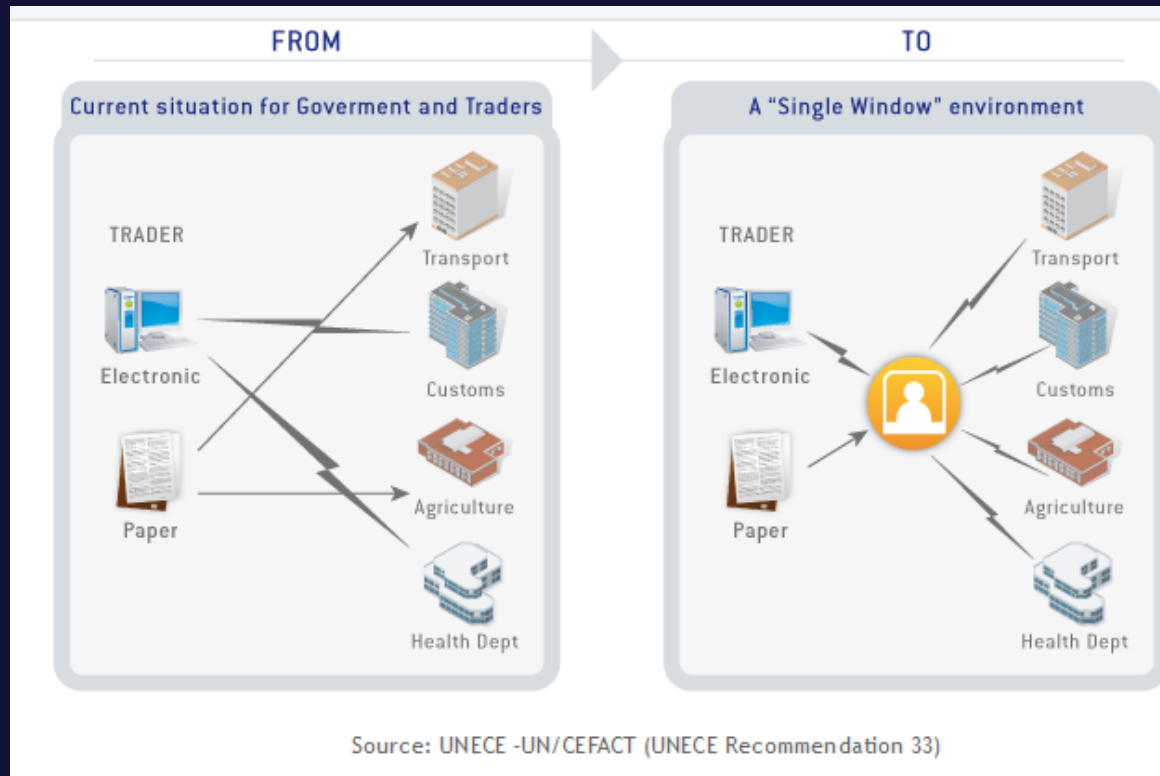
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What is Singe Window (SW)?

The most commonly accepted definition of a SW is the one provided by UNECE Recommendation No. 33. It describes the SW as “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”.



WTO TFA overall strategy includes a Single Window

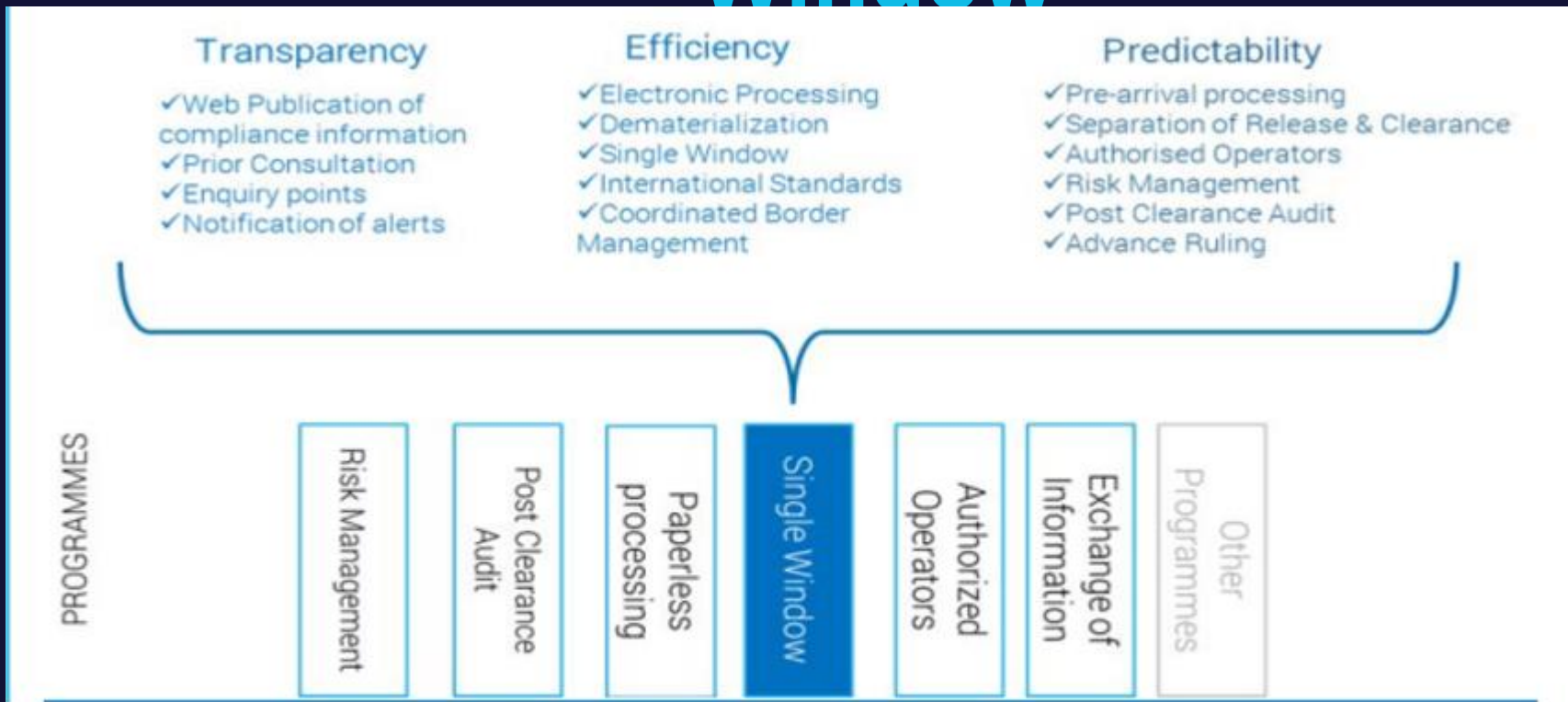


Figure 1: Measures under the WTO TFA can be divided into three different categories of actions, which can be implemented through effective programme management. The Single Window is one of these programmes.

WTO TFA overall strategy includes a Single Window

The WTO Agreement explicitly mentions the Single Window in paragraph 4 of Article 10 (“Formalities connected with Importation, Exportation and Transit”). Paragraph 4 reads:

4.1 Members shall endeavour to establish or maintain a single window, enabling traders to submit documentation and/or data requirements for importation, exportation, or transit of goods through a single entry point to the participating authorities or agencies. After the examination by the participating authorities or agencies of the documentation and/or data, the results shall be notified to the applicants through the single window in a timely manner.

4.2 In cases where documentation and/or data requirements have already been received through the single window, the same documentation and/or data requirements shall not be requested by participating authorities or agencies except in urgent circumstances and other limited exceptions which are made public.

4.3 Members shall notify the Committee of the details of operation of the single window.

4.4 Members shall, to the extent possible and practicable, use information technology to support the single window.

The WCO Adapted Definition

WCO prefers the term ‘Single Window environment’ (which was also the term used in the concept brochure produced as a prelude to UN/CEFACT Recommendation No. 33). The WCO’s website currently gives an unofficial definition of the Single Window environment as a “cross border, ‘intelligent’, facility that allows parties involved in trade and transport to lodge standardized information, mainly electronic, with a single entry point to fulfill all import, export and transit related regulatory requirements” (WCO 2008). This is largely in line with UN/CEFACT Recommendation No. 33



Why is it an 'Intelligent' Facility?

