



UNECE

UN/CEFACT

Supply Chain Reference Data Model

A new way to facilitate eBusiness communication

A breakthrough in how electronic communication will be carried out in the future

Rolf Wessel
Gerhard Heemskerck

SCRDM Project Lead
SCRDM Lead Editor

Mini Conference, Bangkok, 27 September 2016



Mini Conference Background

This Mini Conference will provide participants with information on:

- The UN/CEFACT Reference Data Models “SCRDM” and “MMT”

Participants will also get information on:

- How to use a Reference Data Model
- How to create business documents from a Reference Data Model e.g. purchase order or invoice etc.

Speakers

PM1	1. Raffaele Fantetti	Vice-Chair	- <i>Opening</i>
	2. Rolf Wessel	SCRDM Project Lead	1. <i>The Project introduction</i>
	3. Ian Watt	SCRDM Team Editor	2. <i>The Concept</i>

Coffee break

PM2	1. Sue Probert	MMT	Lead Editor	1. <i>High level focus</i>
	2. Gerhard Heemskerk	SCRDM	Lead Editor	2. <i>Technical Details</i>

A new way to facilitate eBusiness communication

- Harmonization
- Standardization
- Simplification

Reducing the dependency on traditional documents as the means of driving the supply chain by removal of redundancy and adoption of process-driven collaborative workflows and shared trade data

Some of the benefits...

- Reduction of administrative burden
- A trusted Reference Data Model
- Enhanced interoperability of data
- Standardized business document structures
- Integrated international code lists
- A future proof semantic model (syntax neutral)

SCRDM Project

UN/CEFACT Reference Data Model

UN/CEFACT Project Proposal

Supply Chain Reference Data Model (SCRDM)

Date: 2015-08-05

Part 1 of PM1: The SCRDM Project introduction

Rolf Wessel *SCRDM* *Project Lead*



SCRDM Project Leadership

Project Leader Mr Rolf Wessel

Lead Editor Mr Gerhard Heemskerck

Editing team:

- Andreas Pelekies
- Hisanao Sugamata
- Ian Watt
- Karina Duvinger
- Mary Kay Blantz
- Natascha Rossner
- Sue Probert
- Ulrike Linde

Project Purpose & Deliverables

Purpose:

- Development of a semantic model for the Supply Chain
- Easy to use and maintainable semantic framework
- Semantic links and guidelines

Deliverables:

- SCRDM Subset of CCL
- Semantics links
- Guidelines

Project Status

Recent News

30 August 2016: The UN/CEFACT Buy/Pay PDA is pleased to announce the opening of the [Public Review](#) period for the [SCRDM Project](#). The purpose of this project is to develop and publish an international “Supply Chain Reference Data Model” for international & national trade.

The 60 days Public Review period will end on October 30th 2016.

The RDM Guideline, SCRDM-BRS, SCRDM-RSM, SCRDM subset of the CCL and related green paper are available for review.

Any comments should be submitted to the Project Lead [Rolf Wessel](#) and Lead Editor [Gerhard Heemskerk](#) using the [Public Review Comment Template](#).

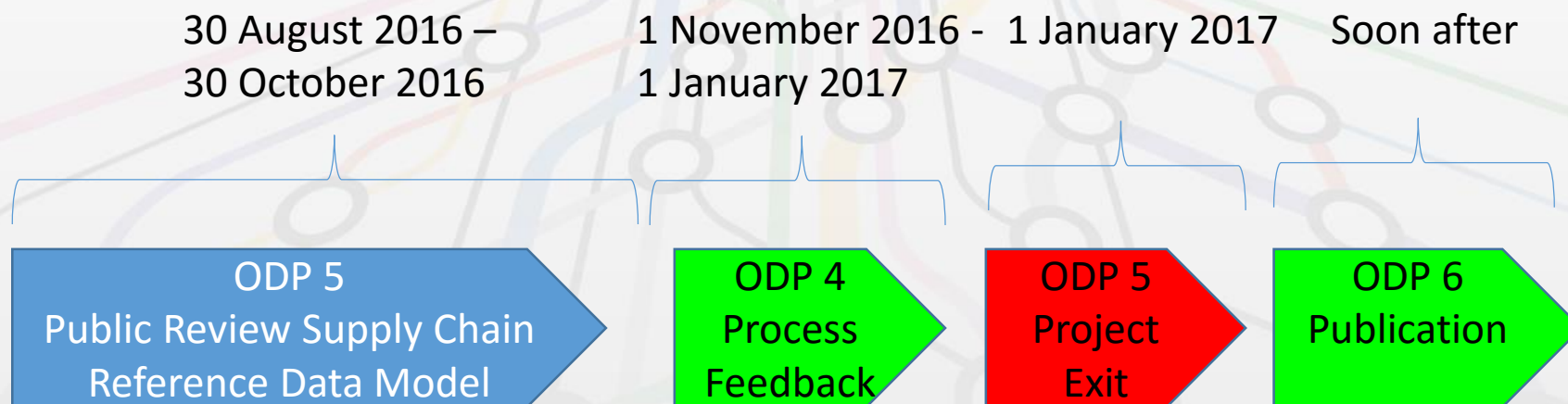
Related Projects

- Cross Industry Invoice Extension of technical artefacts (CII)
- Procedures for Reference Data Model & Associated Artefacts Publication Project
- Multi Modal Transport Reference Data Model (MMT)

Work for the coming months

- Process SCRDM Public Review comments
- Update to the latest Core Component Library version
- Adding additional semantic links

Project Timeline



End of PM1 Part 1 The SCRDM Project

Questions?



