



# 40th UN/CEFACT Forum

Thursday, 11th May 2023  
Transport and Logistics Domain

Sue Probert, UN/CEFACT Chair  
Hanane BECHA, Vice Chair Transport & Logistics  
David Roff, Domain Co-Ordinator

UN / CEFACT

# What does UN/CEFACT has to offer?

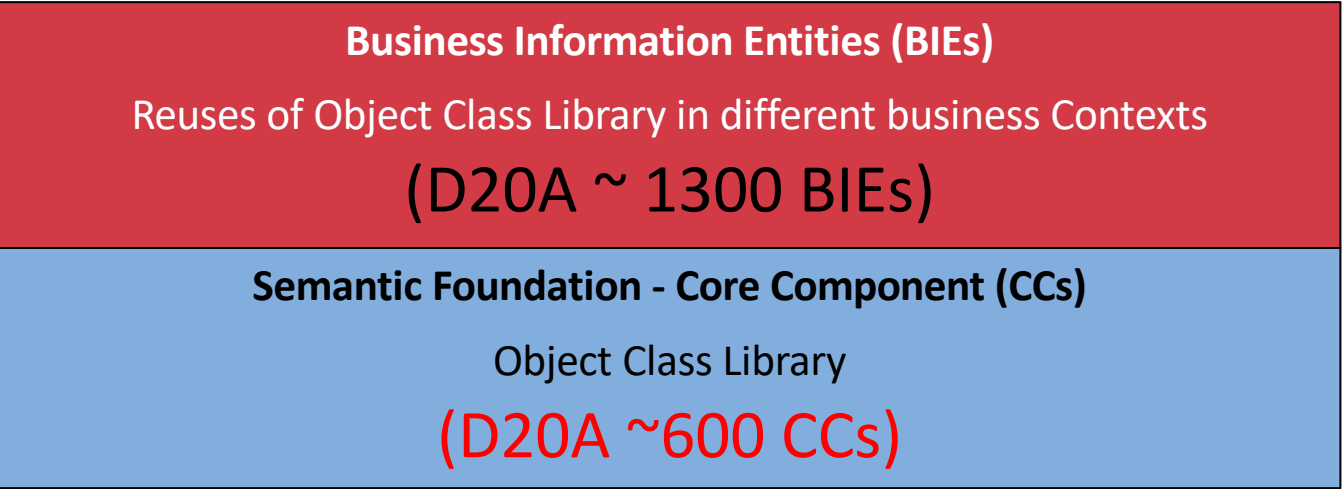
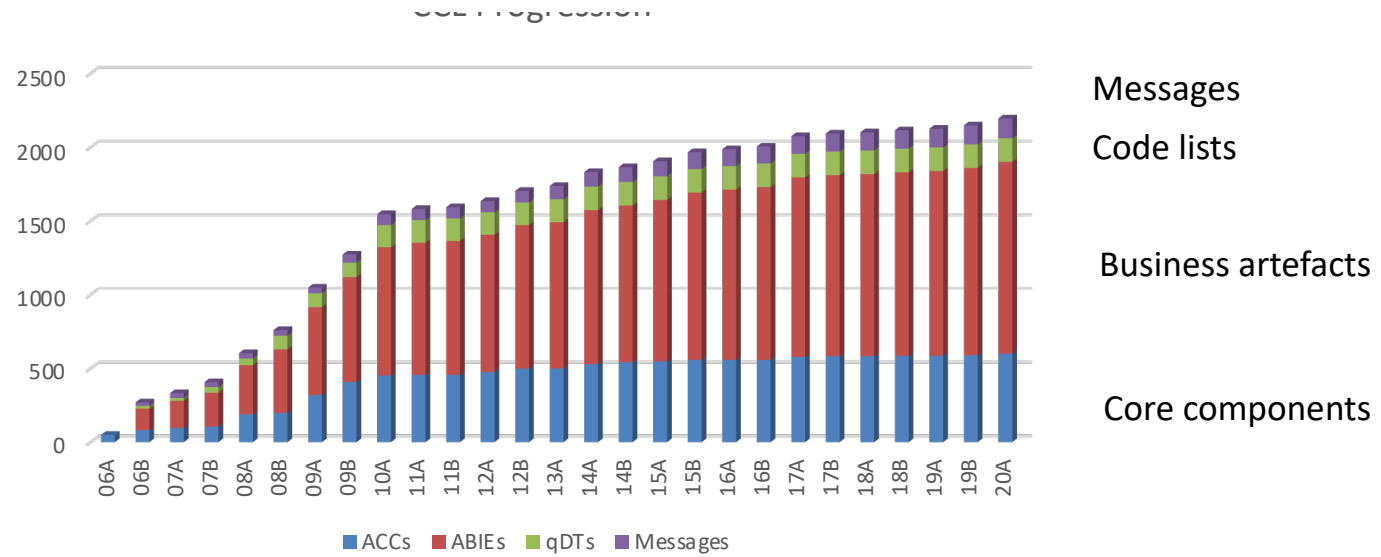


- **Business Standards**
  - Process Models (Business Requirement Specification, BRS)
  - Reference Data Models (RDMs)
  - Semantic Libraries
    - UNTDED, Core Component Library (CCL), UN/XML, UN/JSON)
- **Trade Facilitation Recommendations** (Harmonized Code Lists, etc)
- **Technical Specifications**



# UN/CEFACT Core Component Library

Key:  
 ABIE - Aggregate Business Information Entities  
 ACC - Aggregate Core Component  
 qDT - Qualified DataType



