





## CROSS BORDER ELECTRONIC DATA EXCHANGE

**Use Case: Electronic Certificate of Origin** 

November 2023 – Fachry R. Oemar



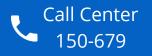




















## **Overview ELECTRONIC DATA EXCHANGE**





## WHAT

To Exchange

**MESSAGE IMPLEMENTATION GUIDE** 

### **DATA STANDARDIZATION**

Standardized and Compatible data format i.e. XML, JSON, EDI Format, PDF

### **DATA VALIDATION & MAPPING**

Properly validated and format and requirements in both Systems (Sender and Receiver) i.e. MIG, XSD, JSD



mapped data to match





### **TRANSMISSION & ACKNOWLEDGMENT**

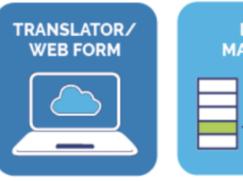
Establish mechanism to confirm and acknowledge data's integrity during completion of successful send, receive, process and store the data. i.e. MIG, XSD, JSD, ACK



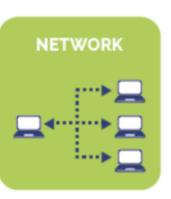
### **CONNECTION & DATA SECURITY**

Security measures to protect data during transmission i.e. Secure connection, Encryption, ACL, **Authentication** 

## FOUR KEY COMPONENTS OF EDI













#### **LOGGING & AUDITING ERROR HANDLING**

Establish error-handling procedures during transmission i.e. validation errors, system failures, network disruptions Maintaining logs and records of transmissions for auditing,

traceability and compliance purpose.

i.e. Logs, Transaction's History



**HOW** 

To Exchange

**PROCESS SPESIFICATION** 

















**TECHNOLOGY** 

or technology for

i.e. Email, FTP, EDI,

APIs, WebServices

electronic data

exchange

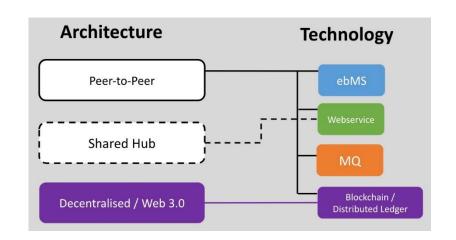
The best suits method

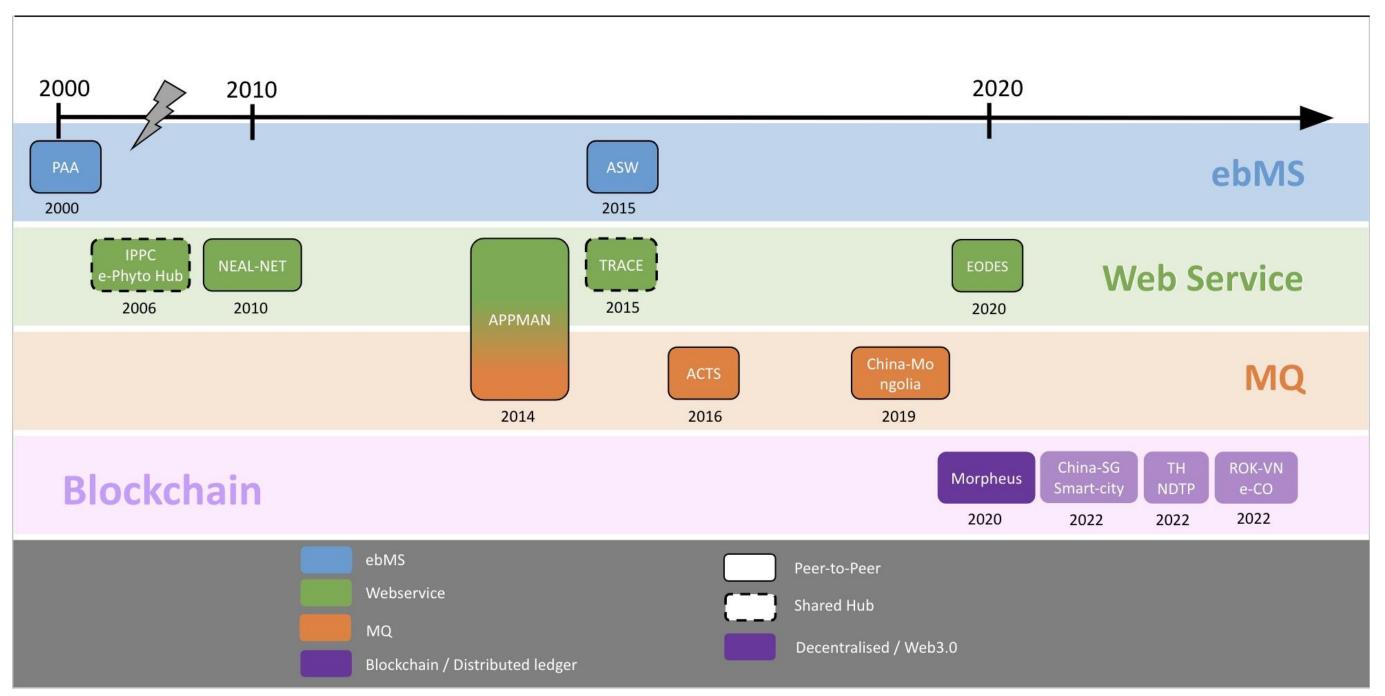


## TECHNICAL EVOLUTION OF HOW TO HOW TO - EXCHANGE DATA ELECTRONICALLY



## Cross Border Trade Platform Evolution – the last 2 Decades





#### Reference:

Initial Analysis for ASW Technical Enhancement, 2023

















## TECHNICAL EVOLUTION OFNITIAL ANALYSIS ECOS STBO FEXERIAL GEORGIA FOR THE FORM RONICALLY



## Cross Border Trade Platform Evolution – the last 2 Decades

Trend Current

#### Peer-to-Peer Architecture

- Create a secure physical connection between 2 parties. This will ensure the identity of sender and receiver, and protect the data or document to be changed by others during the transfer.
- Generic model for bilateral NSW interoperability.

#### Example

- ASW
- CH-SG EODES
- CH-ID EODES
- CH-ROK e-CO
- ID-ROK e-CO
- CH-Mongolia

#### **Enable technologies**

- ebMS
- Web Service
- Web Service
- Web Service
- Web Service

#### MQ

### **Decentralized Architecture**

- New approach using Web 3.0 concept.
- Instead of implementing a private infrastructure (peer-to-peer or shared hub) to allow only authorized person to transfer the document in the secure environment, the Web 3.0 concept is used to ensure that once the document is created, we can check back who is the owner, and we can ensure that the data will not be changed by others.

#### Shared hub Architecture

- Created a centralized hub to link other systems.
- · Possible model for regional NSW interoperability, but this solution does not exist at the moment due to legal and operational concerns. The 1<sup>st</sup> design of ASW used this model, but reverted back to peer-to-peer architecture at the end.
- Used for exchange of a specific document at the global scale e.g. IPPC e-Phyto hub.