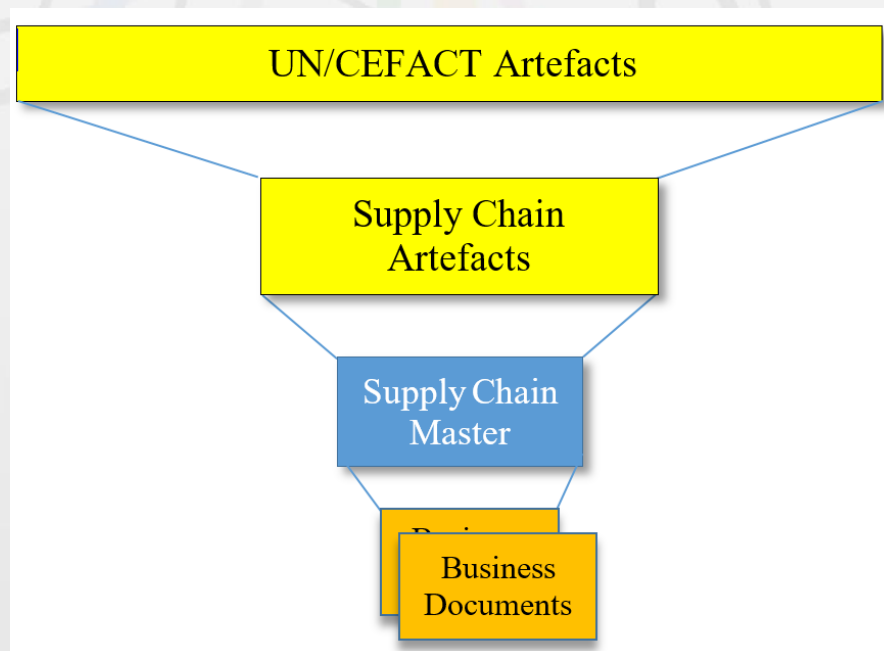
Part 2 of PM1: The Concept

Reference Data Model

Ian Watt

SCRDM

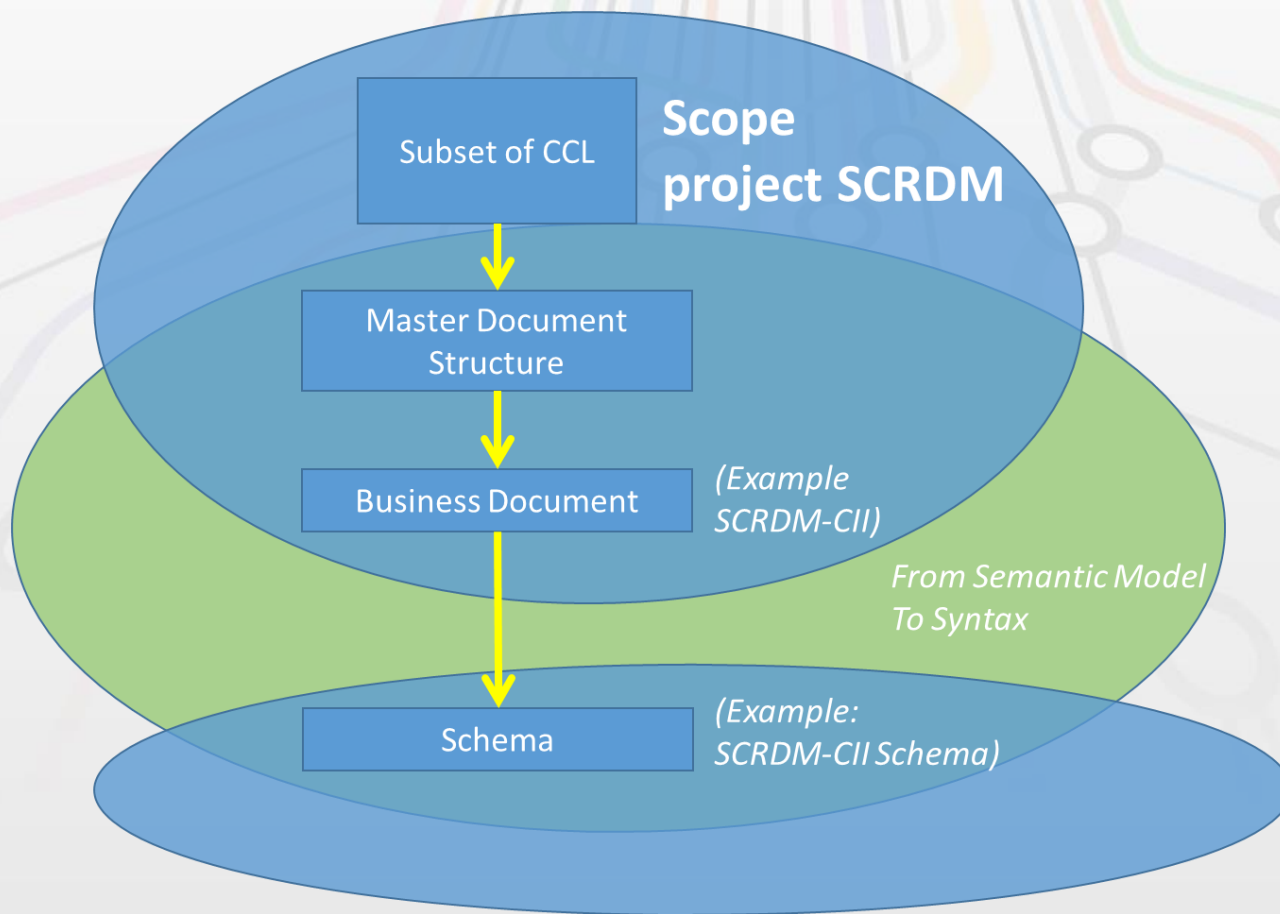
Team Editor



UN/CEFACT Reference Data Models

- Reference Data Model (e.g. SCRDM)
 - a subset of the UN/CEFACT Core Component Library
 - a rich collection of business artefacts from which standard business documents can be created
- The evolution:
 - creation of standard business document subsets from 'Master Structure'
 - contextual message restrictions are applied to the subset artefacts, the Master Structure and/or the business document

First delivery: *Cross Industry Invoice*



Benefits: for Decision Makers

- Reduction of administrative burden, efficient reuse of data
- Trusted semantic model, based on internationally accepted standardized & harmonized library
- Enhanced interoperability of data, by sharing common subset (SCRDM & MMT)
- Standardized document structures, based on common 'Master' document structure
- Integrated international code lists, using commonly used UNECE Recommended code lists, UN/EDIFACT code lists, ISO code lists..
- Future proof semantic model, a syntax neutral semantic model

Benefits: for implementers of UN/CEFACT Reference Data Models

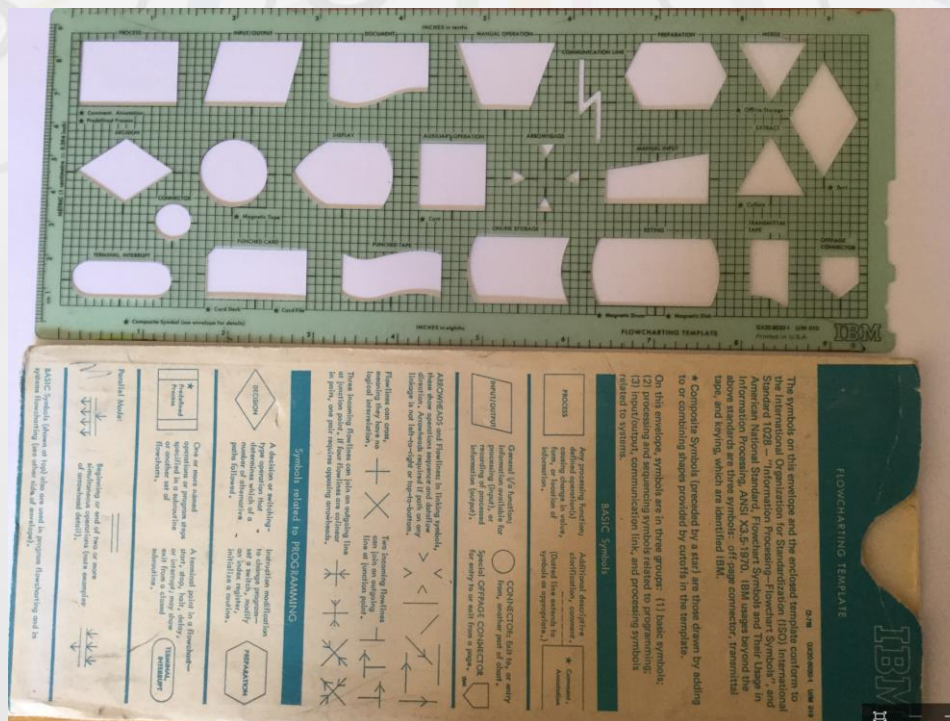
- Easy message specific restriction of artefacts, no need to create document specific ones.
- Restrictions can be applied at process, master document or document level
- Simple creation of new document structures from “Master”
- Available artefacts easy to find (searching in subset “10% of total”)
- Newcomers easily guided to the available, appropriate artefacts (“the right spot”)

Benefits: Government and Private sector

- Facilitation of government & private sector interfaces by supporting Data Pipeline & Single Window concepts
- Reduction of administrative burden, efficient reuse of data
- Trusted semantic model, based on internationally accepted standardized & harmonized library
- Links to rich legacy of UN artefacts including UN Key Layouts, UN/EDIFACT to support migration and interoperability
- Integrated international code lists:
 - UNECE Recommendation Code Lists
 - UN/EDIFACT Codes
 - ISO Codes
 - etc.

Understanding the process & the data

In the past we tended to ignore the connection between data exchanges and their underlying processes which resulted in the development of individual non-linked document structures...



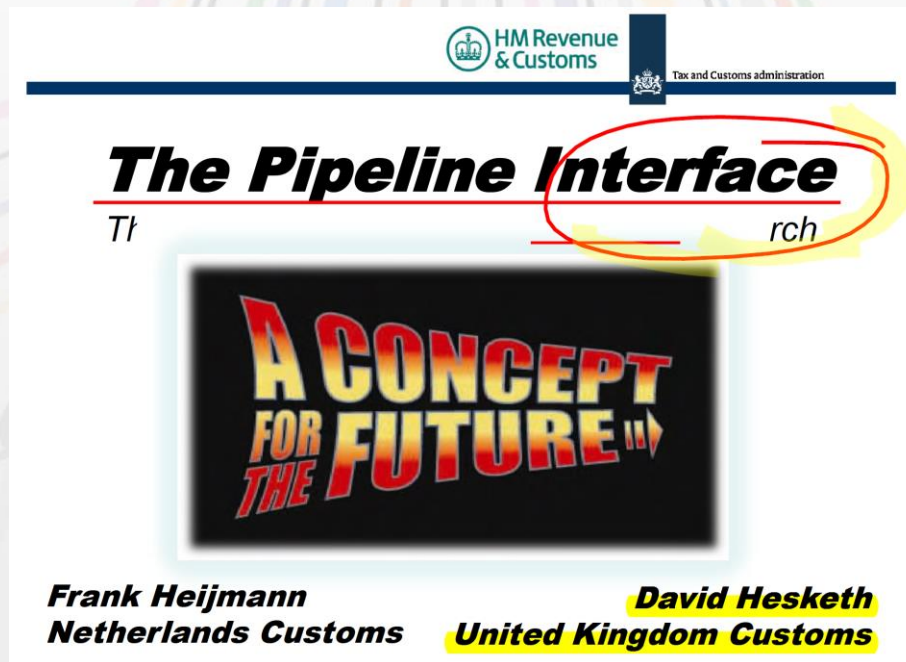
Something had to change...

... we did not try to fix the 400 year old road infrastructure in our cities – we created super highways:



... similarly we have now developed Reference Data Models for defining document families to be exchanged along a process driven highway!

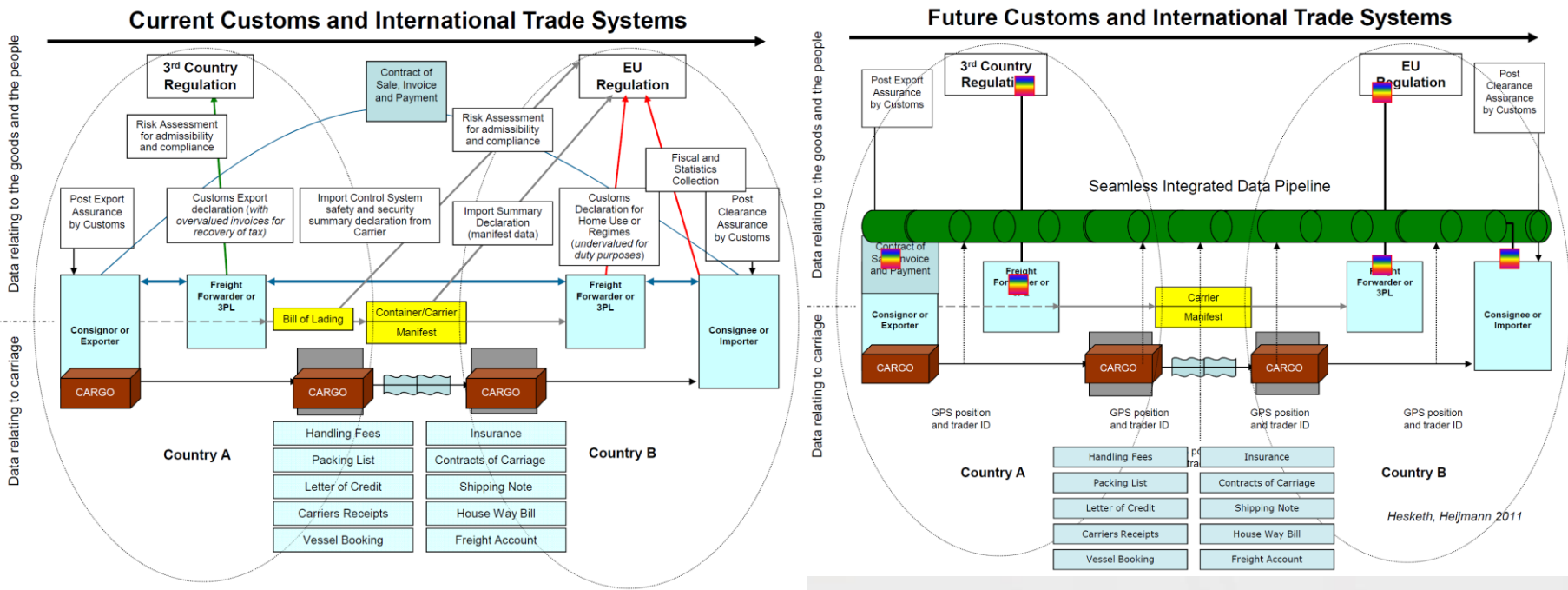
Reference Data Models & Data Pipelines fit together



