UN/CEFACT
CBM RDM:
CROSS-BORDER MANAGEMENT Reference Data Model

Cross Border Management Reference Data Model
CBM RDM

Zisis Palaskas
Tahseen Ahmad Khan
Ian Watt
Sue Probert

CBM-RDM
Vice Chair
Vice Chair
Chair

Project Lead
CBM RDM Project: Purpose and Objectives

The CBM RDM:

- **Provides** a Regulatory Reference Data Model within the UN/CEFACT semantic library to assist authorities link this information to the standards of other organizations.
- **Delivers** a RDM to cover the trade and transport-related processes of cross-border supply chain, the main parties and the information involved.
- **Links** the BSP, SCRDM and MMT RDM with **existing customs standards** based on the developing (EUCDM) standard, sharing base of components the UN Core Component Library (UN CCL).
- **Creates a subset of the UN CCL** showing the shared aspects between the international supply chain and transport-logistics chains and the agency driven data models (EUCDM).

https://unefact.unece.org/display/unefactpublic/Cross-Border+Management+Reference+Data+Model
DG TAXUD – EUCDM (Annex B)

- The Union Customs Code (UCC) entered into force on 1 May 2016 and is a key element of the ongoing actions to modernise EU customs.

- The EU Customs Data Model (EUCDM) implements UCC, aiming at a paperless and fully automated customs union.

- EUCDM is key to various IT systems that are used for data processing by customs in the EU, i.e., NCTS (new computerized transit system), AES (automated export system), ICS-2 (Import Control System) and Member States (MS) national systems.

- The backbone of the EUCDM is the data provided by traders to customs authorities by means of the different declarations and notifications, and data and format requirements and codes are defined in Annex B of the UCC.

- The EUCDM maps Annex B to the WCO Data Model to reliably and unambiguously relate Customs needs and Economic Operators data.
Project Deliverables and Status

3. Project deliverables and 4. Exit Criteria

Required (check all that apply)

Please note that the Bureau may reassess and change a deliverable after its completion at its discretion.

<table>
<thead>
<tr>
<th>Project deliverables</th>
<th>Exit Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Policy Recommendation</td>
<td>Public Review logs demonstrating all comments have been satisfactorily resolved; Final document ready for publication.</td>
</tr>
<tr>
<td>☐ Technical Specification</td>
<td>Final deliverable ready for publication.</td>
</tr>
<tr>
<td>☐ White Paper</td>
<td>Final deliverable ready for publication.</td>
</tr>
<tr>
<td>☐ Green Paper</td>
<td>Final deliverable ready for publication.</td>
</tr>
<tr>
<td>☐ Requirement Specification Mapping</td>
<td>Final deliverable ready for publication.</td>
</tr>
<tr>
<td>☒ Core Component Business Document Assembly</td>
<td></td>
</tr>
<tr>
<td>☐ Guidelines</td>
<td></td>
</tr>
<tr>
<td>☐ Executive Guide</td>
<td></td>
</tr>
<tr>
<td>☐ Brochure</td>
<td></td>
</tr>
<tr>
<td>☒ Entries/alignment to the Core Component Library</td>
<td></td>
</tr>
<tr>
<td>☒ XML Schema</td>
<td></td>
</tr>
<tr>
<td>☐ UN/EDIFACT message</td>
<td></td>
</tr>
<tr>
<td>☐ Internal UN/CEFACT Document</td>
<td></td>
</tr>
<tr>
<td>☒ Other (specify): a new RDM structure in the library</td>
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11. Milestones (repeat for each deliverable, if different)

The following are draft milestones of the project.

<table>
<thead>
<tr>
<th>ODP Stage</th>
<th>Expected Completion Date</th>
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<tbody>
<tr>
<td>Yes</td>
<td>Project Inception</td>
</tr>
<tr>
<td>Yes / No</td>
<td>Requirements gathering</td>
</tr>
<tr>
<td>Yes</td>
<td>Draft development</td>
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</tr>
<tr>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Yes / No</td>
<td>Public Draft Review</td>
</tr>
<tr>
<td>Yes</td>
<td>Project Exit</td>
</tr>
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</table>

https://uncefact.unece.org/pages/viewpage.action?pageId=83591883
CBM-RDM in Public Review

Public Review: CROSS BORDER MANAGEMENT REFERENCE DATA MODEL (CBM-RDM)

This is to announce a 60-day public review until 24 October 2021 concerning the Cross Border Management Reference Data Model project. Please use the Public Comment Log provided to facilitate the preparation of a Disposition Log by the Project Team.