The term 'intelligent' is significant because the Single Window is not merely a data switch or a gateway to facilities belonging to cross-border regulatory agencies, nor simply a centralized access point to information through a web portal. Rather, it is also a vehicle for providing shared services to users.



How to distinguish SW from SSP and TIP

How to distinguish SW from SSP and TIP

National Single Window (NSW)

Transactions: B2G, G2G, G2B

Operation: Public Domain

- ▶ Tariff and non-tariff regulatory compliance (including duty/fee calculations and their e-payment or remittance control);
- ▶ Application of sanitary, veterinary and sanitary-phytosanitary quarantine measures; Safety/security;
- ▶ Management of quota levels; intellectual property rights; submission of supporting documentation.



 **REC. 33**

Single Submission Portals (SSP's)

Transactions: B2B, B2G, G2B

Operation: Private Domain

Services:

- Single entry & Single submission
- Transport
- Logistics
- Financial

Types of SSP's:

- Port Community Systems (PCS)
- Freight Forwarder Systems (FFS)
- Cargo Community Systems (CCS)



 **REC. 37**

Trade Information Portal (TIP)

Information:

- ▶ Laws, regulations and other legal instruments relating to trade and compliance
- ▶ Electronic forms and messages for applications for LPCO's, Customs declarations etc.
- ▶ List of codes used in electronic forms, messages, applications, declarations etc.
- ▶ Information on how to connect to NSW, AW, etc.
- ▶ Tariff and Non-tariff measures, Advance rulings etc.



 **REC. 38**



Use of International Standards

When implementing a Single Window, governments and trade are strongly encouraged to consider the use of existing recommendations, standards and tools that have been developed over the past number of years by intergovernmental agencies and international organizations such as UNECE, UNCTAD, WCO, IMO, ICAO and the ICC

The use of standards and available tools will help ensure that the systems developed to implement the Single Window are more likely to be compatible with similar developments in other countries, and could also help in the exchange of information between such facilities over time.



Lead Agency for a Single Window

The appropriate agency to lead the establishment and operation of a Single Window will vary from country to country depending on legal, political and organizational issues.



Business Needs / Business Opportunities of Cross-border Single Window Interoperability

- Many countries have successfully established Single Window facilities with better regulation and better efficiency (in both time & cost savings)

However the electronic information exchange is used to coordinate work among stakeholders mostly within the country (national-level SW).

- Several documents and information required by authorities are still in paper forms, especially those created in other countries and then used within the country.

Business Needs / Business Opportunities of Cross-border Single Window Interoperability ...

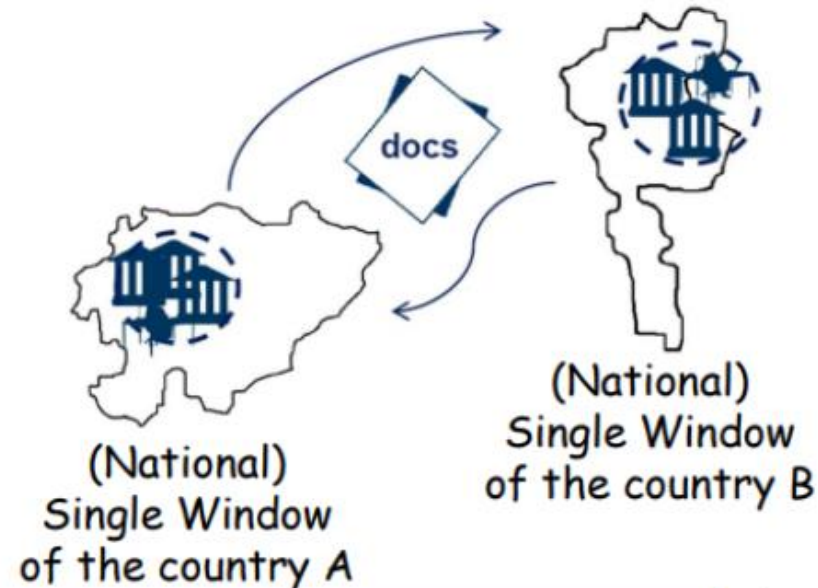
National Level

- On average 15 national agencies are involved in international trade.



Cross-border level

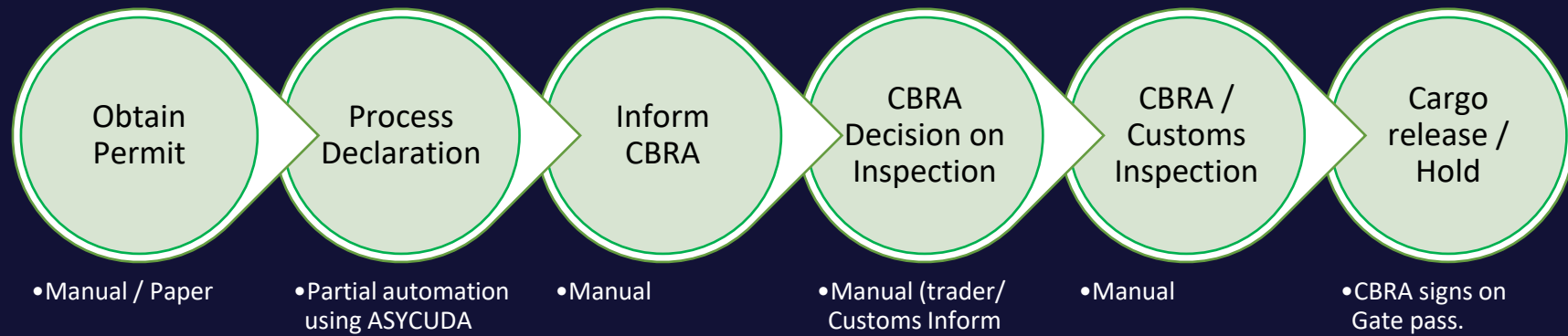
- Many documents for international trade are generated in one country then used in the other country.



