MMT RDM and Role in Transport Data Exchange

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**UN/CEFACT**

**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 1000 experts from government and business
- Experts meet via internet every week plus two Face-to-Face Forums per year (hopefully)
Co-operation / Collaboration

UN / CEFACCT

EEC

EU
DG-MOVE
DG-TAXUD
DG-MARE
DG-DEVCO
DG-DIGIT

ISO
IEC
ITU
WTO
ITC
IATA
WCO
OECD

IPCSA
PROTECT
FIATA
BIC
SMDG
DCSA

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UN/CEFACT Deliverables

- Internationally agreed recommendations
- Internationally agreed e-business standards
- Common Libraries
- Common Directories
- Code Lists

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Multi Modal Transport Reference Data Model

• The MMT reference data model is based on the UN/CEFACT Core Component Library (CCL) which brings together the data exchange requirements of international multimodal transport processes including related trade, insurance, customs and other regulatory documentary requirements based on the integration of trade facilitation and e-Business best practices.

• The UN/CEFACT MMT Reference Data Model is a subset of the Buy/Ship/Pay Reference Data Model and a sister to the Supply Chain Reference Data Model (SCRDM) and to the future Cross Border Management Reference Data Model (CBMRDM)
UN/CEFACT International Supply Chain Reference Data Model Family

Buy/Ship/Pay (BSP) RDM

- SC RDM
  - BSP Cross Industry Supply Chain View
- MMT RDM
  - BSP Multi Modal Transport View
- CBM RDM
  - BSP Cross-Border Management View
- SDCE RDM
  - BSP Sustainable Development & Circular Economy View

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UN/CEFACT International Supply Chain Process Model

- **Commercial Procedures**
  - Establish Contract
  - Order Goods
  - Advise On Delivery
  - Request Payment
  - Packing
  - Inspection
  - Certification
  - Accreditation
  - Warehousing

- **Transport Procedures**
  - Establish Transport Contract
  - Collect, Transport and Deliver Goods
  - Provide Waybills, Goods Receipts Status reports etc.

- **Regulatory Procedures**
  - Obtain Import/Export Licences etc
  - Provide Customs Declarations
  - Provide Cargo Declaration
  - Apply Trade Security Procedures
  - Clear Goods for Export/Import

- **Financial Procedures**
  - Provide Credit Rating
  - Provide Insurance
  - Provide Finance
  - Execute Payment
  - Issue Statements

**INVOLVES**

BUY → SHIP → PAY

Prepare for Export → Export → Transport → Prepare for Import → Import

Prepare for Export

Export

Transport

Prepare for Import

Import

BUY

SHIP

PAY
Global Trade – Semantic Anchors

Shipment (Trade Delivery)
- A shipment is an identifiable collection of one or more Trade Items (available to be) transported together from the Seller (Original Consignor/Shipper) to the Buyer (Final/Ultimate Consignee):
  - A Shipment can only be destined for one Buyer
  - A Shipment can be made up of some or all Trade Items from one or more Sales Orders
  - A Shipment can have only one Customs UCR
  - A shipment may form part or all of a Consignment or may be transported in different Consignments.

Consignment
- A consignment is a separately identifiable collection of Consignment Items (available to be) transported from one Consignor to one Consignee via one or more modes of transport as specified in one single transport service contractual document:
  - A Consignment can only have one Transport Service Buyer
  - A Consignment can only have one Transport Service Provider
  - A Consignment can only have one Consignor
  - A Consignment can only have one Consignee
  - The Transport Service Buyer can be either the Consignor or the Consignee
  - A Consignment is made up of one or more Consignment Items
  - A Consignment can be made up of some or all Trade Items (aggregated into Consignment Items) from one or more Shipments
UN/CEFACT evolution/revolution – Reference Data Models

Benefits of UN/CEFACT Semantic Models

• Cross-industry and multimodal transport focus to support global supply chains in general
• 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
• References individual modal transport conventions
• Identification of regulatory data e.g. Dangerous Goods, Customs reporting requirements
• Standardized data exchange structures, based on common data exchange structure and independent of exchange syntax
I need to build an application to manage freight movements.

Wow! UN/CEFACT have a rich reference data model I can use for multi-modal transport data.

Even Better, I can use the JSON schema for my naming and product API design 😊.

What data elements do I need to consider, what is the structure of data?

And they already have defined subsets for common exchanges of data like a Bill of Lading.

By using the json-ld vocabulary I can tell the world in the context of UN/CEFACT this is what I mean by ‘Consignment’ so it’s obvious to everyone!

https://service.unece.org/trade/uncefact/vocabulary/uncefact/
For further Information

- All UNECE and UN/CEFACT Recommendations, codes, standards and publications are available for free on our website at:
  - www.unece.org/cefact/ and tfig.unece.org
  - All experts are welcome to join the standards development work free of charge

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