



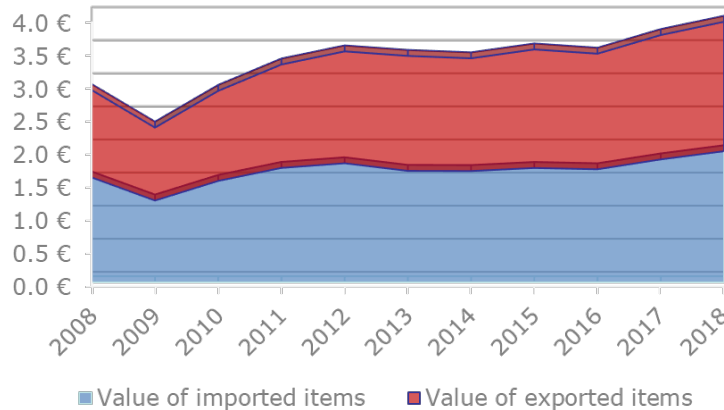
# **XIth International Seminar on Trade and Transport Facilitation DIGITAL TRANSFORMATION OF MULTIMODAL TRANSPORT USING THE UN/CEFACT REFERENCE DATA MODEL**

**Possibilities to use the standardization and  
digitalization of multimodal transport data  
exchange in the collection of information for  
regulatory controls**