Single Window in the Context Of Maldives

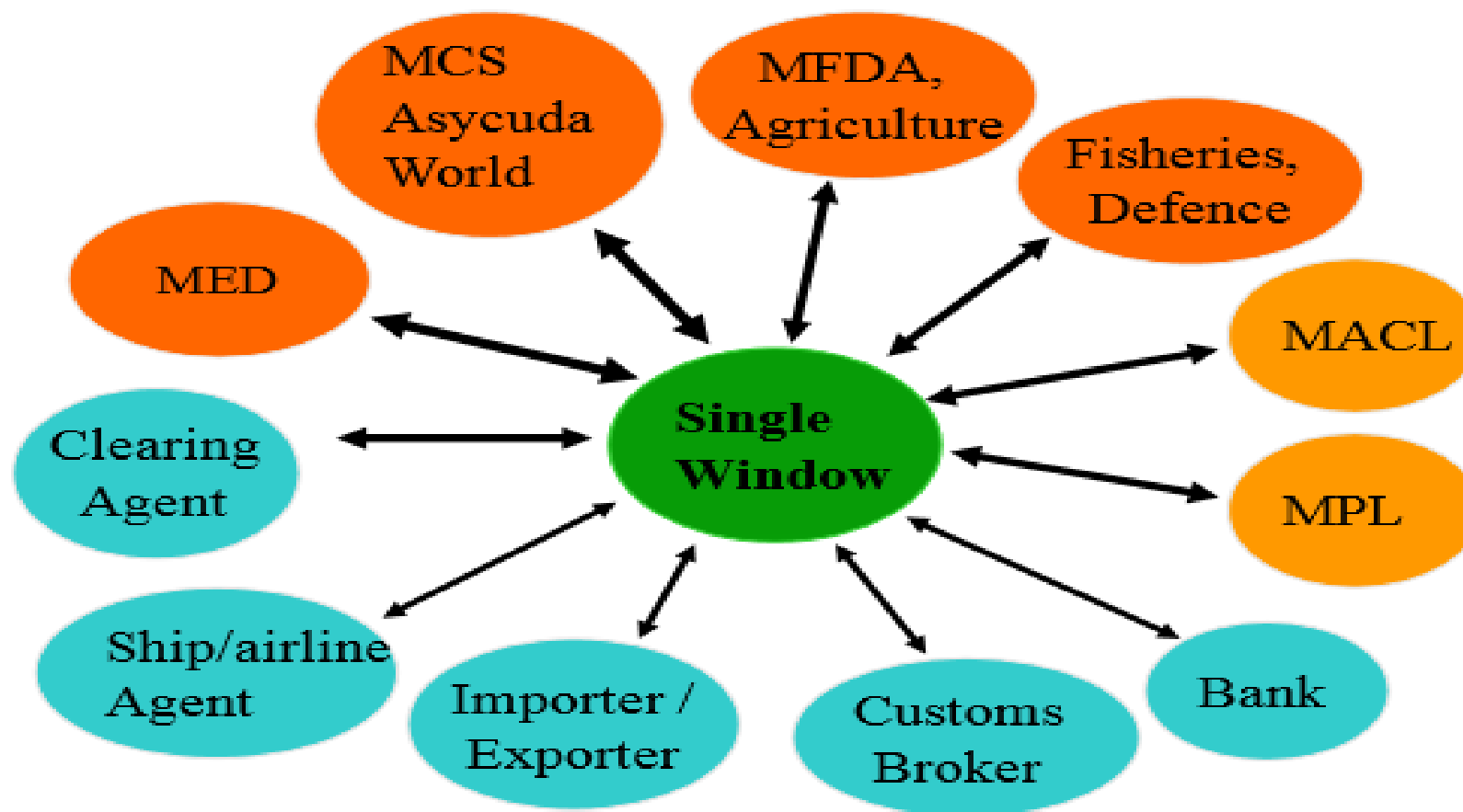


Current Border Control Step on Import / Export



Participating Agencies

Maldives National Single Window Environment - Conceptual Components



Business Process Analysis

- MED has conducted business process analysis for Major CBRA's
- System development
 - MFDA
 - MDNS
 - MOFA
 - Transport Authority

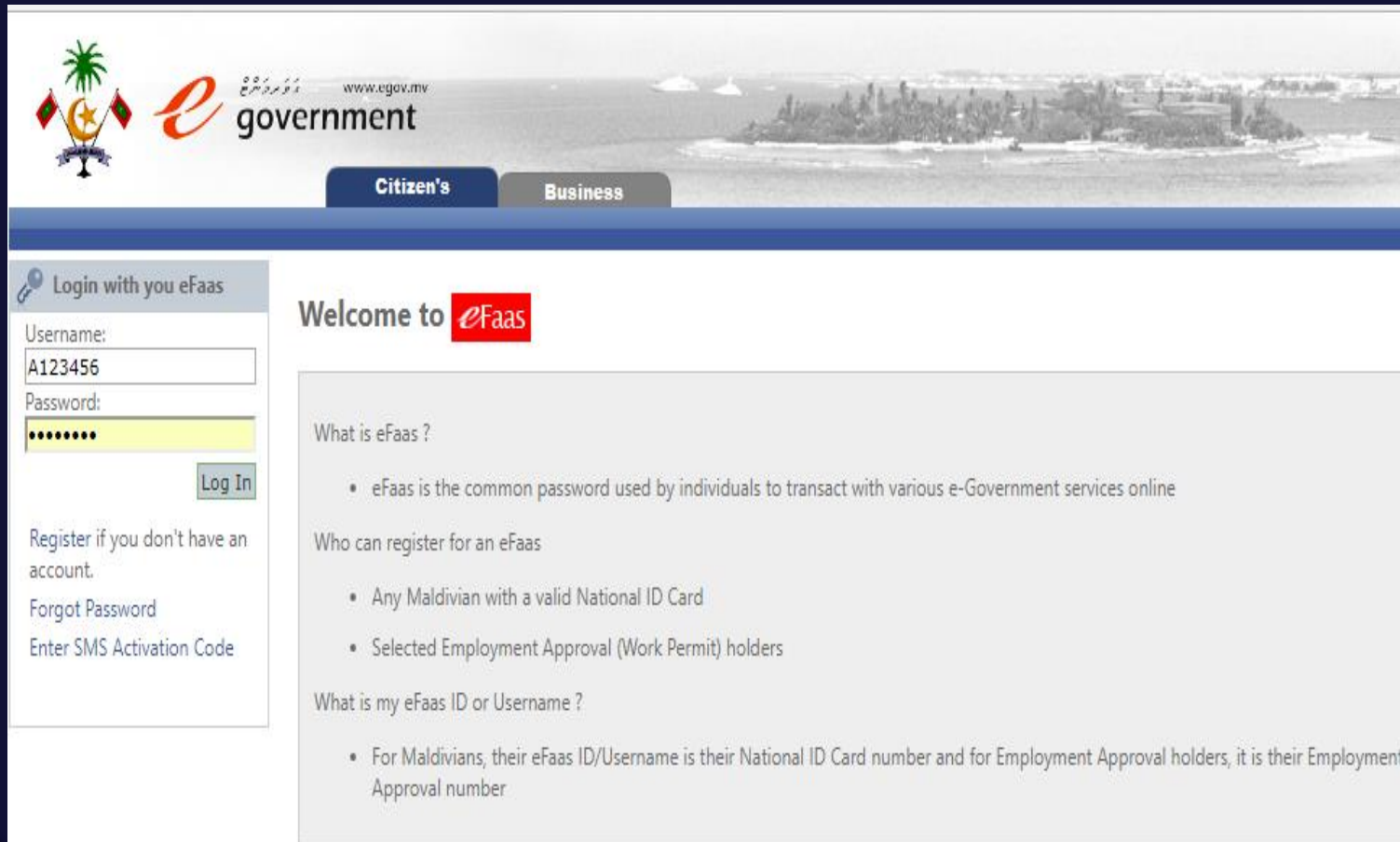
Opportunities for process improvements

- Leveraging the capabilities of automation
- Simplifying trade license requirements by reviewing legislation
- Adopting risk-based strategies and tools for cargo inspection
- Coordinating border control by relevant agencies.

Legally-enabling Environment

- Electronic transaction bill enacted
- Data privacy and protection bill at the draft level
- Cybercrime bill AGO has been working on it
- Administrative law for NSW Operator to empower the company to provide services

Authentication and Authorization



The screenshot shows the eFaas login interface. At the top, there is a header with the Maldivian flag, the eFaas logo, and the text 'www.egov.mv' and 'government'. Below the header, there are two tabs: 'Citizen's' and 'Business'. The main content area is divided into two sections. On the left, there is a login form with fields for 'Username:' (containing 'A123456') and 'Password:' (masked with dots). Below the password field is a 'Log In' button. To the left of the login form, there are links for 'Register if you don't have an account.', 'Forgot Password', and 'Enter SMS Activation Code'. On the right, there is a 'Welcome to eFaas' message. Below this, there are three sections: 'What is eFaas?', 'Who can register for an eFaas', and 'What is my eFaas ID or Username?'. Each section contains a list of bullet points.

www.egov.mv
government

Citizen's Business

Login with your eFaas

Username:
A123456

Password:
.....

Log In

Register if you don't have an account.
Forgot Password
Enter SMS Activation Code

Welcome to eFaas

What is eFaas ?

- eFaas is the common password used by individuals to transact with various e-Government services online

Who can register for an eFaas

- Any Maldivian with a valid National ID Card
- Selected Employment Approval (Work Permit) holders

What is my eFaas ID or Username ?

