

Standards for trade and multimodal transport data exchange

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UNECE and UN/CEFACT

UNECE – one of five UN Regional Economic Commissions

UN Centre for Trade Facilitation and e-Business (UN/CEFACT)
a UNECE subsidiary body.

Objectives

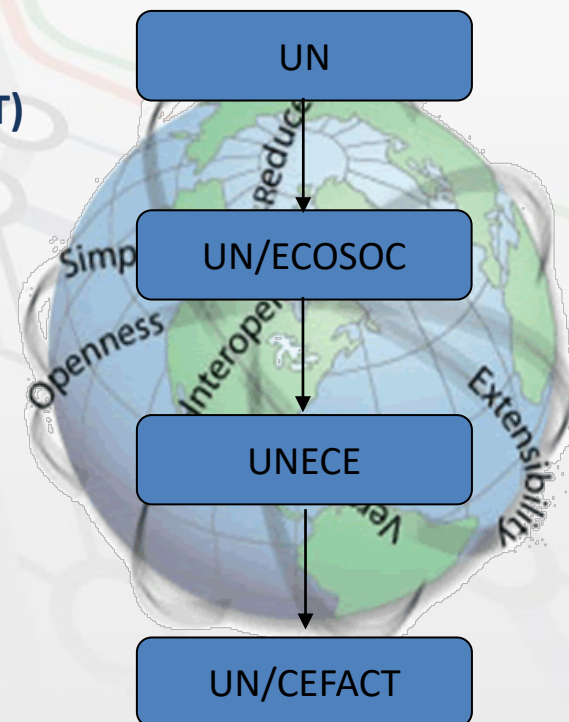
- Simple, transparent and effective processes for global business
- Efficient and automated exchange of information

Outputs

- Global Trade Facilitation and Electronic Business Recommendations and Standards

Means

- Public-Private Sector Partnership
 - over 400 experts from government and business
- Experts meet via internet every week plus two Forums per year



Global Remit

Multi-agency UN Development Account project in response to the COVID-19 crisis. UNECE segment: interoperability of multimodal data exchange using UN/CEFACT standards and reference data models

Upgrading existing and developing new data exchange standards for key documents accompanying goods in various modes of transport

based on UN/CEFACT's multi-modal transport reference data model

Pilot implementation projects: e.g., in a digital multimodal corridor or in various documents (e.g. the FIATA multimodal Bill of Lading, air cargo transportation documents, etc.)

Key partners: UNECE, ICAO, IMO, as well as EC, FIATA, OSJD, CIT, IATA, IRU, GUAM, TRACECA, BSEC, etc.

Digitalization of air cargo transport information as part of interoperability for multimodal data

UNDA project: unttc.org web site



UNTTTC

Transport and trade connectivity in the age of pandemics

[About](#)
[Partners](#)
[Highlights](#)
[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



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 Waterway Transport using the DAVID forms of the Danube Commission for inland waterways;
- Analysis of the feasibility of using API in this corridor;
- Trade for interoperability.