## “Raw material”, also published in friendly HTML, XML, JSON-LD\*

	A	B	C	D	E
	ADD/CHG/D EP/WDR	Unique UN Assigned ID	ABIE/ BBIE/ ASBIE/ACC/ BCC/ASCC/D T/CC/SC	Dictionary Entry Name (auto generated)	Definition Mandatory
1					
2		Library Maintenance Only	<b>START HERE</b> <b>Press Enter</b>	Keep the rows together Adjust selected rows with Ctrl-a	Enable macro's with Ctrl-e Disable macro's with Ctrl-d
086		UN01003819	<b>ABIE</b>	Logistics_ Transport Means. Details	The devices used to convey goods or other objects from place to place during logistics cargo movements.
087		UN01003820	<b>BBIE</b>	Logistics_ Transport Means. Type. Code	The code specifying the type of logistics means of transport (Reference UNECE Recommendation 28).
088		UN01003821	<b>BBIE</b>	Logistics_ Transport Means. Type. Text	The type, expressed as text, of this logistics means of transport.
089		UN01003822	<b>BBIE</b>	Logistics_ Transport Means. Identification. Identifier	An identifier of this logistics means of transport, such as the International Maritime Organization number of a vessel.
090		UN01003823	<b>BBIE</b>	Logistics_ Transport Means. Name. Text	The name, expressed as text, of this logistics means of transport.
091		UN01003824	<b>BBIE</b>	Logistics_ Transport Means. Gross Weight. Measure	The measure of the gross weight (mass) of this logistics means of transport including cargo, such as the measure of the overall size of a vessel determined in accordance with the provisions of the International Convention on Tonnage Measurement of Ships, 1969.
092		UN01003825	<b>BBIE</b>	Logistics_ Transport Means. Net Weight. Measure	The measure of the net weight (mass) of this logistics means of transport, such as the net tonnage of a vessel determined in accordance with the provisions of the International Convention on Tonnage Measurement of Ships, 1969.
093		UN01003826	<b>BBIE</b>	Logistics_ Transport Means. Length. Measure	The measure of the length of this logistics means of transport.
094		UN01003827	<b>BBIE</b>	Logistics_ Transport Means. Draught Level. Measure	The measure of the draught level of this logistics means of transport.
		UN01003828	<b>BBIE</b>	Logistics_ Transport Means. Cargo Gross Weight. Measure	The measure of the total gross weight (mass) of all cargo loaded onto this logistics means of transport, including packaging but excluding any associated transport equipment.