- For Maldivians, their eFaas ID/Username is their National ID Card number and for Employment Approval holders, it is their Employment Approval number

- UN/CEFACT Recommendation No. 35 suggests the adoption of an 'identity management' solution. The Single Window solution needs to provide 'rule-based and role-based' access to heterogeneous systems. Identity management solutions that are based on open standards can promote interoperability by federating and managing identities of users across different organizations

Electronic connectivity between all participating agencies

Interfaces built for sharing information in the form of electronic messages between agencies (**interfaced model**)

Data shared:

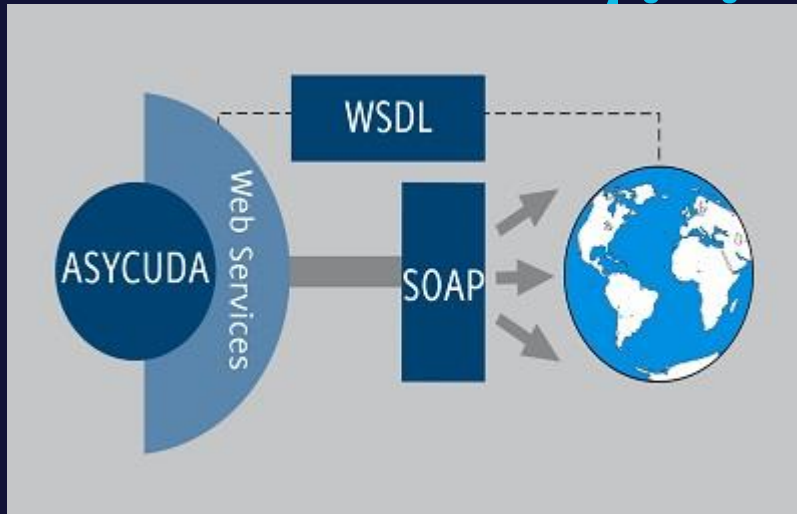
- MIRA
- MED
- MACL
- MPL

```
{
  "productId": 27,
  "productName": "Import License",
  "productNumber": "IL00012018",
  "expiryDate": "2019-02-10T00:00:00",
  "issuedDate": "2018-02-11T00:00:00",
  "valueOfImport": 321600,
  "purposeOfImport": "For Selling",
  "projectName": null,
  "stateName": "Issued",
  "stateID": 6,
  "importItems": [],
  "relatedTradepermit": {
    "productId": 7,
    "productName": "Permit to Sell Imported Goods",
    "productNumber": "IG-0001/T10/2015",
    "registeredName": "BIG TRADE"
  },
  "linkedShippingMark": {
    "productId": 22,
    "productName": "Shipping Mark",
    "productNumber": "SM00012018",
    "registeredName": "LEVEL TWO"
  },
  "owner": {
    "businessEntityTypeID": 3,
    "businessEntityType": "Company",
    "businessEntityNumber": "C-0002/2014",
    "businessEntityName": "SUCHAS Plc"
  }
}
```

