

# TRADE

**Interoperability for data and document exchange in multimodal transport aligned to UN standards.**

**UN project to respond to the COVID-19 crisis**

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# **UNDA multiagency project in response to the COVID-19 crisis.**

## **ECE segment: multimodal data exchange harmonization using UN (UN/CEFACT) standards and reference data models**

Upgrading existing and developing data exchange standards for key documents accompanying cargo in different modes of transport

Based on UN/CEFACT Multimodal Transport Reference Data Model

Pilot applications: e.g. in a digital multimodal transport corridor or documents (FIATA B/L, air cargo, IWT)

**Key partners: UN organizations custodians of transport documents: UNECE, ICAO, IMO, etc., and work with key non-UN partners.**

## Ready standards or standards under preparation

1. Standardized data exchanges (executive guide; business requirement specification; business name structure; subset; CCL structure; XLS guideline structure; XSD schema; UML diagram; HTML index, using as a model the e-CMR standard) [www.unece.org/unecefact/mainstandards.html](http://www.unece.org/unecefact/mainstandards.html), already prepared for the following documents:

- eCMR
  - Cross Industry Invoice
  - Cross Industry Delivery
  - Cross Industry Catalogue
  - Cross Industry Quotation
  - Cross Industry Remittance Advice
  - Cross Industry Scheduling
  - Cross Industry Ordering Process
  - Material Safety Data Sheet Details (MSDS)
  - Contract Financial Execution Management
  - Market Research Information
  - Verified Gross Mass (VERMAS) documents
  - International Forwarding and Transfer documents
  - Smart container information
  - A number of agricultural certificates, accounting and other documents
- These standards you can find at [www.unece.org/trade/unecefact/mainstandards.html](http://www.unece.org/trade/unecefact/mainstandards.html)

2. Standardized data exchanges published in October 2020, making information already in the MMT-RDM more easily discoverable

- Provisional booking
- Firm booking
- Booking confirmation
- Shipping instructions
- Waybill
- Status report
- Status request
- Packing list
- RASFF (Rapid Alert for Security of Food and Feed)

(published at [www.unttc.org](http://www.unttc.org) and [www.unece.org/trade/unecefact/mainstandards.html](http://www.unece.org/trade/unecefact/mainstandards.html))

## Key documents accompanying goods (B2B)

3. Standardized data exchanges to support cross-modal cargo transfers

- Inland water transport contract document: IWT “Bill of Lading”; CMNI consignment note; etc.
- Maritime waybill.
- CIM/SMGS and SMGS Consignment Note;
- CIM/SMGS Wagon List (+ Commercial Act, etc.)
- eCERT (sanitary-phytosanitary certificates and basis for other certificates): aligned to the Buy-Ship-Pay Reference Data Model

4. Addition of dangerous goods and air cargo documents:

- **airwaybill,**
- **dangerous goods declaration, and**
- **consignment security declaration**

**Pivotal reference for all multimodal data in the e-docs based on UN/CEFACT standards & reference data models – Stakeholder agencies retain control over the documents and legal frameworks.**

# Seamless multimodal supply chain

## The transport chain

Transportation of a consignment through different modes

Invoice, packing list, certificate of origin

Bill of Lading IMO/FAL forms	CIM, SMGS	eCMR, eTIR	airwaybill, CSD
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Port community system



airport



Trip 1:  
sea

Trip 2:  
rail

Trip 3:  
road

Trip 4:  
air

Ship

Train

Truck

Airplane

Sea

Country 1, 2

Country 2

shipper, forwarder

transport operator,  
freight forwarder

captain, operator,  
driver, pilot

regulatory controls

Consignment information

B2B

To be fed into regulatory Single Window and other systems processing export and import declarations, transit documents

Information for goods control

# Example of mapping of data in documents accompanying goods in different modes of transport (data matrix)

	A	B	C	D	E	F	G	H	I	J	K
1	Level	BIE Type	BN	MMT ITIGG IFTM P_P	eCMR	Maritime BoL	CIM-SMGS Consignment Note	CIM-SMGS Consignment Note under UR	Wagon List	Inland Waterway BoL	FIATA BoL
223	3	ASBIE	Transport Dangerous Goods	X	X	X	X	X	X	X	X
224	4	BBIE	UNDG ID	X	X	X	X	X	X	X	X
225	4	BBIE	Regulation Code	X	X	X	X	X		X	
226	4	BBIE	Regulation Name				X	X			
227	4	BBIE	Technical Name	X	X		X	X			
228	4	BBIE	Information	X		X	X	X		X	
229	4	BBIE	EMS ID	X		X	X			X	
230	4	BBIE	TREM ID	X			X				
231	4	BBIE	Upper Part Orange Hazard Placard ID	X	X		X				
232	4	BBIE	Lower Part Orange Hazard Placard ID	X	X						
233	4	BBIE	MFAG ID	X			X				
234	4	BBIE	Packaging Danger Level Code	X	X	X	X	X		X	
235	4	BBIE	Marking Text	X		X	X			X	
236	4	BBIE	Packing Instruction Type Code	X		X		X		X	
237	4	BBIE	Gross Weight					X			
238	4	BBIE	Hazard Classification ID	X		X	X	X		X	X
239	4	BBIE	Hazard Class Version ID	X		X				X	
240	4	BBIE	Net Weight				X	X			
241	4	BBIE	Proper Shipping Name	X	X						
242	4	BBIE	Package Type Code				X	X			