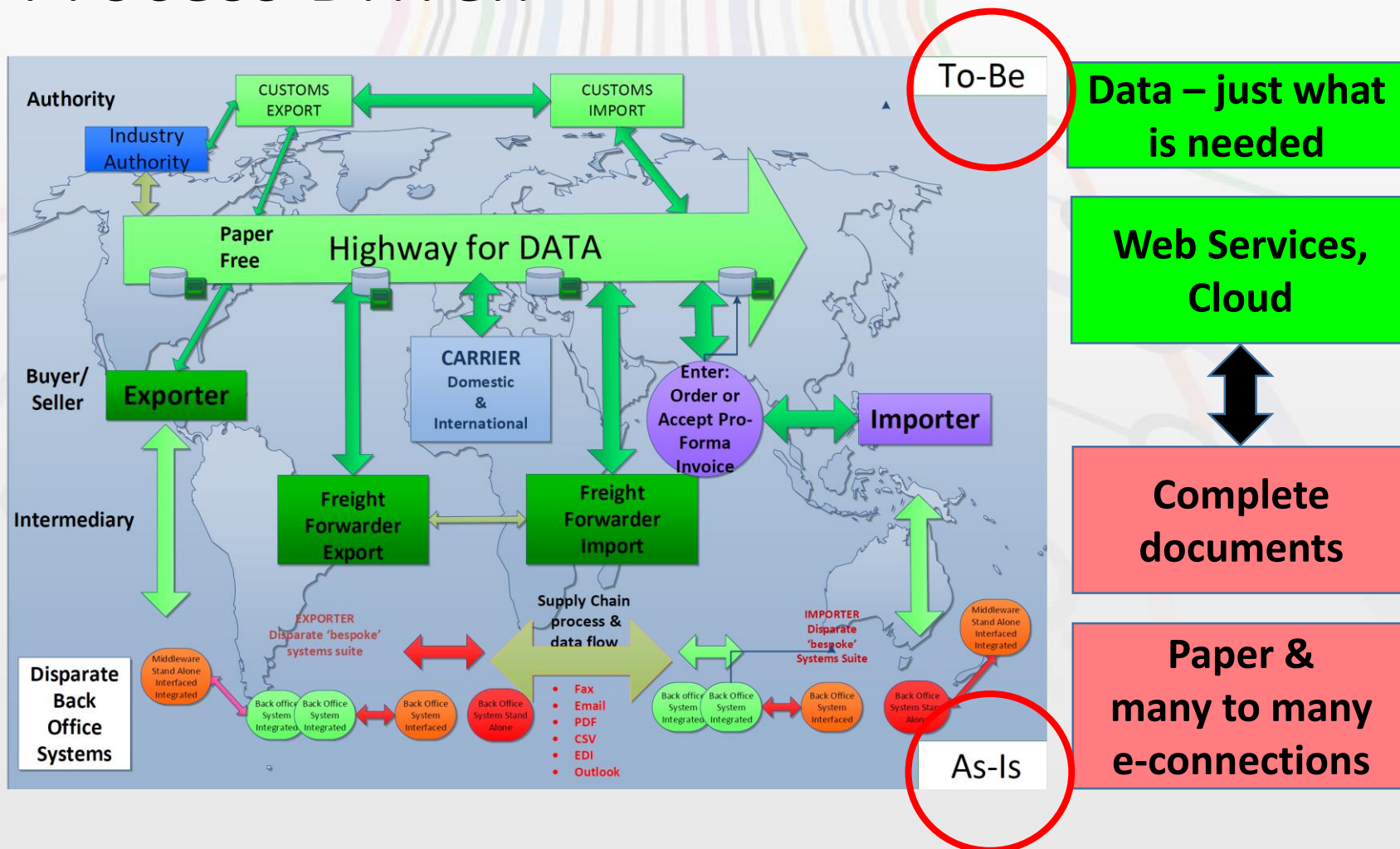
Data Pipeline:

- Information travels from origin to destination and can be accessed by appropriately authorised private and public sector parties to the specific trade transaction.

Integrated Data Pipelines



Moving from *Document Driven* to *Process Driven*



Example: Lao Coffee Project (2011)

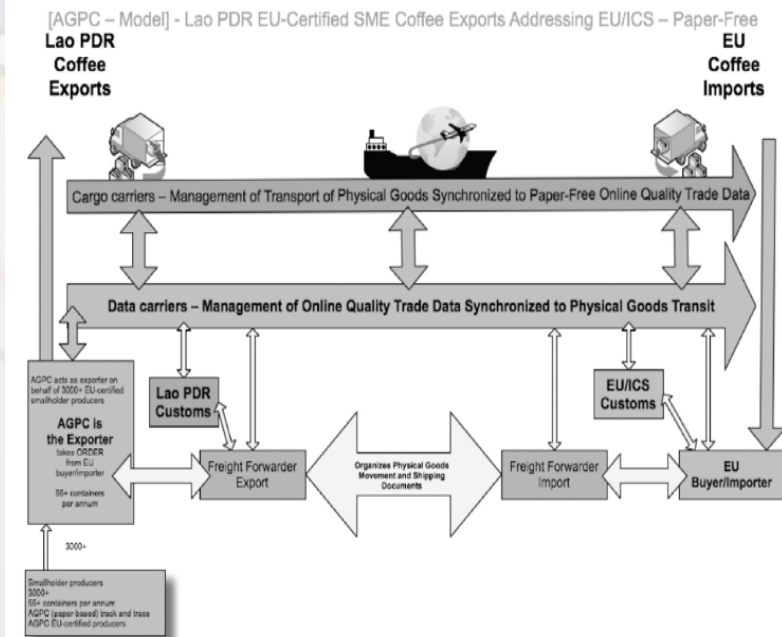
Shipping Lao Coffee to the EU

- Trial 'paper-less' transactions, partly funded by the Asia Development Bank
- Savings per shipment (1 or more containers)

- \$200–\$240*

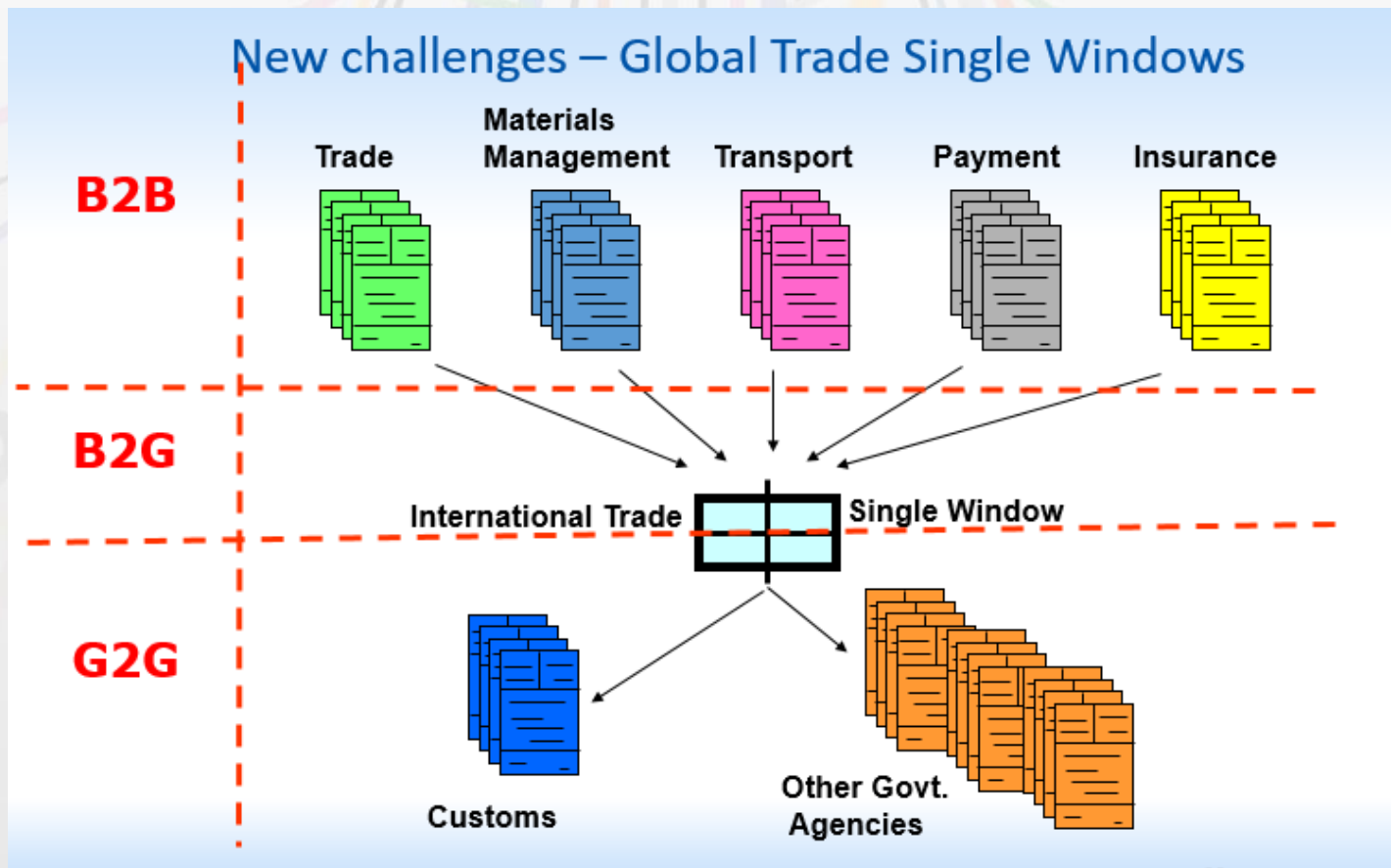
*) incl. \$80 removal document courier costs

