

# UN/CEFACT e-CMR Project

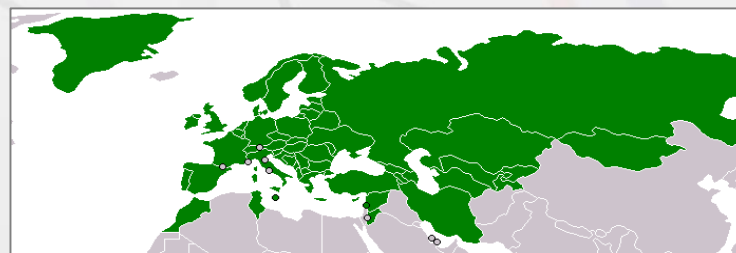


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# CMR Background

- 1956 – CMR convention adopted
- 1976 – Model CMR consignment note developed by IRU, in cooperation with the International Chamber of Commerce (ICC)
- 2007 – Model CMR consignment note updated by IRU and is now used by most, if not all parties to contracts of carriage in CMR contracting countries.



# CMR – Current process Flow

**1****Consignor**

Prepares and coordinates CMR contract

**red** : copy for the consignor

**blue** : copy for the consignee (this copy accompanies the goods throughout the entire transport)

**green**: copy for the carrier

**2****Carrier**

On taken over goods, checks the accuracy of data in CMR (quantity of packages, condition of goods, their packaging and etc).

Signs the CMR note (with reservations if needed)

**3****Consignee**

Consignee acknowledge the receipt of goods upon its verification.

**CMR is prima facie evidence of the making of the contract of carriage, the conditions of the contract and the receipt of the goods by the carrier. CMR is obligatory document for international road transport in countries, which adopted CMR Convention.**

# e-CMR protocol adopted by 17 countries

United Nations Economic Commission for Europe

**Invitation**  
to a Signing Ceremony  
for the



**Electronic Contract for the International Carriage of Goods by Road (e-CMR)**

**To e-CMR**  
The natural technological development of the 21st century with

- › Faster and more efficient information transfer
- › Reliable and secure data exchange
- › Inalterability of the message
- › Less labour intensive
- › Less expensive

**From CMR**  
A paper-based system which is:

- Time-consuming
- Human resource intensive
- Needlessly expensive

**Benefits**  
Enhanced commercial relations for the public and private sectors with:

- › Reduced scope for human error and manipulation
- › Understanding and acceptance of the message by the consignee
- › Identification of the parties and signature authentication
- › Advances e-governance - a key characteristic of modern economies

So far, 12 initial countries have declared their intention to sign. The Protocol shall enter into force on the ninetieth day after five of the States have deposited their instruments of ratification or accession.

Delegates must have full powers to be able to sign the Protocol. According to the Vienna Convention on the Law of Treaty, 1969, "full powers" means a document emanating from the competent authority of a State designating a person or persons to represent the State for negotiating, adopting or authenticating the text of a treaty, for expressing the consent of the State to be bound by a treaty, or for accomplishing any other act with respect to a treaty. Only authorized representatives of the Contracting Parties to the CMR Convention can sign this Additional protocol.

**When**  
Tuesday 27 May 2008 at 10.00

**Where**  
Salle V, Palais des Nations, Geneva

For more information:  
Mrs. Virginia Tanase - Tel: +41 (0) 22 917 3389 - Email: [infotransport@unece.org](mailto:infotransport@unece.org) - [www.unece.org/trans](http://www.unece.org/trans)

The Protocol will be open for signature from 27 to 30 May 2008 in Geneva, and after this date, at United Nations Headquarters in New York until 30 June 2009 inclusive. On 27 May a signing ceremony will be organized at the Palais des Nations.



# e-CMR operations and pilots

- e-CMR operational in Netherlands since 2015
- France and Spain initiated pilots in January 2017
- Greece started pilots in June 2017
- Benelux Pilot starts in December 2017

