

63rd session of the UNECE Working Party on Inland Water Transport
INTEGRATION OF INLAND WATER TRANSPORT IN MULTIMODAL
TRANSPORT AND LOGISTICS CHAINS
Geneva, 6 Nov. 2019

A Standard Set of Data and Transport Documents in the context of Single Window and Data Pipeline

**Mario Apostolov, Regional Adviser,
UNECE Economic Cooperation and Trade Division,
mario.apostolov@unece.org**

- **Traders fill in appr. 40 documents to 40 different agencies with often repeated data**
 - **The aim of trade facilitation is to reduce red tape**
 - **Reusing the available information**
 - **The information on trade flows comes from business (incl. transport)**
- **An idea to create a set of transport documents or a common data set for multimodal exchange, considering the Viking Corridor (Odessa – Klaipeda: Ukraine-Belarus-Lithuania)**
- **Prepare a standardised data set aligned with the UN/CEFACT Multimodal Transport Reference Data Model (MMT RDM) and the European Union Customs Data Model (EUCDM).**

Single Window planning algorithm inc. interoperability

Level 1: Paperless Customs + e-payment of Customs duties + full container load electronic lists + risks taken into account

Level 2: Connection with the IT systems of other public regulatory bodies (aligning the paperless Customs with additional documents – e-certificates and e-permits)

Level 3: Electronic document interchange between stakeholders within the Port Community Systems (e.g. sea and air)

Level 4: Integrated national logistics platform where traders and providers of services related to logistics are exchanging the relevant information

Level 5: Regional system of electronic data exchange

Regional system of electronic data exchange or cross-border paperless trade

National electronic logistics platform

Traders

Port Community Systems data exchange

Banks – for misc. electronic payments

Insurance companies

Other public regulatory bodies exchange e-permits and e-certificates
Paperless Customs

NSW

Forwarders and providers of services related to logistics

Airlines

Free Trade Zones

Airport/Port Administration etc.