\* For JSON-LD see <https://github.com/uncefact>

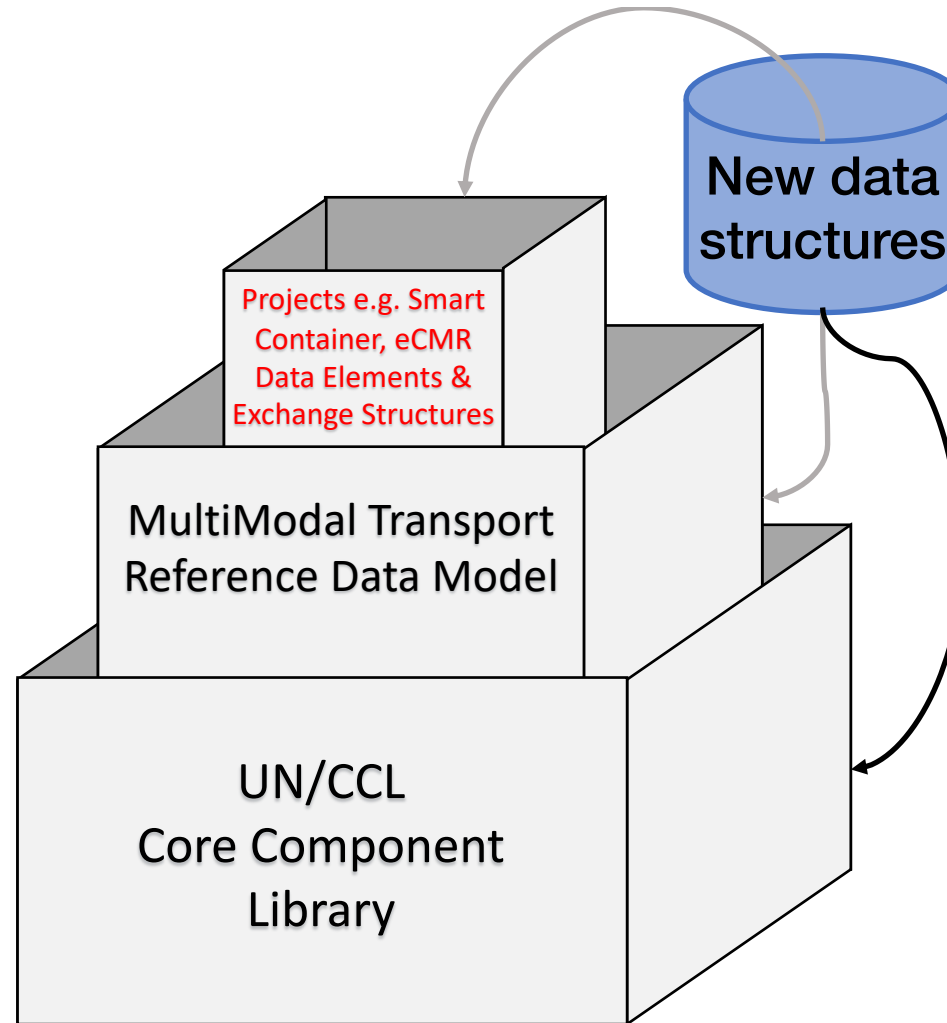
# How CCL growth is managed

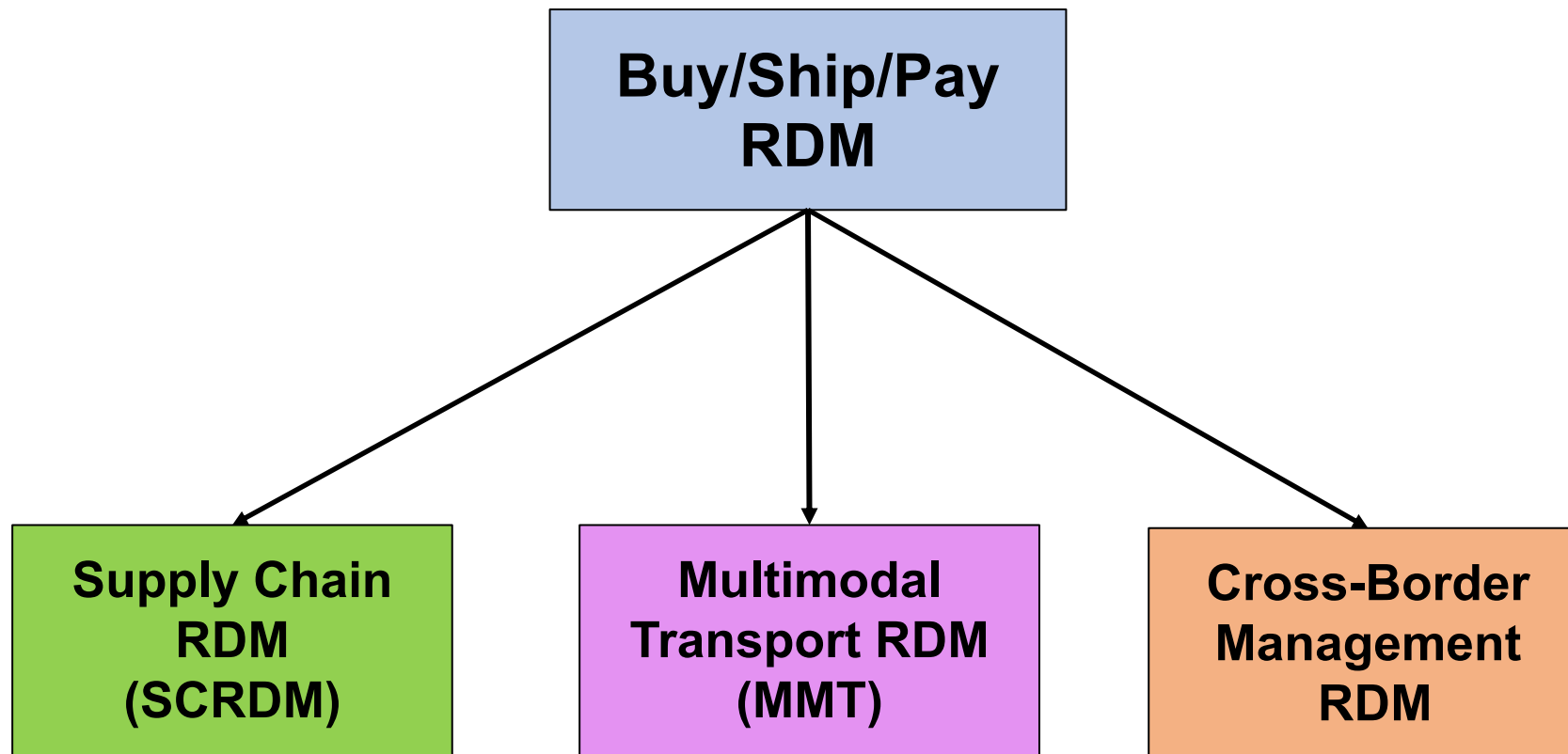
Library Maintenance Team responsible for

- Cross-Domain **Harmonisation**

Project Teams responsible for

- **Contextualised** RDM development, CCL submissions and **customised** data exchange structures