#### Example

- e-Phyto Hub
- TRACE

#### **Enable technologies**

- Web Service
- Web Service

#### **Enable technologies** Example

- SG NTP blockchain + QR code (TradeTrust)
- TH NDTP blockchain (Tradewaltz) • JP NDTP • blockchain (TradeWaltz)
- · CH NSW · blockchain

#### Reference:

Initial Analysis for ASW Technical Enhancement, 2023













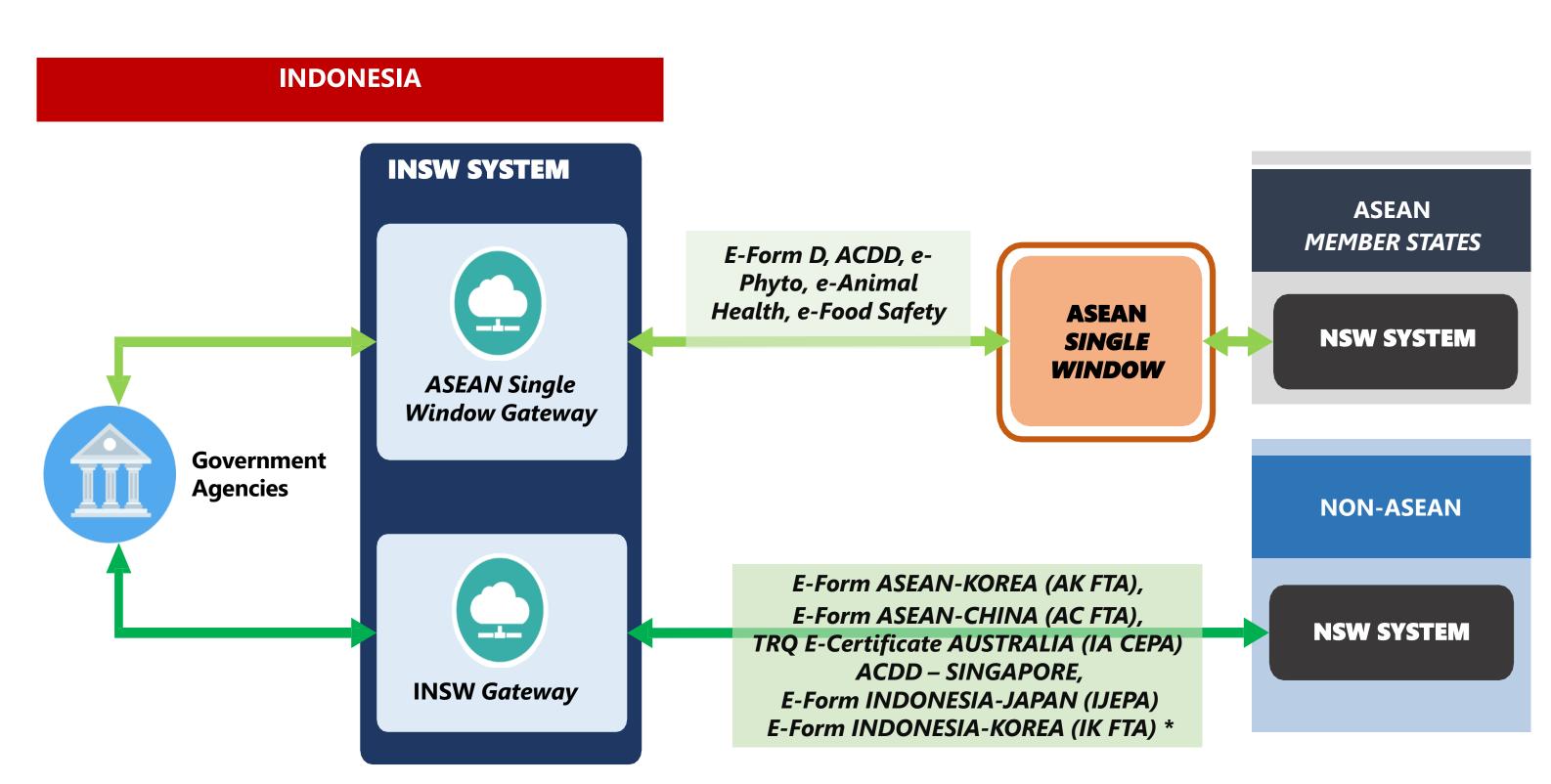






## INDONESIA AND PARTNERS HOW TO - EXCHANGE DATA ELECTRONICALLY















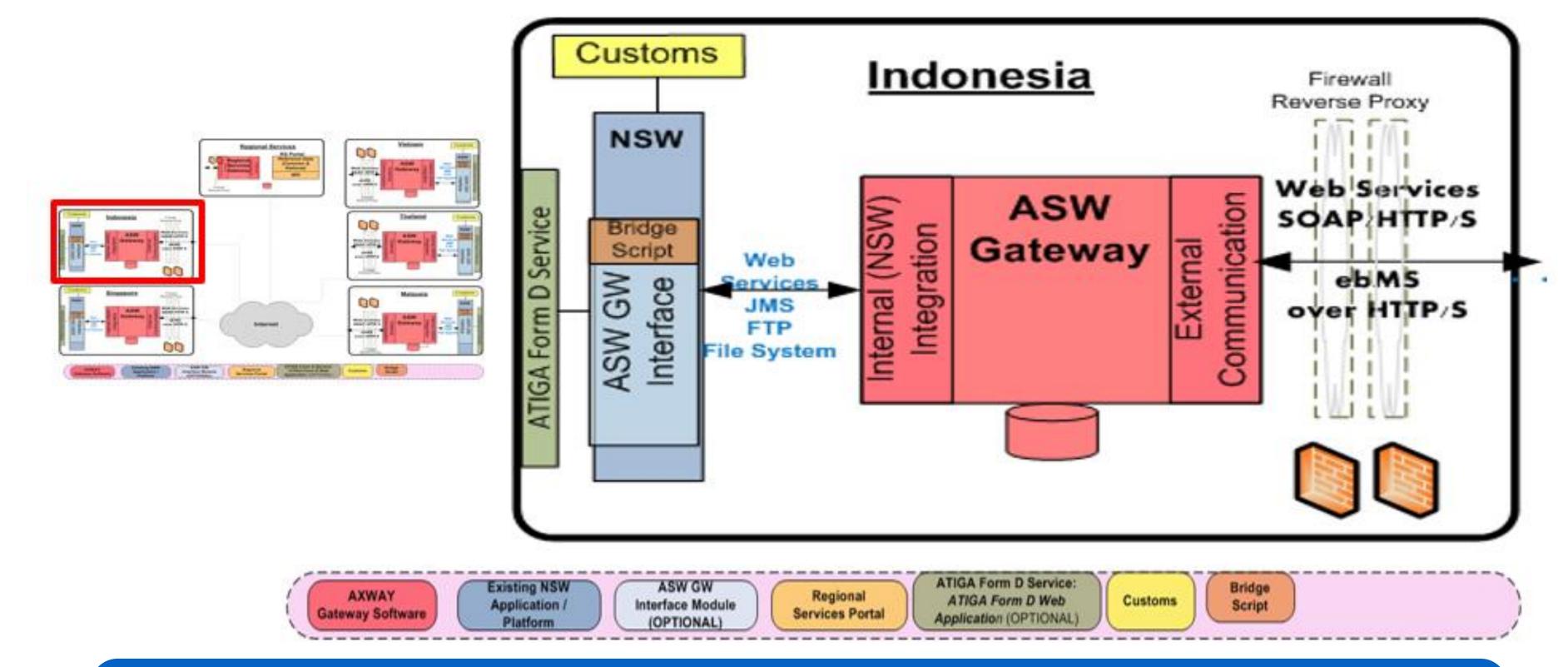






## ASEAN SINGLE WINDOW GATEWAY HOW TO - EXCHANGE DATA ELECTRONICALLY

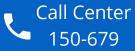




















## **ASEAN SINGLE WINDOW GATEWAY HOW TO - EXCHANGE DATA ELECTRONICALLY**



#### Local server

Showing 1 - 100 of 1680 messages

Result page: 1 2 3 4 5 6 7 8 9 10 11 Next Last

Select an action... 🗸

Click a table cell for more filtering options