Vessel agents

Terminal operators

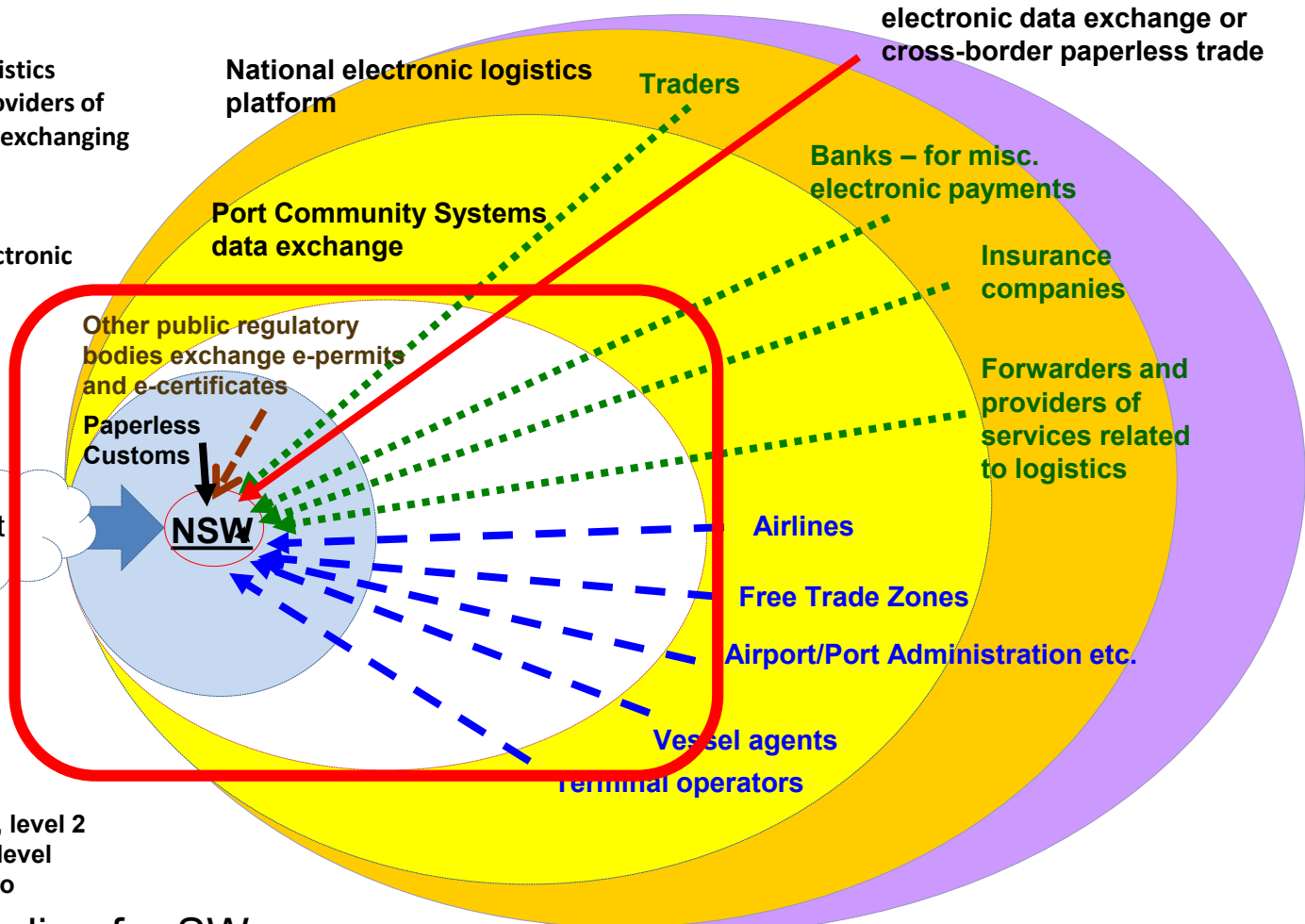


Internet

Importer/Exporter/ Customs broker/ Intermediary/ other stakeholders