On the project web site ([unttc.org](http://unttc.org)), we upload information on the standards and tools at <https://unttc.org/stream/electronic-trade-and-transport-documents-and-data>

# unttc.org web site



UNTTC

Transport and trade connectivity in the age of pandemics

- About
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- Contact

## Working together to better respond to pandemics through resilient supply chains, transport and trade.



### Contactless solutions

It aims at minimizing physical contact among people in cross-border supply chains by facilitating the flow of goods without spreading the virus.

eTIR International System application / Interagency multidisciplinary Advisory Group

Electronic trade and transport documents and data

Supporting the implementation of automated road and rail solutions

Support to implementing best practices in TF in times of crisis and epidemic



### Seamless connectivity

It focuses on eliminating obstacles to cross-border trade and transport operations arising from the COVID-19 crisis.

UNCTAD/ ASYCUDA Guidelines

Cross-border processes performance management – ASYPM

Facilitate Humanitarian aid flows through efficient and managed coordination – ASYREC

Key international commercial law implications

National TF Committee coordination: general

National TF Committees coordination: best practices in times of crisis and epidemic

National TF Committees: ECE

TRAINS online NTM portal & training

Analysis of NTMs introduced as part of the broader COVID-19 containment effort



### Collaborative solutions

It seeks to strengthen regional and sectoral cooperation to facilitate joint actions and solutions in responding to the COVID-19 pandemic.

Asia Pacific Region

Africa Region

West Asia Region

Latin America and the Caribbean Region

Europe and Central Asia Region

Regional Trade Facilitation coordination

Port resilience against invisible threats

Maritime Supply Chain Resilience Tracker and KPIs

## Documents

### Dnieper – Danube Corridor Pilot Dataset Alignment to International Standards and Data Models and Documents Implementation Prototypes for Use in Eastern Europe

Fulfilling the recommendations of the 2019 and 2020 UNECE "Odessa" seminars to support the development of digital multimodal transport corridors, with a view to increasing the harmonization and standardization of data exchange in international transport, trade and logistics to encourage electronic data exchange and thereby to reduce person-to-person contacts during the COVID-19 crisis and in the post-pandemic recovery, using relevant UN/CEFACT standards, a pilot project under the overall UN Development Account project "Transport and Trade Connectivity in the Age of Pandemic: United Nations solutions for contactless, seamless and collaborative transport and trade produced the following results:

- Analysis of data and documents transported via the Dnieper – Danube route (as a pilot implementation project);
- Development of electronic document equivalents for Inland Water Transport using the DAVID forms of the Danube Commission for inland waterways;
- Analysis of the feasibility of using API in this corridor;
- Test for interoperability.

The aim is to foster the harmonization of electronic data sharing using global (UN/CEFACT) standards for transport, trade and logistics, and to prepare standards for e-documents based on the UN/CEFACT semantic standards and reference data models. The focus will be on the development of electronic document equivalents for the documents mentioned above, using UN/CEFACT tools in the countries developing a digital multimodal transport corridor.



### Phytosanitary Certificate Standard Package

The Phytosanitary Certificate Standard Package was developed as part of the United Nations response to the challenges of the COVID-19 pandemic under the United Nations multi-agency project "Transport and Trade Connectivity in the Age of Pandemic: UN solutions for contactless, seamless and collaborative transport and trade".

This electronic document equivalent Standard Package consists of the following elements:

- UML Diagram
- XSD Schema
- Guideline Structure
- HTML



## Activities

### Tenth International Seminar on Trade and Transport Facilitation: Multimodal Transport Data Exchange, Digital Transport Corridors, and Trade Facilitation