Click Details to view message details. Or, place the cursor over the Details link for 2 seconds to display a pop-up of attributes.

Circk Details	o to view ii		or, place the cursor over the Details link for 2 second			
		Туре	Origination T	From ID	To ID	Status
☐ <u>Details</u>		Payload	Jul 17, 2023 02:17:20 PM WIB	ASWIndonesia	ASWMalaysia	Delivered
☐ <u>Details</u>		Payload	Jul 17, 2023 02:17:20 PM WIB	ASWIndonesia	ASWMalaysia	Delivered
☐ <u>Details</u>		Payload	Jul 17, 2023 02:17:20 PM WIB	ASWIndonesia	ASWMalaysia	Delivered
☐ <u>Details</u>		Payload	Jul 17, 2023 02:17:20 PM WIB	ASWIndonesia	ASWMalaysia	Delivered
☐ <u>Details</u>		Payload	Jul 17, 2023 02:17:20 PM WIB	IDTRD080001	MYTRD080002	Delivered to processing
☐ <u>Details</u>		Payload	Jul 17, 2023 02:17:20 PM WIB	IDTRD080001	MYTRD080002	Delivered to processing
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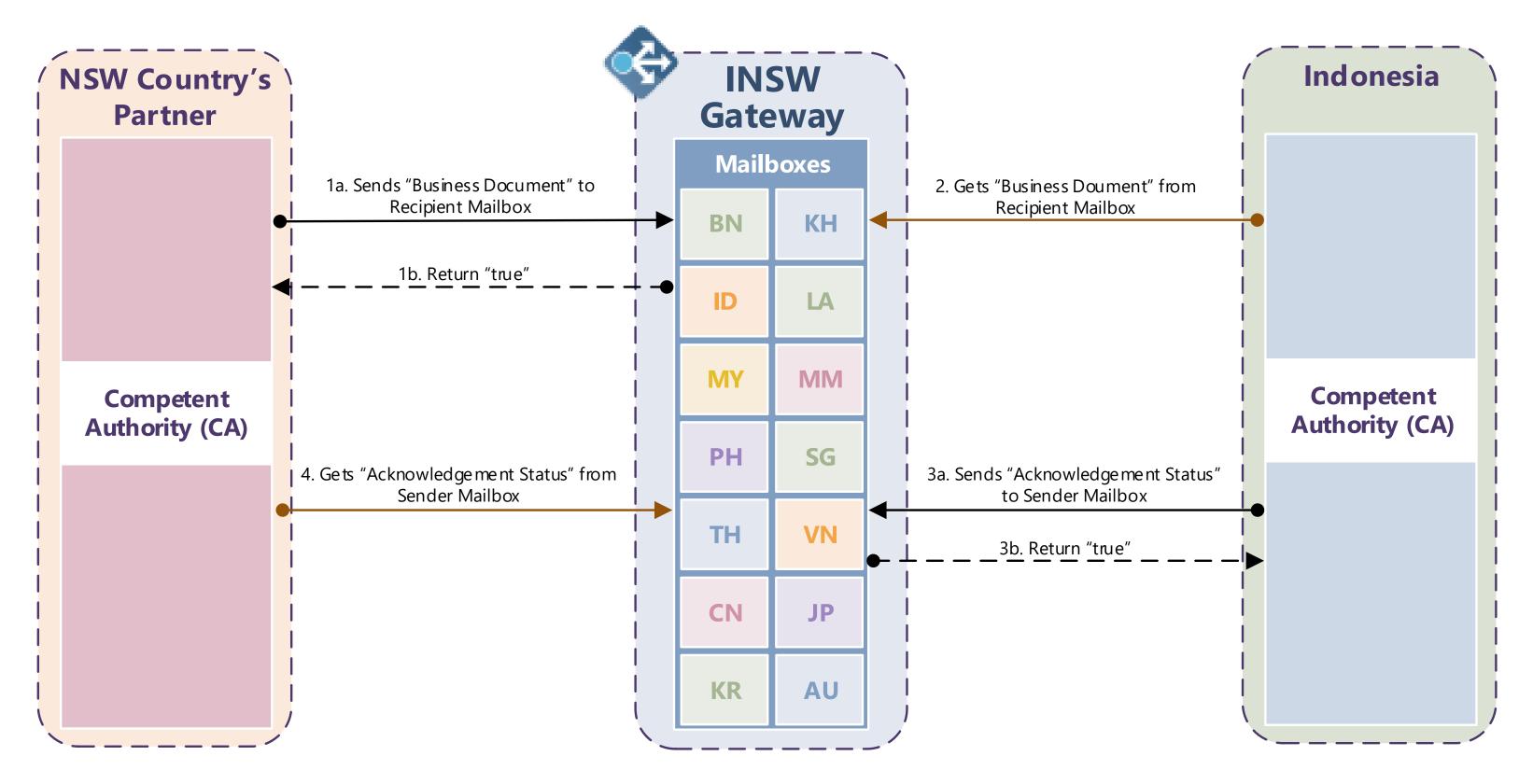