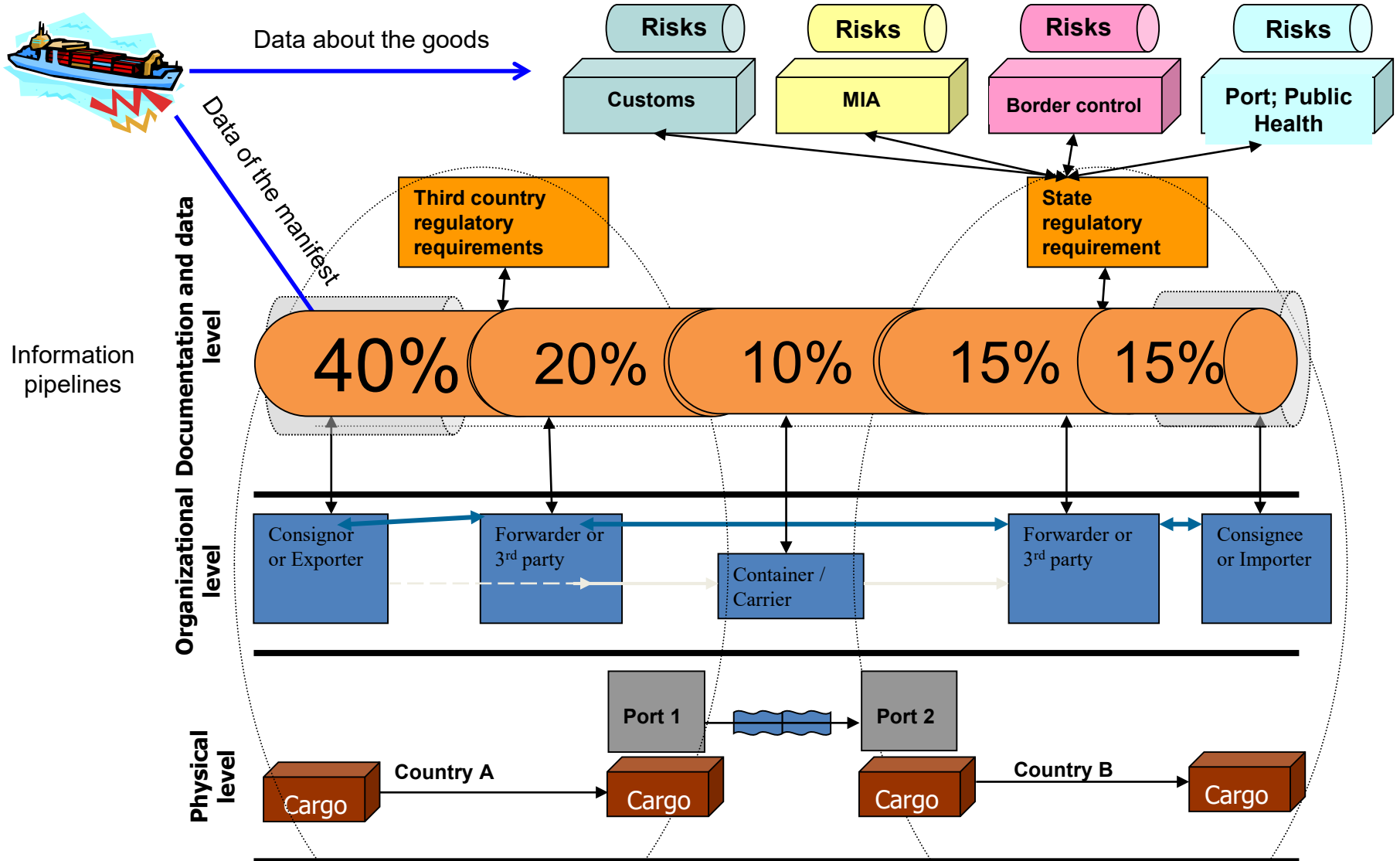
Attention: in some countries, level 2 has been developed prior to level one, or level three prior to two