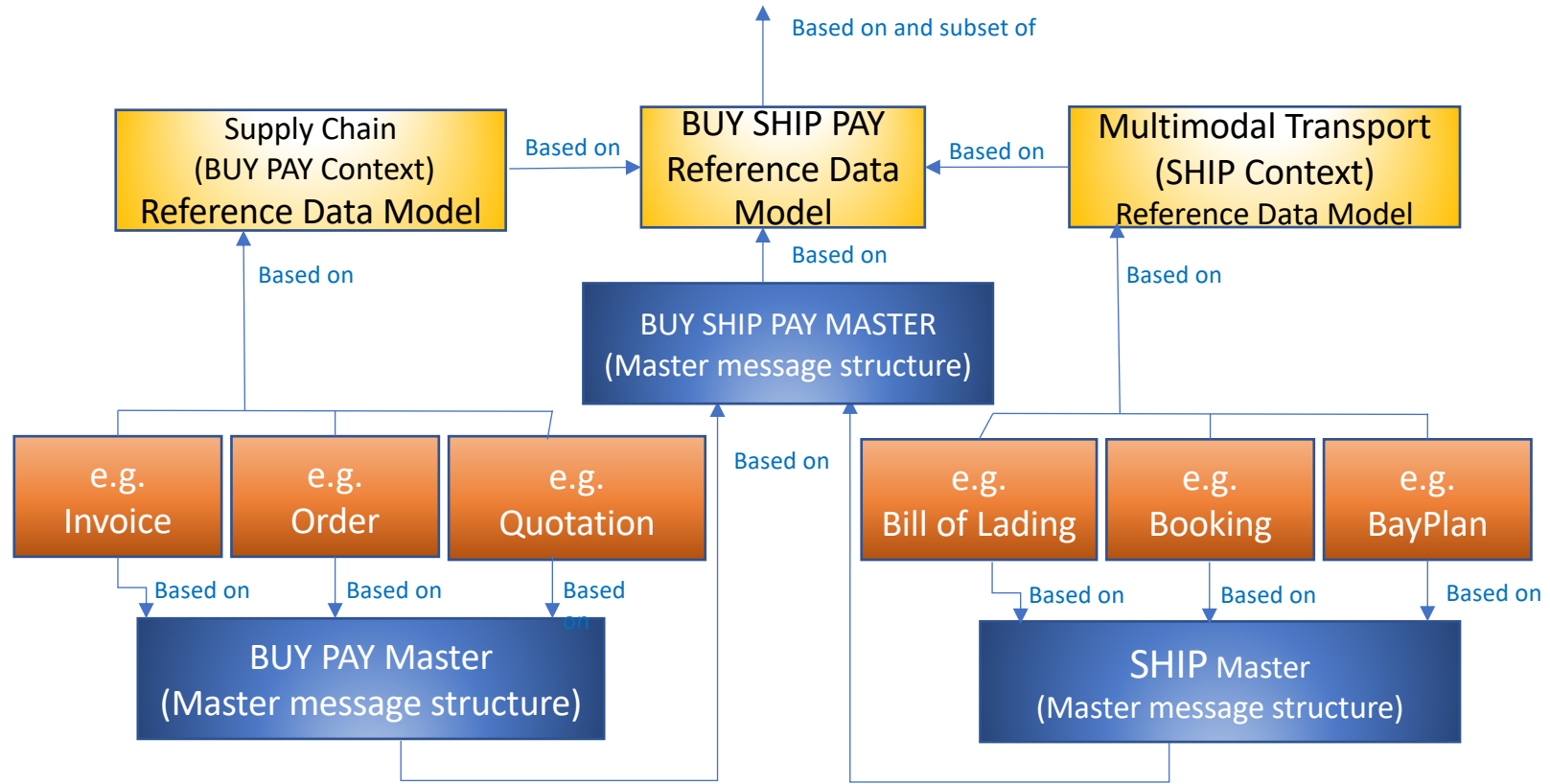






# Building semantic models using a common library

## UN/CEFACT Core Component Library (CCL)



## Buy Ship Pay (BSP RDM)

- .....
- > **C** Transport Temperature Setting \*
  - > **C** Transport Waste Component
  - > **C** Transport Waste Material
  - > **C** Transport Cargo Insurance \*
  - > **C** Transport Cargo \*
  - > **C** Transport Dangerous Goods \*
  - > **C** Transport Event \*
  - > **C** Transport Instructions \*
  - > **C** Transport Person \*
  - > **C** Transport Route \*
  - > **C** Transport Service \*
  - > ~~**C**~~ Travel Product Feature \*\*
  - > ~~**C**~~ Travel Product Intermediary Sale \*\*
  - > ~~**C**~~ Travel Product Note \*\*
  - > ~~**C**~~ Travel Product Period \*\*
- .....

## Transport (MMT RDM)

- .....
- > **C** Transport Temperature Setting \*
  - > **C** Transport Waste Component \*
  - > **C** Transport Waste Material \*
  - > **C** Transport Cargo Insurance \*
  - > **C** Transport Cargo \*
  - > **C** Transport Dangerous Goods \*
  - > **C** Transport Event \*
  - > **C** Transport Instructions \*
  - > **C** Transport Person \*
  - > **C** Transport Route \*
  - > **C** Transport Service \*
  - > ~~**C**~~ Travel Product Feature \*\*
  - > ~~**C**~~ Travel Product Intermediary Sale \*
  - > ~~**C**~~ Travel Product Note \*\*
  - > ~~**C**~~ Travel Product Period \*\*
- .....

## Supply Chain (SCRDM)

- .....
- > **C** Transport Temperature Setting \*\*
  - > ~~**C**~~ Transport Waste Component \*\*
  - > ~~**C**~~ Transport Waste Material \*\*
  - > **C** Transport Cargo Insurance
  - > **C** Transport Cargo \*
  - > **C** Transport Dangerous Goods \*
  - > ~~**C**~~ Transport Event \*\*
  - > ~~**C**~~ Transport Instructions \*\*
  - > ~~**C**~~ Transport Person \*\*
  - > ~~**C**~~ Transport Route \*\*
  - > ~~**C**~~ Transport Service \*\*
  - > ~~**C**~~ Travel Product Feature \*\*
  - > ~~**C**~~ Travel Product Intermediary Sale \*\*
  - > ~~**C**~~ Travel Product Note \*\*
  - > ~~**C**~~ Travel Product Period \*\*
- .....



## BSP

Buy Ship Pay Master

- C Exchanged Document Context
- C Exchanged Document
- C Exchanged Declaration
- C Logistics Transport Movement
- C Supply Chain Consignment
- C Logistics Transport Equipment
- C Transport Service
- C Trade Settlement Payment
- C Supply Chain Trade Transaction
- C Valuation Breakdown Statement

## MMT

Multi Modal Transport Master \*\*

- C Exchanged Document Context
- C Exchanged Document \*
- C Exchanged Declaration
- C Logistics Transport Movement \*
- C Supply Chain Consignment
- C Logistics Transport Equipment
- C Transport Service
- ~~C~~ Trade Settlement Payment \*\*
- ~~C~~ Supply Chain Trade Transaction \*\*
- ~~C~~ Valuation Breakdown Statement \*\*