# INDONESIA NSW GATEWAY HOW TO - EXCHANGE DATA ELECTRONICALLY















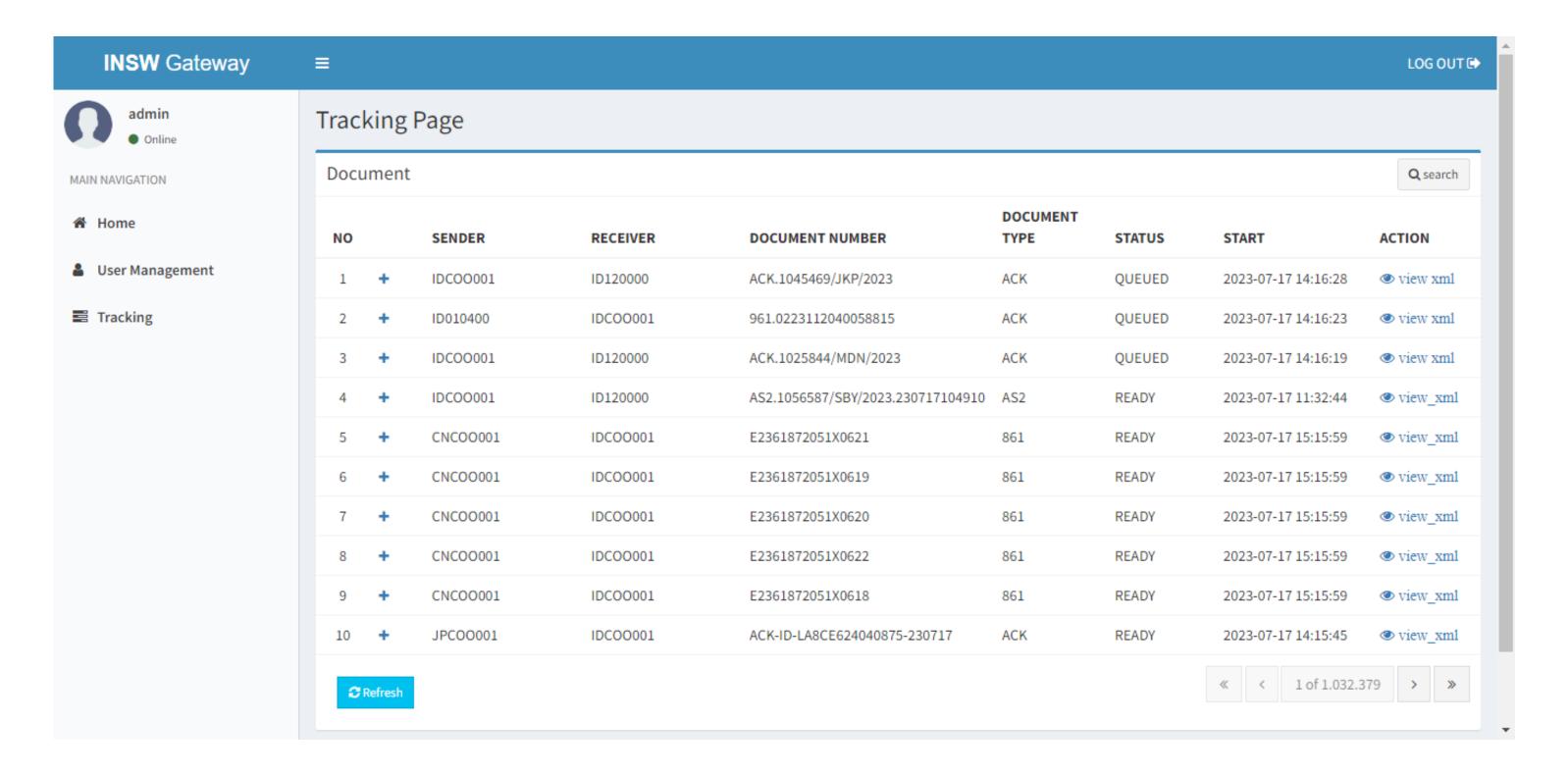






## INDONESIA NSW GATEWAY HOW TO - EXCHANGE DATA ELECTRONICALLY





















## BUSINESS PROCESS SPESIFICATION HOW TO - EXCHANGE ELECTRONIC CERTIFICATE OF ORIGIN



## ATIGA e-Form D

**Business Process Specification** 

Version No. 1.3

20 December 2021

e-Form AK

**Business Process Specification** 

Version No. 1.1 (Final)

9 Mei 2019

**Tariff Rates Quota Business Process Specification** 

Version No. 3.3

01 August 2022

## e-CO IJEPA

## **Business Process Specification**

Version No. 1.4

05 September 2022

## e-CoO KI CEPA Business Process Specification

Version No. 1.1

06 July 2023

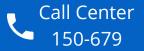
# ASEAN-Japan e-CO Business Process Specification

Version No. 1.0 17 January 2023

















## **BUSINESS PROCESS SPESIFICATION HOW TO - EXCHANGE ELECTRONIC CERTIFICATE OF ORIGIN**



### ATIGA eForm D

ATIGA e-Form D

Sending eCoO Returning Customs Response

**Cancellation** 20 December 2021 Querying

## eCoO IJEPA

**Sending TRQ eCert Returning Feedback Information Cancellation Querying Business P** Version No. 1.4 **Tracking Encryption Contingency Plan** 

## eCoO AK FTA e-Form AK **Sending eCoO** Returning Feedback Information Version No. 1.1 Cancellation Querying **Tracking** 9 Mei 2019 **Encryption**

### eCoO IK CEPA

**Sending eCoO Returning Feedback Information** Busines Cancellation cification Querying Version No. 1.1 **Tracking Encryption** 06 July 2023

## TRQ eCert **Tariff Rates Quota Sending TRQ eCert Returning Feedback Information Cancellation** Version No. 3.3 **TRQ eCert Amendment** 01 August 2 **Tracking Encryption Contingency Plan**

eCoO AJEPA

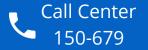
**Sending eCoO Returning Feedback Information** Revocation Contingency Plan