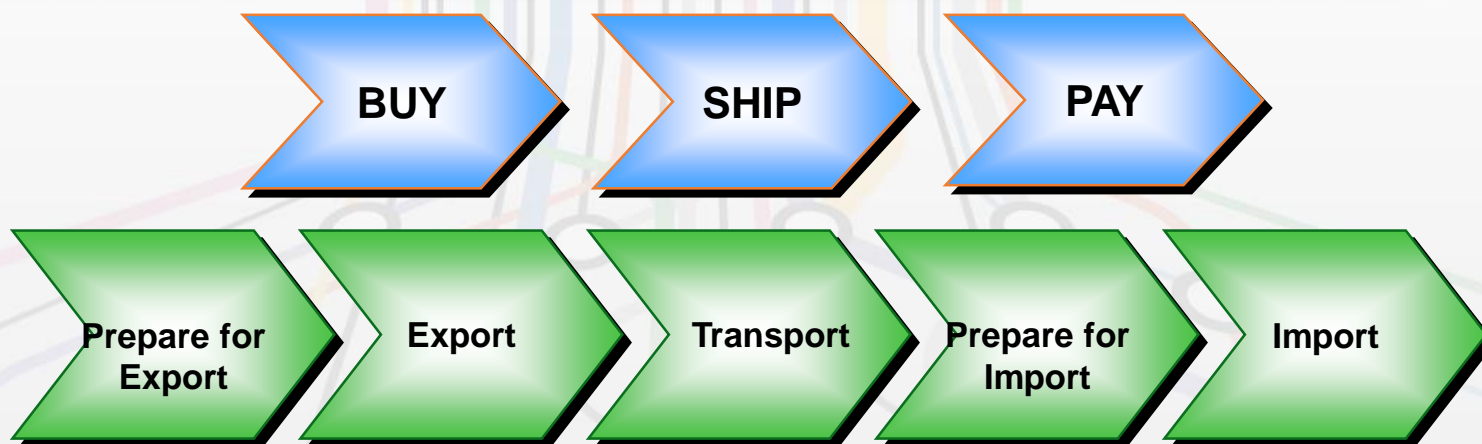
Others in pipeline



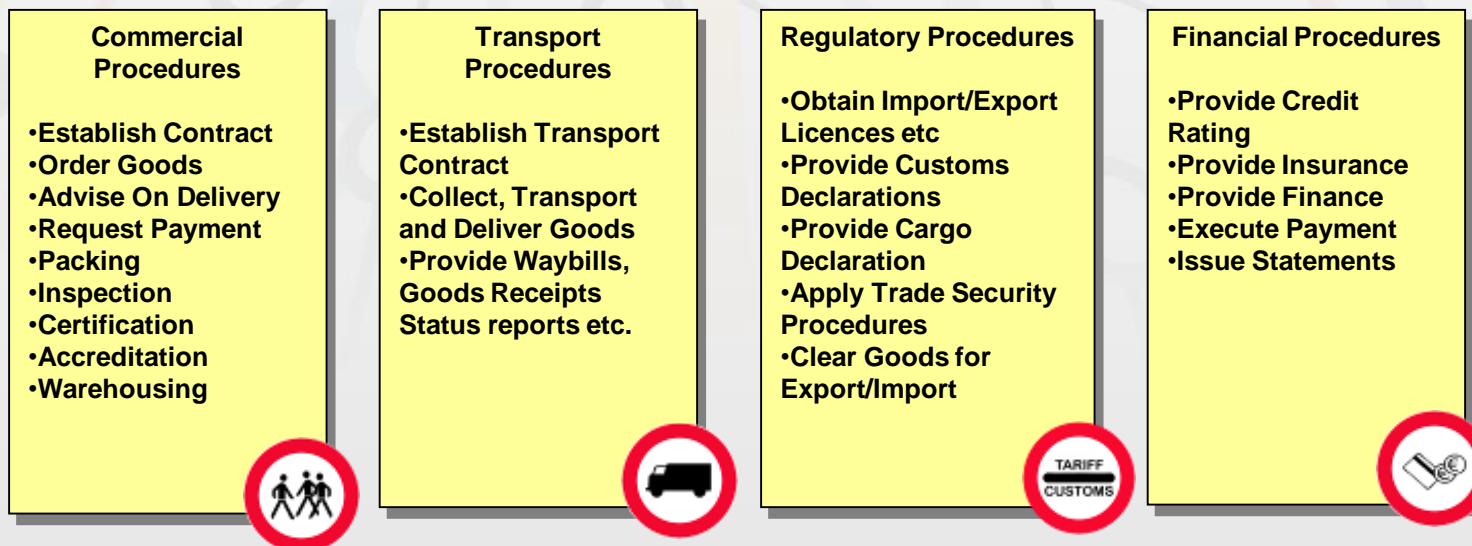
# UN/CEFACT BUY-SHIP-PAY reference data models

- Cover the data requirements of the international supply chain (BUY-SHIP-PAY) process model
- Share a common library (subset of the UN/CEFACT Core Component Library – CCL)
- Include “Master” exchange syntax neutral message structures for developing process aligned subset structures
- Subset message structures can be realized into any required exchange syntax (e.g. JSON, any XML or EDIFACT etc.)
- Support collaborative information sharing
  - such as enabled by data exchange pipelines