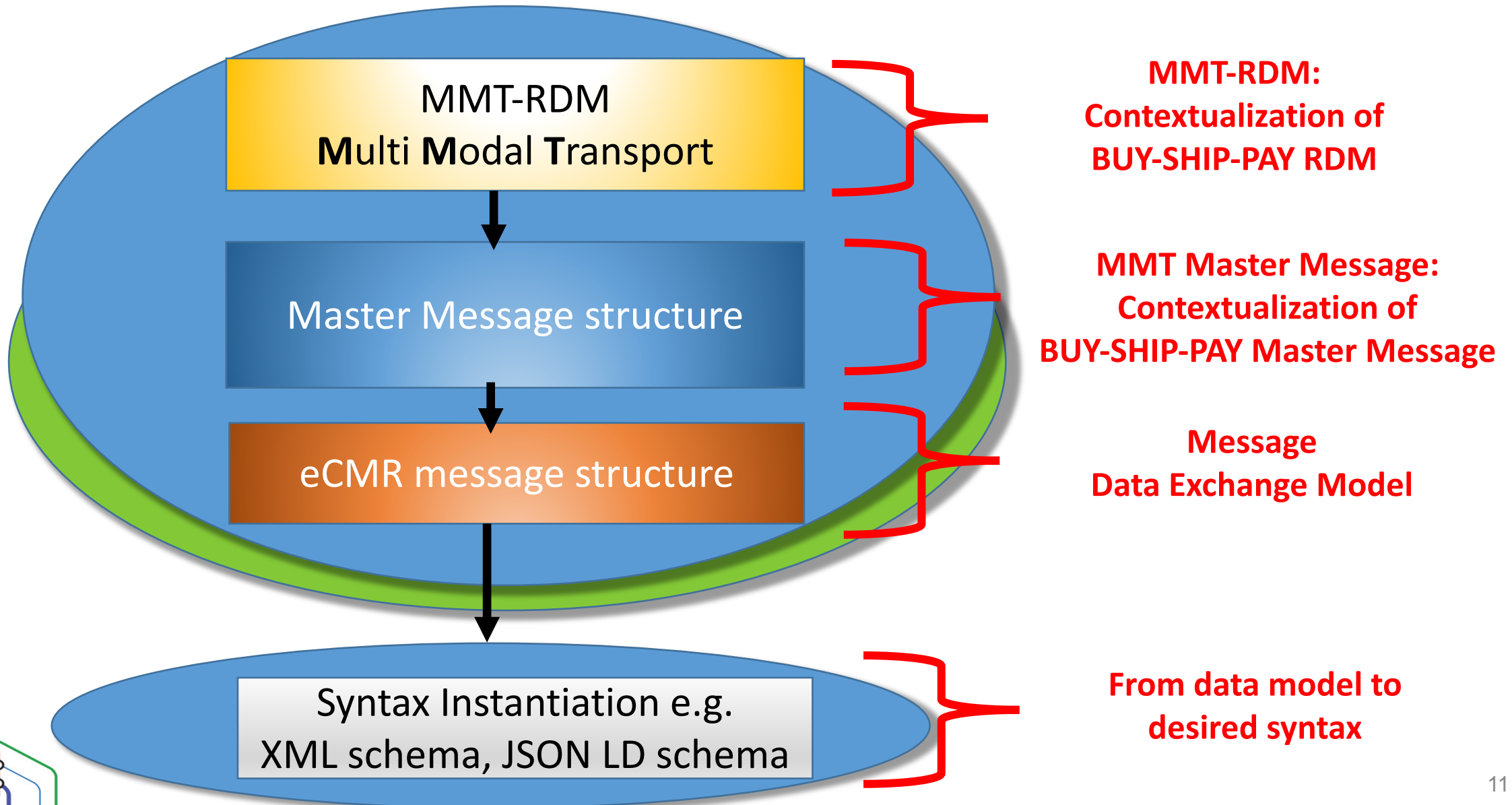
## SCRDM

SCRDM CCBDA Master Message Structure \*\*

- C Exchanged Document Context
- C Exchanged Document
- ~~C~~ Exchanged Declaration \*\*
- ~~C~~ Logistics Transport Movement \*\*
- ~~C~~ Supply Chain Consignment \*\*
- ~~C~~ Logistics Transport Equipment \*\*
- ~~C~~ Transport Service \*\*
- C Trade Settlement Payment \*
- C Supply Chain Trade Transaction \*
- C Valuation Breakdown Statement \*

Derive message  
data exchange model  
e.g. e-CMR

Derive message  
data exchange model  
e.g. Despatch Advice, Order



An RDM provides a consolidated list of standardized data and processes for use in a particular business domain, which are globally understandable and exchangeable between parties using common standard data exchange structures.

1. Reflects the simplification and harmonization of trade data and standard data exchange structure requirements, which can contribute significantly to reducing the time and costs of international trade transactions.
2. Reduction of administrative burden by efficient reuse of data shared within the BUY SHIP PAY domain model
3. Standardized data exchange structures, based on common master data exchange structure and independent of exchange syntax
4. An RDM is a key tool in the development of modern Information and
5. Communication Technology (ICT) applications that need to interchange data with other applications.

Open Development Process  
ECE/TRADE/C/CEFACT  
/2016/17

Provides a description of the  
sequence how projects are carried  
out within UN/CEFACT