> Version No. 1.0 17 January 2023











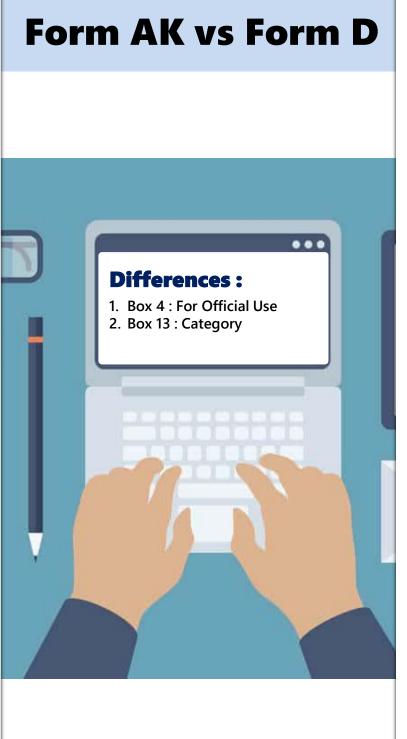


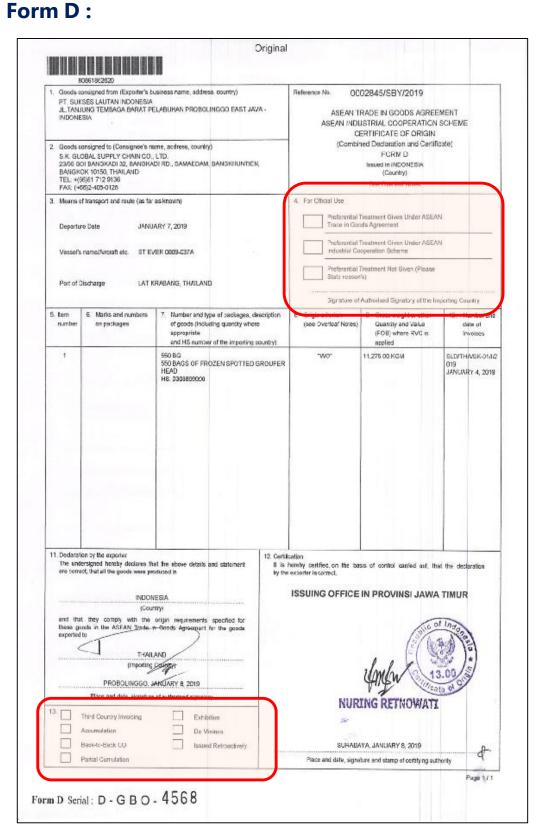






#### Form AK: Original 1. Goods consigned from (Exponer's business name, -0036744/BKI/2018 ASEAN-KOREA FREE TRADE AREA PT OH SUNG ELECTRONICS INDONESIA JL, SELAYAR BLCK D7 KAWABAN INDUSTRI MME10). CIKARANG BARAT BEKASI, JAWA BARAT, INDONESIA PREFERENTIAL TARIFF CERTIFICATE OF ORIGIN (Combined Declaration and Certificate) FORM AK 2. Goods consigned to (Consignee's name, address. Issued in INDONESIA LG INNOTEK CO.,LTD 28, HANAWSANDAN 5BEON-RO. GWANGSAN-GU, GWANGJU, 82228, KOREA NAME I KIM SEULGI Sea Notes Overleaf PHONE: 82-82-950-1958 3. Means of transport and route (as far as known) Freferenzia: Treatment Silven Under ASEAN-Korea. Free Trade Area Preferential Tariff. OCTORER 9, 2018 Thererential Tresoment Not Given (Please Vossel's name/Aircraft etc. CZ762 INCHEON Fort of Discharge Signature of authorised Signatory of the Importing 5. flom 6. Marks and Number and type of packages Origin orberion 8. Gross weight or other quantity and value (FOB and date numbers on description of goods (including of Invoices quantity where appropriate and Overleaf) only when RVC HS number of the importing country! criterion is used) BVC 100 % 8 PALLETS- 34 BOX OF BRACKET USD 16,914.38 11. Declaration by the exporter The undersigned hereby declares that the above details It is hereby certifled, on the basis of control carried out, that the and statements are correct; that all the goods were declaration by the exporter is correct ISSUED RETROACTIVELY ISSUING OFFICE IN KABUPATEN BEKASI INDONESIA (country) and that they comply yight the origin requirements specified for these goods in the ASEAN-KOREA Free YULIATI (Importing Country) BEKASI, DECEMBER 5, 2018 BEKASI, DECEMBER 6, 2016 Place and date, signature and stamp of certifying authority Place and date, signature of authorised eignatory □ Exhibition □ Back-to-Back CO Form AK Serial: AK - FAR - 0127















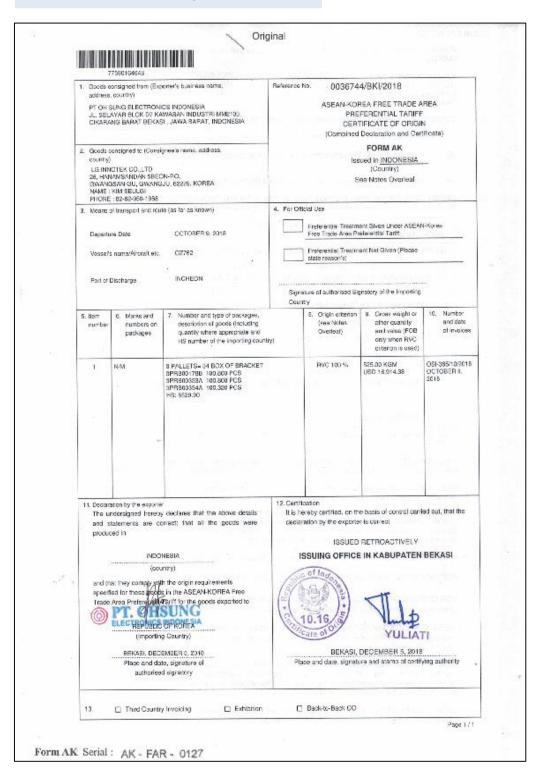








## **Hardcopy CoO**



### **Electronic CoO**

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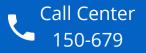