## EU Single Window integrated environment for the international trade in goods: international context

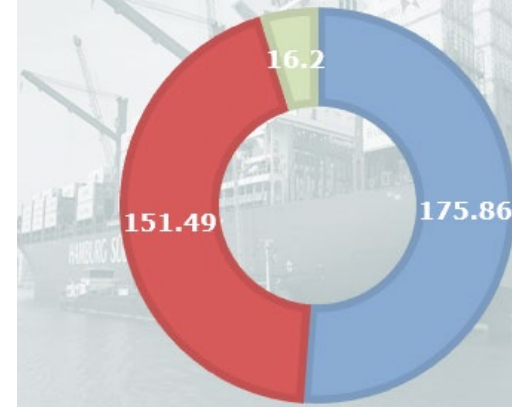
Increased trade flows

**Extra-EU trade since 2008**  
(value in trillion EUR)

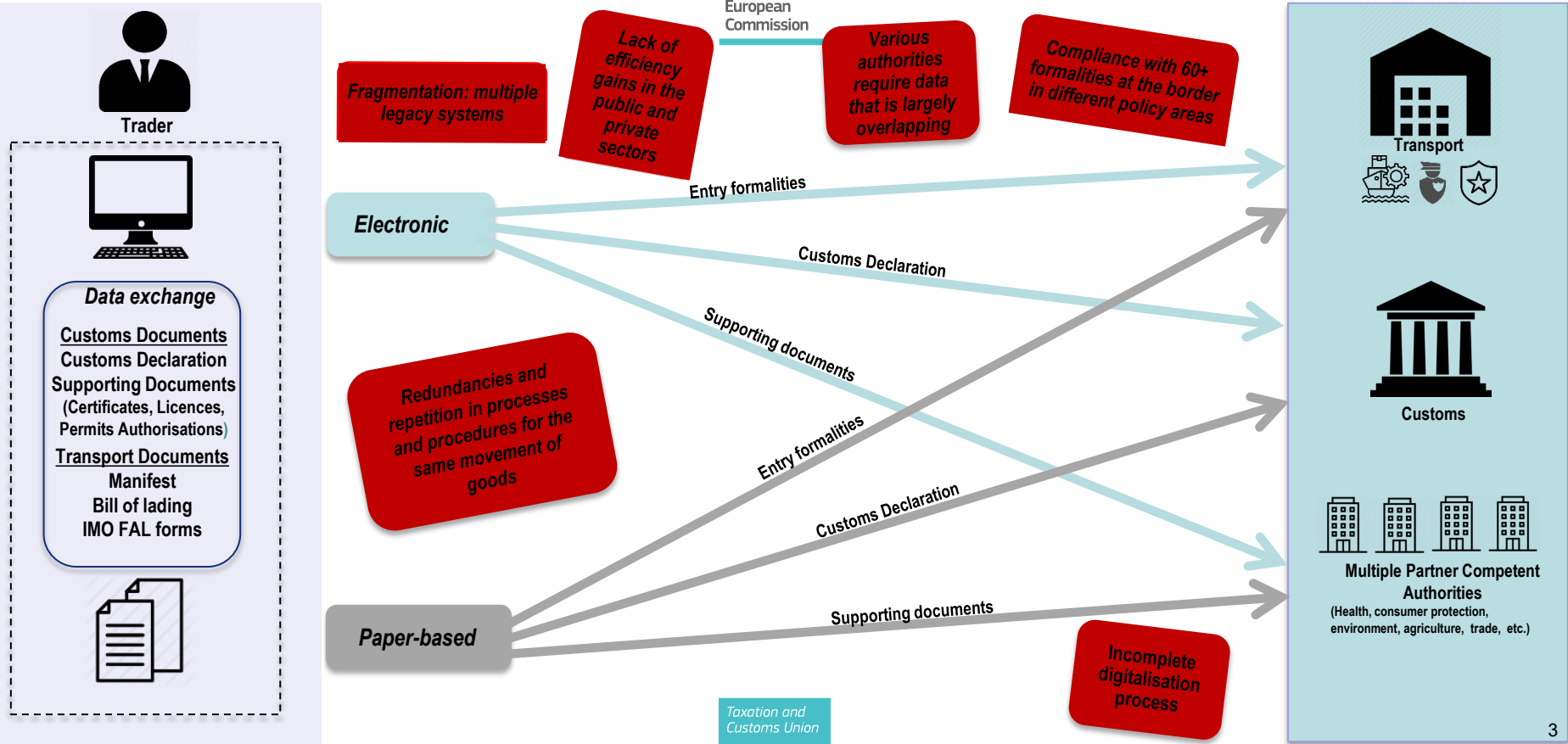


**DECLARATIONS IN 2018**  
(IN MILLIONS)

■ Import ■ Export ■ Transit



# Current situation : scene of EU regulatory formalities for traders



## WTO trade facilitation agreement pushes for the development of Single Windows

The EU is strongly committed to complying with the World Trade Organisation's (WTO) Trade Facilitation Agreement that entered into force on 22/02/2017 and foresees the establishment of a Single Window for the international trade in goods

### WTO TRADE FACILITATION AGREEMENT (TFA) (Art. 10.4)

4.1 Members shall endeavor 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.

## Key benefits of Trade Facilitation Agreement implementation: World Bank estimates

### Benefits of full implementation of Trade Facilitation Agreements:

US\$110 billion    US\$ 210 billion/year

Through reductions in time spent at customs

[Hillberry & Zhang 2015]

**Reduction of supply chain barriers:  
If all countries reduce halfway to global best  
practice (Singapore)**

**= + 4.7% Global GDP (US\$ 2.6 trillion)  
+14.5% World Trade (US\$ 1.6 trillion)**

(WEF 2103)

**Impact of  
delay prior to shipment:  
+ 1 day = - 1% trade**

[Djankov, Freund, & Pham 2006]

**Adoption of e-documentation for  
air cargo:  
= US\$12 billion annual savings  
through reduced paperwork  
related delays (70-80%)**

[WEF, WB and Bain & Company 2013]

## Political will

1

*The extension of the scope of current segmented initiatives needs a **Clear Mandate** and **follow-up action** during implementation by a **central leadership entity***

2

*The implementation requires the engagement of all DGs involved in cross-border movements to enable the implementation of a trans-European ecosystem for the fulfillment of EU regulatory formalities. The focus should be on coordinating and enhancing existing initiatives and put in place the full potential of cooperation between customs and partner competent authorities*



European  
Commission

# Interoperability

## Legal



Reduce, harmonise and fully digitalise requirements for economic operators

Enable the exchange/reuse of information between different competent authorities and regulatory requirements

## Organisational



Integrated end2end business process

EU SW integrated environment for international trade in goods will serve as an enabler for:

- Reporting only once principle
- One stop shop principle for physical controls
- Joint risk analysis where necessary

## Semantic



Convergence of data models and harmonised management strategy

## Operational



Unique identification for economic operators for international trade in goods (EORI)

Digital Signature and harmonised authentication solutions at EU level (eIDAS)

Central infrastructures

Formal technical specifications



## **Data issues – to ensure data coherence**

- *Importance of understanding data requirements in all "forms" concerned across modes of transport*
- *Need to "scientifically" map data of Customs declarations and all certificates against same reference standards*
- *Guide to do this in UN ECE recommendation 34 (data simplification and standardisation for international trade)*



# Methodology

- *(1) To capture a trade data inventory of government agencies concerned.*
- *(2) Define data: identify basic features for each data element*
- *(3) To analyse data*
- *(4) To reconcile data*