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



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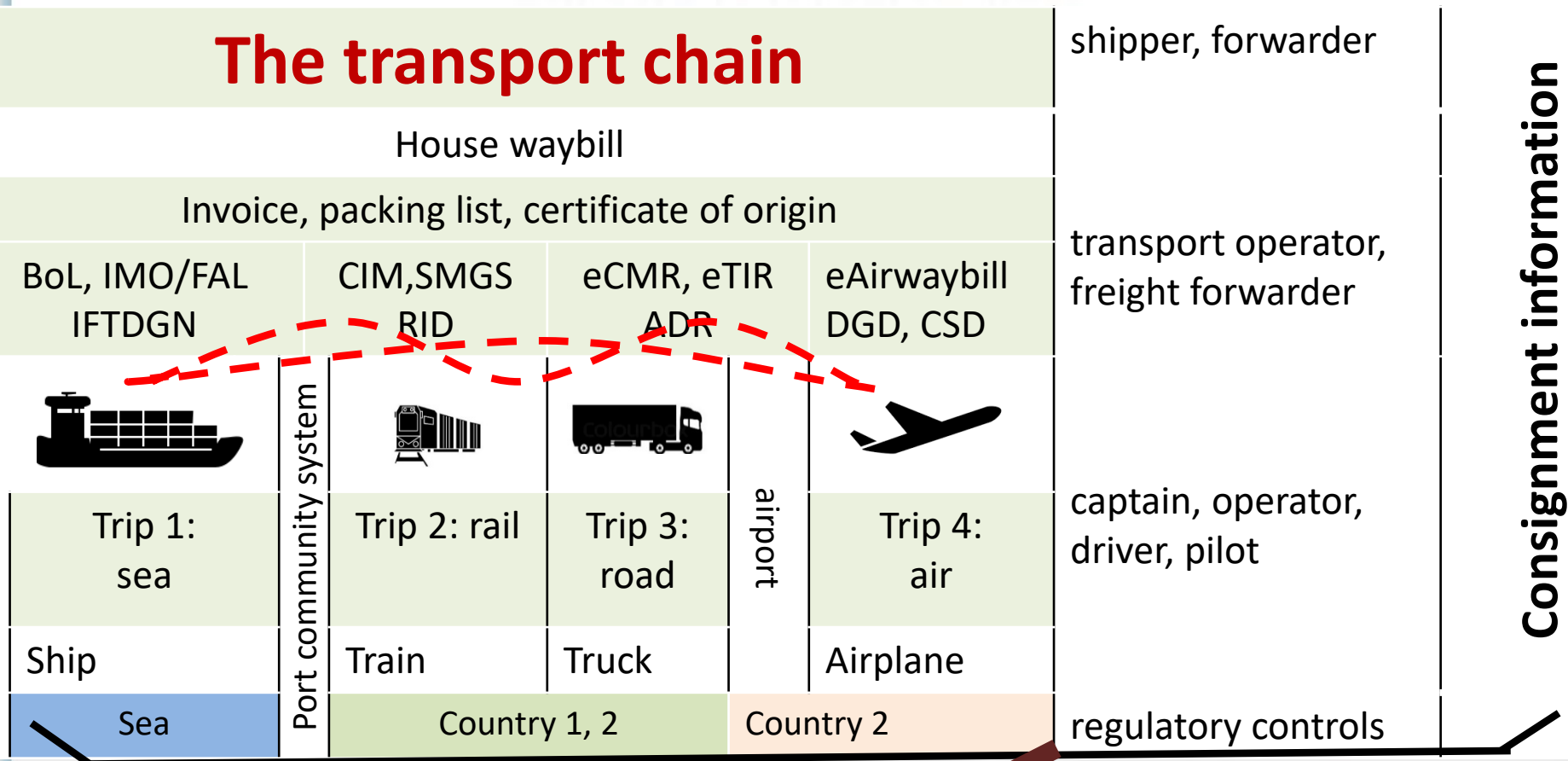
Modal Specific MMT-based Customizations: standards developed



information about the standards and tools: <https://unece.org/trade/uncefact/standards>
<https://unttc.org/stream/electronic-trade-and-transport-documents-and-data>

Seamless multimodal supply chain

The transport chain



B2G

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

Information for goods control

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, 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

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 and

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

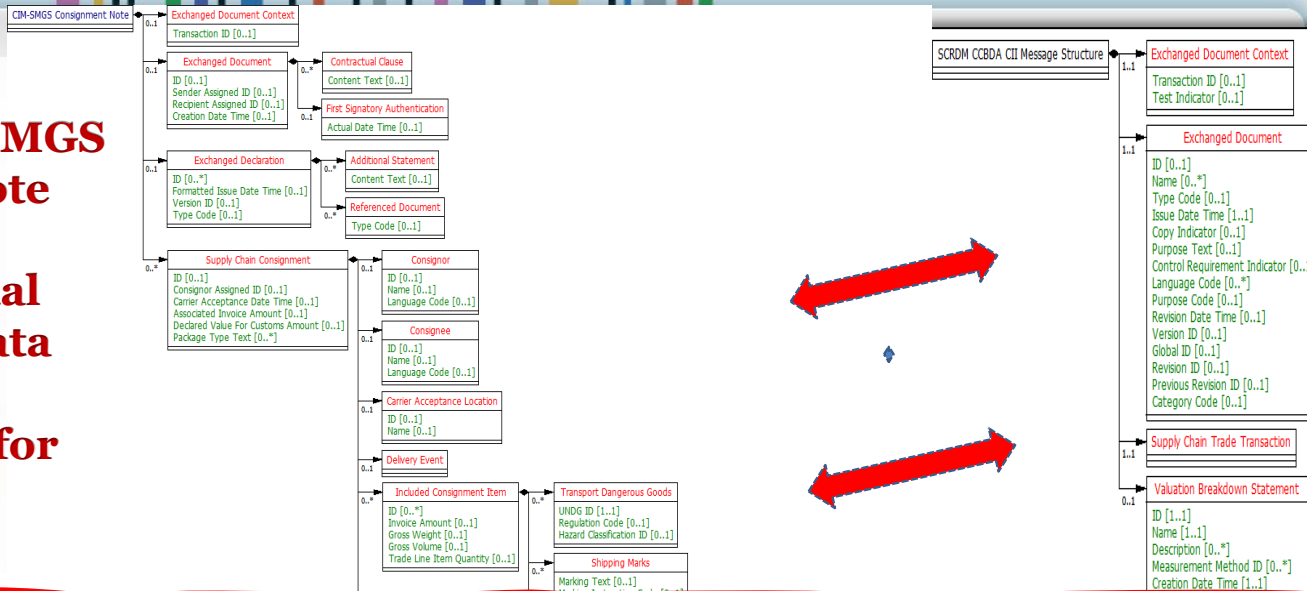
4. Air cargo and dangerous goods documents:

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

FIATA multimodal Bill of Lading + 3 more FIATA documents

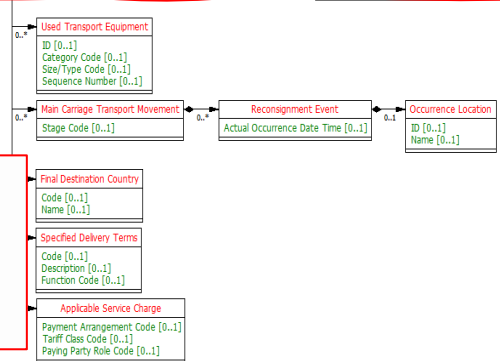
Common foundation for all multimodal data & e-docs: the UN/CEFACT standards & reference data models – Stakeholder agencies retain control over their documents and legal frameworks. EU’s eFTI Regulation uses MMT RDM

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



Transport data and documents can and are exchanged between modes and with other sectors

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)



Air: core mappings

DGD

AWB

CSD

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

(Provide at least two copies to the airline.)

Shipper	Air Waybill No.																
Consignee	Page of Pages																
SHIPMENT DETAILS																	
PASSENGER AND CARGO AIRCRAFT	CARGO AIRCRAFT ONLY																
NATURE AND QUANTITY OF DANGEROUS GOODS																	
<table border="1"> <thead> <tr> <th>UN or ID No.</th> <th>Proper Shipping Name</th> <th>Class or Division</th> <th>Packing Group</th> <th>Subsidiary Risk</th> <th>Quantity and Type of Packing</th> <th>Packing Inst.</th> <th>Authorization</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		UN or ID No.	Proper Shipping Name	Class or Division	Packing Group	Subsidiary Risk	Quantity and Type of Packing	Packing Inst.	Authorization								
UN or ID No.	Proper Shipping Name	Class or Division	Packing Group	Subsidiary Risk	Quantity and Type of Packing	Packing Inst.	Authorization										
<p>ADDITIONAL HANDLING INFORMATION: "Prior arrangements as required by IATA Dangerous Goods Regulations 1.3.3.1 have been made." Prepared according to ICAO/IATA.</p> <p>24hr. Emergency Contact No.</p>																	
<p>I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked, labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national government regulations.</p>																	
<p>FOR RADIOACTIVE MATERIAL SHIPMENT ACCEPTABLE FOR PASSENGER AIRCRAFT: THE SHIPMENT CONTAINS RADIOACTIVE MATERIAL INTENDED FOR USE IN OR INCIDENT TO RESEARCH, MEDICAL DIAGNOSIS, OR TREATMENT.</p>																	

STAPLE DOCUMENTS ABOVE PERFORMANCE

Air Waybill

Issued by

Consignor's Name and Address

Consignee's Name and Address

Issuing Carrier's Agent Name and City

Agent's IATA Code

Account No.