Source: UNNEXt Guideline for SW






Related concepts : data pipeline





Future Customs and International trade systems (David Hesketh and others)



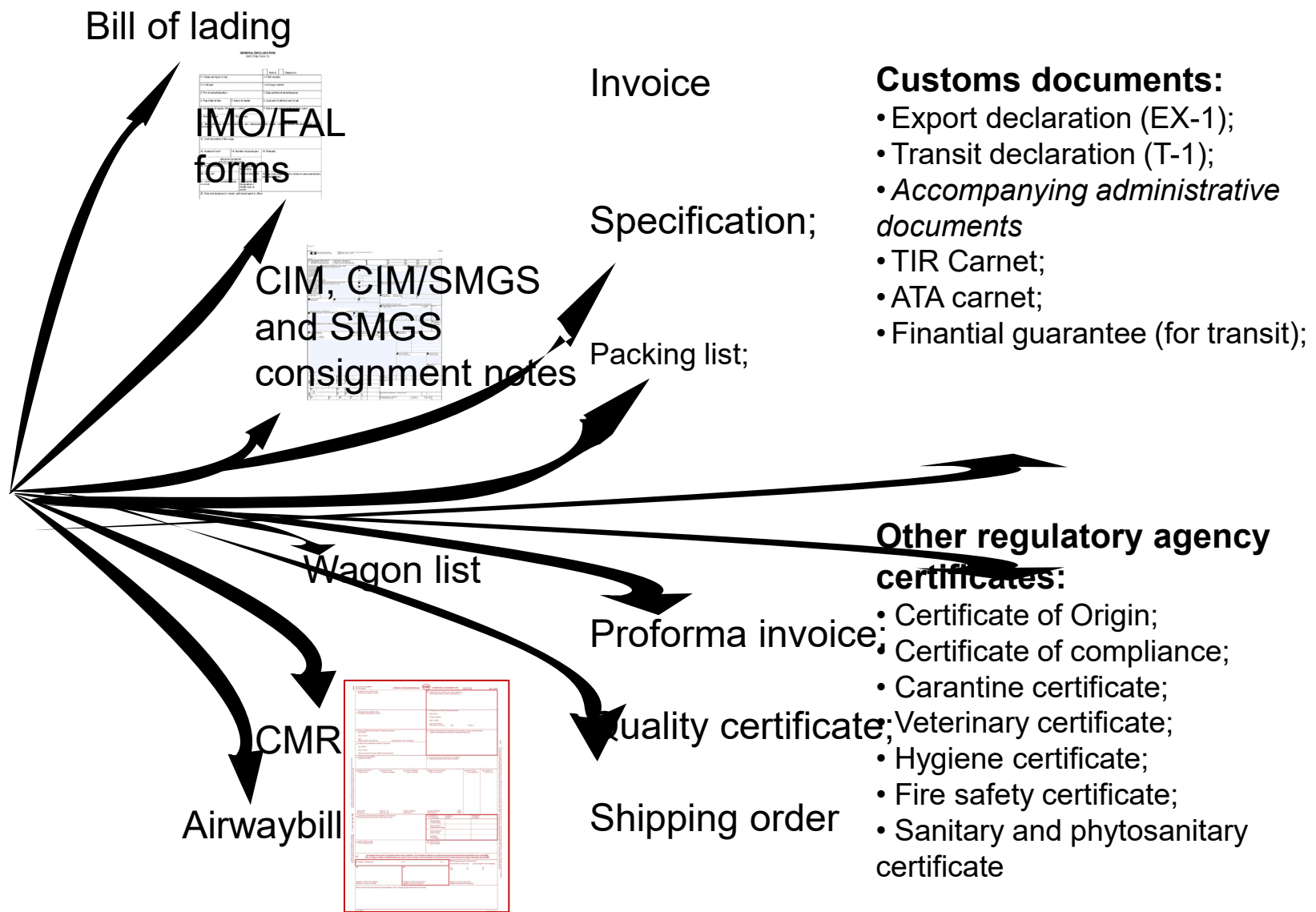
Seamless multimodal supply chain

Supply				Shipper, forwarder
Shipment – preparation for transportation				
Bill of Lading IMO/FAL forms	Bill of Lading eCMR, etc.	eCMR eTIR, TIR carnet		Transport operator
Invoice, package list, certificate of origin				Freight forwarder
	Port Community System			
Trip 1: sea		Trip 2: inland water transport	Trip 3: road	Skipper, driver
Ship		Ship	Truck	
Sea		Country 1, 2	Country 2	Regulatory agency

Seamless multimodal supply chain

Supply					Shipper, forwarder
Shipment – preparation for transportation					
Bill of Lading IMO/FAL forms	BoL, eCMR	CIM, SMGS	eCMR eTIR, TIR carnet		Transport operator
Invoice, package list, certificate of origin					Freight forwarder
	Port Community System				
Trip 1: sea		Trip 2: inland water	Trip 3: rail	Trip 4: road	Skipper, driver
Ship		Ship		Truck	
Sea		Country 1, 2	Country 2		Regulatory agency

WCO No	UNTD ED	UNTTED DEFINITION
001	1001	Code specifying the name of a document such as 352 for Proforma invoice, 380 for Commercial invoice.
071, 239 - 245 (address)	3336	Name of the party consigning goods as stipulated in the transport contract by the party ordering transport.
072	3337	To identify the party consigning goods as stipulated in the transport contract by the party ordering transport.
	3446	To identify a number assigned to a party by a tax authority.
N/A	N/A	N/A
013	1166	The number of loading lists, manifests or similar documents.
228	7240	Count of the total number of goods items within a consignment.
146	7370	Count of total number of packages referred to as one consignment.
009	1097	Reference assigned by a trader to identify



Multimodal corridor approach

General transport documents:

- SMGS, CIM/SMGS or CIM Consignment Note;
- CIM / SMGS Wagon List (Appendix 7.2 to point 20)
- Container List (Appendix 7.4 to point 20)
- Handover sheet (Appendix 3 to SI to SMGS) <https://www.cit-rail.org>
- CMR, (eCMR);
- Air waybill (eAir waybill);
- Bill of Lading - B/L (e B/L)) and

Additional accompanying documents and

- Invoice;
- Specification;
- Packing list;
- Proforma invoice;
- Certificate of Quality.
- Shipping order (export and transit)

Customs Documents

- Export Declaration
- Transit Declaration
- Administrative Document (AAD)
- TIR Carnet
- TIR Transport Document
- TIR Transport Document for transit);

OGA Documents

- COC
- Certificate of Safety or Compliance;
- Quarantine Certificate;
- Veterinary Certificate;
- Hygienic Certificate;
- Fire Safety Certificate;
- Sanitary and Phytosanitary Certificates.