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header/>
  <soapenv:Body>
    <asy:storeControl>
      <!--Optional:-->
      <asy:Id>232121</asy:Id>
      <!--Optional:-->
      <asy:User>847</asy:User>
      <!--Optional:-->
      <asy:Section>RELEASE</asy:Section>
    </asy:storeControl>
  </soapenv:Body>
</soapenv:Envelope>
```



Electronic connectivity between all

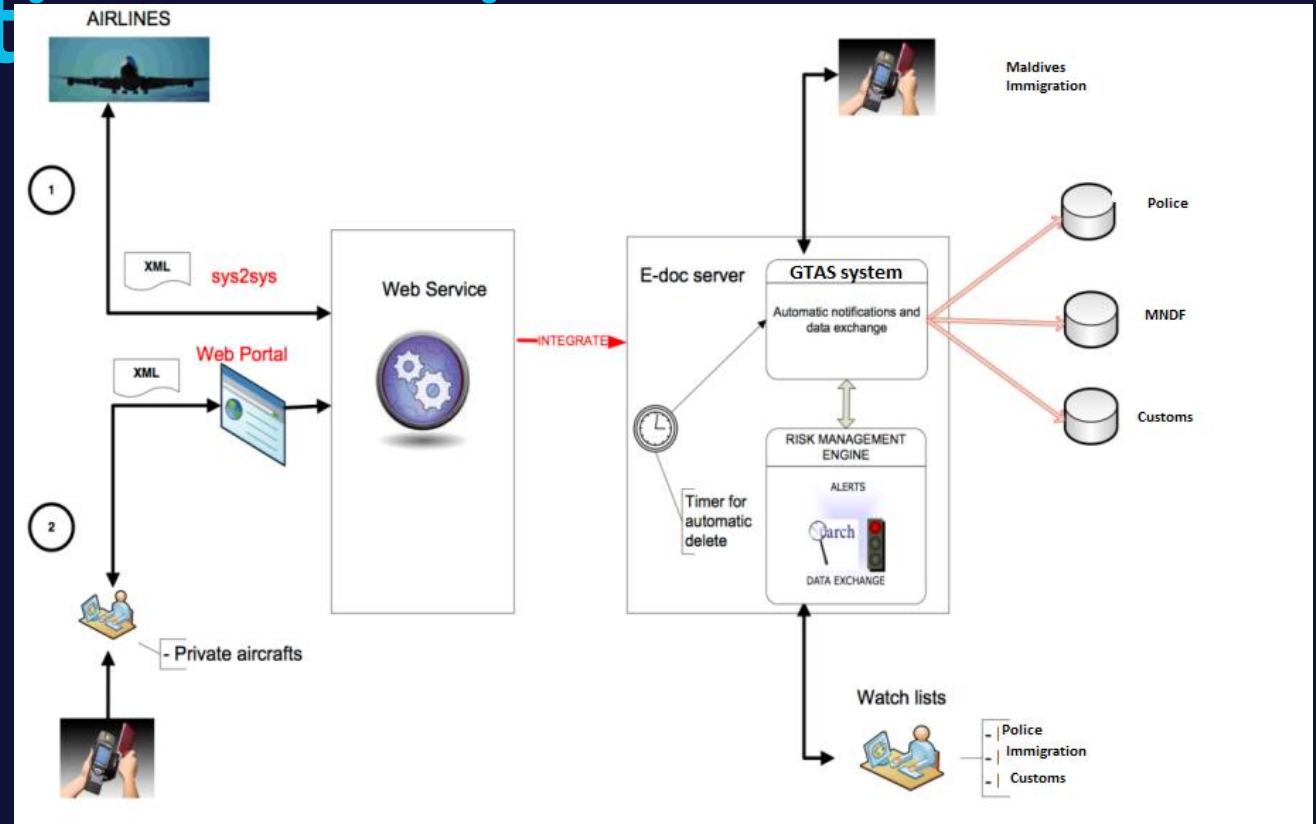


Web Services

An inter-operable services hosted & up-running over the web which could be accessed by different independent clients like web browser

There are 2 types Web Services

- REST (**R**epresentational **S**tate **T**ransfer)
- SOAP (**S**imple **O**bject **A**ccess **P**rotocol)




Risk Management

Criteria (View) - View criteria (red)

File Edit View Help

100 %

 **ASYCUDA**

Selection Criteria

Customs office: 00BW Export ☐
 BONDWAREHOUSE OFF Import ☒

Criteria Code	Level	Valid from	Valid to	Random selection	Hit on items
BOND_IN	National	01/11/2016	false		1, 2, 3
HIGHDUTY_RATE	National	03/01/2018	false		1
PERMIT_REQUIRED	National	03/01/2018	false		1

Documentation for selected criteria: BOND_IN

Criteria for Bonded Warehouse Declarations

Criteria

Trader Profile

C3536 [Display Profile](#)

Trader Name
C3536 - STATE TRADING ORGANIZATION PLC LTD/S.T.O PEOPLES CHOICE STAPLE FOODS

Score Channel
13 GREEN

1. Customs Clearance (Score: 5)
 - Number of declaration, (Score: 0) *Standard Declaration (More than 100 declarations in past 1 year)*
 - CIF Value, (Score: 5) *CIF less than 100K (CIF value less than MVR 100,000.00 in past 1 year)*
2. Business Form (Score: 0)
 - Business Entity, (Score: 0) *Big Company (Must have 2 or more outlets)*
3. Financial Status (Score: 0)
 - External, (Score: 0) *Surplus More Than MVR 50K for 3 Years (Surplus of more than MVR 50,000 per year for 3 consecutive years)*
 - Internal - Bounce Check, (Score: 0) 0