# UN/CEFACT International Supply Chain Process Model

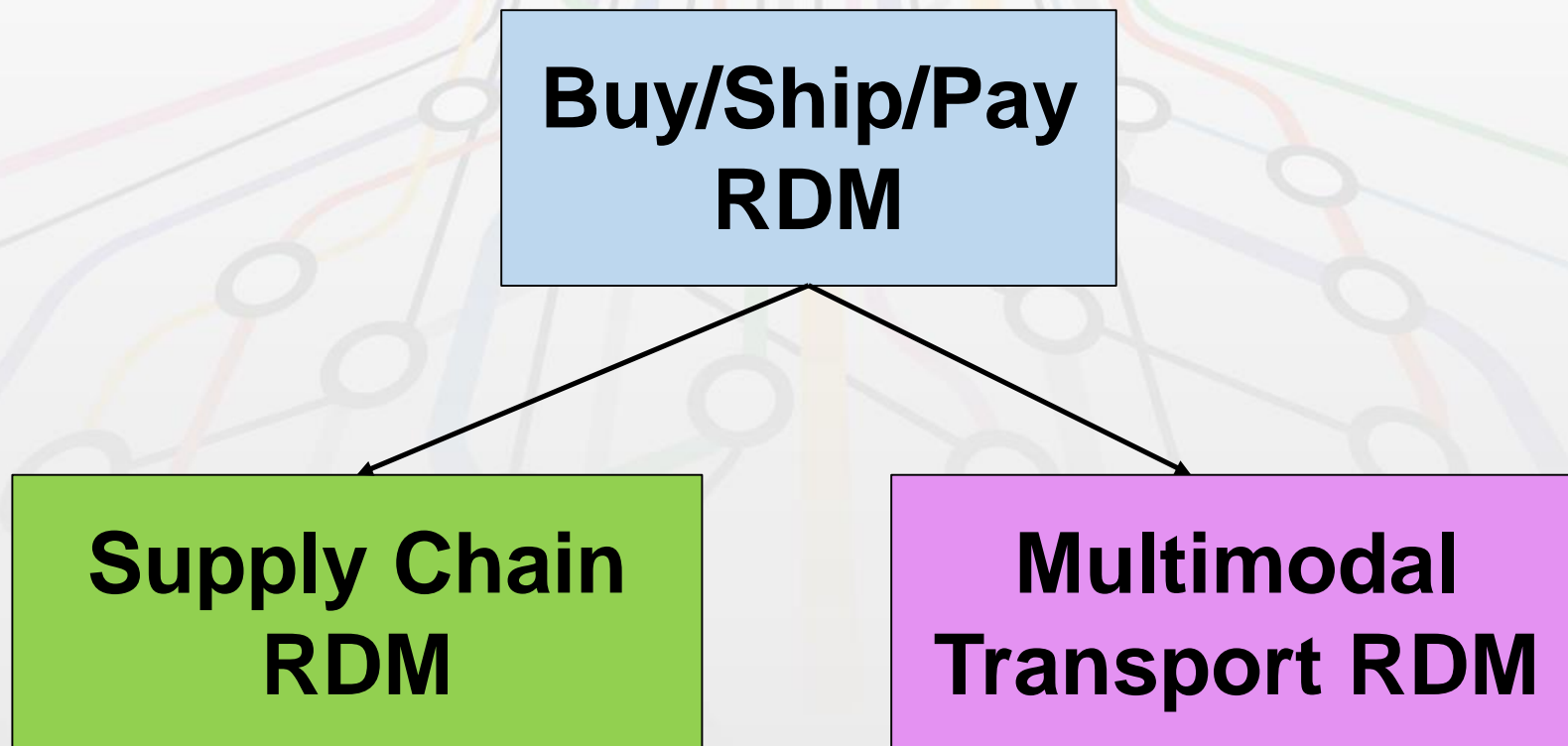


## INVOLVES

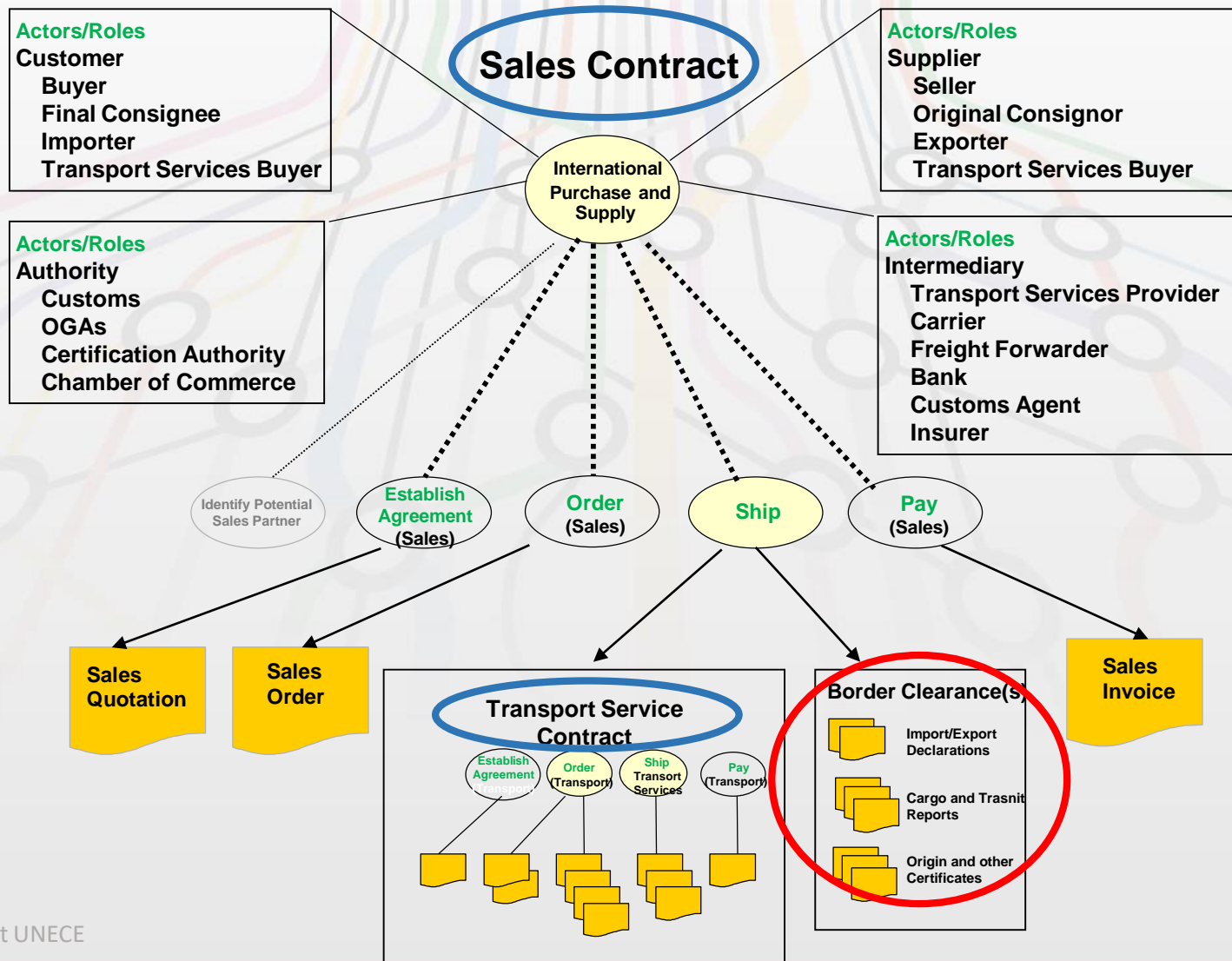