Airport of Departure (State of first Carrier) and requested Routing

Reference Number

Optional Shipping Information

Declared Value for Customs

No. of Pieces	Gross Weight	Net Weight	Net Class	Chargeable Weight	Rate	Charge	Total	Nature and Quantity of Goods (Unit, Dimensions or Volume)

Signature of Shipper or the Agent

Consignment Security Declaration

Regulated Entity Category (RA, KC or AD) and Identifier (of the regulated party issuing the security status)

Unique Consignment Identifier (if AWB format is non-relevant)

Contents of Consignment

Origin

Destination

Transfer/Transit points (if known)

Security Status

Reasons for issuing the Security Status

Received from (codes)

Screening Method (codes)

Grounds for Exemption (codes)

Security Status Issued on

Name of Person or Employee ID

Date (ddmmyy)

Time (HH)

Regulated Entity Category (RA, KC or AD) and Identifier (of any regulated party who has accepted the security status given to a consignment by another regulated party)

Additional Security Information

Air Foundation Common Data Elements

Modal dangerous goods data



RID (OTIF)
1082 pages

Air DGD

EDIFACT
ITFDGN

United Nations Directories
for Electronic Data Interchange for
Administration, Commerce and Transport



UN/EDIFACT

Common dangerous goods data elements

SHIPPER'S DECLARATION FOR DANGEROUS GOODS
(Provide at least two copies to the carrier)

Shipper		Air Waybill No.	
Consignee		Page of Pages	
Two completed and signed copies of this Declaration must be handed to the operator.		Shipper's Reference No. (optional)	
TRANSPORT DETAILS		WARNING	
This shipment is within the limitations prescribed for: (delete non-applicable)		Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable penalties. This Declaration, in circumstances, be completed by a consolidator, a forwarder, or an IATA cargo agent.	
Airport of Departure: PASSENGER AND CARGO AIRCRAFT CARGO AIRCRAFT ONLY		Airport of Destination: NON-RADIOACTIVE RADIOACTIVE	
NATURE AND QUANTITY OF DANGEROUS GOODS			
Dangerous Goods Identification			
UN or ID No.	Proper Shipping Name	Class or Division	Packing Group
ADDITIONAL HANDLING INFORMATION: Prior arrangements as required by IATA Dangerous Goods Regulations 1.3.3.1 have been made. Prepared according to ICAD/IATA. 24hr. Emergency Contact No.			
I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked, labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national government regulations.		Name/Title of Signatory	
FOR RADIOACTIVE MATERIAL SHIPMENT ACCEPTABLE FOR PASSENGER AIRCRAFT: THE SHIPMENT CONTAINS RADIOACTIVE MATERIAL INTENDED FOR USE IN OR INCIDENT TO RESEARCH, MEDICAL DIAGNOSIS, OR TREATMENT.		Place and Date	
		Signature (see WARNINGS above)	

MULTIMODAL DANGEROUS GOODS FORM (right edge black hatchings)

1. Shipper/Consignee/Sender		2. Transport document number	
3. Page 1 of ... Pages		4. Shipper's reference	
5. Freight forwarder's reference		6. Consignee	
7. Carrier (to be completed by the carrier)		8. Shipper's Declaration	
9. Additional handling information		10. This shipment is within the limitations prescribed for: (delete non-applicable)	
PASSENGER AND CARGO AIRCRAFT		CARGO AIRCRAFT ONLY	

13. Shipping marks * Number and kind of packages, description of goods, Gross mass (kg) Net mass (Cube m³)

14. FOR DANGEROUS GOODS: you must specify: UN No., proper shipping name, hazard class, packing group (where assigned) and any other element information required under applicable national and international regulations.

15. Container identification No. (vehicle reg. attribution No.)	16. Seal number (s)	17. Container/vehicle size & type	18. Tare (kg)	19. Total gross mass (including tare) (kg)
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CONTAINER/VEHICLE PACKING CERTIFICATE
I hereby declare that the goods described above have been pre-packaged from the container/vehicle identified above in accordance with the applicable provisions.
MUST BE COMPLETED AND SIGNED FOR ALL CONTAINER/VEHICLE LOADS BY PERSON RESPONSIBLE FOR PACKING/LOADING

20. Name of company	Hauler's name	22. Name of company (OF SHIPPER PREPARING NOTE)
Name/Status of declarant	Vehicle reg. no.	Name/Status of declarant
Place and date	Signature and date	Place and date
Signature of declarant	DRIVERS SIGNATURE	Signature of declarant