 - Internal - Outstanding to Customs, (Score: 0) 0
 - External - Outstanding to MIRA, (Score: 0) 0
4. Fined Declaration Issues (Score: 2)

Article 7 of the WTO Trade Facilitation Agreement lays down that each Member shall, to the extent possible, adopt or maintain a risk management system for Customs control (paragraph 4.1 of Article 7)



Control Result

Detailed Declaration - View [2018]

File Edit View Help

ASYCUDA

Selectivity control document

Customs Office
00AP HULHULE PORT

Model	Customs reference	Declarant reference	Assessment reference	Nbr of Items
IM 4	2018 R 28	01/01/2018	2018 A 55 / 01/01/2018	63

Declarant
B5001

Selected
Green

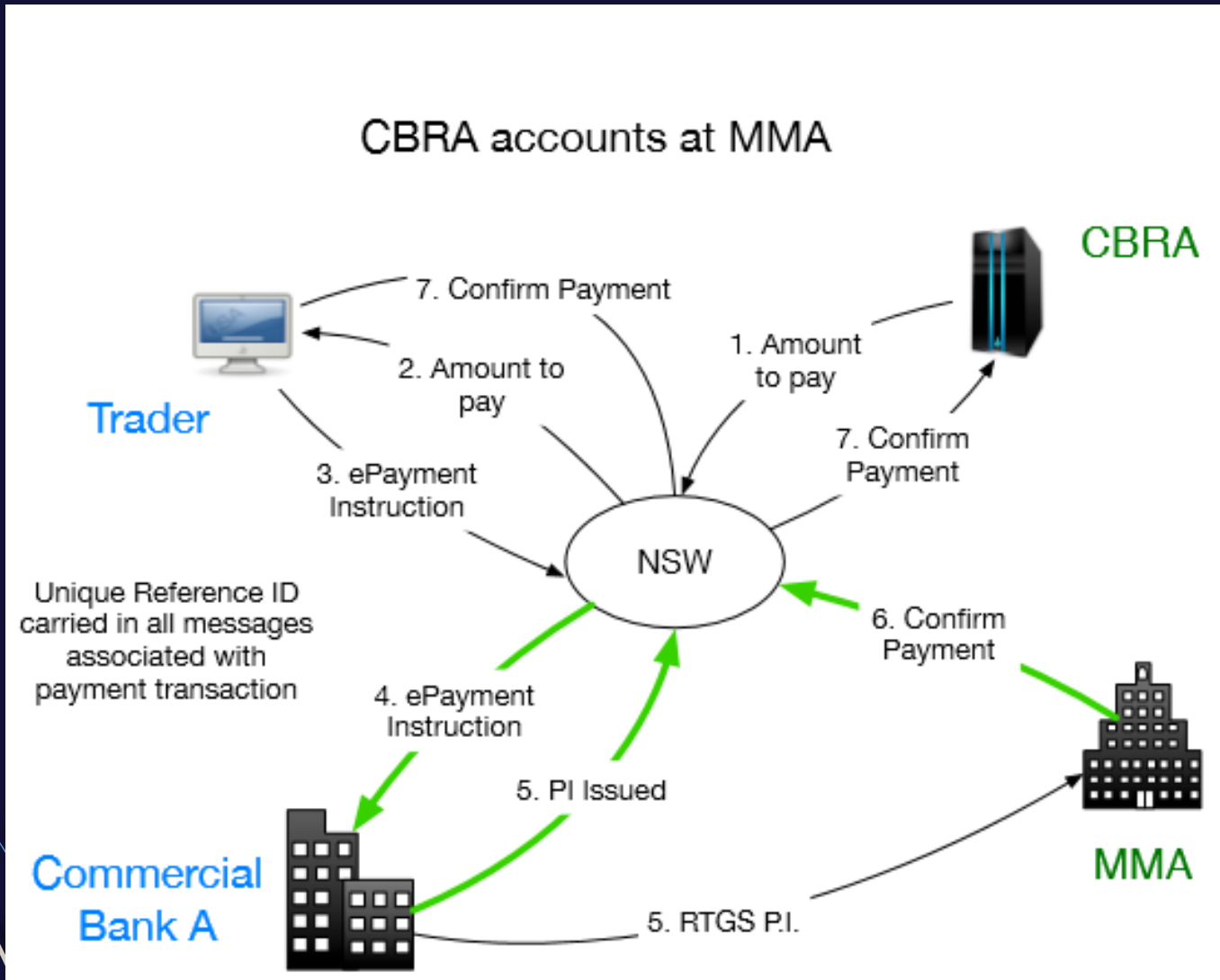
Initial Selected
Yellow

Bonito Group Pte Ltd
M. Hasowa Building, 5th Floor
Boduthakurufaanu Magu

Assigned Section	Assigned Officer	Officer Type	Selection Criteria involved	Work completed	Check	Comments
DOCUMENTA...	891	Officer	PERMIT_REQ...	2018-01-01 11:5...	<input checked="" type="checkbox"/>	
EXAM	325	Officer	Manual Assign	2018-01-15 12:1...	<input checked="" type="checkbox"/>	
RELEASE		Officer	PERMIT_REQ...		<input type="checkbox"/>	

- Other government agency systems can be integrated with ASYCUDA through web service

Electronic Payment (proposed model)

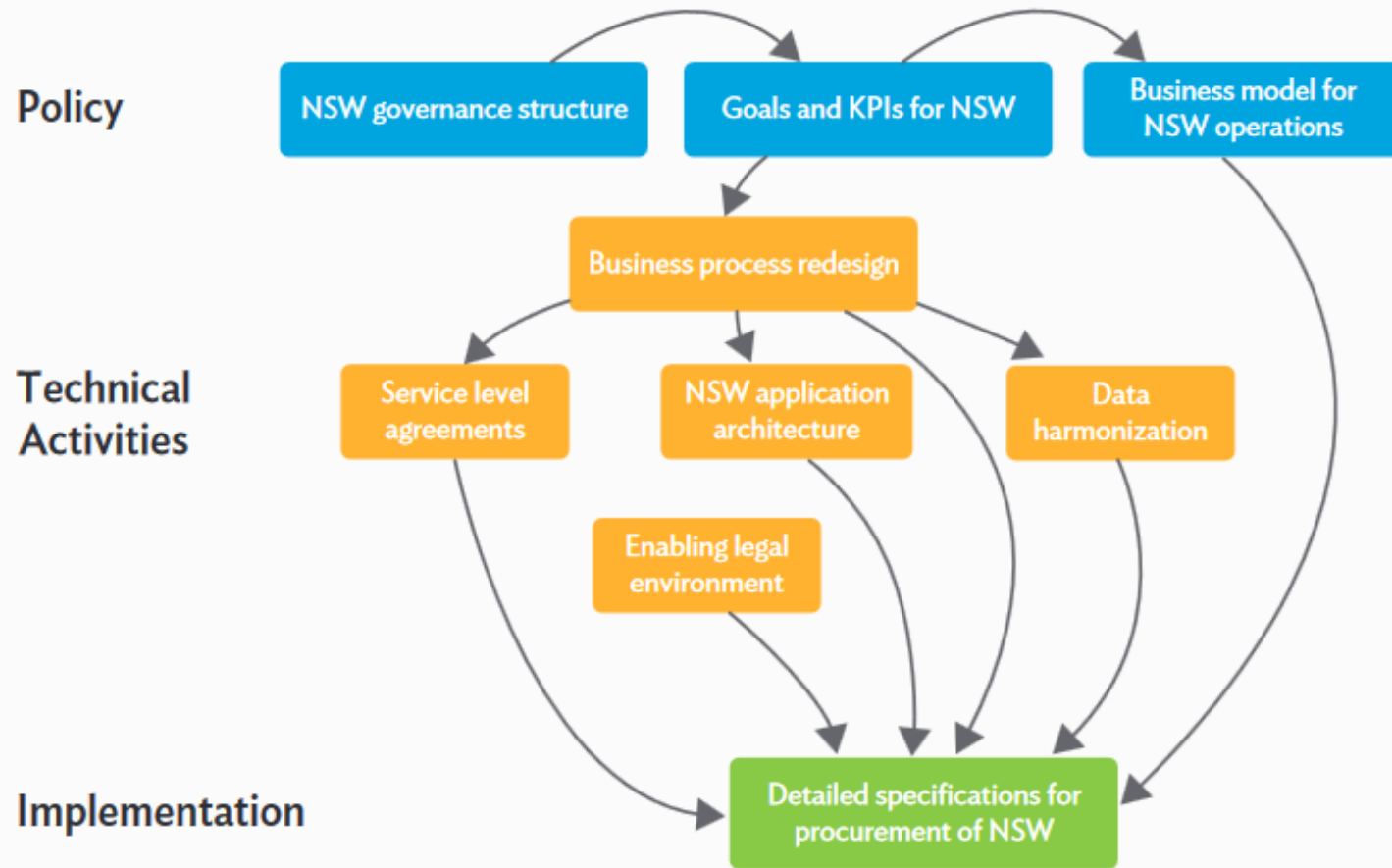


- WTO Trade Facilitation Agreement Article 7.2 Electronic Payment
- Each Member shall, to the extent practicable, adopt or maintain procedures allowing the option of electronic payment for duties, taxes, fees, and charges collected by customs incurred upon importation and exportation.

Data Harmonization

- Data, Systems, and business process need to be harmonized to maximize efficiency.
 - Some data harmonization activities like introduction of single registration form
 - Interfacing with MACL/MPL system

Road Map and National Single Window Implementation

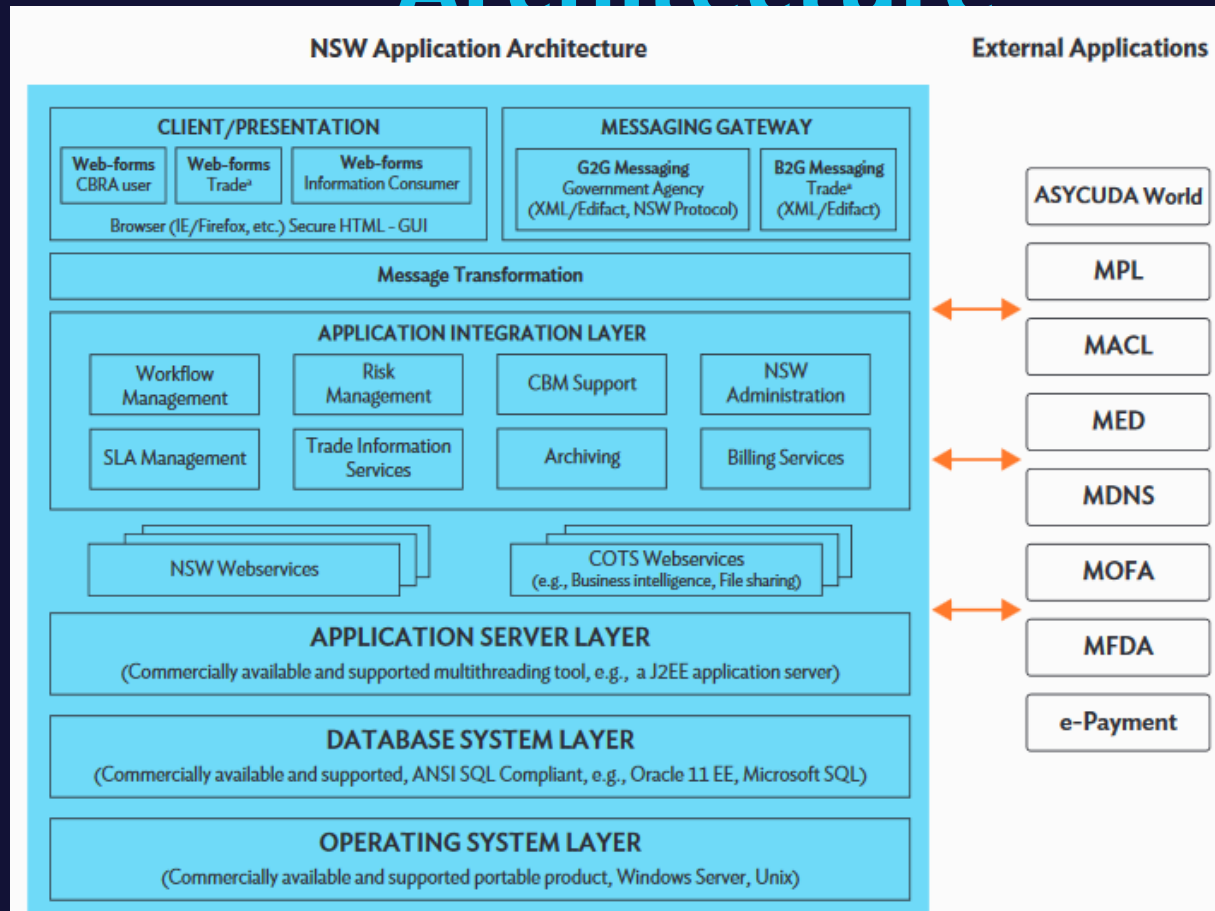