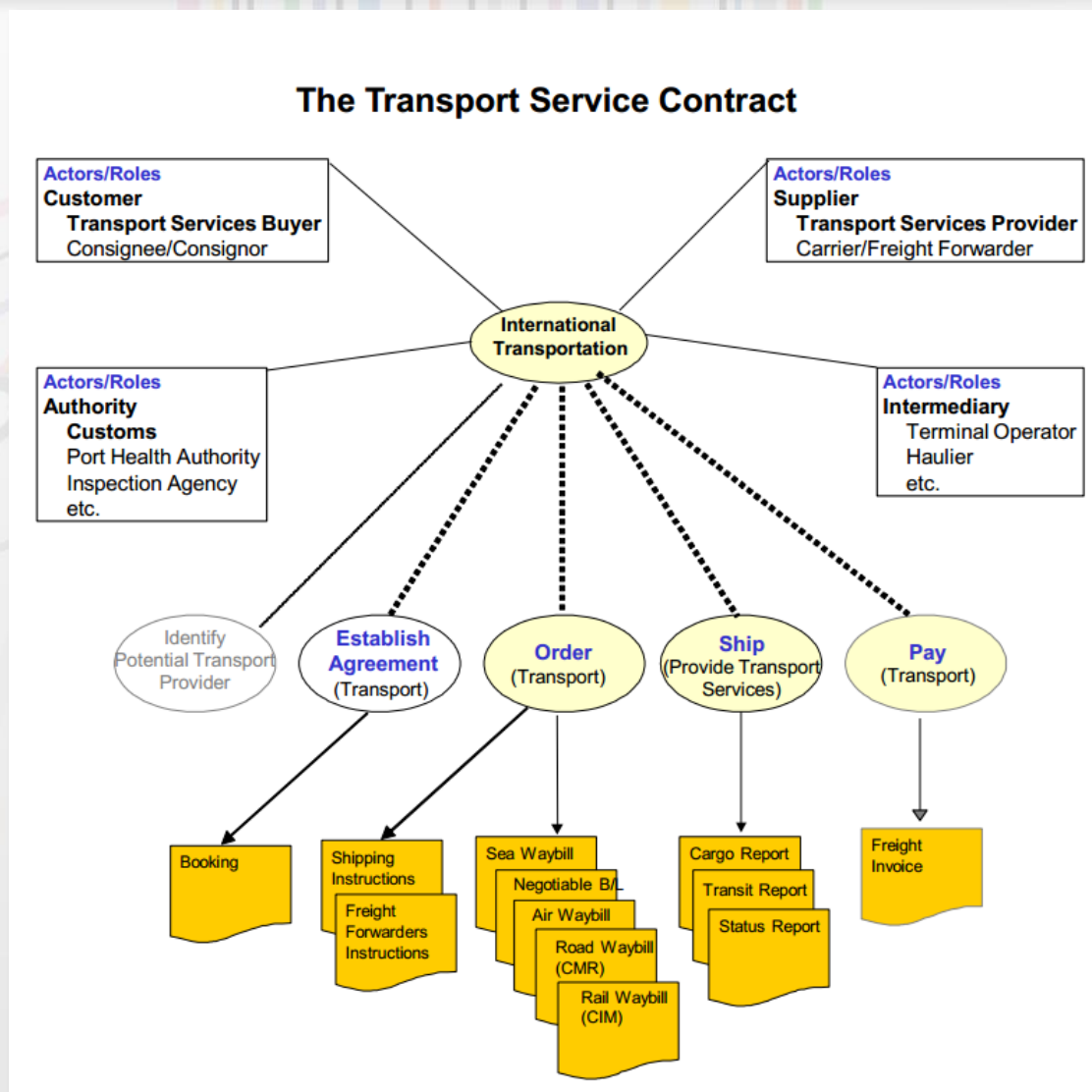
## UN/CEFACT International Supply Chain Reference Data Model Family