APPENDIX 2: RELATIONSHIP BETWEEN SOFTWARE AS A SERVICE AND FLOW OF GOODS

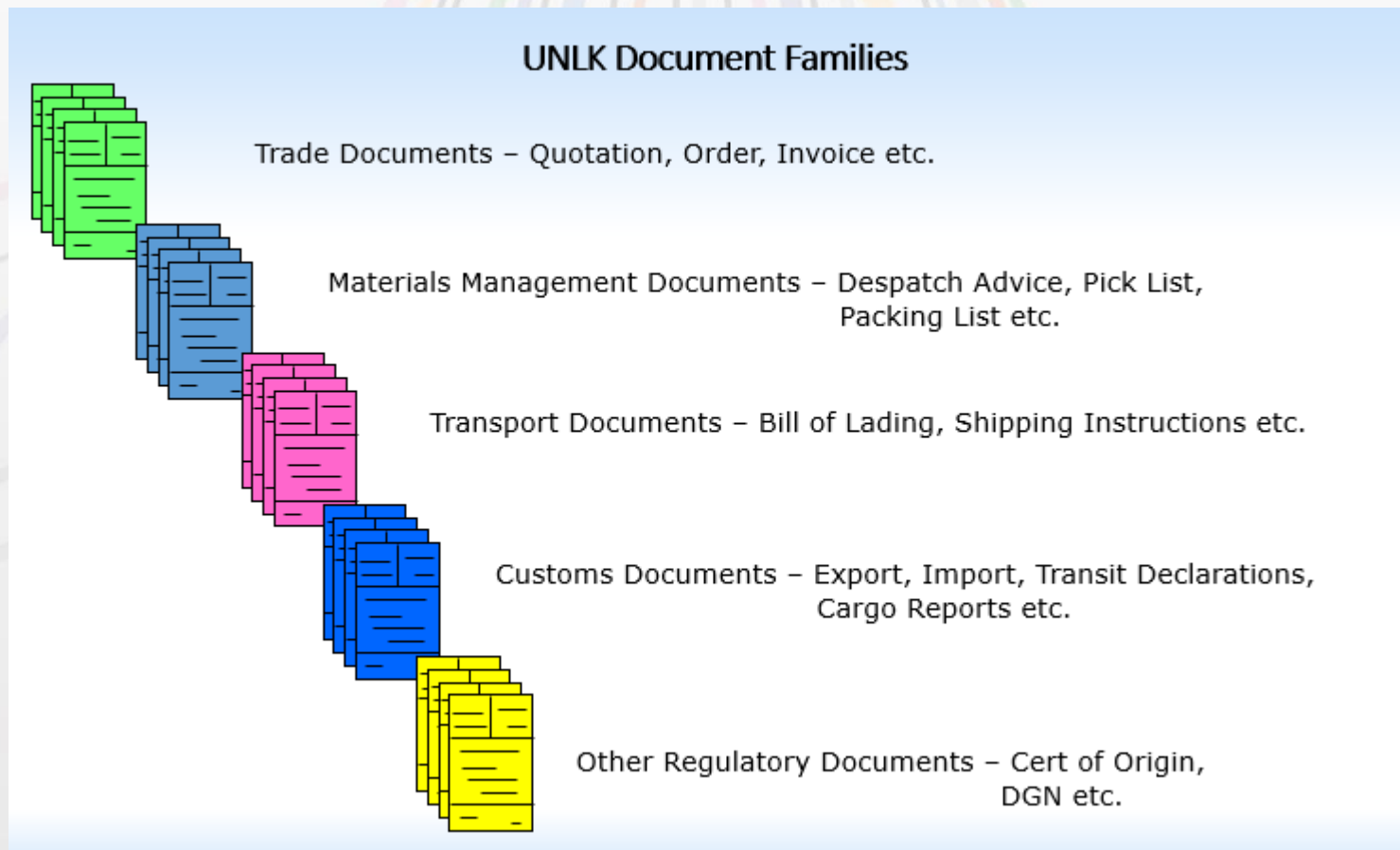


AGPC = Bolaven Plateau Coffee Producers Association (now the Bolaven Plateau Coffee Producers Cooperative), EU = European Union, ICS = Import Control System, Lao PDR = Lao People's Democratic Republic, SMEs = small and medium-sized enterprises.

Facilitating regulatory functions by standardized document structures



United Nations Lay Key Document Families



End of PM1 Part 2 The Concept

Questions?



Part I of PM2: High level focus

Sue Probert MMT Lead Editor



Green Paper

High Level BRS

High level RSM

The high level explanatory materials accompanying the SCRDM...

High-Level Green Paper

- Executive summary for the Reference Data Model

High level SCRDM-BRS (Business Requirements Specification)

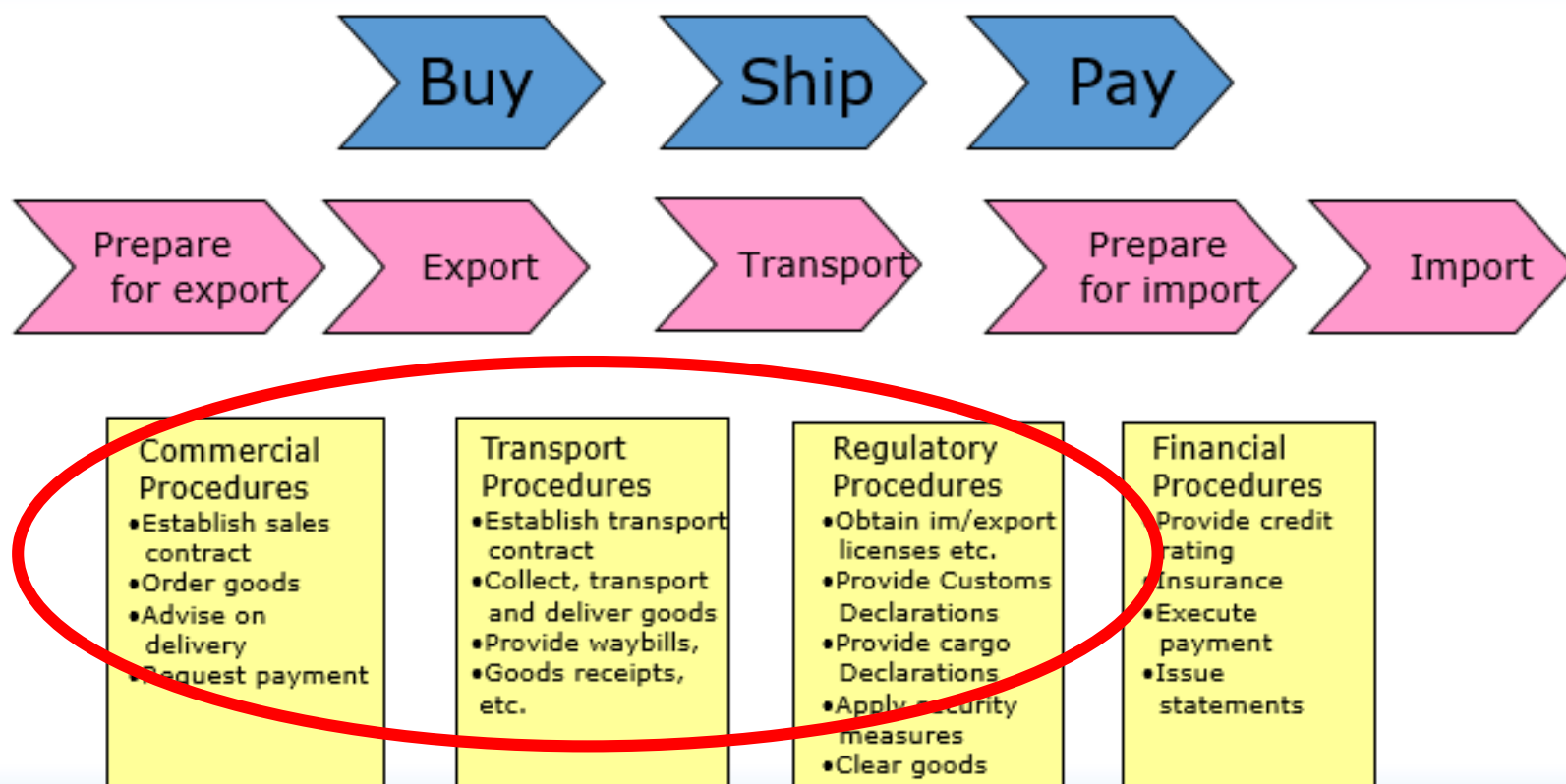
- Processes in the Supply Chain domain
- Processes in the Transport, Finance, Government domain
- The actors and scenarios

High level SCRDM-RSM (Requirements Specification Mapping)

