



EU CDM

(The EU Customs Data Model)

An introduction

Jean-Luc Delcourt

Head of Sector
Data Integration and harmonisation
DG TAXUD, European Commission



Introduction

- *Customs data – Importance*
- *EU CDM – Basic principles*

Legal issues

- *UCC data-related principles*
- *Legal framework - Data-related texts*
- *Legal framework - Main data-related blocks*

The EU CDM

- *Objective - Method - Tool*
- *Dissemination*
- *Publication*
- *Integrity features*
- *Consignment and shipment views*
- *How Legal provisions are included in EU CDM*
- *Mapping to WCO DM*



- *Data at the heart of **connectivity**.*
- *Data provided by traders is the life blood of Customs activity*
- *Without **quality data**, Customs cannot:*
 - *Collect **revenue** according to tariff and taxes*
 - **Protect society**
 - *by implementing prohibitions and restrictions*
 - *by assessing and preventing security risks presented by goods and people/traders involved in international transactions*

>> Without quality data, Customs would be blind and powerless! <<

- *Need to **strengthen** data quality*
- *How do we do this **in the EU**?*
 - *By creating a strong EU-wide **legal framework***
 - *By integrating data requirements into a detailed common data model, the **EU CDM***



- ***EU data requirements based on the Union Customs Code (UCC).***
- ***UCC data legal provisions are based on international standards such as the World Customs Organisation Data Model (WCO DM) and others.***
- ***Data modelling developed by Commission in the EU CDM made on the basis of the WCO DM.***

The **UCC** provides for the **general use of IT** for:

- *the lodging,*
- *exchange and*
- *storage of information*

Between:

- *economic operators,*
- *customs administrations and*
- *where appropriate the EU Commission.*

Main Texts:

- *Union Customs Code (UCC) (Reg 2013/952)*
- *UCC delegated and implementing acts (UCC DA and IA) purview:*
 - *Title I, Chapter 2 (Common data requirements), and EORI (economic operators registration and identification)*
- *Annex B to UCC DA (Reg 2015/2446): Data requirements:*
 - *Data "matrix" (Heart)*
 - *Explanatory notes*
- *Annex B to UCC IA (Reg. 2015/2447):*
 - *Data formats and cardinality*
 - *Codes*
- *Annex A to UCC DA and UCC IA : Applications and decisions*
- *Guidelines (Under preparation in a C2020 project group)*



UCC (Electronic declarations are the rule) >>

- **Integration of provisions currently scattered**
 - *Customs declarations (previously "SAD") provisions*
 - *Pre-arrival / pre-departure "Security" provisions*
 - *Streamlined valuation data*
 - *"Simplified Customs declarations" data*
- **New "blocks":**
 - *"Fiscal" declarations*
 - *Arrival and presentation notifications, temporary storage*
 - *Customs goods manifest*
 - *Transit (Reduced data set and Electronic Transport Document)*
 - *Postal traffic import*
- **Total alignment with international standards**
- **Opportunistic updates ...**



- **Objective**: *To integrate all this in a way that helps implementation.*
- **Method**: *Creation of an extension of the WCO DM with EU specificities (WCO DM + an EU "layer").*
- **How?**
 - *Use of **specific tool** (GEFEG FX) to develop the EU CDM which:*
 - *Helps to **map** the EU CDM against **international standards**, notably the **WCO data model***
 - *Includes all necessary **code lists***
 - ***Data elements and modelling** defined in the tool are **reused in many applications**, based on customs declaration information, such as Surveillance 2+, BTI, CS/RD, Single Window...*
 - ***Schemas** used for data exchange can rely on the data elements and structures of the EU CDM*

Dissemination – National extensions

- *The tool:*
 - allows EU CDM data and structures to be **made available to MS** for **IT development**
 - allows other users (MS, traders) to **inherit** the EU CDM and to **customise** it in accordance with specific national requirements (Excise ...)
- MS can **add** their **national** data requirements **layer** on the common EU CDM
- **EU-wide** implementation **commonality** is ensured for EU legal obligations + Non harmonized **national rules** added to common EU CDM core.



Publication

- *EU CDM publication:*
 - **Read-only repository**
(in GEFEG.FX native formats)

GEFEG

Home | About GEFEG | Products | Services | Training | Industries | Support | News | Contact German

EUCDM

- Introduction
- TAXUD EUCDM HTML Publication
- TAXUD EUCDM Repository
- TAXUD EUCDM Repo Access Request
- TAXUD EUCDM with GEFEG.FX
- Download Product Information
- Industry

TAXUD EU Customs Data Model HTML Publication

Viewing the TAXUD EU Customs Data Model's Content and Structures

The [TAXUD EU Customs Data Model HTML Publication](#) is an easily understandable browser version of the TAXUD EU Customs Data Model (EUCDM), **freely available to government administrations and private companies**. The TAXUD EUCDM has been developed by the European Commission Directorate-General for Taxation and Customs Union (TAXUD).