# The Relationship between International Sales and Transport Service Contracts

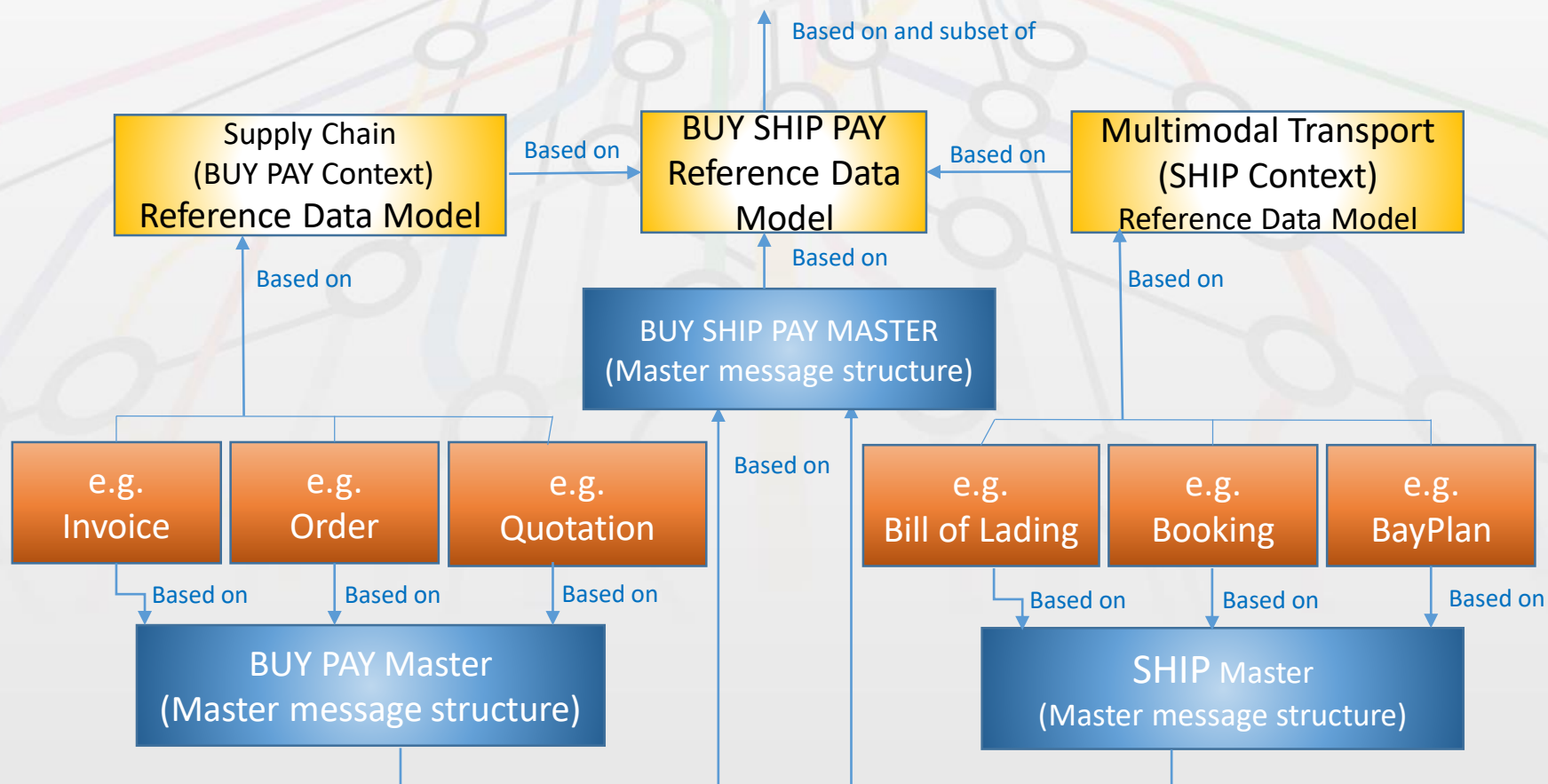


# The Transport Contract

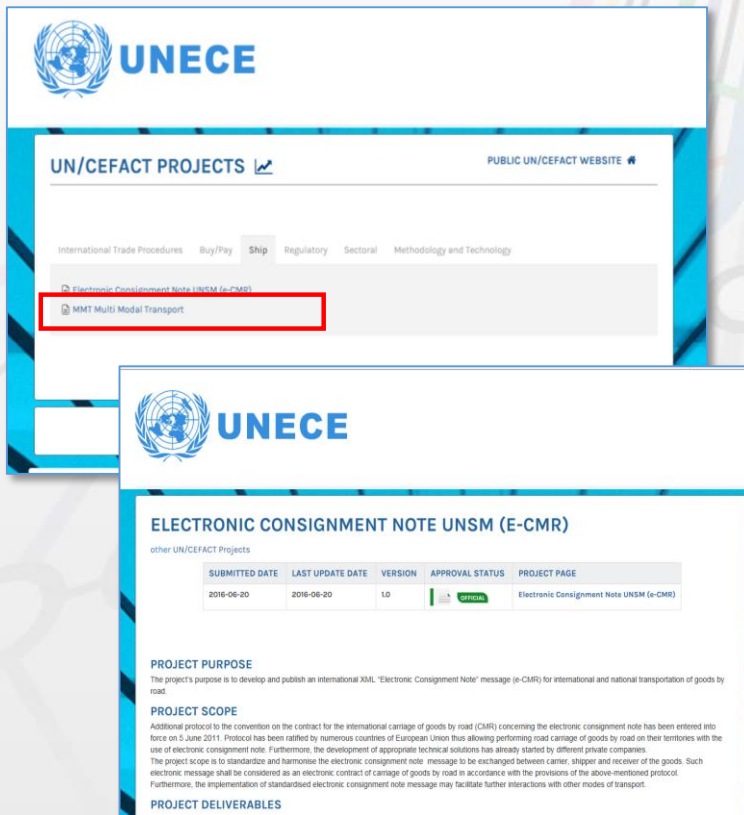


# Building semantic models using a common library

## UN/CEFACT Core Component Library (CCL)



# UN/CEFACT e-CMR project deliverables



**UN/CEFACT PROJECTS** PUBLIC UN/CEFACT WEBSITE

International Trade Procedures Buy/Pay Ship Regulatory Sectoral Methodology and Technology

Electronic Consignment Note UNSM (e-CMR)

MMT Multi Modal Transport

**ELECTRONIC CONSIGNMENT NOTE UNSM (E-CMR)**  
 other UN/CEFACT Projects

SUBMITTED DATE	LAST UPDATE DATE	VERSION	APPROVAL STATUS	PROJECT PAGE
2016-06-20	2016-06-20	1.0	Approved	Electronic Consignment Note UNSM (e-CMR)

**PROJECT PURPOSE**  
 The project's purpose is to develop and publish an international XML "Electronic Consignment Note" message (e-CMR) for international and national transportation of goods by road.

**PROJECT SCOPE**  
 Additional protocol to the convention on the contract for the international carriage of goods by road (CMR) concerning the electronic consignment note has been entered into force on 2 June 2011. Protocol has been ratified by numerous countries of European Union thus allowing performing road carriage of goods by road on their territories with the use of electronic consignment note. Furthermore, the development of appropriate technical solutions has already started by different private companies. The project scope is to standardize and harmonise the electronic consignment note message to be exchanged between carrier, shipper and receiver of the goods. Such electronic message shall be considered as an electronic contract of carriage of goods by road in accordance with the provisions of the above-mentioned protocol. Furthermore, the implementation of standardised electronic consignment note message may facilitate further interactions with other modes of transport.

**PROJECT DELIVERABLES**

## e-CMR project deliverables:

- Business Requirements Specification (BRS) for Electronic Road Consignment Note (e-CMR) based on the high-level MMT BRS
- Subset exchange syntax-neutral message structures for e-CMR
- XML schemas of the e-CMR messages
- Mapping to the relevant existing UN/EDIFACT UNSM (IFTMIN) **future extension**

e-CMR project supported by:    

# Challenge: Interoperability of e-CMR solutions

## CMR convention

- Content of CMR document
  - Date and time
  - Name and address of carrier, sender, consignee
  - The description of nature of goods, method of packing ...
  - Number of packages
  - Charges related to carriage
  - etc.

## e-CMR Protocol

- Set requirements for e-CMR. Parties shall agree on:
  - The method for issuance and delivery of e-CMR
  - An assurance that e-CMR retains its integrity
  - The manner in which the party entitled to the rights arising out of e-CMR is able to demonstrate that entitlement
  - etc.

*First step: identify a list of vital messages for e-CMR, provide appropriate message model*