Electronic Form Certificate of Origi									tificate of Origin (COO)				
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0	1 2	3 4 5	Description	Cardinality	Format			Format	EXHIBITOR Street Mattie	Cardinality	Format	Guideillie	
I	ncludedCo	nsignmentItem		110000		Information pretaining to the goods being transported, may repeat 1-10,000 times	110000		Information pretaining to the goods being transported, may repeat 1-10,000 times	11000		Information pretaining to the goods being transported, may rep	
	Sec	uenceNumeric	Item Number	11	n5	Item Number (N5) - Sequence number differentiating a specific goods item within a consignment.	11	n5	Item Number - Sequence number differentiating a specific goods item within a consignment.	11	n4	Item Number - Sequence number differentiating a specific good	
	Imp	oortTypeCode	HS Code / Tariff Code	11	an10	HS Code of importing country - may be 8 digits or 10 digits depending on the importing country requirements. This is the code specifying a type of goods for Customs, transport or statistical purposes (generic term).	11	an10	HS Code of importing country - may be 8 digits or 10 digits depending on the importing coutnry requirements. This is the code specifying a type of goods for Customs, transport or statistical purposes (generic term).	11	an6	HS Code of importing country - may be 8 digits or 10 digits deperequirements. This is the code specifying a type of goods for Cupurposes (generic term).	
	Fre	e On Board Value Amoun	t Value (FOB)	01	n13.n3	Value (FOB) - Monetary amount that has to be or has been paid as calculated under the applicable trade delivery.	01	n27.n5	Value (FOB) - Monetary amount that has to be or has been paid as calculated under the applicable trade delivery.	01	n13.n3	Value (FOB) - Monetary amount that has to be or has been paid applicable trade delivery.	
		currencyId	Currency code (FOB Value)	11	a3	Currency code - as defdined by ISO 4217 (3 char code), UN/ECE Rec. No. 9. Currency should be specifed if FOB value is specified  See Appendix A.7	11	a3	Currency code - as defdined by ISO 4217 (3 char code), UN/ECE Rec. No. 9. Currency should be specifed if FOB value is specified see Appendix A.7.	01	a3	Currency code - as defdined by ISO 4217 (3 char code), UN/ECE specifed if FOB value is specified - see Appendix A.7.	
	Gro	ssWeightMeasure	Gross Weight (or other quantity)	01	n13.n3	Gross weight - Weight(mass) of goods item including packaging but excluding the carrier's equipment. Either gross weight or quantity must be filled in	01	n18.n4	Gross weight - Weight(mass) of goods item including packaging but excluding the carrier's equipment. Either gross weight or quantity must be filled in	11	n13.n3	Gross weight - Weight(mass) of goods item including packaging equipment. Either gross weight or quantity must be filled in	
		unitCode	Unit of measurement (Gross weight)	11	an3	Code for Unit of measurement (UOM) of the gross weight - according to UNECE UOM code (UN Rec. No. 20). Code should be specified if weight is specified	11	an3	Code for Unit of measurement (UOM) of the gross weight - based on a subset of UNECE Rec. No. 20. Code should be specified if weight is specified - see Appendix A.8.	11	an3	Code for Unit of measurement (UOM) of the gross weight  See Appendix E.2	
						See Appendix A.8							
	Spe	cifiedQuantity	Quantity of Goods Item	01	n13.n3	Quantity of goods item - Either gross weight or quantity must be filled in	01	n18.n4	Quantity of goods item - Either gross weight or quantity must be filled in	11	n13.n3	Number of individual items packaged in such a way that they ca doing the packing.	
		unitCode	Unit of measurement (quantity)	11	an3	Code for Unit of measurement (UOM) - according to UNECE UOM code (UN Rec. No. 20). Code should be specified if weight is specified  See Appendix A.9	11	an3	Code for Unit of measurement (UOM) - based on the full UNECE Rec. No. 20. Code should be specified if quantity is specified - see Appendix A.9	11	an3	Code for Unit of measurement (UOM) - based on the full UNECI specified if quantity is specified  See Appendix E.2	
	God	dsCargoDescription		11			11			11			
		Identification	Description of Goods	110	an512	Goods description - Plain language description of the nature of a goods item sufficient to identify it for Customs, statistical or transport purposes.	110	an3000	Goods description - Plain language description of the nature of a goods item sufficient to identify it for Customs, statistical or transport purposes.	110	an512	Goods description - Plain language description of the nature of a identify it for Customs, statistical or transport purposes.	
	Phy	sicalShippingMarks		11			11			11			
		Description	Mark and Numbers on Packages	112	an512	Free form description of the marks and numbers on a transport unit or package. If blank, should be set to "No Marks"	112	an900	Free form description of the marks and numbers on a transport unit or package. If blank, should be set to "No Marks"	11	an1024	Free form description of the marks and numbers on a transport be set to "No Marks"	
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						Description of the Physical Shipping Marks may contain a free form description of the details of the packages, total weight and / or			Description of the Physical Shipping Marks may contain a free form description of the details of the packages, total weight and			and / or shipping marks as they describe the whole consignmen importing customs, the free form descriptions. The following pro	
						shipping marks as they describe the whole consignment. To help identify this to the importing customs, the free form descriptions.  The following provides an example:			/ or shipping marks as they describe the whole consignment. To help identify this to the importing customs, the free form descriptions. The following provides an example:			"Total Gross Weight=100 Tonnes; Packages for the whole Consbundles; Shipping Marks on Packages - "Order 12345 for ABC C	
						"Total Gross Weight=100 Tonnes; Packages for the whole			"Total Gross Weight=100 Tonnes; Packages for the whole			- Form E : increase length of the data element from 512 to 1024	
	Inv	oica Accaciatad Dacuma	int	1 1		Information about related invoice documents, may repeat 1 time	0 1		Information about related invoice documents, may repeat 1	1 1		Information about related invoice decuments, may repeat 1 tim	



















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Include	2		LTag Name (including level)		Form D (update) Guideline		Form AK		Guideline	Form E		Guideline			
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	SequenceNumeric		Item Number	11	n5	Item Number (N5) - Sequence number differentiating a specific goods item within a consignment.	11	n5	Item Number - Sequence number differentiating a specific good item within a consignment.	11	n4	Item Number - Sequence number differentiating a specific good			
	ImportTypeCode		HS Code / Tariff Code	11	an10	HS Code of importing country - may be 8 digits or 10 digits depending on the importing coutnry requirements. This is the code specifying a type of goods for Customs, transport or statistical purposes (generic term).	11	an10	HS Code of importing country - may be 8 digits or 10 digits depending on the importing coutnry requirements. This is the code specifying a type of goods for Customs, transport or statistical purposes (generic term).	11		HS Code of importing country - may be 8 digits or 10 digits depe requirements. This is the code specifying a type of goods for Cu: purposes (generic term).			
	FreeOnBoardValueAmoun		Value (FOB)	01	n13.n3	'alue (FOB) - Monetary amount that has to be or has been paid a alculated under the applicable trade delivery.	01	n27.n5	Value (FOB) - Monetary amount that has to be or has been paid as calculated under the applicable trade delivery.	01	n13.n3	/alue (FOB) - Monetary amount that has to be or has been paid applicable trade delivery.			
		currencyId	Currency code (FOB Value)	11		Currency code - as defdined by ISO 4217 (3 char code), UN/ECE R No. 9. Currency should be specifed if FOB value is specified See Appendix A.7	c. 11	85	Currency code - as defdined by ISO 4217 (3 char code), UN/ECE Rec. No. 9. Currency should be specifed if FOB value is specified see Appendix A.7.	01		currency code - as defdined by ISO 4217 (3 char code), UN/ECE specified - see Appendix A.7.			
	GrossW	eightMeasure	Gross Weight (or other quantity)	01	n13.n3	iross weight - Weight(mass) of goods item including packaging be excluding the carrier's equipment. Either gross weight or quantity nust be filled in	t 01	n18.n4	Gross weight - Weight(mass) of goods item including packaging but excluding the carrier's equipment. Either gross weight or quantity must be filled in	11	n13.n3	iross weight - Weight(mass) of goods item including packaging equipment. Either gross weight or quantity must be filled in			
		unitCode	Unit of measurement (Gross weight)	11	an3	Code for Unit of measurement (UOM) of the gross weight - according to UNECE UOM code (UN Rec. No. 20). Code should be specified if weight is specified	11	an3	Code for Unit of measurement (UOM) of the gross weight - based on a subset of UNECE Rec. No. 20. Code should be specified if weight is specified - see Appendix A.8.	11		Code for Unit of measurement (UOM) of the gross weight  See Appendix E.2			
	- 10					See Appendix A.8		- 10 1							
	Specifie	dQuantity	Quantity of Goods Item	01	n13.n3	Quantity of goods item - Either gross weight or quantity must be illed in	01	n18.n4	filled in	11		Number of individual items packaged in such a way that they calloing the packing.			
		unitCode	Unit of measurement (quantity)	11	an3	Code for Unit of measurement (UOM) - according to UNECE UON code (UN Rec. No. 20). Code should be specified if weight is specified.  See Appendix A.9	d 11	an3	Code for Unit of measurement (UOM) - based on the full UNEC Rec. No. 20. Code should be specified if quantity is specified - see Appendix A.9	11		Code for Unit of measurement (UOM) - based on the full UNECI specified if quantity is specified  See Appendix E.2			
	_	argoDescription Identification	Description of Goods	110	an512	ioods description - Plain language description of the nature of a coods item sufficient to identify it for Customs, statistical or ransport purposes.	110	an3000	Goods description - Plain language description of the nature of a goods item sufficient to identify it for Customs, statistical or transport purposes.	110	an512	Boods description - Plain language description of the nature of a dentify it for Customs, statistical or transport purposes.			
	Physica	ShippingMarks		11		anispore purposes.	11		a a raport par poses.	11					
			Mark and Numbers on Packages	112	an512	ree form description of the marks and numbers on a transport user package. If blank, should be set to "No Marks"	_	an900	Free form description of the marks and numbers on a transport unit or package. If blank, should be set to "No Marks"	11	an1024	ree form description of the marks and numbers on a transport e set to "No Marks"			
						In the situation where the number and type of the packages, gross weight or shipping marks are consolidated for the whole consignment instead of by individual consignment items, the first occurrence of the IncludedConsigmentItem (tag 950) for the Description of the Physical Shipping Marks may contain a free for description of the details of the packages, total weight and / or shipping marks as they describe the whole consignment. To help identify this to the importing customs, the free form descriptions. The following provides an example:  "Total Gross Weight=100 Tonnes; Packages for the whole	n		In the situation where the number and type of the packages, gross weight or shipping marks are consolidated for the whole consignment instead of by individual consignment items, the first occurrence of the IncludedConsignmentItem (tag 950) for the Description of the Physical Shipping Marks may contain a free form description of the details of the packages, total weight and / or shipping marks as they describe the whole consignment. To help identify this to the importing customs, the free form descriptions. The following provides an example:  "Total Gross Weight=100 Tonnes; Packages for the whole			In the situation where the number and type of the packages, gn are consolidated for the whole consignment instead of by indivi- first occurrence of the IncludedConsigmentItem (tag 950) for the Shipping Marks may contain a free form description of the deta and / or shipping marks as they describe the whole consignment importing customs, the free form descriptions. The following prounding the form the following prounding the forms who in the following proundings: Shipping Marks on Packages - "Order 12345 for ABC C - Form E: increase length of the data element from 512 to 1024			



