The TAXUD EU Customs Data Model in HTML format aims to facilitate the understanding and the application of the TAXUD EU Customs Data Model. The hyperlinked data model allows for comfortable navigation through data objects and structures, using a standard internet browser.

The TAXUD EU Customs Data Model is thus not only a reference model for customs authorities of the EU Member States but also for the private sector which will be implementing the EU requirements on national level soon.

Copyright © 1997-2016 GEFEG mbH. All Rights reserved.
Impressum | General Terms | Webmaster | Last update: 2016-05-31

- **In html format**

EUCDM

- Introduction
- UCC Annex B**
 - Legal text
 - Guidance
 - Data element view
 - Column view
 - Consignment view DIP
 - Shipment view DIP
- UCC Annex A**
 - Legal text
 - Guidance
 - Data element view
- UCC Annex 12**
 - Legal text
 - Data element view

EU Customs Data Model

The EU Customs Data Model (EUCDM) is the model for Customs trans-European systems such as NCTS, AES, ICS and for Member States national customs clearance systems. Its overall objective is to provide a technical instrument that models the data requirements laid down in EU Customs legislation and present a single and genuine source of information for the technical developments of the different IT systems that are used for data processing by customs in the EU.

The backbone of the EUCDM is the data provided by traders to customs authorities by means of the different declarations and notifications defined in EU Customs legislation, the data requirements of which as well as their formats and codes are defined in Annex B of the UCC-DA and of the UCC-IA respectively. The EUCDM also contains the mapping of these data requirements against the WCO Data Model. This mapping serves the following main purposes:

- To provide evidence that the EUCDM is fully compatible with the WCO Data Model.
- To link the data elements of the EUCDM with their corresponding data elements in the WCO Data Model, thereby defining unambiguously the relation between Customs needs and economic operators data.

The objective is to extend in the future the scope of the EUCDM by integrating data elements used for the purpose of response messages and those used for the exchange of data between customs authorities, as well as those provided for in UCC-DA and UCC-IA Annex A.

By its nature, and by virtue of the tool used to design it, which is also used by the WCO for the management of the WCO Data Model, the EUCDM enables Member States to complement it for their national purposes in full abidance of EU Customs provisions. Member States using the same data mapping tool, may inherit the EUCDM and complement it in accordance with their national needs. Others may exploit the EUCDM as published under other formats, such as this html presentation, on the EUROPA website.

- **Translations in all EU languages (currently under preliminary development)**



- ***UCC Annexes B-DA and B-IA publications can be automatically generated from a single source (Guarantee for absolute coherence between legal texts and EU CDM) (EU law <> EU CDM)***
- ***Transformation of the UCC legal requirements into document structures via re-use and customization of the WCO DM (UCC Information Packages) (EU CDM < WCO DM)***
- ***Member States can reuse the UCC Information Package to:***
 - ***Cover their requirements beyond the UCC annexes by extending the EU CDM for national technical and administrative purposes and other data sources (e.g. reporting formalities directive) but still based on the wider WCO Data Model (National implementations <> EU CDM-EU law)***
 - ***Auto-generate their extended XML schemas***

UCC Procedures (42)

Exit summary declarations
Export declarations
Export simplified declarations
Transit
emanifest and customs status
Entry summary declarations
Entry "pentalogy"
Import declarations
Import simplified declarations

A (3)

B (4)

C (2)

D (3)

E (2)

F (15)

G (5)

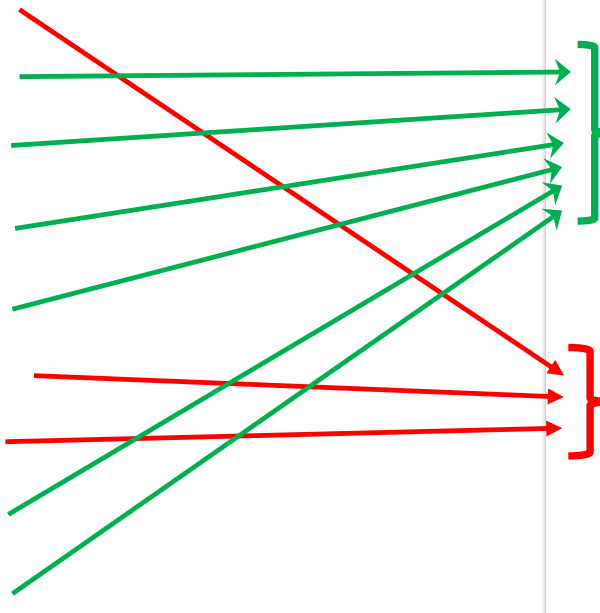
H (6)

I (2)

WCO Data Model

Shipment View

Consignment View



How Legal provisions are included in EU CDM



The EU CDM

GEFEG.FX - Professional+ - [Data model editor - UCC Pubs; 2.1]