# UN/CEFACT eCMR

Buy/Ship/Pay (BSP)  
*Semantic model*  
*Subset of CCL*

Part of

SEMANTIC MODEL  
 MultiModal Transport (MMT)  
*(subset of BSP)*

BUY SHIP PAY  
*Master message structure*

Part of

MultiModal (MMT)  
 Master message structure

MMT subset  
*Exchange Syntax-neutral data exchange structure*

eCMR message model

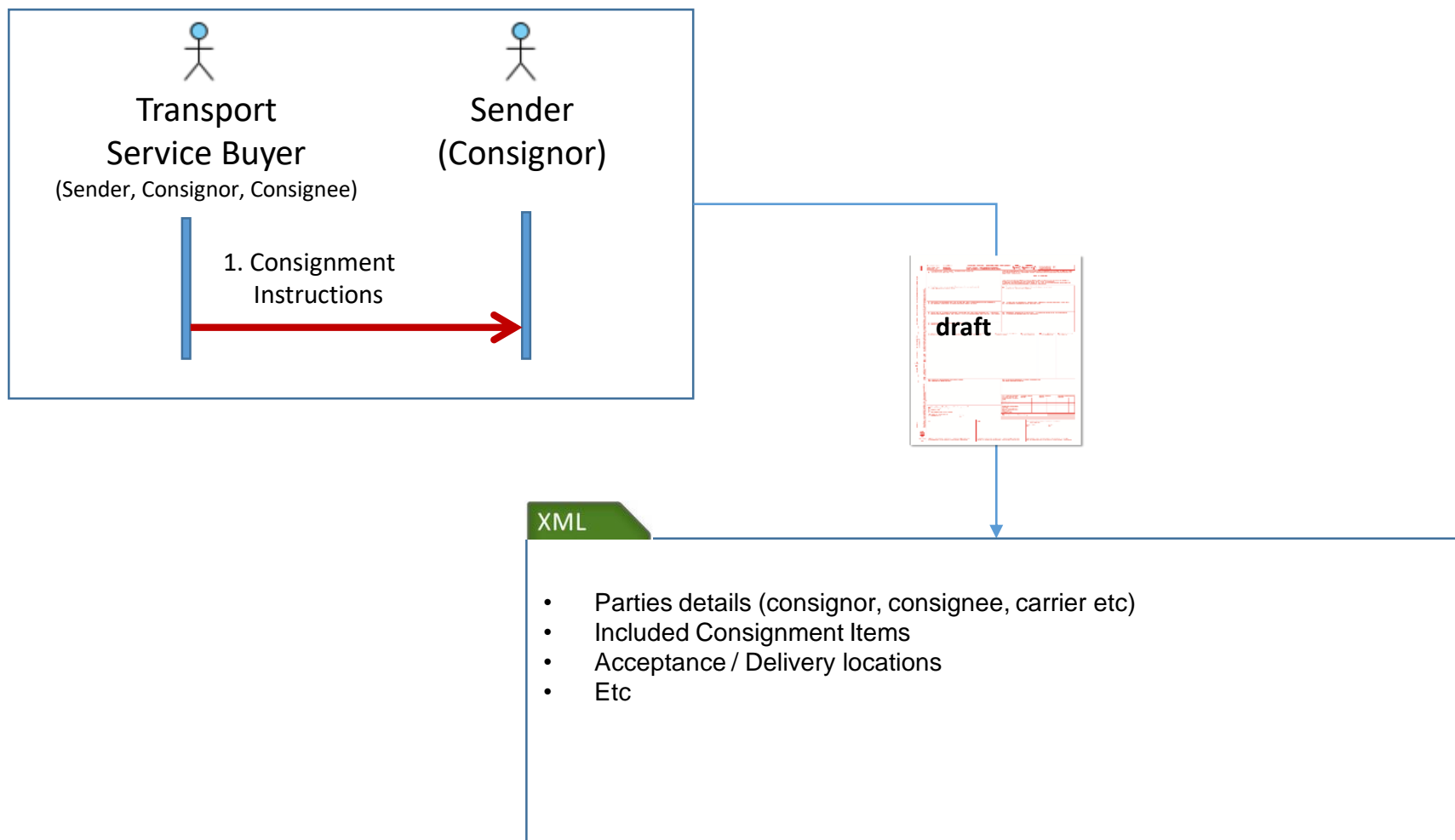
Syntax

XML eCMR schema

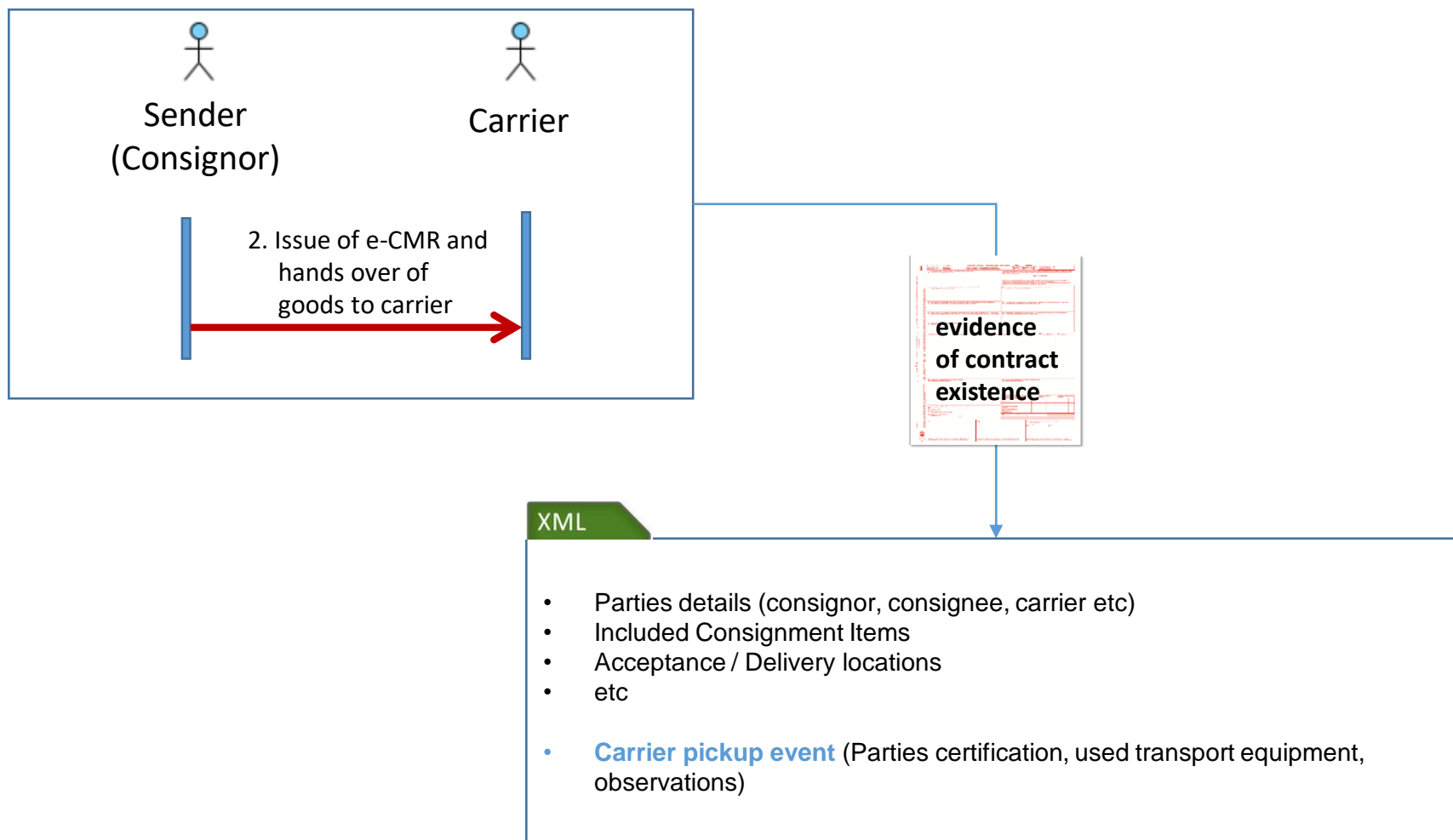




# e-CMR model



# e-CMR model



# e-CMR model

e-CMR Master Message

Supply Chain Consignment

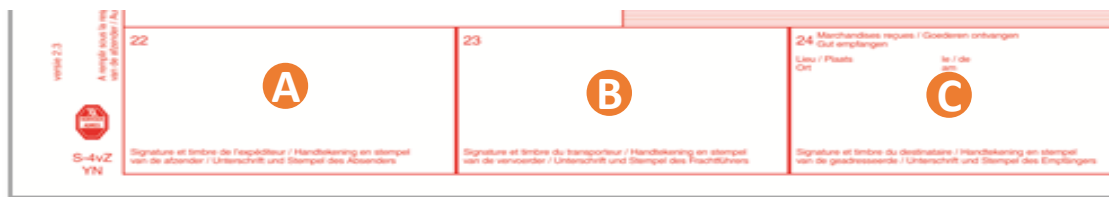
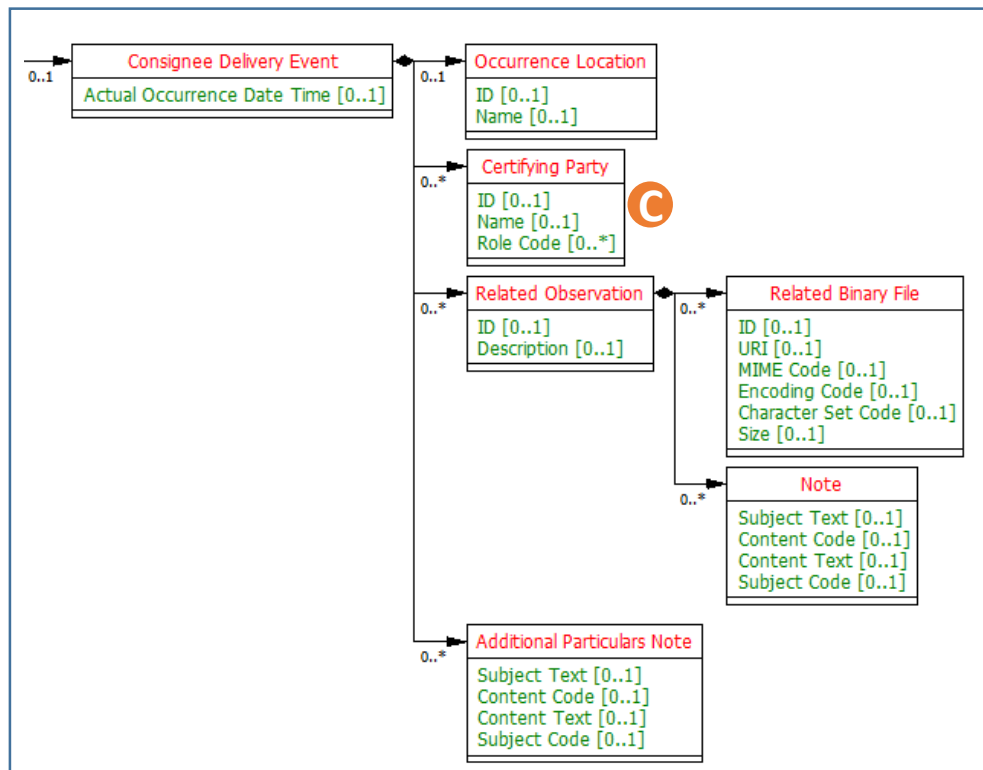
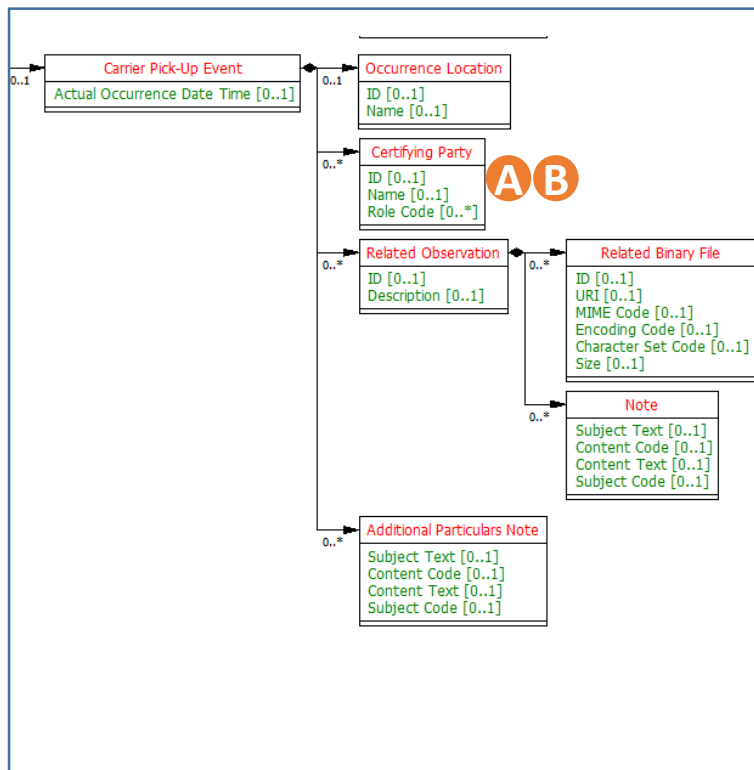
Included Consignment Item