GUIDELINE

- Download all the files for Public Review for this project
- Take note of your comments using the Public Review Comment Template for this project
- Send by email your Public Review Comment Template to the Public Review Editor before the end of the Public Review Period

PUBLIC REVIEW PERIOD

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021-07-21</td>
<td>2021-10-24</td>
</tr>
</tbody>
</table>

FILES FOR PUBLIC REVIEW

- CBM-RDM_DraftForReview.pdf
- CBM-RDM_CommentsLog.docx

Download All

https://uncefact.unece.org/pages/viewpage.action?pageId=83591883
CBM-RDM as part of UN/CEFACT ISC RDM Family

- UN/CEFACT Reference Data Models (RDMs) provide a comprehensive subset of the UN/CCL and Code Lists.
- CBM-RDM will expand/link to data models based in well established
  - Buy-Ship-Pay (BSP) which is the top level;
  - Supply Chain Management (SCRDM);
  - Multimodal Transport (MMT RDM).
UN/CEFACT RDMs

• UN/CEFACT RDMs and domain Models are not ‘plain’ vocabularies.
• Their creation and update process is based in a certain requirements specifications and delivery lifecycle supported by UMM.
• They are modelled around document structures which are always addressing/implement specific business processes.
• They are consistently maintained by a tool which is storing rich metadata information around concepts.
UN/CEFACT Reference Data Model Benefits

Benefits of UN/CEFACT Semantic Reference Data Models

• Subsets of CCL Business Information Entities by Context.

• Support **information sharing** with the timely capture of quality data from original data sources ensuring supply chain visibility.

• **Standardized data exchange structures**, based on common master data exchange structure and independent of exchange syntax.

• **Reduction of administrative burden** by efficient reuse of data shared within a contextualized domain model i.e. CBM-RDM.
Using the UN/CEFACT Core Component Library (CCL)

Business Information Entities (BIEs)
Reuses of Object Class Library in different business Contexts
(D21A ~ 1330 BIEs)

Semantic Foundation - Core Component (CCs)
Object Class Library
(D21A ~ 600 CCs)

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UN/CEFACT Available Resources

https://unece.org/trade/uncefact/mainstandards
ISC B2B Data Exchange Document Structures Families

Trade Documents – Quotation, Order, Invoice etc.

Materials Management Documents – Despatch Advice, Pick List, Packing List etc.

Transport Documents – Bill of Lading, Shipping Instructions etc.

Customs Documents – Export, Import, Transit Declarations, Cargo Reports etc.

Other Regulatory Documents – Cert of Origin, etc.
Document Families - Border Management Challenges

UN/CEFACT Buy/Ship/Pay
UN/CEFACT eCerts

Materials Management
Transport
Payment
Insurance

Trade

UN/CEFACT eCerts

Other Cross-Border Agencies

Standard Customs Data Models
EUCDM Data Model

Customs

G2B
B2G
B2B
G2G

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BSP Semantics

- **Master Bill Level**
  - Master Transport Contract Details e.g. Carrier, Consignor, Consignee etc.
  - 1..n
  - Master Consignment Items e.g. Shipping Description, Gross Weight etc.

- **House Bill Level**
  - House Transport Contract Details e.g. Forwarder, Consignor, Consignee etc.
  - 1..n
  - House Consignment Items e.g. Shipping Description, Gross Weight etc.

- **Trade Level**
  - Trade Transaction Details e.g. Seller/Buyer
  - 1..n
  - Trade Item Details e.g. HS code, Gross Weight, Values etc.