PDF 

PDF 

PDF 

<https://unece.org/trade/uncefact/policiesprocedures-and-termsreference>

**Stage 1:** Project Inception

**Stage 2:** Requirements Gathering

**Stage 3:** Draft Development

**Stage 4:** Public Review (Optional)

**Stage 5:** Project Exit

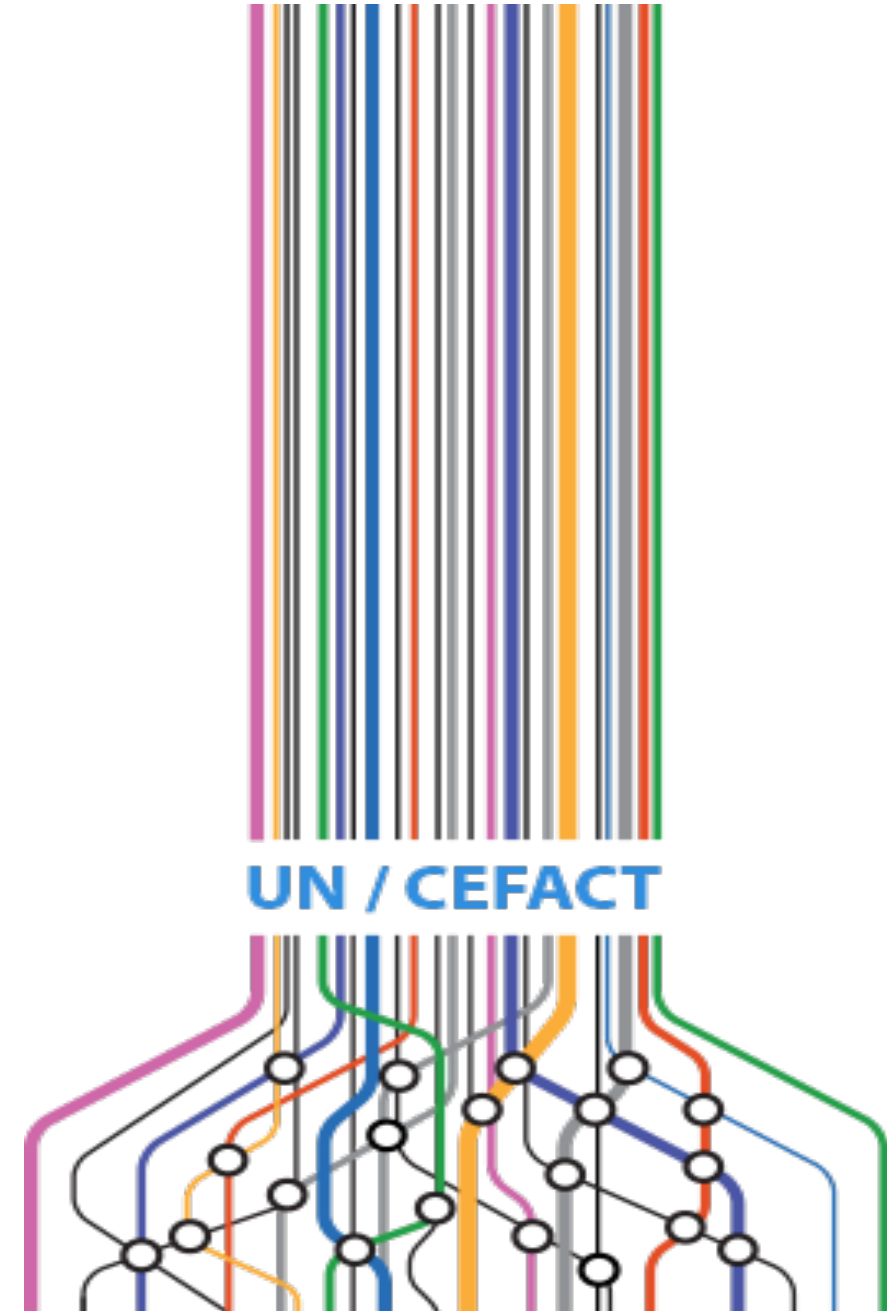
**Stage 6:** Publication

**Stage 7:** Maintenance (Optional)

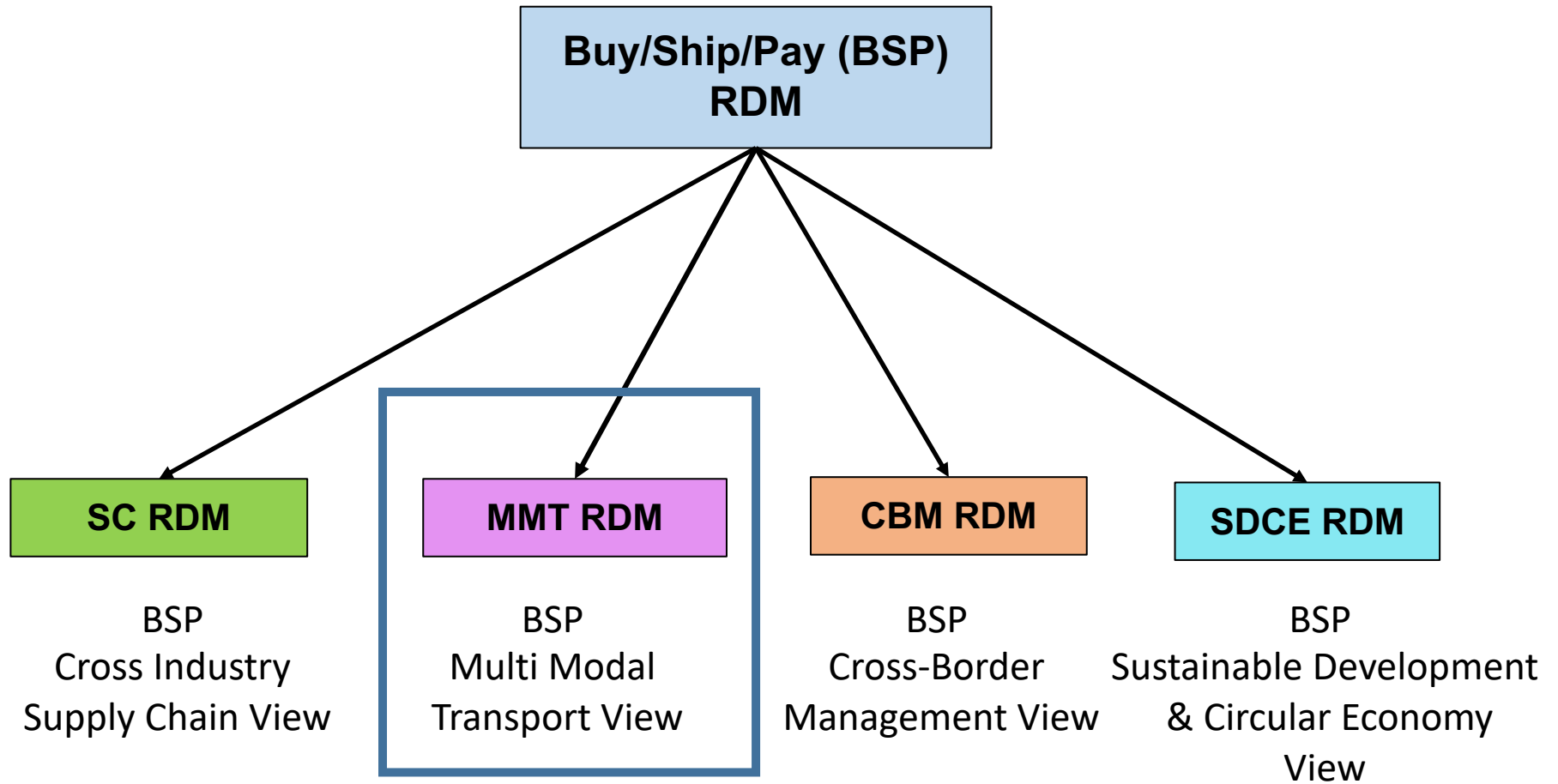
# Transport and Logistics Domain

## Standards Recap and Signpost

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# UN/CEFACT International Supply Chain Reference Data Model Family