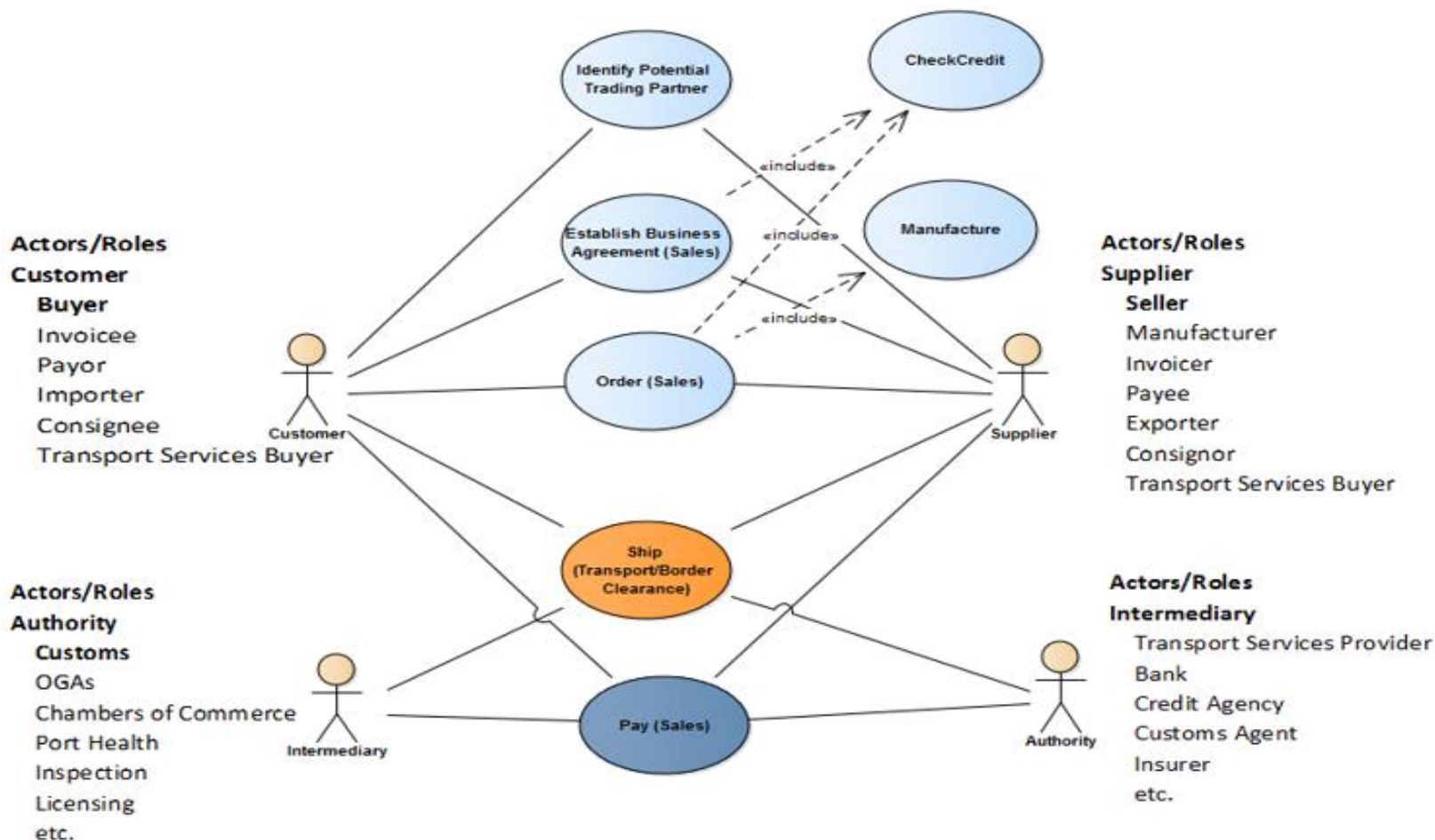
- Mapping of common party roles
- Mapping of common locations
- Mapping of common business entities

Aligned SCRDM and MMT

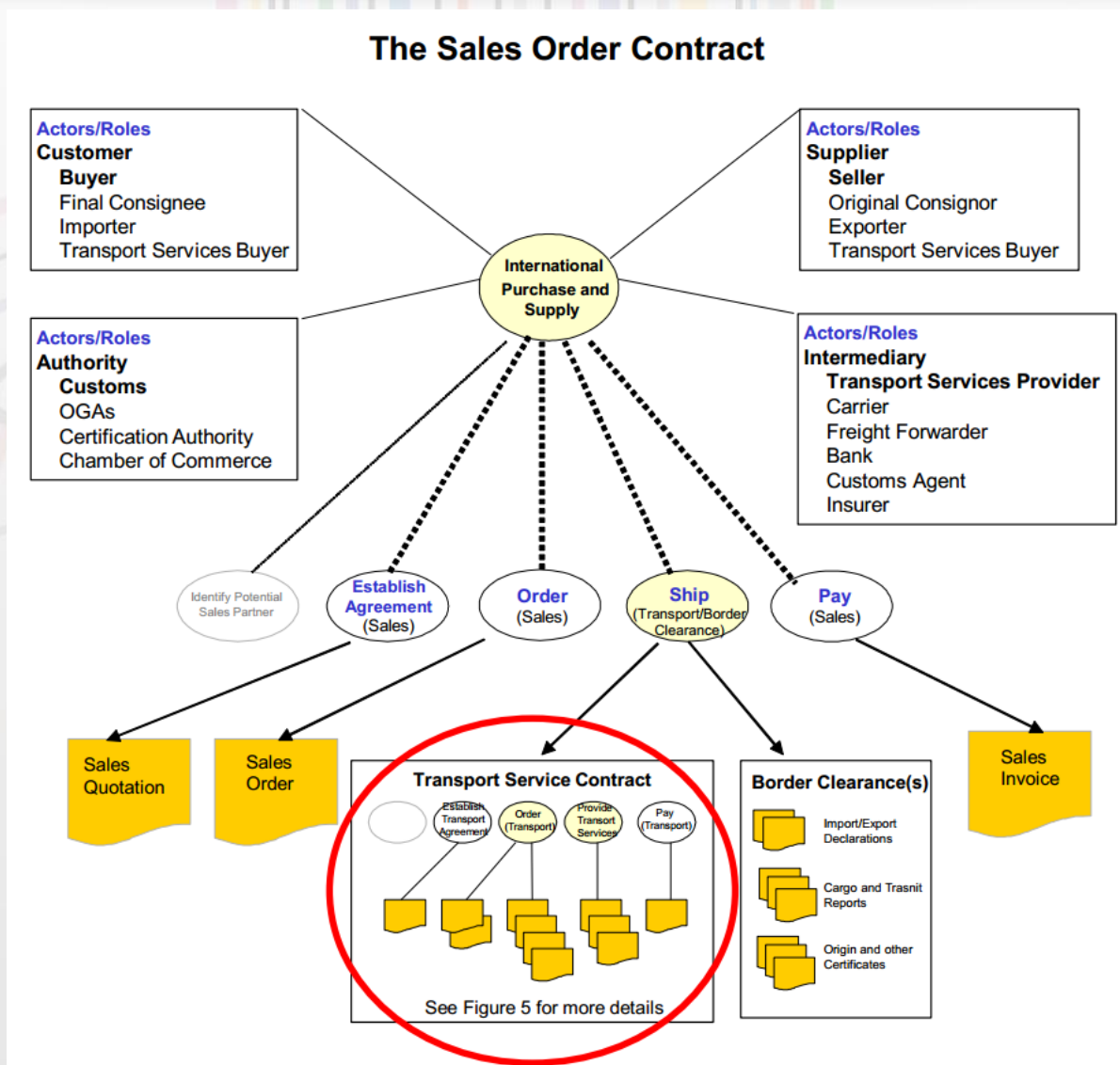
high-level BRSSs (*Business Requirements Specifications*)



