MMT RDM and Role in Transport Data Exchange

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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 RDM

Supply Chain RDM (SCRDM)

Multimodal Transport RDM (MMT)

Cross-Border Management RDM
UN/CEFACT International Supply Chain Process Model

- **BUY**
  - 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

- **SHIP**

- **PAY**

IN VOLVES

BUY

Export

Transport

Prepare for Import

Import

Prepare for Export

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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
## Alignment between Modes of Transport

<table>
<thead>
<tr>
<th>Business Name</th>
<th>MMT/IDCO</th>
<th>eCMR</th>
<th>Maritime Rot</th>
<th>CIM-SMGS Consignment Note</th>
<th>CIM-SMGS Consignment Note under UNL</th>
<th>Wagon List</th>
<th>Inland Waterway</th>
<th>PIATA Rot</th>
<th>BOM Path</th>
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All modes aligned to the UN/CEFACT Multi Modal Transport (MMT) Reference Data Model
MMT – Pipeline Data Exchange Structure (PDES D21A)

Border Transport Means

Main Transport Movement details

Master Bill Information

Master Transport Contract details

Master Transport Contract Item details

Master Consignment Item Info

House Transport Contract

House Transport Contract Item details

House Bill Information (Y or X)

Trade Product Information (commodity code etc.).

House Consignment Item Information (X)

Trade Line Item Info

Commercial information (seller and buyer details).

Trade-Related Transaction Info
Trade Example: UN/CEFACT Cross Industry Invoice (CII)

SEMANTIC MODEL
Supply Chain (BUY PAY)
(subset of BSP)

Supply Chain (BUY PAY)
Master message structure

Invoice message model

Syntax
XML Invoice schema

BUY SHIP PAY (BSP)
Semantic model
subset of UN/CCL

BUY SHIP PAY
Master message structure

BUY PAY
Exchange Syntax-neutral business data exchange structure

CII European Invoice Mandatory Syntax Implementation

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

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

MultiModal (MMT)
Master message structure

eCMR message model

Syntax
XML eCMR schema

BUY SHIP PAY (BSP)
Semantic model
Subset of UN/CCL

BUY SHIP PAY
Master message structure

MMT subset
Exchange Syntax-neutral
data exchange structure

Part of