27 - 29 Apr 2020

UNECA  
United Nations Economic Commission for Africa

UNECE  
United Nations Economic Commission for Europe

## News

17 March 2021



Road freight in ASEAN: New COVID-19 Response and

### Third Technical Cooperation Workshop for the Western Balkans: Single Window and Data Sharing in the Western Balkans

27 - 28 Oct 2020

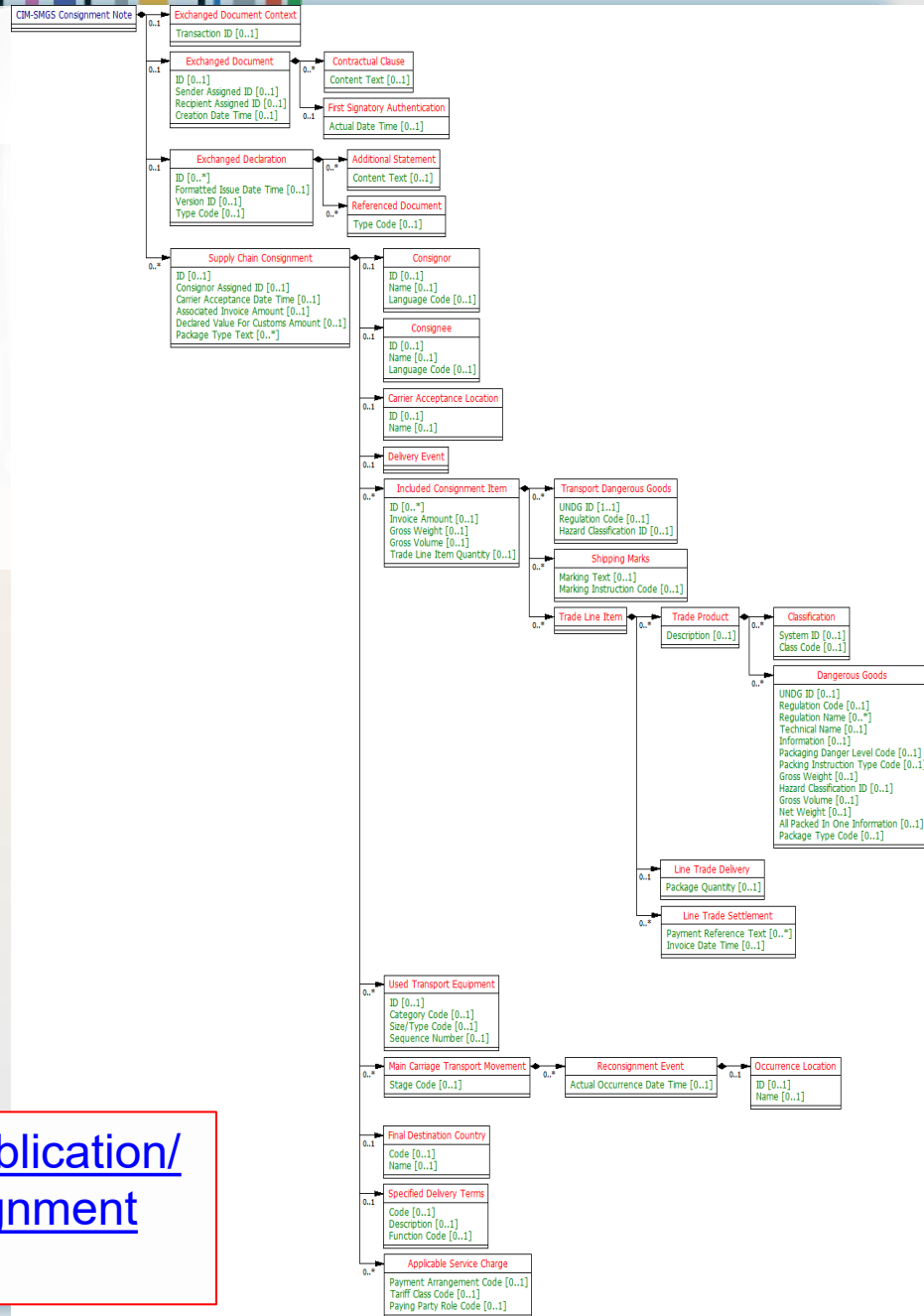
**For example:  
the CIM-SMGS railway consignment note referenced to the UN/CEFACT Multi-Modal Transport Reference Data Model, according to the prepared XML schema for CIM-SMGS**

**Subsets for the CIM-SMGS consignment note and the consignment note under UNECE's work on the Unified Railway Law (URL) developed**

**MS Excel and UML diagram, XSDs and html publication prepared**

**Standards for CIM/SMGS wagon list finalized**

[https://service.unece.org/trade/uncefact/publication/Transport and Logistics/CIM-SMGS Consignment Note/HTML/001.htm](https://service.unece.org/trade/uncefact/publication/Transport%20and%20Logistics/CIM-SMGS%20Consignment%20Note/HTML/001.htm)



# On data sharing: next steps

- **In general**
  - Use the project's products (standards) in real world business practices.
  - Dangerous goods declarations for various modes – can be combined in the same data set / data model
  - Moving from exchange of documents to exchange of data.
- **Implementation pilot projects:**
  - Electronic FIATA Bill of Lading; possible further FIATA documents.
  - Exports of wood and cellulose from Belarus to Serbia via rail, road, sea and inland transport.
  - Possible further pilots: Eurasian Economic Union; Ukraine-Georgia-Azerbaijan
  - Developing data models for digital MMT corridors as subsets of MMT RDM?
- **Capacity-building:**
  - Guide on how to use the standards for real world documents
  - Upcoming: 11<sup>th</sup> UNECE Odessa seminar on trade facilitation and digitalization of multimodal corridors 26-28 May 2021
  - 4<sup>th</sup> Western Balkan seminar on the Single Window and data sharing





**Pilot case – Dnieper-Danube (sea, railway, road, inland waterways)**

# Thank you!

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