**Transport**

**Trade**
Top Level BSP Business Entities - Relationships

Buy/Ship/Pay –
Cross-Border Trade, Transport & Customs
Business Entity Entity Overview

Trade Data

Transport Data
EUCDM on the web: Processes
## EUCDM on the web: Declarations and Notifications

<table>
<thead>
<tr>
<th>C</th>
<th>Procedures</th>
<th>Related Data</th>
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</thead>
<tbody>
<tr>
<td>A1</td>
<td>Exit summary declaration</td>
<td>Document Data Structure Definition</td>
</tr>
<tr>
<td>A2</td>
<td>Exit summary declaration - Express consignments</td>
<td>Document Data Structure Definition</td>
</tr>
<tr>
<td>A3</td>
<td>Re-export notification</td>
<td>Document Data Structure Definition</td>
</tr>
<tr>
<td>B1</td>
<td>Export declaration and re-export declaration</td>
<td>Document Data Structure Definition</td>
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## EUCDM (v6.0) – UCC Annex B

### Annex B Data set view > Structure A1

#### Exit summary declaration

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<tr>
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<th>Format</th>
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<td>13 08 074 018</td>
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<td>Department or employee – Contact name</td>
<td>Name</td>
</tr>
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<td>13 08 074 000</td>
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<td>Contact</td>
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<tr>
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<td>13 08 074 075</td>
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<td>carrierContactPersonEmailAddress</td>
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<td>ID</td>
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</tbody>
</table>
### Data element Overview

<table>
<thead>
<tr>
<th>Group 11</th>
<th>Message information (including procedure codes)</th>
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</thead>
<tbody>
<tr>
<td>11.01.000.000</td>
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<tr>
<td>11.02.000.000</td>
<td>Additional declaration type</td>
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<td>Goods item number</td>
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<td>Specific circumstance indicator</td>
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<td>11.05.000.000</td>
<td>Re-entry indicator</td>
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<tr>
<td>11.06.000.000</td>
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<tr>
<td>11.07.000.000</td>
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<td>11.08.000.000</td>
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<table>
<thead>
<tr>
<th>Group 12</th>
<th>References of messages, documents, certificates, authorisations</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.01.000.000</td>
<td>Previous document</td>
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<tr>
<td>12.02.000.000</td>
<td>Additional information</td>
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#### EUCDM 6.0
as of 2021-04-13 (r1)

### Information
- About
- Download

### UCC Annex B
- Source text
- Guidance
  - Data element view
  - Overview
  - Usage
  - Data set view
  - Structure
  - Mapping

### UCC Annex A
- Source text
- Guidance
  - Data element view
  - Data set view

### UCC Annex 12-01
- Source text
  - Data element view

### UCC Annex 21 ST+82
- Source text
  - Data element view
  - Data set view

### ECE Receipt Declaration
- Source text
  - Data element view
  - Data set view

### Archive
- as of EUCDM 3.0

### Future EUCDM
- Publication plan
EUCDM on the web: Data Elements

- **GR11** Message information (including procedure codes)
- **GR12** References of messages, documents, certificates, authorisations
- **GR13** Parties
- **GR14** Valuation Information-Taxes
- **GR15** Dates-Times-Periods
- **GR16** Places-Countries-Regions
- **GR17** Customs offices
- **GR18** Goods Identification
- **GR19** Transport information (modes, means and equipment)
- **GR99** Other data elements (statistical data, guarantees, tariff related data)
## EUCDM on the web: related data per document type