Align data in these documents with UN/CEFACT reference data models and WCO data model

UN/CEFACT eCMR

multimodal transport semantic data
model (MMTDM)
(subset of Buy-Ship-Pay DM)

Multimodal transport (MMT)
basic message structure

eCMR message model

XML syntax of eCMR schema

UN/CEFACT Cross- industry Invoice (CII)

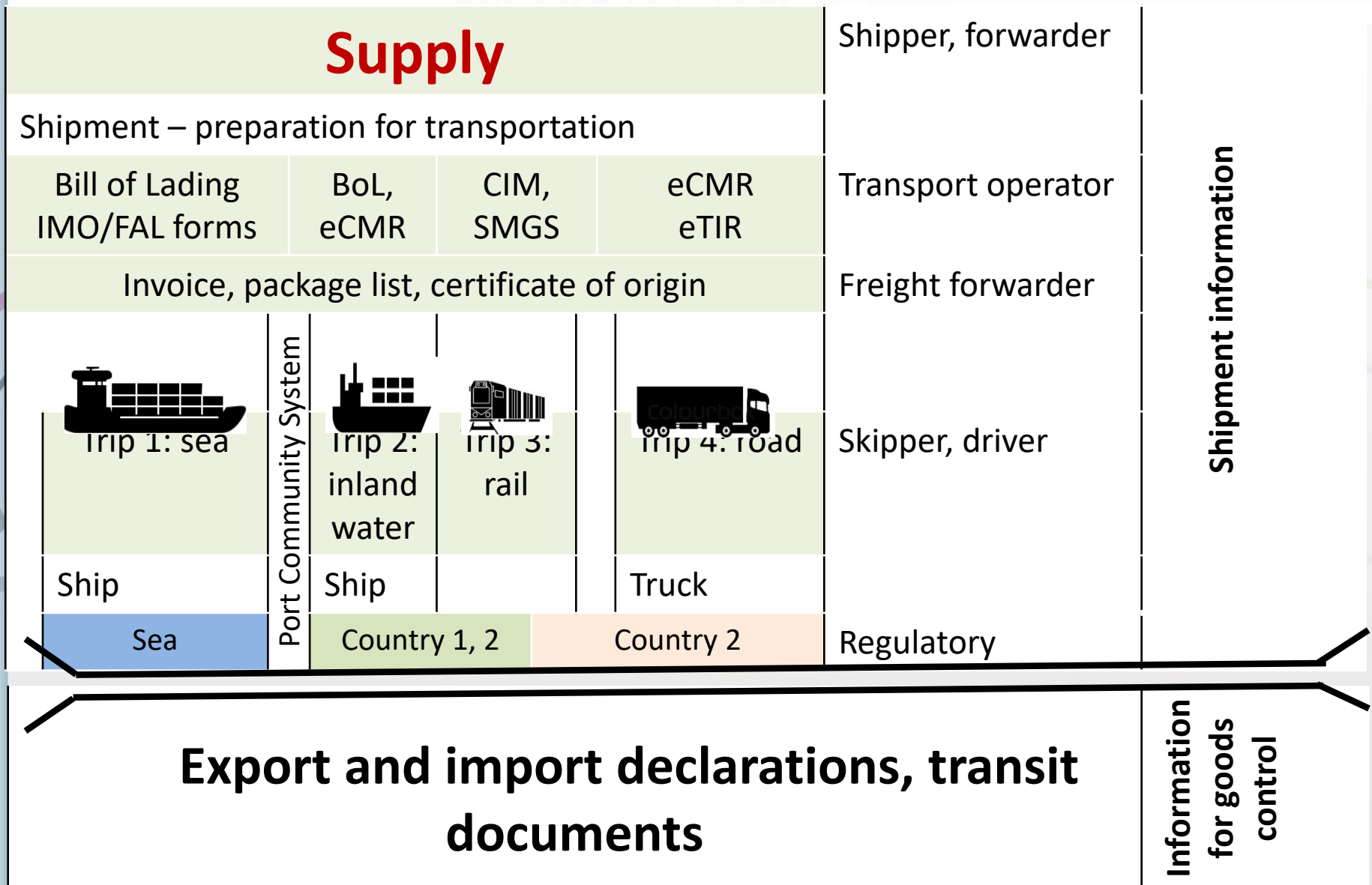
Supply chain semantic data model
(Buy-ship-pay)
(subset of Buy-Ship-Pay DM)

basic message structure in the supply
chain (Buy-Ship-Pay)