KPI = key performance indicator, NSW = national single window.

Source: Asian Development Bank.



National Single Window Application Architecture

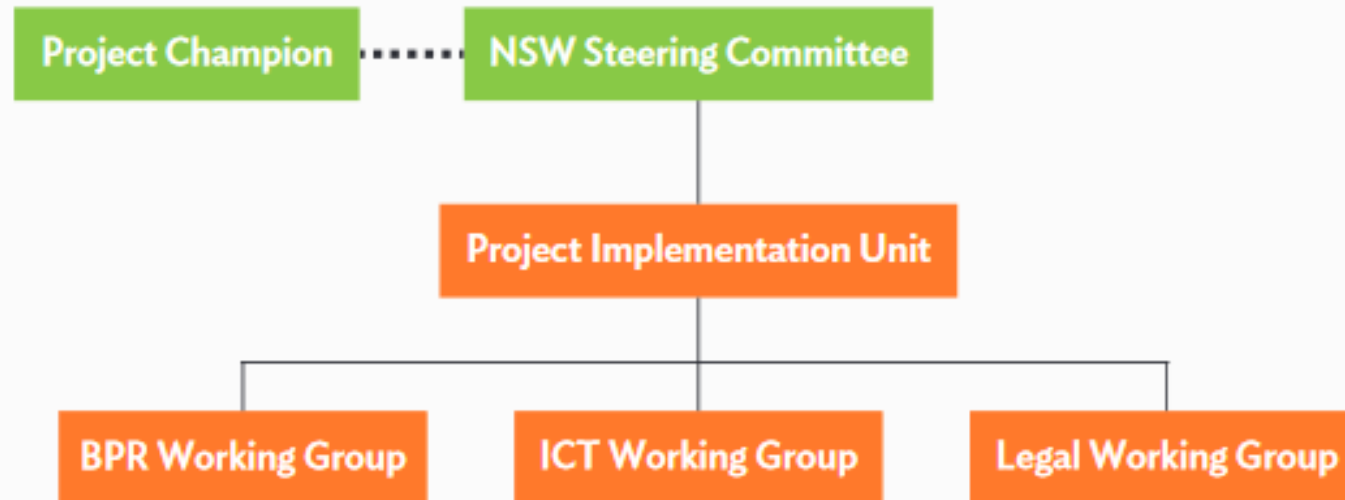


ANSI = American National Standards Institute, B2G = business-to-government, CBM = cross-border management, CBRA = cross-border regulatory agency, COTS = commercial off the shelf software, G2G = government-to-government, J2EE = Java 2 Platform Enterprise Edition, MACL = Maldives Airport Company Limited, MCS = Maldives Customs Service, MDNS = Ministry of Defence and National Security, MED = Ministry of Economic Development, MFDA = Maldives Food and Drug Authority, MOFA = Ministry of Fisheries and Agriculture, MPL = Maldives Ports Limited, SQL = Structured Query Language, XML = eXtensible Markup Language.

Source: Asian Development Bank.



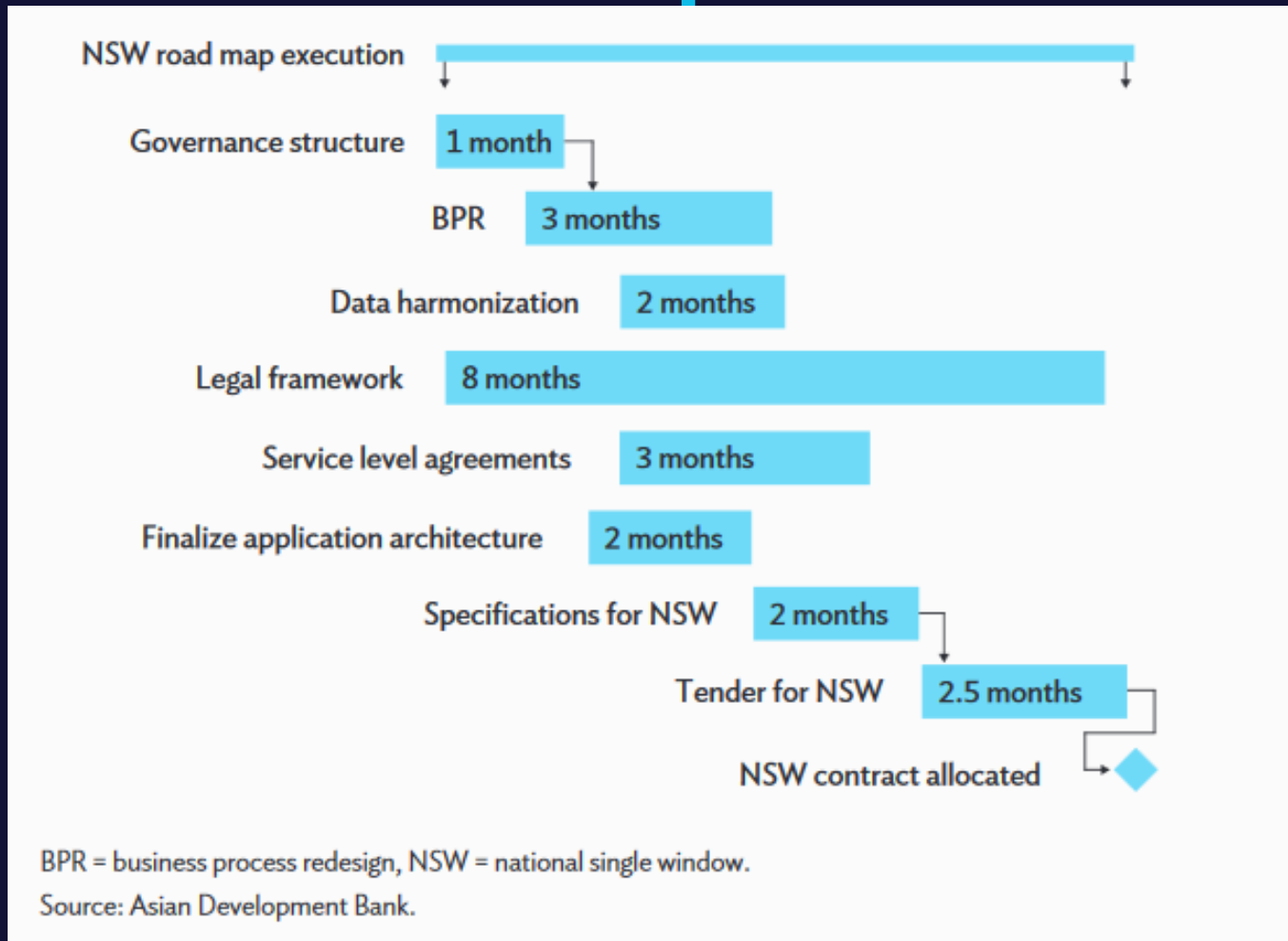
Proposed Governance Structure for the National Single Window Road Map



BPR = business process redesign, ICT = information and communication technology, NSW = national single window.

Source: Asian Development Bank.

Sequencing of National Single window Road Map Activities



Changes due to Covid-19

- Easier on boarding process - Importer registration requests by Customs portal and automatic registration of importer/Declarant In ASYCUDA.
- Automatic Assessment of Green Channel Declarations – 30%
- Changes to risk parameters , Green, Blue, Yellow, Red (Green, Blue % increase)
- Introduction of Electronic Gatepass – Electronic Approval of cargo release approval between Customs and Other CBRAs
- Acceptance of Electronic payment only
- ASYCUDA Password reset by customs portal
- Automatic renewal of Customs Brokers/ Shipping agents when payment is made.
- Other Payments Web Service - Manifest Late Submission fine, CO Charges etc..



Other Experiences

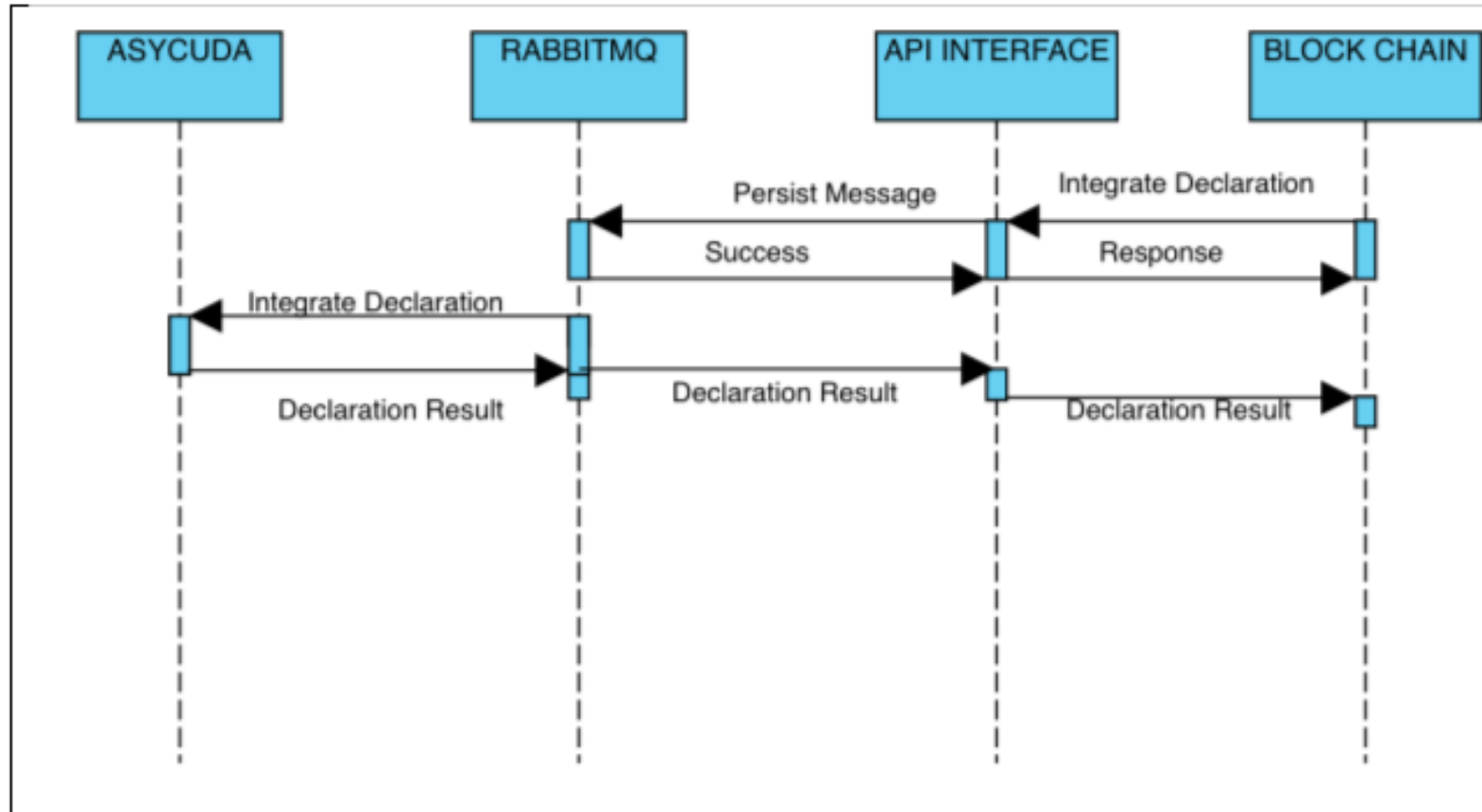
- Block Chain POC
 - Phase 1: Manifest,
