Regional Integration –
Global connectivity at regional level

Experience with the use of the WCO Data Model in harmonizing the electronic data requirements within the EU

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WCO 15-16 June 2015
Major changes in EU Customs are happening!

- In October 2013 the EU Institutions adopted the **Union Customs Code** which will replace the current Community Customs Code (OJ L269 10 October 2013)
- In 2015 detailed customs legislation will be adopted (UCC Implementing and Delegated Acts)
- Between 2016 and 2020 many new electronic customs systems will be created as indicated in the **UCC Work Programme** (OJ L134 07 May 2014)
- The new Customs systems will have new data requirements based upon a **new WCO compatible data model**
WCO Data Model Compliant
EU Customs Data Model

- Develop legal basis for the EU Customs data model in the UCC-DA and UCC-IA and their Annexes
- Develop publication projects to automatically generate UCC DA and IA documents from UCC Pubs DM
- Provide tools environment for mapping the data elements of the UCC Pubs Data Model to the World Customs Organisation Data Model (WCO DM) to form the EUCDM
- Provide mapping assistance to MS and information to Economic operators
UCC Pubs Development Stages

Stage 1: Legal Requirements Model

UCC Annexes B-DA and B-IA publications can be generated from a single source

Stage 2: Mappings to WCO Data Model

Transformation of the UCC legal requirements into document structures via re-use and customization of the WCO Data Model (UCC Information Packages)

- Auto-generation of document structure publications for both single documents and their supersets.
- Auto-generation of XML schema following either WCO XML schema design rules or another concept

The WCO DM with its richness serves as a reservoir for future TAXUD and Member State enhancements.
Stage 3: Reuse by Member States

**Member States reuse the UCC Information Package to:**
- Cover their requirements beyond the UCC annexes by extending the EUCDM for national technical and administrative purposes and other data sources (e.g. reporting formalities directive) but still based on the wider WCO Data Model
- Auto-generate their extended XML schema

**The exchange interfaces of all Member States which follow the same XML design will be technically interoperable.**

Even, if the Member States just use the same modeling approach, the EU superset of all used data and their structures can be generated automatically. Then the government side would have the same level of data alignment as major companies already do.
Tool

- Use of specific tool to develop the EU CDM and ensure respect to international standards (GEFEG FX)
- FX helps to map the EU CDM against international standards, notably the WCO data model
- FX includes code lists
- D.E. defined in FX are reused in many applications or are connected to them, based on customs declaration information, such as:
  - Surveillance
  - BTI
  - CS/RD
  - Single Window
- Schemas used for the data exchange rely on the EU CDM
Dissemination

• FX allows EU CDM information to be made available to MS + NA IT development

• FX allows other users (NA, traders) to inherit the EU CDM and to customise it in accordance with specific national requirements, where authorized by EU legislation

Publication

• EU CDM publication: FX and other formats
Consignment and Shipment Views

**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

**WCO Data Model**

- **Shipments View**
- **Consignment View**

A (3) → B (4) → C (2) → D (3) → E (2) → F (15) → G (5) → H (6) → I (2)
UCC Legal Requirements Data Model

Composition

Notes

Enhanced

Children

B-DA DataReqTable Columns

B-DA DataReqTable Usage

B-DA DataReqTable Usage

UCC DE Def

- Name: Goods item number
- Box No: 32
- Format: n/5
- Code list Y/N: N
- Header Cardinity: 989
- Item Cardinity: 9

Data Requirements table columns A1-A5, B1-B5, C1, D1, D2, E1 to F1d, F2a to F2c, F3a, F4a, F4b, F4d, F5, G3 to G5, H2 to H7 and I1:

Data Requirements table column C2 and I2:

Data Requirements table column F4c:

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

Item number assigned to the goods within the CN23 concerned.
The EU Customs DM and its use by the EU MS

- **Reuse and customization** of the WCO Data Model and the EUCDM Information Package (and the UCC)
- **National localizations** of the WCO Data Model and the EUCDM Information Package (and the UCC)
- Cover their requirements by extending the EUCDM Information Package but still based on wider WCO Data Model + DMRs to DMPT
- **Auto-generation of document structure publications** for both single documents and their supersets
- **Auto-generation of XML schema** The exchange interfaces of all Member States which follow the same XML design will be technically interoperable.
Wider use of the EU Customs Data Model

- **Reuse and customization** of the WCO Data Model
- **National localizations** of the WCO Data Model
- **Extensions** for additional requirements + DMRs to DMPT
- **Auto-generation of document structure publications** for both single documents and their supersets
- **Auto-generation of XML schema** following either WCO XML schema design rules or another concept

**WCO Data Model**

- Information Packages 1..n
- Information Packages 1..n
- Customs Agency / SW Lead Agency
  - Reuse and customize
  - Localize
  - Extensions
- ePhyto
- eTIR
- EU MSW

**Other Governmental Agencies**

- Reuse and customize
- Localize
- Extensions

**European Commission**
Collaborative Meta Data Development and Implementation Environment

- **GEFEG.FX and WCO Data Model Packages** for the re-use and customization of the WCO Data Model, the auto-generation of publications, the auto-generation of XML schemas.

- **GEFEG.DCF** for the shared development, publication and customization of compliant, interoperable data structures, including methods, know-how and the technical infrastructure of the collaborative development. Involvement of all stakeholders.

- **GEFEG.Services** in support of the development and publication tasks of WCO, Customs Agencies and other Governmental Agencies, including consulting, collaboration support, training courses and workshops.
Tooling Benefits to date

UCC Pubs DM development

• Removal of data redundancy
• Editing environment
• Attribute structure level for mapping to WCO DM
• Matching Annex B document publication templates
• Comparison feature to compare annex document versions

Mapping to WCO DM and development of EUCDM

• UCC WCO DM DIP including necessary extensions
• Documentation of required WCO DM DMRs
• Consignment and Shipment Views
• Mapping report from UCC Views to WCO DM
• Auto XML schema generation & flexibility of XSD design
THANK YOU VERY MUCH FOR YOUR ATTENTION

ANY QUESTIONS?

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