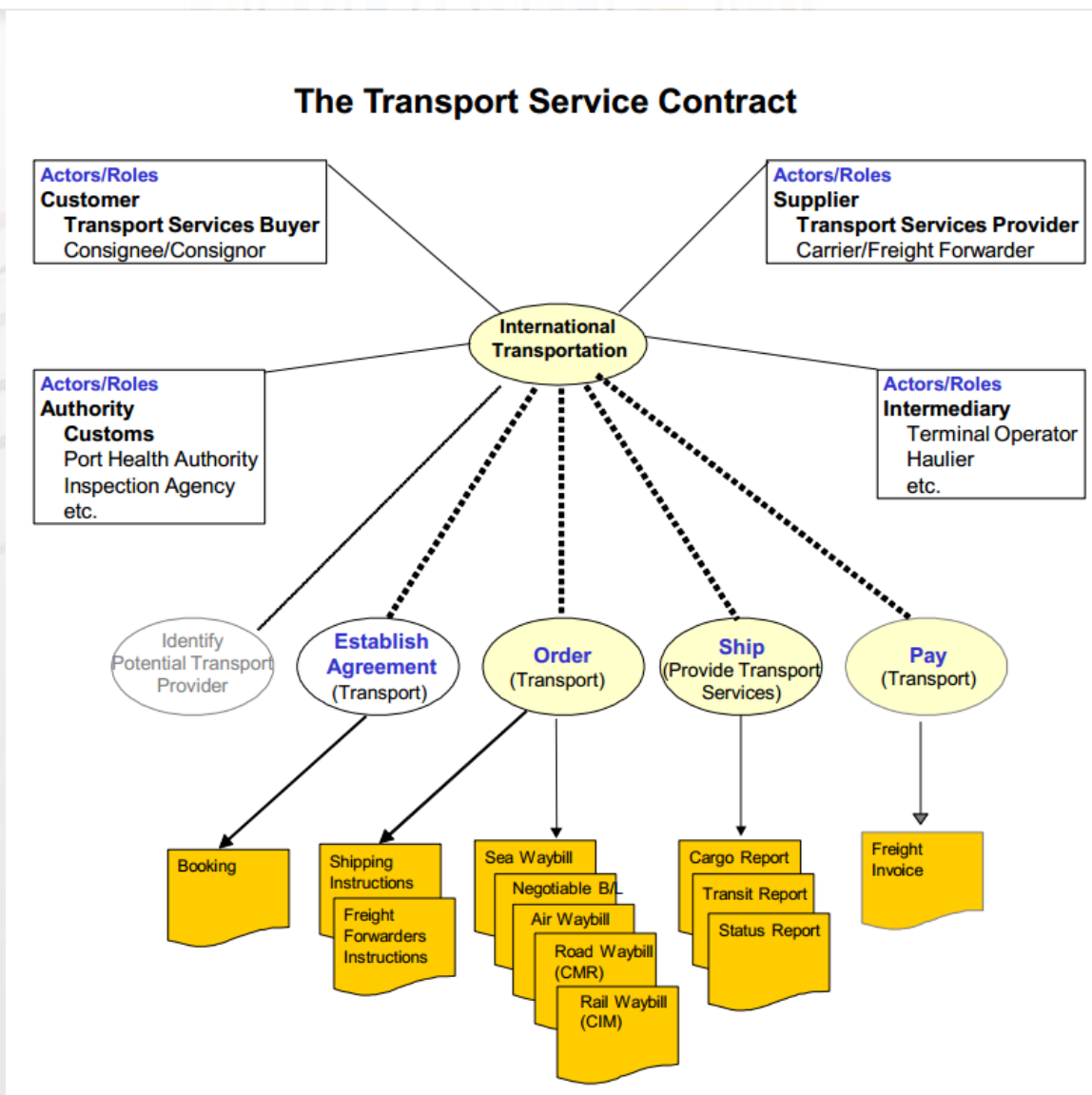
The actors



Focussing on the Sales Contract

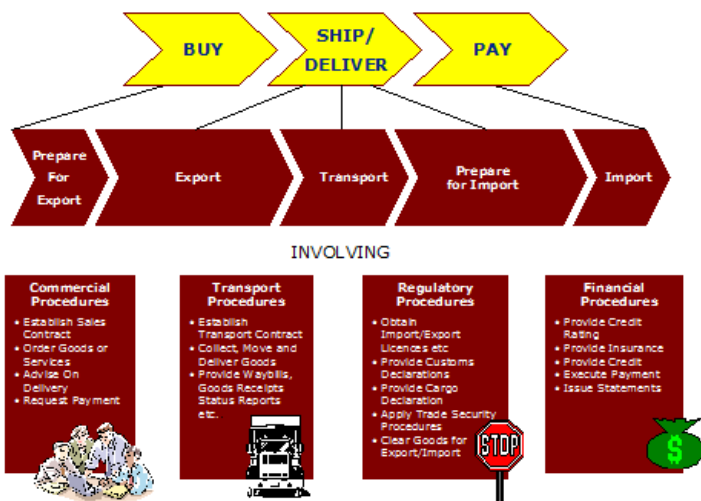


And now the Transport Contract

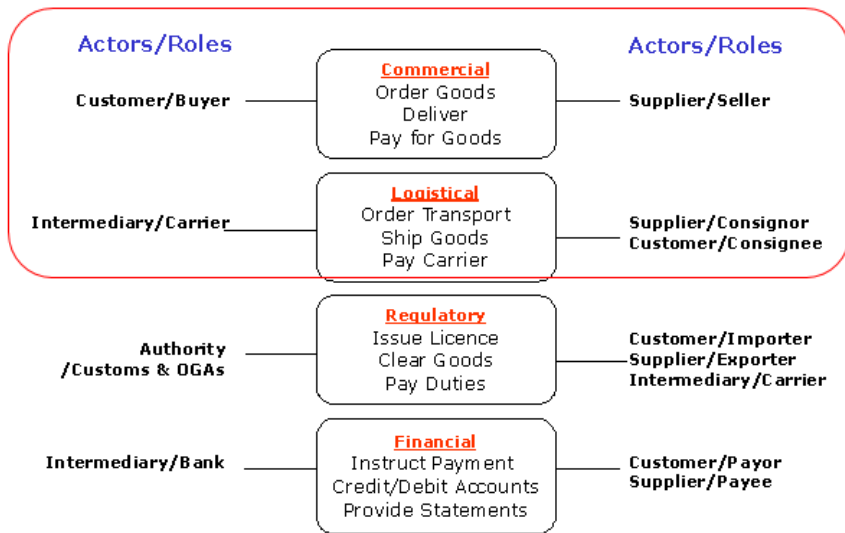


Relationship Commercial & Logistic processes

INTERNATIONAL TRADE TRANSACTION PROCESSES



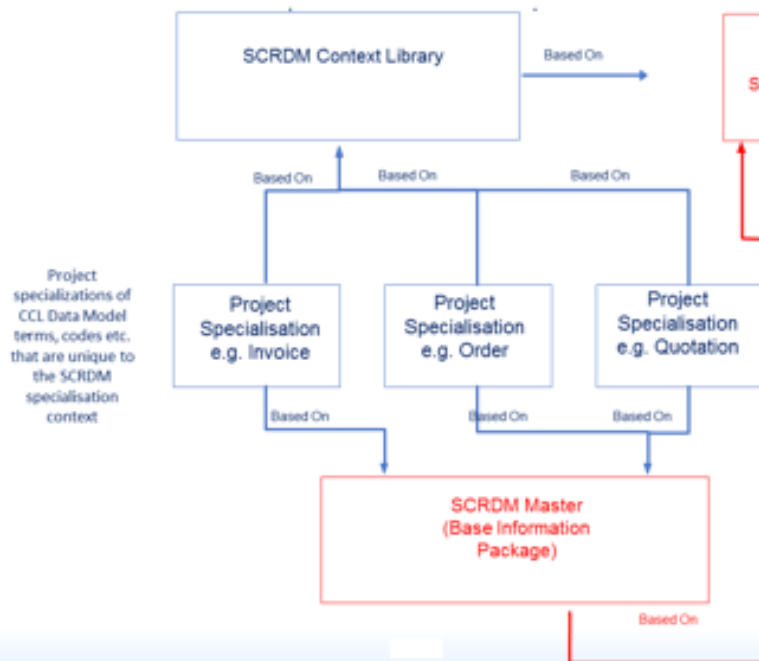
International Supply Chain Processes and Procedures



Two projects using the same common subset of the library

SCRDM

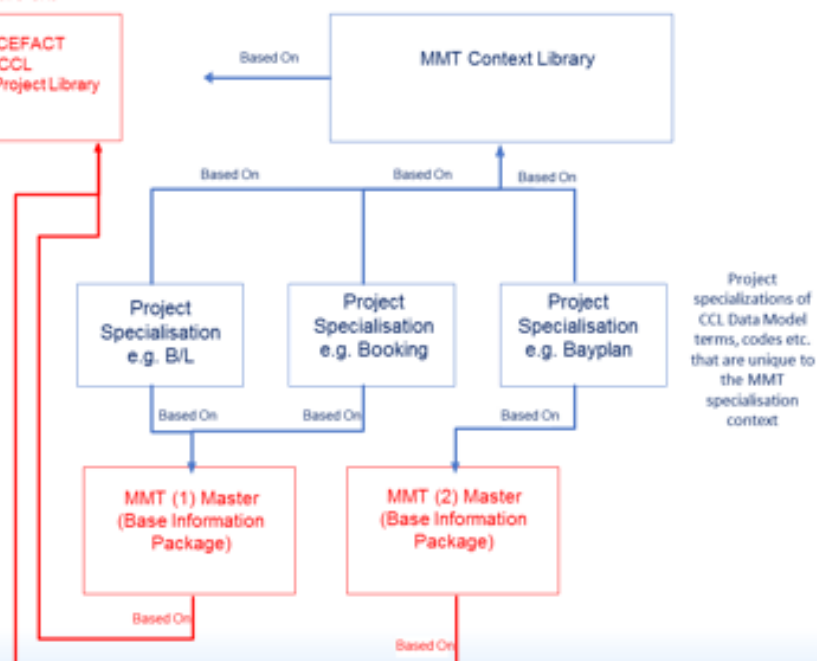
Generic specialisations of Project Library business names, code restrictions, business rules etc. that apply consistently for all project specialisations should be set at this level



Joint project copy of the BUY-SHIP-PAY subset of the UN/CEFACT CCL used as the base for modelling restrictions and extensions which may be future CRs

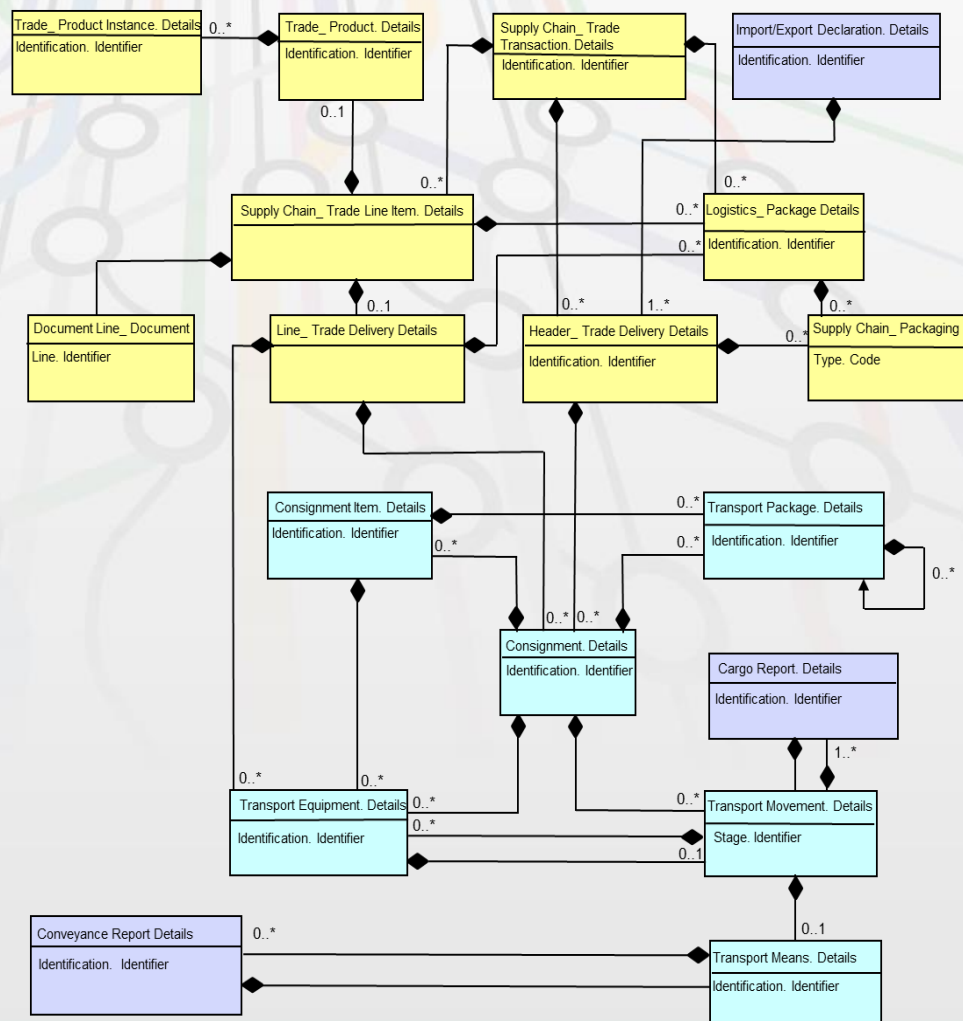
MMT

Generic specialisations of Project Library business names, code restrictions, business rules etc. that apply consistently for all project specialisations should be set at this level