# (1) TO CAPTURE

- *To capture a trade data inventory of government agencies concerned*
- *Listing of agencies concerned*
- *Listing of each "form" concerned for each agency*
- *Identification of each data element in each form. (A spreadsheet or a database can be used)*

## (2) TO DEFINE: To identify basic features for each data element

- Agency element number
- Data element name
- Data element description
- Data type (numeric, alpha ...)
- Data domain Range of values.  
Ex: Country codes)
- International standard identifier (UNTDDED, WCO DM ...)
- Mode of transport concerned
- Process (export, transit, import ?)
- Category of use (is it for cargo, means of transport, crew ... ?)
- Legal permission to collect or view the data element
- Source of legal authority: (Regulation, MoU, ... ?)
- Expiration date of legal authority (if any)
- Data source (who provides it: trade, government, is it derived?)
- Trade source (what trading partner is the usual source?)
- Agency flow source (what government agency created this element?)
- Timing (when is data required, provided? Pre-arrival, arrival, release, post release ... ?)
- Remarks (for annotations)

## (3) TO ANALYSE

- Example 1:
- Port of unloading
- Port of unloading
- Domestic port of unloading
- Domestic port of unloading
- Foreign port of unloading
- Foreign port of unloading
- Port of discharge
- Similarity of names  
(unloading/unloading): Let us choose one, "unloading"
- Contextual meaning of Foreign / domestic
- (This can be derived by type of transaction) This can be disregarded
- Result: One DE replaces the original 6 entries

- Example 2:
- "exporter", "net mass":
- Different meanings in different areas: customs, other agencies ...
- Consequences:
- The definitions are aligned
- If not possible: different data elements have to be created, with different names and definitions
- Result: Clarification achieved

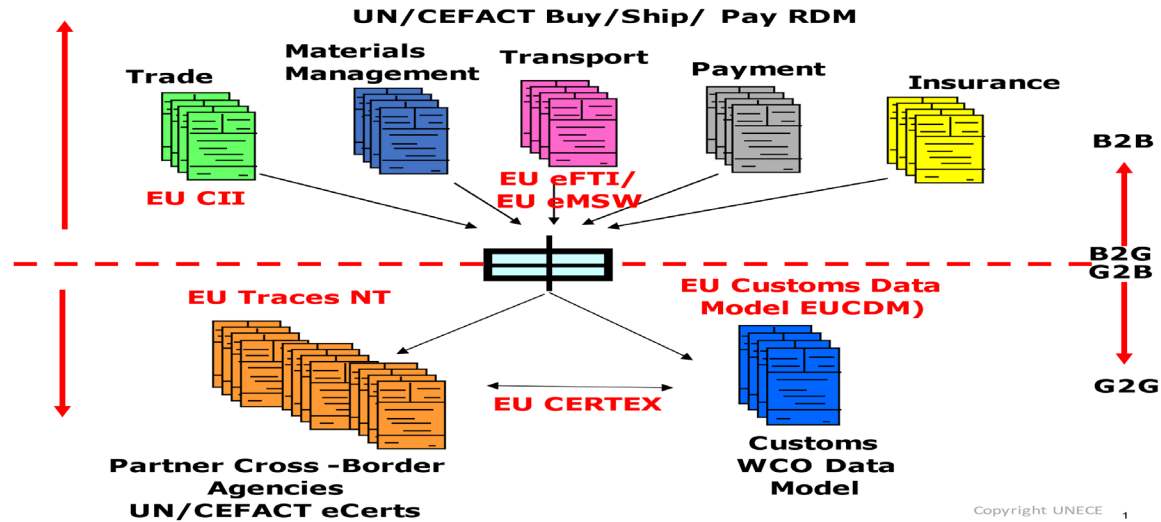
## (4) TO RECONCILE

- **Get agreement to use one data element name with a common definition / coding.**
- **Reconcile it with UNTDED, WCO DM, ...**
- The EU commission uses a dedicated software for data mapping
- which ensures the respect of international standards
- via the principle of inheritance (One can only build one's requirements on the basis of the standards chosen)
- The mapping done at EU level can be provided to other partners (MS, ...) to form the basis of their own ad hoc developments.
- Example in Customs world:
- The EU data model is based on the WCO data model.
- MS data models can be based on the EU data model.
- The consequences have to be taken with CS/RD (Central System / Reference Data) to ensure coherence with data mapping.



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## Single Windows Document Families European Union Perspective



**THANKS FOR YOUR ATTENTION**