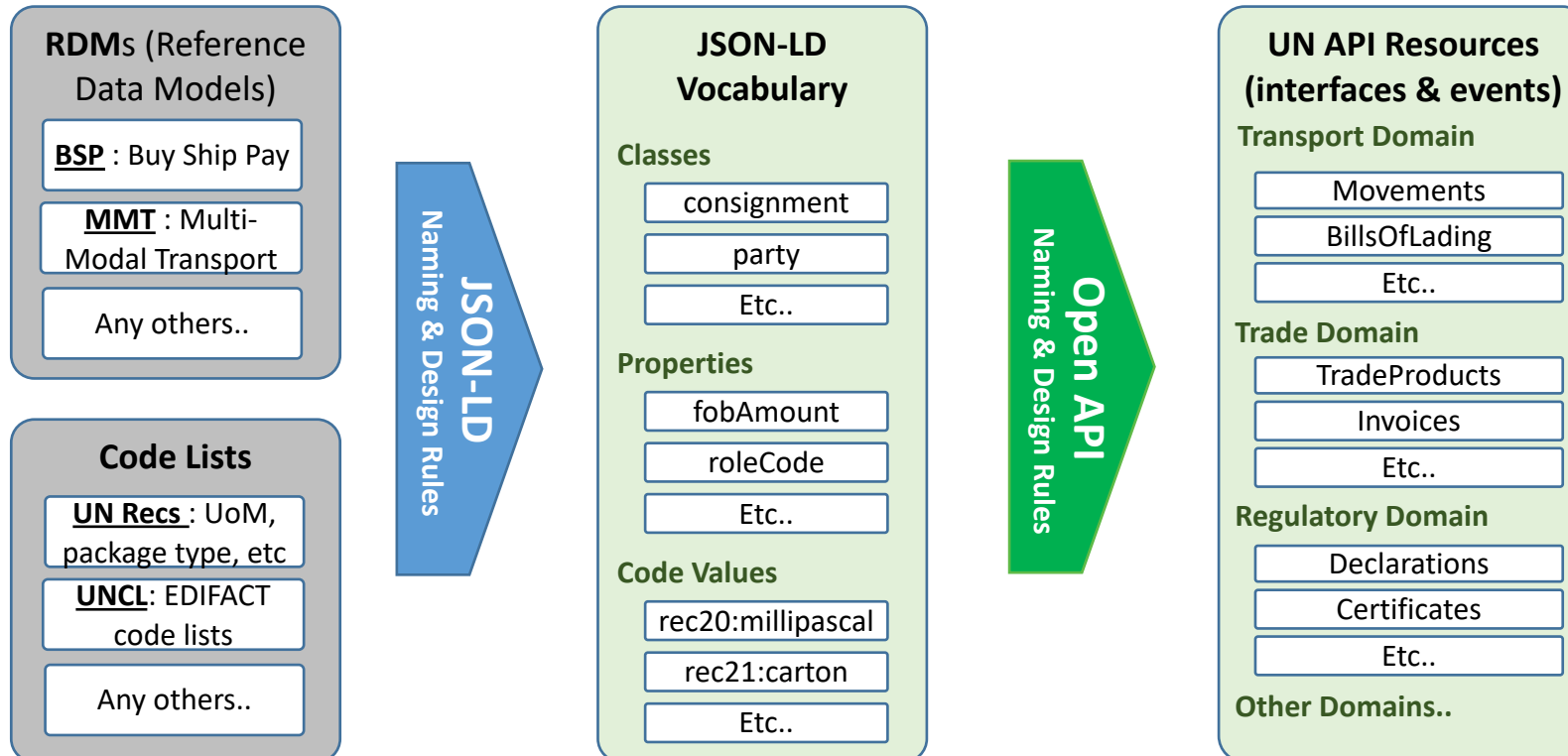
# Mapping to MMT Reference Data Model

	C	D	E	F	G	H	I	J	K	L	M	N	O
BN	FIATA Bill	CIM-SMGS	CIM-SMGS URL	Wagon List	River B/L	Maritime B/L	eCMR	EFTI DR FEB2021	EFTI DG to	Air Waybill	Air CSD	Air DG	
BN	FIATA Bill	CIM-SMGS Co	CIM-SMGS Co	Wagon list; Co	River Bill of Lading	Maritime B/L	eCMR MMT; R	EFTI DESCopy	MMT Cont	Air Waybill	CSD; D21	DG Decla	
MMT CCBDA IFTM** Data Exchange Structure	X	X	X	X	X	X	X	X	X	X	X	X	
Exchanged Document Context							X						
Exchanged Document	X	X	X	X	X	X	X			X	X	X	
ID	X	X	X	X	X	X	X			X	X	X	
Name													
Type Code					X	X	X			X	X	X	
Issue Date Time	X	X	X	X	X	X	X			X	X	X	
Remark							X						
Original Issued Quantity	X				X								
Copy Issued Quantity	X				X								
Purpose Code		X	X							X	X	X	
Sender Assigned ID		X	X										
Recipient Assigned ID		X	X										
Version ID		X											
Note		X	X				X				X		
Subject Text							X						
Content Code							X						
Content Text		X	X				X				X		
Subject Code							X				X		
Reference Document		X	X										
Type Code		X	X										
Issue Location	X				X	X	X			X		X	
ID	X				X	X	X			X		X	
Name	X				X	X	X			X		X	
Country Code	X						X						
Contractual Clause	X	X	X							X			
ID	X									X			
Content Text	X	X	X							X			
Air Waybill Consignor Signatory Authentication	X	X	X	X						X			
Actual Date Time	X	X	X							X			

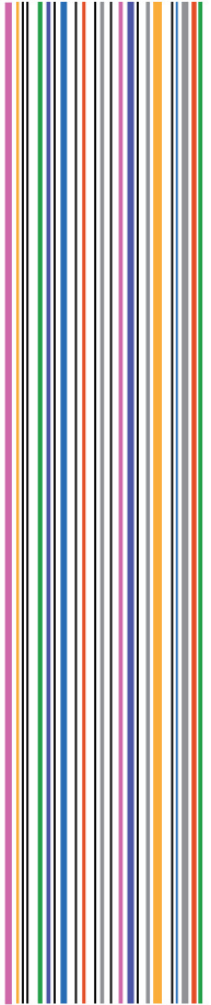
Air, Inland Waterway, Road, Rail, Sea



# UN/CEFACT CCL/RDM/Codes to be officially published as JSON-LD







UN / CEFACT



# JSON-LD Web Vocabulary



United Nations



About

Classes

Properties

Code Lists

## UN/CEFACT Web Vocabulary

<https://vocabulary.uncefact.org/>