High level SCRDM-RSM

Requirements Mapping Specification



- Supply Chain Related Entities
- Transport Related Entities
- Customs Related Entities

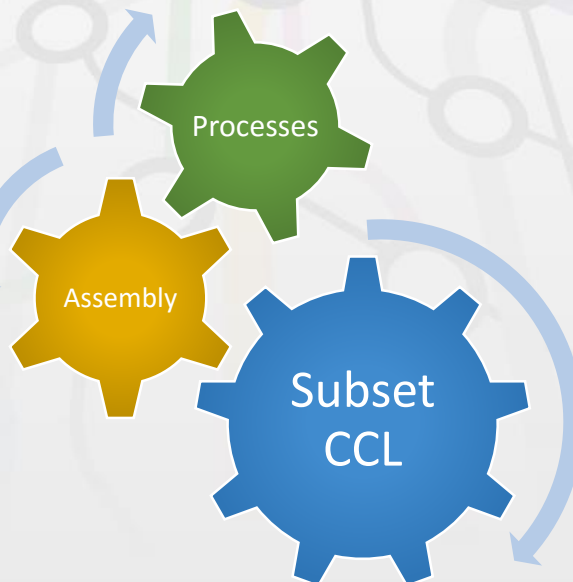
End of PM2 Part 1 High level focus

Questions?



Part 2 of PM2: Technical details

Gerhard Heemskerk *SCRDM* *Lead Editor*



Project Deliverables

Structured Reference Data Model for the Supply Chain

- High-level Business Requirements Specification (BRS)
- High-level Requirements Specification Mapping (RSM)
- The Supply Chain artefacts “subset of the CCL”

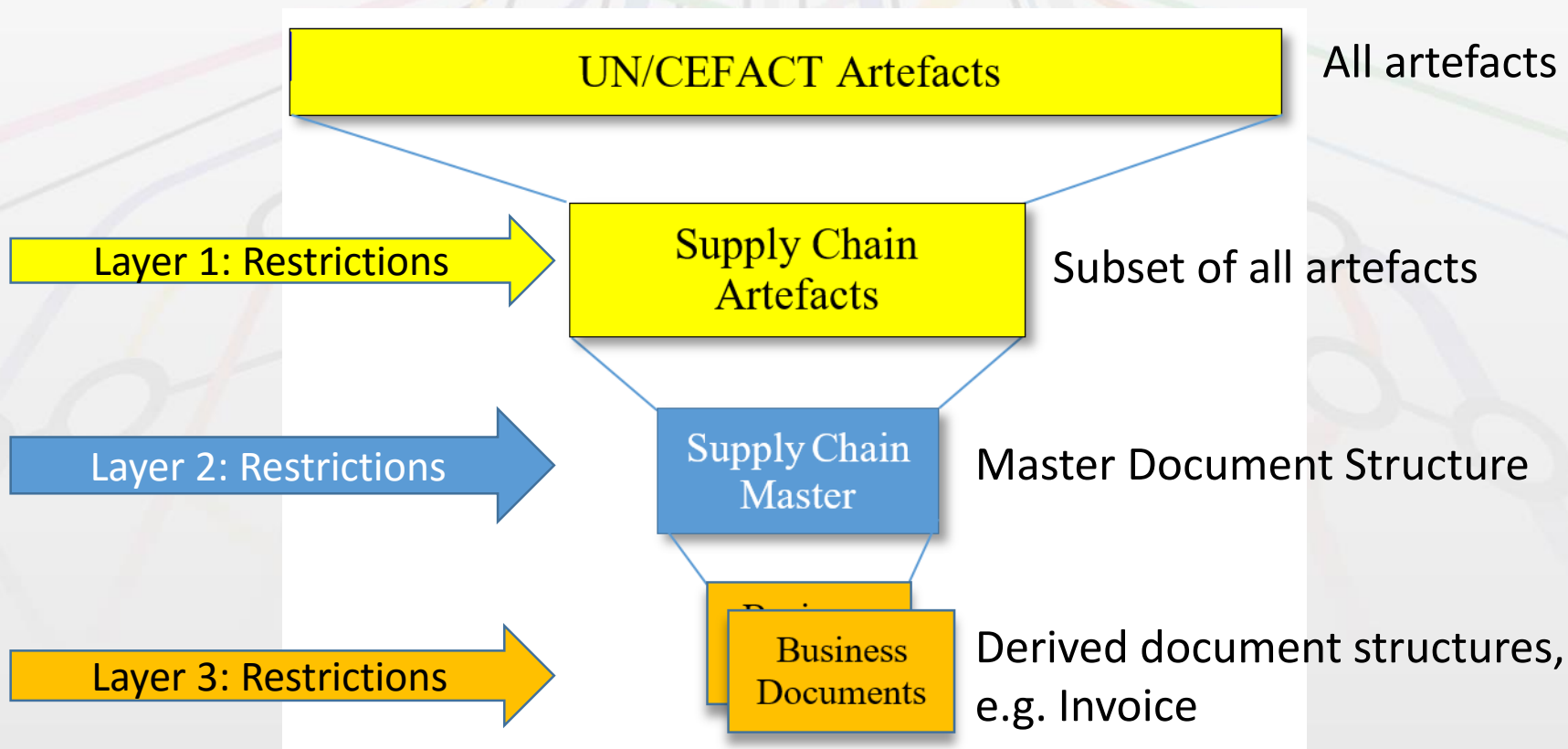
Semantics links

- UN/EDIFACT
- TDED

Guidelines

- High-level Green Paper explanation
- How to create syntax neutral subset messages

How the Supply Chain Reference Data Model works..



The high level: on top of BRSs

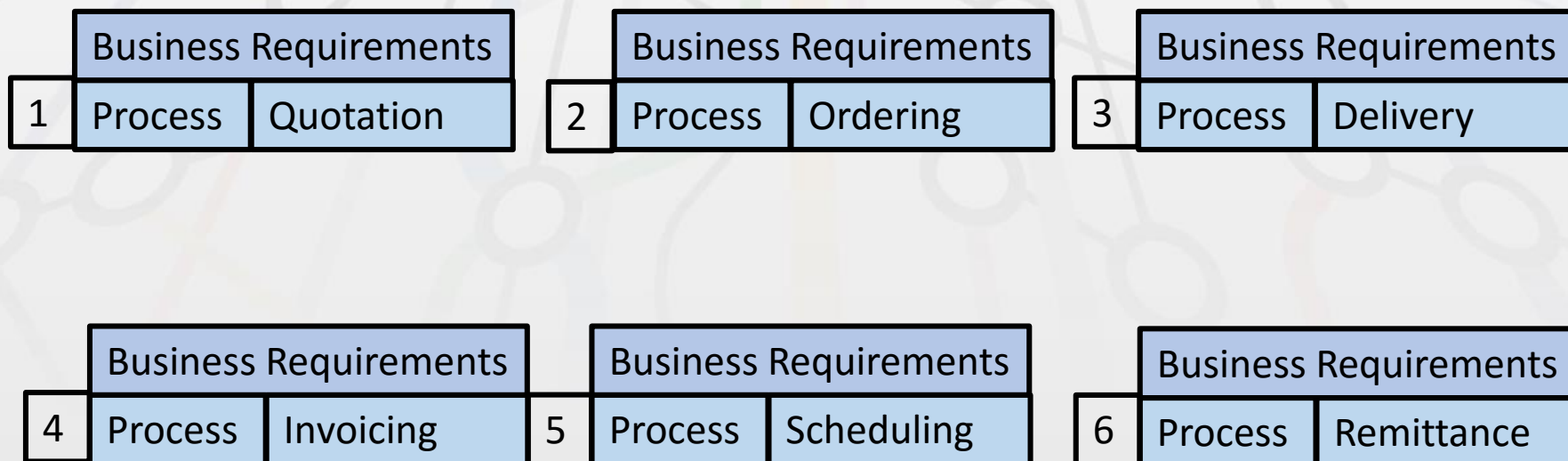
Supply Chain
Business Requirements
Specification
(BRS-SCRDM)



- Cross Industry Quotation BRS
- Cross Industry Ordering BRS
- Cross Industry Delivery BRS
- Cross Industry Scheduling BRS
- Cross Industry Invoicing BRS
- Cross Industry Remittance Advice BRS

The model has been based on previous work.....it didn't start from scratch.