<table>
<thead>
<tr>
<th>C</th>
<th>Procedures</th>
<th>Related Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>F10</td>
<td>Entry summary declaration – Sea and inland waterways – Complete dataset</td>
<td>UN Dangerous Goods code, Type of packages, Transport charges method of payment, Subsequent customs office(-s) of entry, Specific circumstance indicator, Signature/ authentication, Shipping marks, Seller identification No., Seller, Seal number, Representative status code, Representative identification No., Reference number/UCR, Place of unloading, Place of loading, Place of delivery code – Master level transport contract, Place of delivery code – House level transport contract, Place of acceptance, Number of packages, Notify party — Master level transport contract, Notify party — House level transport contract, Notify party identification No. — Master level transport contract, Notify party identification No. — House level transport contract, Notify party identification No. — Master level transport contract, Notify party identification No. — House level transport contract, Notify party identification No. — Master level transport contract, Notify party identification No. — House level transport contract, Nationality of passive means of transport crossing the border, Nationality of active means of transport crossing the border, Mode of transport at the border, LRN, Identity of passive means of transport crossing the border, Identity of active means of transport crossing the border, Gross mass (kg) – Master level transport contract, Gross mass (kg) – House level transport contract, Goods item number, Estimated date and time of arrival at first place of arrival in the Customs territory of the Union, Equipment Supplier Type, Documents produced, certificates and authorisations, additional references, Description of goods – Master level transport contract, Description of goods – House level transport contract, Declarant identification No., Customs office of first entry code, CUS code, Countries of routing of the means of transport codes, Countries of routing of the consignment codes, Conveyance reference number, Container size and type, Container packed status, Container identification number, Consignor — Master level transport contract, Consignor — House level transport contract, Consignor identification No. — Master level transport contract, Consignor identification No. — House level transport contract, Consignor identification No. — Master level transport contract, Consignee — Master level transport contract, Consignee — House level transport contract, Consignee identification No. — Master level transport contract, Consignee identification No. — House level transport contract, Commodity code – Combined Nomenclature code, Carrier identification No., Buyer identification No., Buyer, Additional supply chain actor(s) identification No., Additional information</td>
</tr>
</tbody>
</table>
EUCDM on the web: Data Types
CCL Shipment (SC) and Consignment (MMT) coverage

[Diagram of Business Context and Core]

ABIE
ASBBIE
BBIE

AMC
ASCC
BCC

May Specify Restrictions
On
Derived From
May Specify Restrictions
On
Derived From
May Specify Restrictions
On

Define Values of
Business Data Type

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https://www.unece.org/cefact/codesfortrade/unccl/ccl_index.html
Ship View

Buy/Ship/Pay – Cross-Border Trade, Transport & Customs Business Entity Overview

Trade Data
- Customs Item Details (Trade)
- Trade Item Details
- Trade Item Identification Identifier
- Import/Export Declaration Details
- Declaration Identification Identifier

Transport Data
- Customs Item Details (Transport)
- Customs Item Identification Identifier
- Cargo Report Details
- Cargo Report Identification Identifier
- Consignment Item Details
- Consignment Identification Identifier

Trade Details
- Order Identification Identifier
- Trade_ Packaging Details
- Trade_ Packaging Identification Identifier

Shipment Details
- Shipment Identification Identifier

Transport Details
- Transport Equipment Details
- Transport Equipment Identification Identifier
- Transport Movement Details
- Transport Movement Stage Identifier

Transport Means Details
- Transport Means Identification Identifier

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CBM RDM Shipment View
Exchange Structures

- Regulatory Header
- Goods Shipment Details
  - Goods Shipment Item Details
  - Trade Agreement Details
  - Trade Delivery Details
  - Trade Financial Details
Buy/Ship/Pay – Cross-Border Trade, Transport & Customs Business Entity Overview

Trade Data
- Customs Item Details (Trade)
- Customs Item Identification Identifier
- Import/Export Declaration Details
- Declaration Identification Identifier
- Trade Item Details
- Trade Item Identification Identifier
- Shipments Details
- Shipment Identification Identifier

Transport Data
- Customs Item Details (Transport)
- Customs Item Identification Identifier
- Cargo Report Details
- Cargo Report Identification Identifier
- Consignment Item Details
- Consignment Item Identification Identifier
- Consignment Details
- Consignment Identification Identifier
- Transport Equipment Details
- Transport Equipment Identification Identifier
- Transport Means Details
- Transport Means Identification Identifier

Consignment View
CBM RDM Consignment View Exchange Structures

- Regulatory Header
  - Master Consignment Details
    - House Consignment Details
    - Transport Equipment Details
  - Border Transport Movement
    - House Consignment Details
    - Transport Equipment Details
# Mapping BSP to Customs

![Diagram showing mapping between BSP and Customs data.](image)

### Mapping List

<table>
<thead>
<tr>
<th>Seq</th>
<th>Source</th>
<th>Link</th>
<th>Target</th>
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</thead>
<tbody>
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<td>S793</td>
<td>BSP Master. Details/BSP Master. Details</td>
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</tbody>
</table>

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**UN/CEFACT**

37th UN/CEFACT Forum
Round Table

Discussion