### About

The UN/CEFACT Web Vocabulary is a linked data representation of the UN/CEFACT [Buy-Ship-Pay Reference Data Model](#). The BSP RDM generalizes concepts of Multi-Modal Transport Reference Data Model (MMT-RDM) and the Supply Chain Reference Data Model (SCRDM), which can be applied by country and regional administrations and industries.

### Version

The vocabulary reflects BSP version 22A.

### Contexts

JSON-LD Context files are available here:

<https://vocabulary.uncefact.org/unece-context.jsonld>

<https://vocabulary.uncefact.org/unlocode-vocab-context.jsonld>

### Content Negotiation

Machine readable JSON-LD term definitions are accessible using HTTP content negotiation:

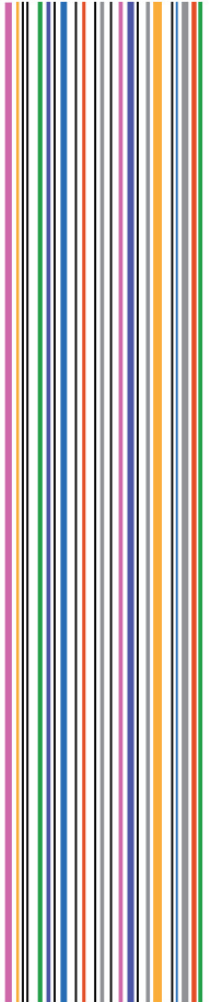
```
curl https://vocabulary.uncefact.org/ -H 'Accept: application/ld+json'
```

```
curl https://vocabulary.uncefact.org/unlocode# -H 'Accept: application/ld+json'
```

### Links

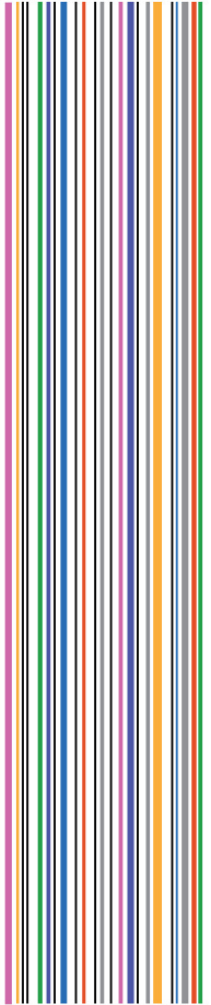
<https://unece.org/trade/uncefact/mainstandards>

<https://github.com/uncefact>



# Signpost to Standards

- Visit the [streamlined standards](#) page for UN/CEFACT, find relevant standards easily.
- Review the [UN/CEFACT web vocabulary](#) and share with your developers
- [Register to become an expert](#) and contribute to active projects
- Attend [UN/CEFACT events](#)
  - Forum is twice a year (Spring and Autumn)
  - Participate in virtual events



UN / CEFAC

# Thank you

Dr. Hanane BECHA

Senior Innovation & Standards Advisor

UN/CEFACT Vice Chair, Transport & Logistic

[becha@gmail.com](mailto:becha@gmail.com)

+33 6 34 02 35 17



David Roff

Independent Consultant

UN/CEFACT Domain Coordinator, Transport & Logistic

[david@cif-consulting.co.uk](mailto:david@cif-consulting.co.uk)

+44 78111 69371



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