Invoice message model

XML syntax of invoice schema

Seamless multimodal supply chain



New FAL forms, effective from 1 January 2018

- [IMO General Declaration](#) (FAL form 1)
- [Cargo Declaration](#) (FAL form 2)
- [Ship's Stores Declaration](#) (FAL form 3)
- [Crew's Effects Declaration](#) (FAL form 4)
- [Crew List](#) (FAL form 5)
- [Passenger List](#) (FAL form 6)
- [Dangerous Goods](#) (FAL form 7)

**E**

FACILITATION COMMITTEE
37th session
Agenda Item 5 and 7 (part)

FAL 37/WP.6/Add.1
8 September 2011
Original: ENGLISH

DISCLAIMER

As at its date of issue, this document, in whole or in part, is subject to consideration by the IMO organ to which it has been submitted. Accordingly, its contents are subject to approval and amendment of a substantive and drafting nature, which may be agreed after that date.

ELECTRONIC MEANS FOR THE CLEARANCE OF SHIPS**Report of the Working Group**

Attached are annexes 1 to 3* to the report of the Working Group on Electronic Means for the Clearance of Ships (FAL 37/WP.6).

New

018

- [IMO G](#)
- [Cargo](#)
- [Ship's](#)
- [Crew's](#)
- [Crew L](#)
- [Passer](#)
- [Dange](#)

		<input type="checkbox"/> Arrival	<input type="checkbox"/> Departure
1.1 Name and type of ship		1.2 IMO number	
1.3 Call sign		1.4 Voyage number	
2. Port of arrival/departure		3. Date and time of arrival/departure	
4. Flag State of ship	5. Name of master	6. Last port of call/Next port of call	
7. Certificate of registry (Port; date; number)		8. Name and contact details of ship's agent	
9. Gross tonnage	10. Net tonnage		
11. Brief particulars of voyage (previous and subsequent ports of call; underline where remaining cargo will be discharged)			
12. Brief description of the cargo			
13. Number of crew	14. Number of passengers	15. Remarks	
Attached documents (indicate number of copies)			
16. Cargo Declaration	17. Ship's Stores Declaration		
18. Crew List	19. Passenger List	20. The ship's requirements in terms of waste and residue reception facilities	
21. Crew's Effects Declaration (only on arrival)	22. Maritime Declaration of Health (only on arrival)		
23. Date and signature by master, authorized agent or officer			

And Recommended Existing message Implementation Guidelines (MIG)

(Comments from Japan)

Data element	ISO7372 (UNTDDED) 2005	TDID (05B)	Form 1	Form 2	Form 3	Form 4	Form 5	Form 6	Form 7
Vessel name	8212 (Transport Means. Identifier.Text)	8212 in TDT	X	X	X	X	X	X	X
Vessel type	8179 (Transport Means. Type.Code)	8179 in TDT	X	X	X	X	X	X	
IMO number	8213 (Transport Means. Identifier)	8213/1131/305 5 in TDT	X	X	X	X	X	X	X
Call sign	8213 (Transport Means. Identifier)	1153/1154 in RFF	X	X			X	X	X
Flag state	8453 (Transport Means. Registration Nationality.Identifier)	8453 in TDT	X	X	X		X	X	X
Registry	1001 (Document. Type.Code)	1001 in DOC	X						
Registry date	2001 (Date. Date.Date Time)	2305/2380/237 9 in DTM	X						
Registry number	1004 (Document. Identifier)	1001/1004 in DOC	X						
Registry location	3411 (Document. Issue Location.Identifier)	3227/3225/322 4 in LOC	X						
Gross tonnage	6300 (Transport Means. Gross Weight.Measure)	6311/6313/641 1/ 6314 in MEA	X						
Net tonnage	6302 (Transport Means. Net Weight.Measure)	6311/6313/641 1/ 6314 in MEA	X						
Name of master	3036 (Party. Name.Text) You may wish to put here 3408 "Name of the Master of the vessel	3035/3036 in NAD	X						X
Name of agent	3036 (Party. Name.Text)	3035/3036 in NAD	X						X
Contact for agent	3412 (Contact. Name.Text)	3035/3036 in NAD	X						
Description of cargo	7004 (Consignment. Summary Description.Text)		X						
Previous ports of call	3224 (Location. Name.Text)	3227/3225/322 4 in TDT	X						
Subsequent ports of call	3224 (Location. Name.Text)	3227/3225/322 4 in TDT	X						
Number of crew	6106 (Crew. Quantity)	6063/6060 in QTY	X		X				