SOURCE: TBG3 Transport

Message Type : ITFDGN
Version : D
Release : 14A
Contr. Agency: UN
Revision : 8
Date : 2014-04-30

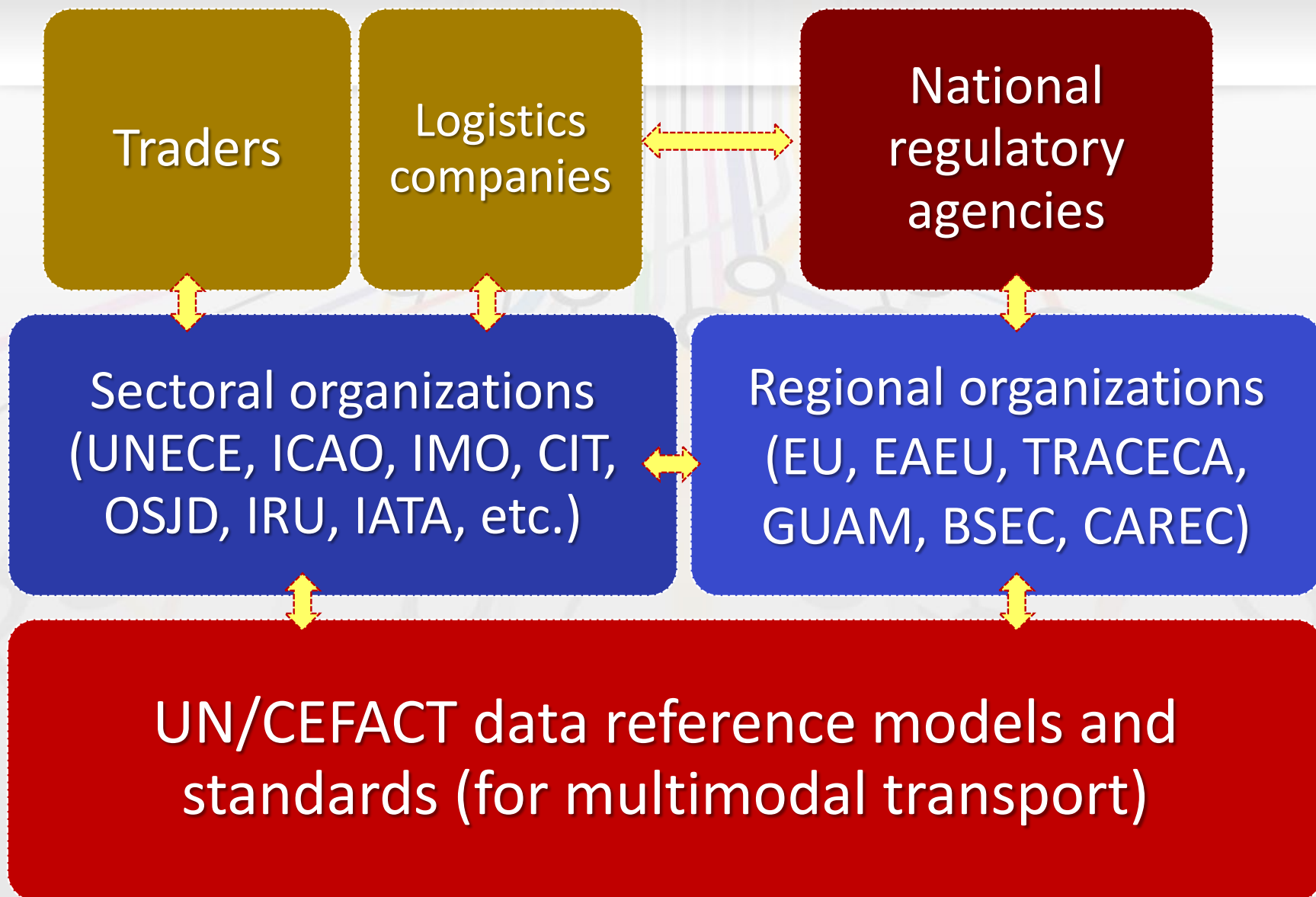
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Dangerous goods notification message

- 0. INTRODUCTION
- 1. SCOPE
 - 1.1 Functional definition
 - 1.2 Field of application
 - 1.3 Principles
- 2. REFERENCES

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** See 5.4.2.



Thank you!

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