 - Phase 2: Import Declaration
- Indo-Maldives pre-arrival Data Sharing



Block chain (POC)

ANNEX 1-Import Message Sequence Flow

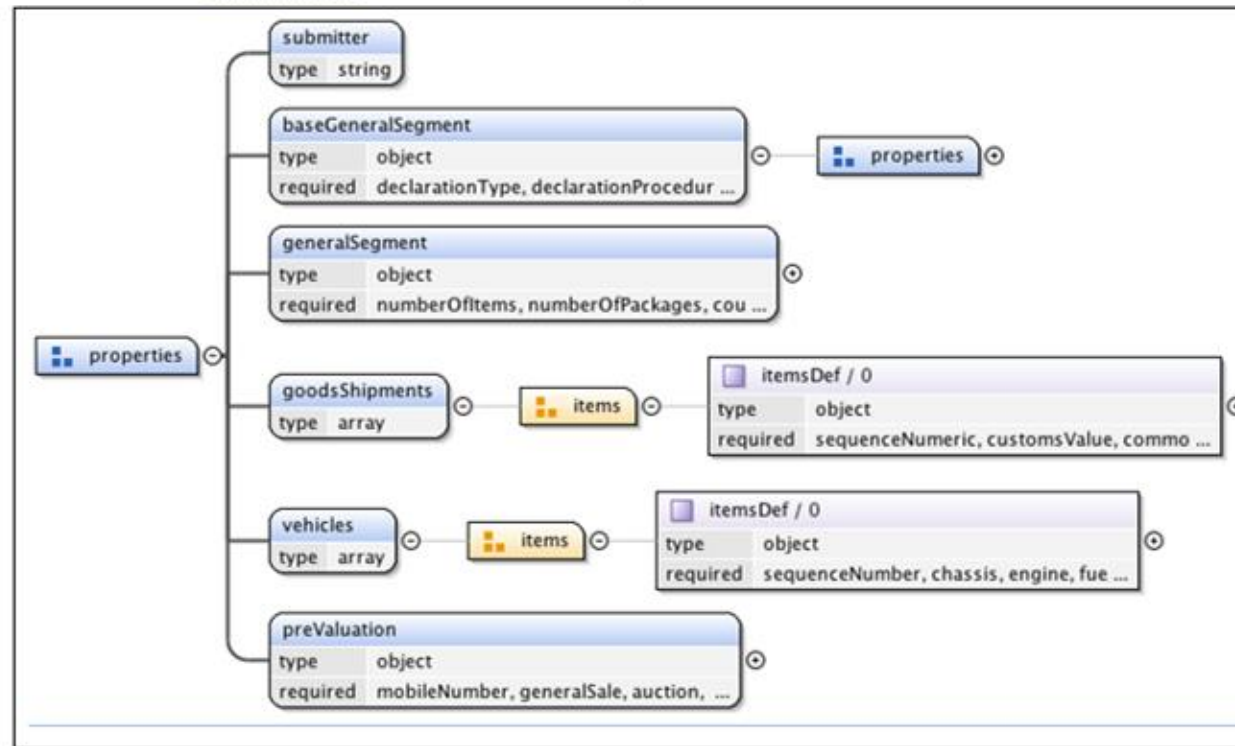
Integrate Declaration



Block chain (POC)

ANNEX 2-Import Messages Structure

Declaration message(New Submission)



Declaration Query and Amendments message



Use of JSON messages

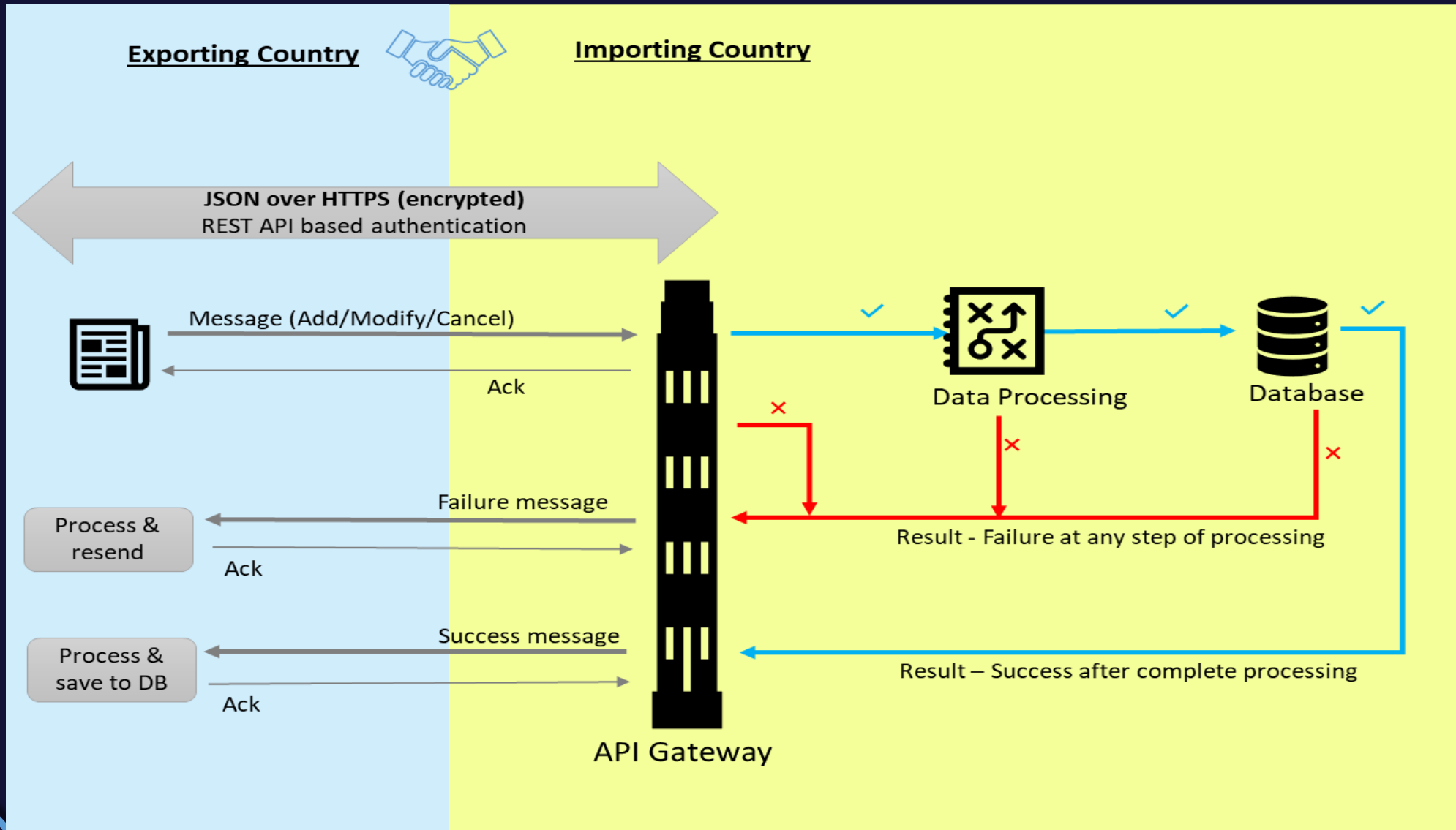
```
{
  "submitter": "string",
  "baseGeneralSegment": {
    "declarationType": "string",
    "declarationProcedure": "string",
    "officeCode": "string",
    "manifestRegNumber": "string",
    "exporterInfo": {
      "line": "string",
      "cityName": "string",
      "countryCode": "string"
    },
    "importerCode": "string",
    "nationalIDInfo": "string",
    "declarantCode": "string"
  },
  "generalSegment": {
    "numberOfItems": 0,
    "numberOfPackages": 0,
    "countryOfTrading": "string",
    "sections": "string"
  }
}
```

India Maldives Data Exchange

A Data Exchange Platform is envisaged for message exchange between Indian Customs (CBIC) and Maldives Customs. This data exchange platform is an envisaged inter country electronic exchange system which helps India and Maldives to share import and export related information. The objective of data exchange platform is to have import/export related information in advance which can help to expedite customs clearance process.



India Maldives Data Exchange



Challenges

- Lack of local development team
- Lack of Support Agreements between UNCTAD or SoClass
- Confusion between web-based and web application - ASYCUDA
- Knowledge of Java and SoClass Framework is required.
- The existing team is developing on the Microsoft development stack – C#, MSSQL
- Lack of technical knowledge to fine tune database
- Running Customs system on virtualized environment

THANK YOU !

Q & A

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