	Electronic Form Certificate of Origin (COO)											
XMLTag Name (including level) Form D (update)				Guideline	Form AK			orm AK Guideline For				
0 1	2	3 4 5	Description	Cardinality	Format	Guidenire	Cardinality	Format	CAMUNIO STIEST NAME	Cardinality	Format	Guideline
Includ	edConsig	nmentitem		110000		Information pretaining to the goods being transported, may repe 1-10,000 times	110000	011.170	Information pretaining to the goods being transported, may repeat 1-10,000 times	11000		Information pretaining to the goods being transported, may rep
	Sequer	ceNumeric	Item Number	11	n5	Item Number (N5) - Sequence number differentiating a specific goods item within a consignment.	11	n5	Item Number - Sequence number differentiating a specific good item within a consignment.	11	n4	Item Number - Sequence number differentiating a specific good
	Import	FypeCode	HS Code / Tariff Code	11	an10	HS Code of importing country - may be 8 digits or 10 digits depending on the importing coutnry requirements. This is the cocspecifying a type of goods for Customs, transport or statistical purposes (generic term).	11	an10	HS Code of importing country - may be 8 digits or 10 digits depending on the importing coutnry requirements. This is the code specifying a type of goods for Customs, transport or statistical purposes (generic term).	11	an6	HS Code of importing country - may be 8 digits or 10 digits depe requirements. This is the code specifying a type of goods for Cu- purposes (generic term).
	FreeOr	BoardValueAmount	Value (FOB)	01	n13.n3	'alue (FOB) - Monetary amount that has to be or has been paid a alculated under the applicable trade delivery.	01	n27.n5	Value (FOB) - Monetary amount that has to be or has been paid as calculated under the applicable trade delivery.	01	n13.n3	/alue (FOB) - Monetary amount that has to be or has been paid pplicable trade delivery.
		currencyId	Currency code (FOB Value)	AA	as	Currency code - as defdined by ISO 4217 (3 char code), UN/ECE R No. 9. Currency should be specifed if FOB value is specified See Appendix A.7	c. 11	a3	Currency code - as defdined by ISO 4217 (3 char code), UN/ECE Rec. No. 9. Currency should be specifed if FOB value is specified see Appendix A.7.	01	85	currency code - as defdined by ISO 4217 (3 char code), UN/ECE specified if FOB value is specified - see Appendix A.7.
	GrossV	eightMeasure/	Gross Weight (or other quantity)	01	n13.n3	Fross weight - Weight (mass) of goods item including packaging to excluding the carrier's equipment. Either gross weight or quantity must be filled in	t 01	n18.n4	Gross weight - Weight(mass) of goods item including packaging but excluding the carrier's equipment. Either gross weight or quantity must be filled in	11	n13.n3	iross weight - Weight(mass) of goods item including packaging equipment. Either gross weight or quantity must be filled in
		unitCode	Unit of measurement (Gross weight)	11	an3	Code for Unit of measurement (UOM) of the gross weight - according to UNECE UOM code (UN Rec. No. 20). Code should be specified if weight is specified	11	an3	Code for Unit of measurement (UOM) of the gross weight - based on a subset of UNECE Rec. No. 20. Code should be specified if weight is specified - see Appendix A.8.	11		Code for Unit of measurement (UOM) of the gross weight  See Appendix E.2
						See Appendix A.8						
	Specifi	edQuantity	Quantity of Goods Item	01		Quantity of goods item - Either gross weight or quantity must be illed in	01	n18.n4	filled in	11		lumber of individual items packaged in such a way that they ca loing the packing.
		unitCode	Unit of measurement (quantity)	11	an3	Code for Unit of measurement (UOM) - according to UNECE UON code (UN Rec. No. 20). Code should be specified if weight is specified.  See Appendix A.9	d1	an3	Code for Unit of measurement (UOM) - based on the full UNEC Rec. No. 20. Code should be specified if quantity is specified - see Appendix A.9	11	an3	Code for Unit of measurement (UOM) - based on the full UNECI specified if quantity is specified  See Appendix E.2
						эес препакт.э						See Appendix E.E.
	Goods	CargoDescription		11			11			11		
		Identification	Description of Goods	110	an512	isoods description - Plain language description of the nature of a coods item sufficient to identify it for Customs, statistical or ransport purposes.	110	an3000	Goods description - Plain language description of the nature of a goods item sufficient to identify it for Customs, statistical or transport purposes.	110	an512	boods description - Plain language description of the nature of a dentify it for Customs, statistical or transport purposes.
	Physica	lShippingMarks		11			11			11		
			Mark and Numbers on Packages	112	an512	ree form description of the marks and numbers on a transport u or package. If blank, should be set to "No Marks"	t 112	an900	Free form description of the marks and numbers on a transport unit or package. If blank, should be set to "No Marks"	11	an1024	ree form description of the marks and numbers on a transport e set to "No Marks"
						In the situation where the number and type of the packages, groweight or shipping marks are consolidated for the whole consignment instead of by individual consignment items, the first occurrence of the IncludedConsigmentItem (tag 950) for the Description of the Physical Shipping Marks may contain a free for description of the details of the packages, total weight and / or shipping marks as they describe the whole consignment. To help identify this to the importing customs, the free form descriptions. The following provides an example:  "Total Gross Weight=100 Tonnes; Packages for the whole	n		In the situation where the number and type of the packages, gross weight or shipping marks are consolidated for the whole consignment instead of by individual consignment items, the first occurrence of the IncludedConsignmentItem (tag 950) for th Description of the Physical Shipping Marks may contain a free form description of the details of the packages, total weight and / or shipping marks as they describe the whole consignment. To help identify this to the importing customs, the free form descriptions. The following provides an example:  "Total Gross Weight=100 Tonnes; Packages for the whole			In the situation where the number and type of the packages, gn are consolidated for the whole consignment instead of by indivifirst occurrence of the IncludedConsigmentItem (tag 950) for th Shipping Marks may contain a free form description of the deta and / or shipping marks as they describe the whole consignmen importing customs, the free form descriptions. The following prc "Total Gross Weight=100 Tonnes; Packages for the whole Consbundles; Shipping Marks on Packages - "Order 12345 for ABC C - Form E: increase length of the data element from 512 to 1024