A B Carrier Pick-Up Event

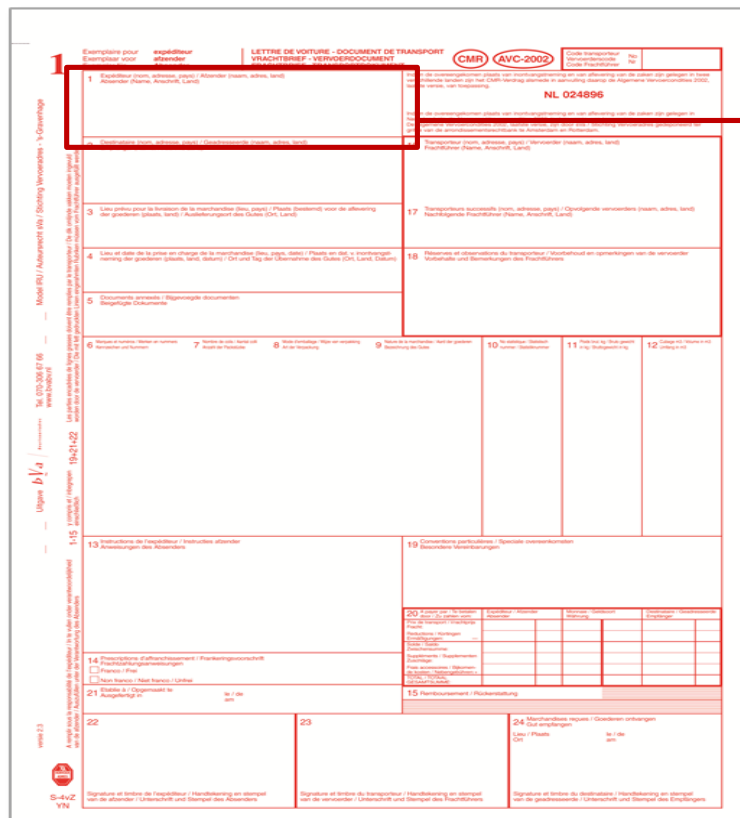
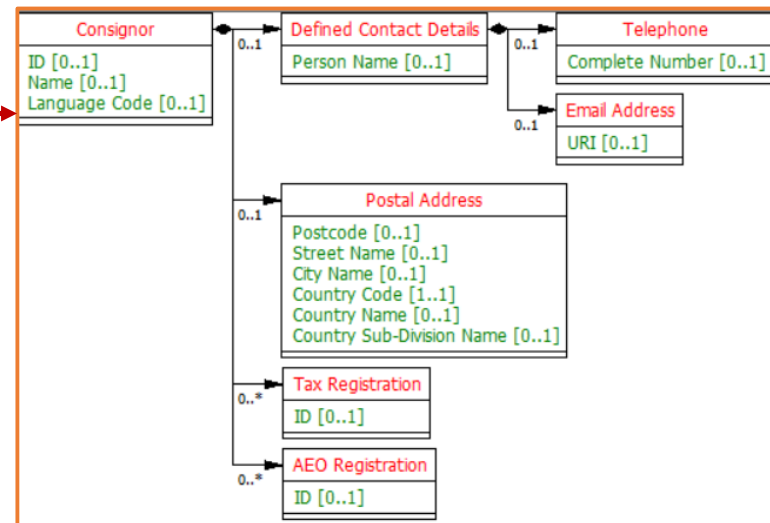
C Consignee Delivery Event

Main Carriage Transport Movement

# e-CMR model (contractual events)



# e-CMR model: CMR Convention data taken into account

Each object in the eCMR structure has a unique Dictionary Entry Name plus a business short name for readability.

Based upon the UN/CEFACT Core Component Library (CCL), the MultiModal Transport Reference Data Model (MMT) and the Supply Chain Reference Data Model (SCRDM).

# e-CMR model: Transit Declaration in Eurasian Customs Union and European Customs Union are taken into account

ЭЛЕКТРОННАЯ КОПИЯ декларации на товары / транзитной декларации						
Не зарегистрировано						
Тип перемещения:	ТТ	Тип перевозки:	Код страны ТО:	Всего наименований товаров:	1	
Страна происхождения:						
ГРУЗОПРАВИТЕЛЬ						
ГРУЗОПОЛУЧАТЕЛЬ						
ПЕРЕВОЗЧИК						
ЛИЦО, ПОДАВШЕЕ ДЕКЛАРАЦИЮ						
Фамилия:	Имя:	Дата представления ТД:	2017-09-21			
Сведения о транспортных средствах при прибытии/убытии. (всего 0)						
№ ТС	Идентификатор ТС	Номер шасси (VIN)	Код страны принадлежности ТС	Активное ТС		
ТОВАРЫ (всего 1 наим.)						
№	Код ТНВЭД	Описание	Вес брутто	Стоимость	Валюта	№№ контейнеров
1	0702000001	ТОМАТЫ СВЕЖИЕ ИЛИ ОХЛАЖДЕННЫЕ, С 1 ЯНВАРЯ ПО 31 МАРТА	1000	1000	RUB	
Итого:			1 000.000	1 000.00		

## Included Consignment Item

ID [0..\*]  
 Sequence Number [1..1]  
 Goods Type Code [0..1]  
 Invoice Amount [0..1]  
 Gross Weight [1..1]  
 Gross Volume [0..1]  
 Additional units of measurement [0..1]  
 Global ID [0..1]

## Goods Description

Identification Text [0..1]

## Transport Dangerous Goods

UNDG ID [1..1]  
 Technical Name [0..1]  
 Packaging Danger Level Code [0..1]

## Transport Package

Item Quantity [0..1]  
 Level Code [0..1]  
 Type Code [0..1]  
 Type Text [0..1]  
 ID [0..1]

## Additional Particulars Note

## For more information

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