UN/CEFACT Multimodal Transport Reference Data Model

The advantage of using the UN/CEFACT MMTRDM is that:

The MMT model already includes more than 90% of the information used for B2A and B2B interoperability

The MMTRDM is aligned to the WCO Data Model

- The model is supported by a neutral organization with a well-documented management, in which thematic experts can submit proposals to change specifications with the support of 3 national representatives.
- From the logistics point of view, at least 50-70% of the information is available from the beginning in the supply chain

Legal aspects of data sharing for multimodal transport

Government agencies and trading partners previously accepted paper forms, so regulatory frameworks corresponded to these requirements. The regulatory framework needs to be reviewed.

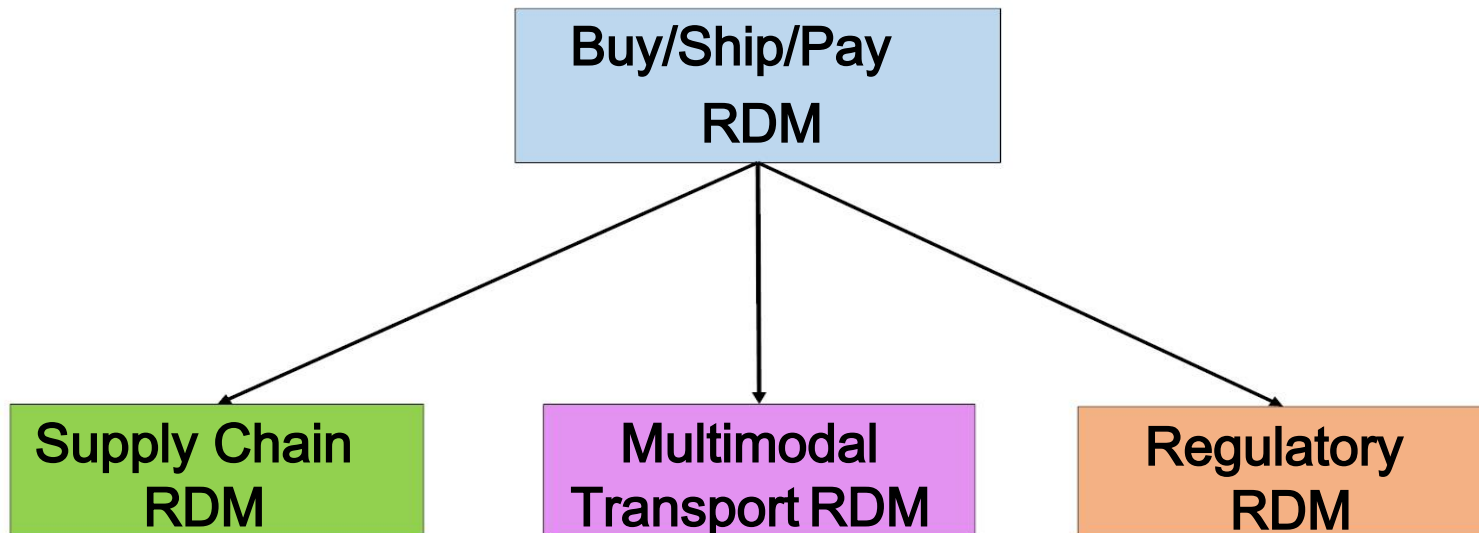
Some points on using datasets in a legal perspective:

- Should be benefit for all stakeholders;
- Availability, accuracy and completeness of data should be assured;
- Possibility for multi-purpose use, similar to the use of documents, data sets should be admissible in courts;
- Possibility for seamless use of data across transport modes, provided the existence of a relevant agreement between countries;
- Involve international organizations managing certificates and other forms from which data are taken