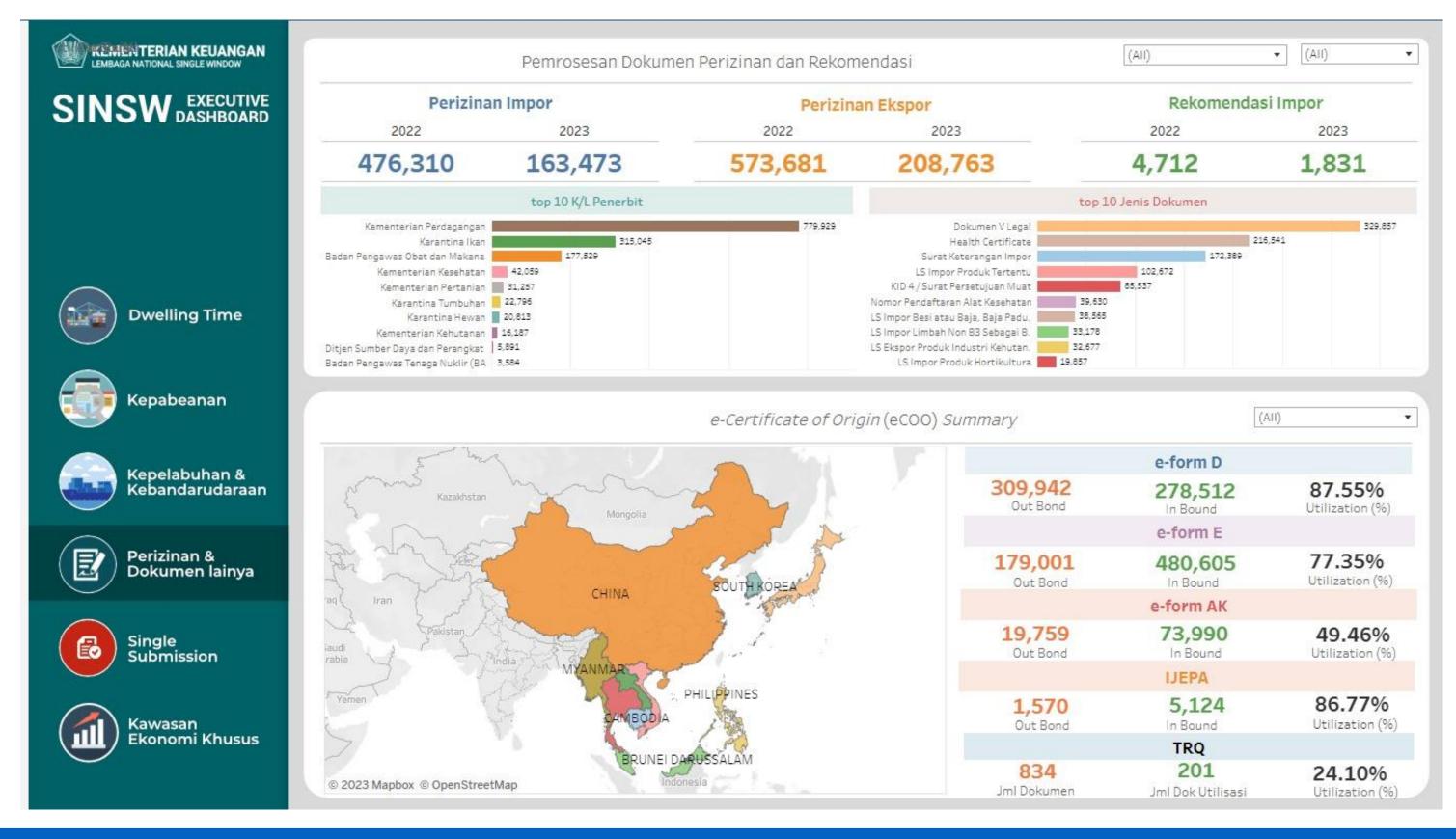






## OPPORTUNITIES ELECTRONIC CERTIFICATE OF ORIGIN DATA EXCHANGE

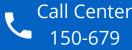




















## **Overview ELECTRONIC DATA EXCHANGE**





## WHAT

To Exchange

**MESSAGE IMPLEMENTATION GUIDE** 

### **DATA STANDARDIZATION**

Standardized and Compatible data format i.e. XML, JSON, EDI Format, PDF

### **DATA VALIDATION & MAPPING**

Properly validated and mapped data to match format and requirements in both Systems (Sender and Receiver) i.e. MIG, XSD, JSD



**TECHNOLOGY** 

or technology for

i.e. Email, FTP, EDI,

APIs, WebServices

electronic data

exchange

The best suits method

### **TRANSMISSION & ACKNOWLEDGMENT**

Establish mechanism to confirm and acknowledge data's integrity during completion of successful send, receive, process and store the data. i.e. MIG, XSD, JSD, ACK



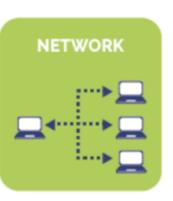
### **CONNECTION & DATA SECURITY**

Security measures to protect data during transmission i.e. Secure connection, Encryption, ACL, **Authentication** 

## FOUR KEY COMPONENTS OF EDI













## **ERROR HANDLING**

Establish error-handling procedures during transmission i.e. validation errors, system failures, network disruptions

#### **LOGGING & AUDITING**

Maintaining logs and records of transmissions for auditing, traceability and compliance purpose.

i.e. Logs, Transaction's History



**HOW** 

To Exchange