File Edit View Reports Extras Window Help

Show all objects

Main/Data groups/Group 1/1/6 Goods item number

Data groups

- Group 1
 - 1/1 Declaration type
 - 1/2 Additional Declaration Type
 - 1/3 Transit Declaration Type
 - 1/4 Forms
 - 1/5 Loading lists
 - 1/6 Goods item number**
 - 1/7 Specific circumstances indica
 - 1/8 Signature/Authentication
 - 1/9 Items
 - 1/10 Procedure
 - 1/11 Additional procedure
 - 1/13 MRN
 - 1/14 Goods item number in previ
- Group 2
- Group 3
 - 3/1 Exporter Address
 - 3/1 Name
 - 3/1 Street
 - 3/1 Country
 - 3/1 Postcode
 - 3/1 City
 - 3/2 Exporter ID
 - 3/3-1 Consignor Address (Master)
 - 3/3-1 Name
 - 3/3-1 Street
 - 3/3-1 Country
 - 3/3-1 Postcode
 - 3/3-1 City
 - 3/3-1 Phone number
 - 3/3 Consignor ID (Master)
 - 3/3-2 Consignor Address (Master)

Composition	Notes	Enhanced	Children	A1	A2	A5	B1	B2	B4	B5	C1	C2	D1	D2	D3	E1	E2	F1a	F1b	F1c	F1d	F2a	F2b
B-DA DataReqTable Columns																							
B-DA DataReqTable Usage	1/6	AB		A	A	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	A	A
B-DA DataReqTable Usage	1/6	XY	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
B-DA DataReqTable Usage	1/6	Foot note										[79]	[3]	[3]		[3]							

UCC DE Def

DE 1/6

Name Goods item number

Box No 32

Format n..5

Code list Y/N N

Header Cardinality

Item Cardinality 999x

Notes

Remarks

B-DA DataReqNotes Usage

DE 1/6

Title Data Requirements table columns A1-A5, B1-B5, C1, D1, D2,E1, E2 F1a to F1d, F2a to F2c, F3a, F4a, F4b, F4d, F5, G3 to G5, H1 to H7 and I1:

Text Number of the item in relation to the total number of items contained in the declaration, the summary declaration, notification or proof of Union status, where th

B-DA DataReqNotes Usage

DE 1/6

Title Data Requirements table column C2 and I2:

Text Item number assigned to the goods upon entry in the declarant's records.

B-DA DataReqNotes Usage

DE 1/6

Title Data Requirements table column F4c:

Text Item number assigned to the goods within the CN23 concerned.



Software interface showing mapping between UCC DE Map and WCO DM. The interface includes a tree view of objects, a table of attributes, and a mapping table.

Tree View (Left):

- 2/8 Identification of warehouse (O)
 - 2/8 Type (O - string)
 - 2/8 Identifier (O - string)
- Group 3
 - 3/1 Exporter Address (O)
 - 3/1 Name (O - string)
 - 3/1 Street (O - string)
 - 3/1 Country (O - string) **(Selected)**
 - 3/1 Postcode (O - string)
 - 3/1 City (O - string)
 - 3/2 Exporter ID (O)
 - 3/3-1 Consignor Address (Master) (O)

Tree View (Right):

- Exporter (O)
 - name (O)
 - identification (O)
 - role (N)
 - Address (O)
 - type (N)
 - cityName (O)
 - country (O)
 - countrySubDivision (N)
 - countrySubDivisionName (N)
 - line (O)
 - postcode (O)
 - Contact (N)

Attribute Table (Left):

Attribute	Notes	External code lists	Codes	Enhanced	Children
UCC DE Map					
DE			3/1		
Name			Exporter country code		
Box No			2		
Format			a2		
Code list Y/N			N		
Header Cardinality					
Item Cardinality					
Notes			Country code:		

Attribute Table (Right):

Attribute	Notes	Enhanced	Children
UnqualifiedDataType			
WCO Code Remarks			EDIFACT codes (3207) = ISO 3166-1 2-alpha code
WCO			
WCO ID			242
WCO NAME			Country, coded
WCO DESC			Identification of the name of the country or other ge
WCO Class Name			Address
WCO Format			a2
Core Data Type			Code

Mapping Table:

Seq	Source	Link	Target
7	1/11 Additional procedure (O - string)	3	current (O)
8	2/8 Type (O - string)	57	role (O)
9	2/8 Identifier (O - string)	58	identification (O)
10	3/1 Name (O - string)	5	name (O)
11	3/1 Street (O - string)	115	line (O)
12	3/1 Country (O - string)	6	country (O)
13	3/1 Postcode (O - string)	7	postcode (O)

UCC Pubs Mapping Guideline; 2.1 | EUCDM Shipment 0.2; E3-TAXUD



**THANK YOU VERY MUCH FOR
YOUR ATTENTION**

ANY QUESTIONS ?

Jean-Luc Delcourt

- *European Commission - TAXUD A/3*
- *Telephone: + 32 2 296 23 24*
- *e-mail: Jean-Luc.Delcourt@ec.europa.eu*
- *Web:*
http://ec.europa.eu/taxation_customs/customs/customs_code/union_customs_code/ucc/index_en.htm
and http://ec.europa.eu/taxation_customs/customs/procedural_aspects/general/sad/index_en.htm
- *See also an article in [WCO news magazine](#) (page 60)*