Benefits of UN/CEFACT Semantic Models

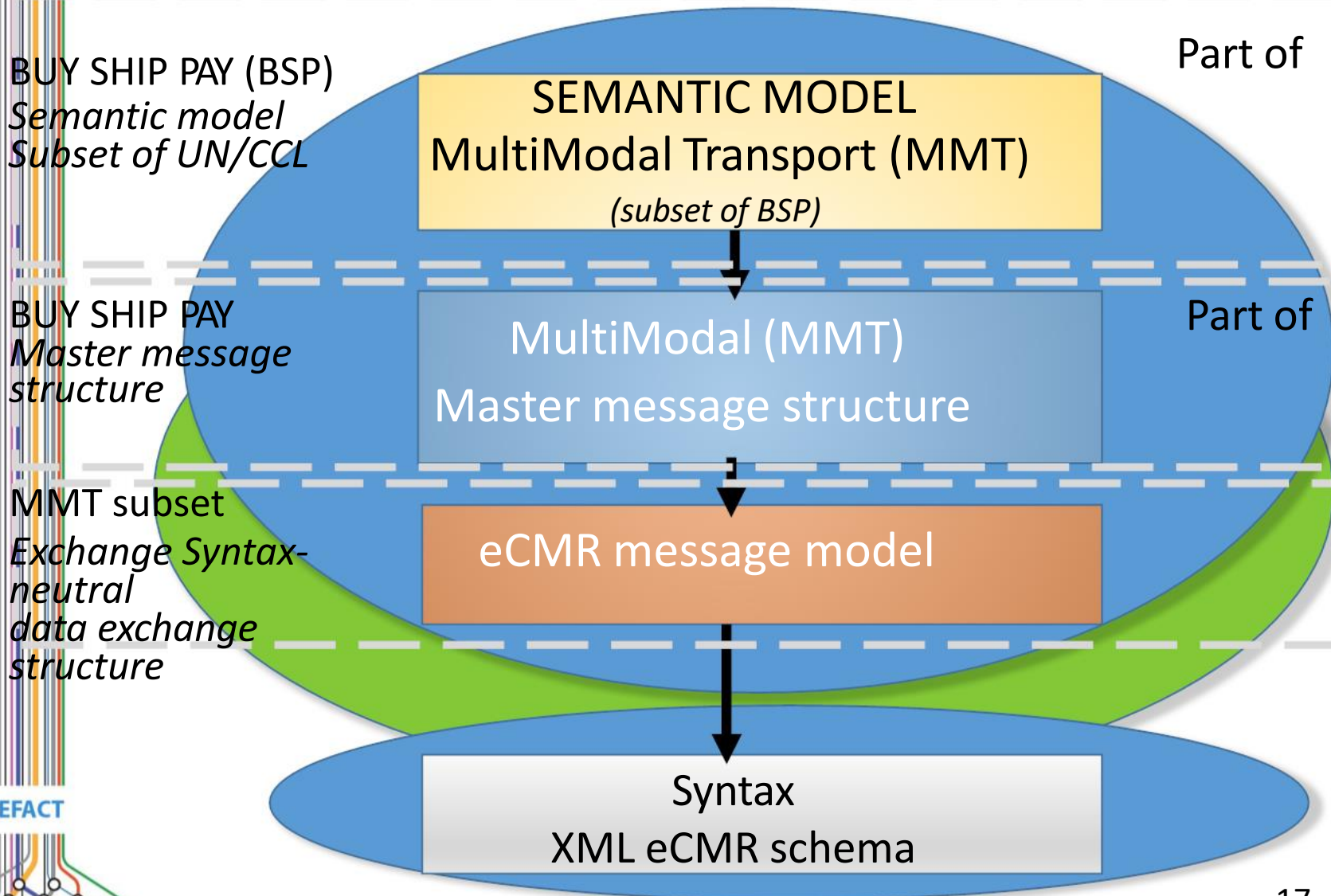
- The support for information sharing, such as enabled by data pipelines, with the timely capture of quality data from original data sources ensuring supply chain visibility
- Reduction of administrative burden by efficient reuse of data shared within the BUY SHIP PAYdomain model
- Standardized data exchange structures, based on common Master data exchange structure and independent of exchange syntax
- Common basis for implementing in chosen data exchange syntax(es)

UN/CEFACT International Supply Chain Reference Data Model Family





Example: UN/CEFACT electronic Road Consignment Note (eCMR)



Thanks !

Mario Apostolov, Regional Adviser,
UNECE Economic Cooperation and Trade Division,
mario.apostolov@unece.org