6 Existing Processes (from published as BRSs)



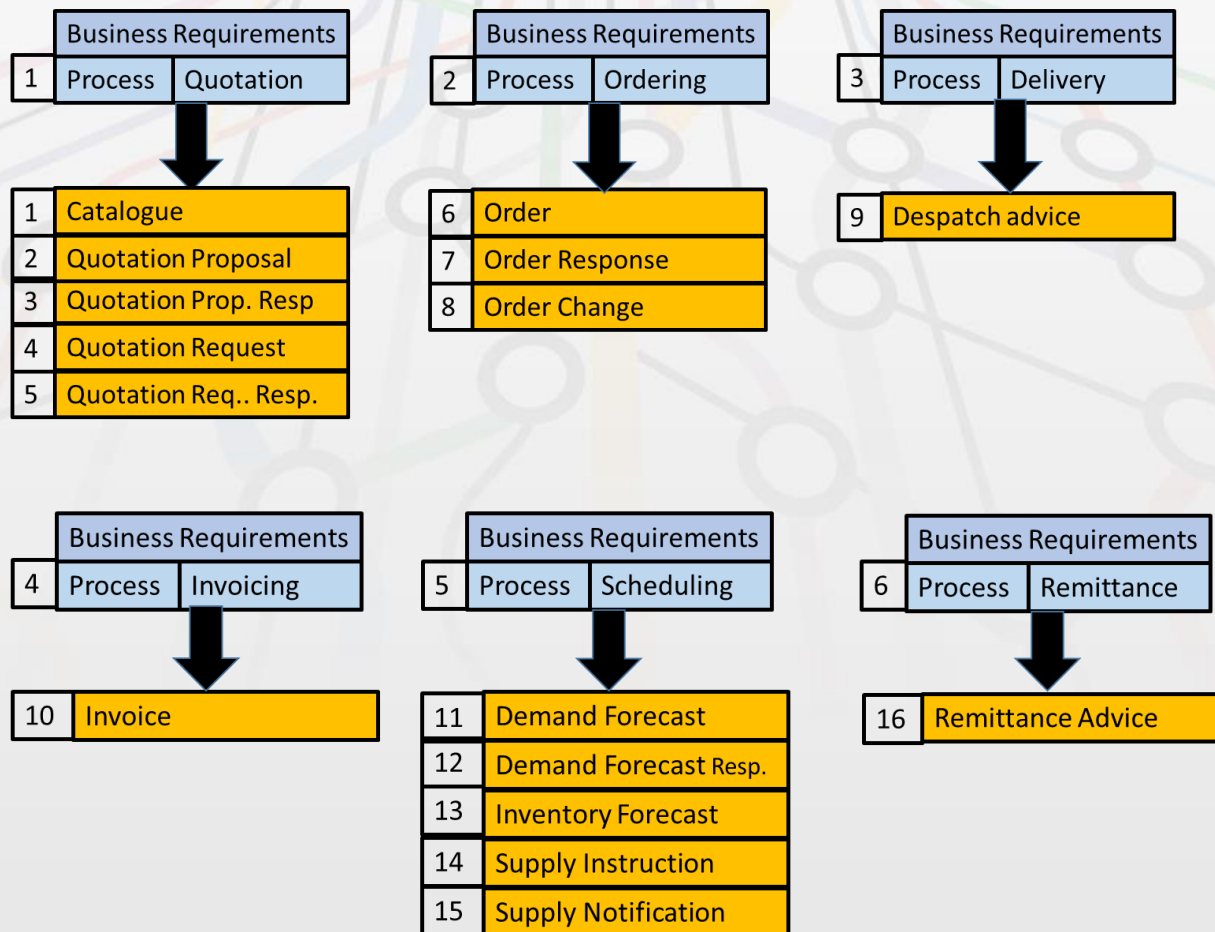
High level RSM: on top of RSMs

Supply Chain
Requirement Mapping
Specification
(SCRDM-RSM)



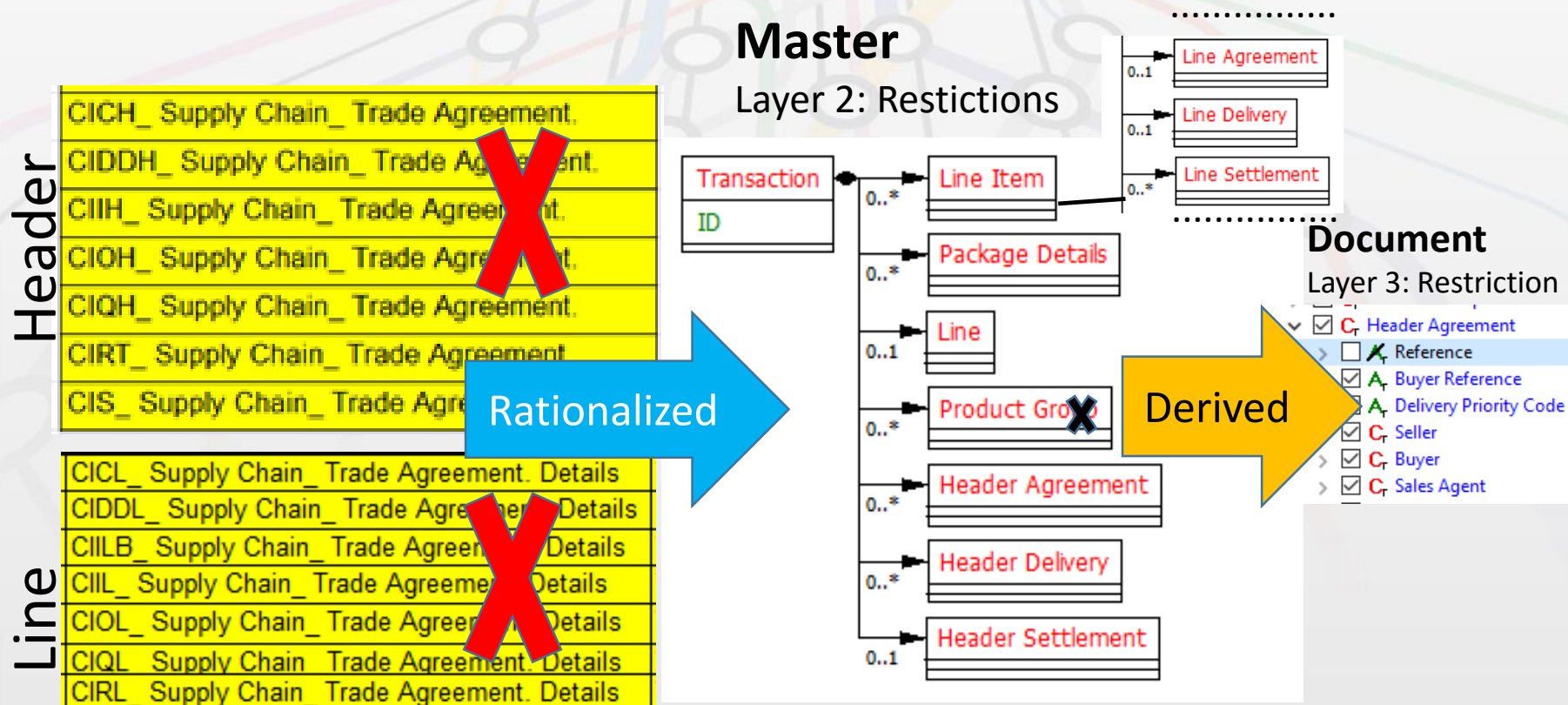
Cross Industry Quotation CCBDA RSM
Cross Industry Ordering CCBDA RSM
Cross Industry Delivery CCBDA RSM
Cross Industry Scheduling CCBDA RSM
Cross Industry Invoicing CCBDA RSM
Cross Industry Remitt.Advice CCBDA RSM

The artefacts where taken from existing published requirements mappings...



So what's new?

- Artefacts which are process driven instead of document specific
- Restrictions done on master and/or document layer



The same work has been done for ALL artefacts...

	D	E	F	G	H	I	J	K	L	O	R	S
1	CCL15B	CCL15B	SCRDM	Dictionary Entry Name	Definition	CCL15B	CCL15B	SCRDM Min Occurrence	SCRDM Max Occurrence	CCL15B	CCL15B	CCL15B
2198	UN01004757	ABIE	UN01004757	Transport_Cargo. Details	Information about goods being transported identifying their nature for customs, statistical or transport purposes.	Despatch Advice -Invoice - Order -Order Change -Order Response -	Used					0
2199	UN01004758	BBIE	UN01004758	Transport_Cargo. Type. Code	The code, such as UNECE Recommendation 21 single digit codes, specifying the type of transported cargo.	Despatch Advice -Invoice - Order -Order Change -Order Response -						0 qDT
2200	UN01004759	BBIE	UN01004759	Transport_Cargo. Identification. Text	The identification, expressed as text, of this transport cargo that is sufficient to identify it for customs, statistical or transport purposes.	Despatch Advice -Invoice - Order -Order Change -Order Response -	Used	0	1		7002	
2201	UN01004760	BBIE	UN01004760	Transport_Cargo. Operational Category. Code	The code specifying the operational category for this transport cargo, such as obnoxious or military.	Despatch Advice -Invoice - Order -Order Change -Order Response -	Used	0	1	UN02000077	7085	qDT
2202	UN01004761	BBIE	UN01004761	Transport_Cargo. Statistical Classification. Code	The code specifying a statistical classification for this transport cargo.	Despatch Advice -Invoice - Order -Order Change -Order Response -	Used	0	1	UN02000053	7357	qDT

Where is it used?
What's their cardinality?

Rationalization results...

- 40% less business information artefacts needed
- Realized by just adding 17 new artefacts (ABIEs) to the Library (1%)
- Just 1400 artefacts needed for Supply Chain (out of 11,500)
- Just 1000 for the invoice
- Easily maintainable
- Easier to implement (less is more!)

Quality instrument used by the team

....results discussed during the forum in Geneva April 16

[HOME](#)
[SECRETARIAT](#)
[THE BUREAU](#)
[PROJECTS](#)
[HOD\(S\)](#)
[DOMAINS](#)
[MY PERSONAL ASSISTANT](#)

SCRDM INTERNAL REVIEW SURVEY DEADLINE 17TH APRIL 2016

TABLE OF CONTENTS

- 1. New objects
 - 1.1. ABIE CI_ Note -> Trade_ Note
 - 1.2. ABIE Workflow Object -> Trade_Workflow Object
 - 1.3. New ABIEs for header, line, subordinate and payment.
 - 1.4. CIRL_ Supply Chain_ Trade Transaction -> Line_ Trade Transaction
 - 1.5. Payment_ Trade Settlement -> extend existing ABIE
- 2. New objects (Property Term)
 - 2.1. Supply Chain_ Trade Transaction. Shipment_ Identification. Identifier
 - 2.2. Trade_ Price. Trade_ Comparison. Reference_ Price
 - 2.3. Supply Chain_ Trade Line Item. Physical. Referenced_ Logistics_

INSTRUCTIONS

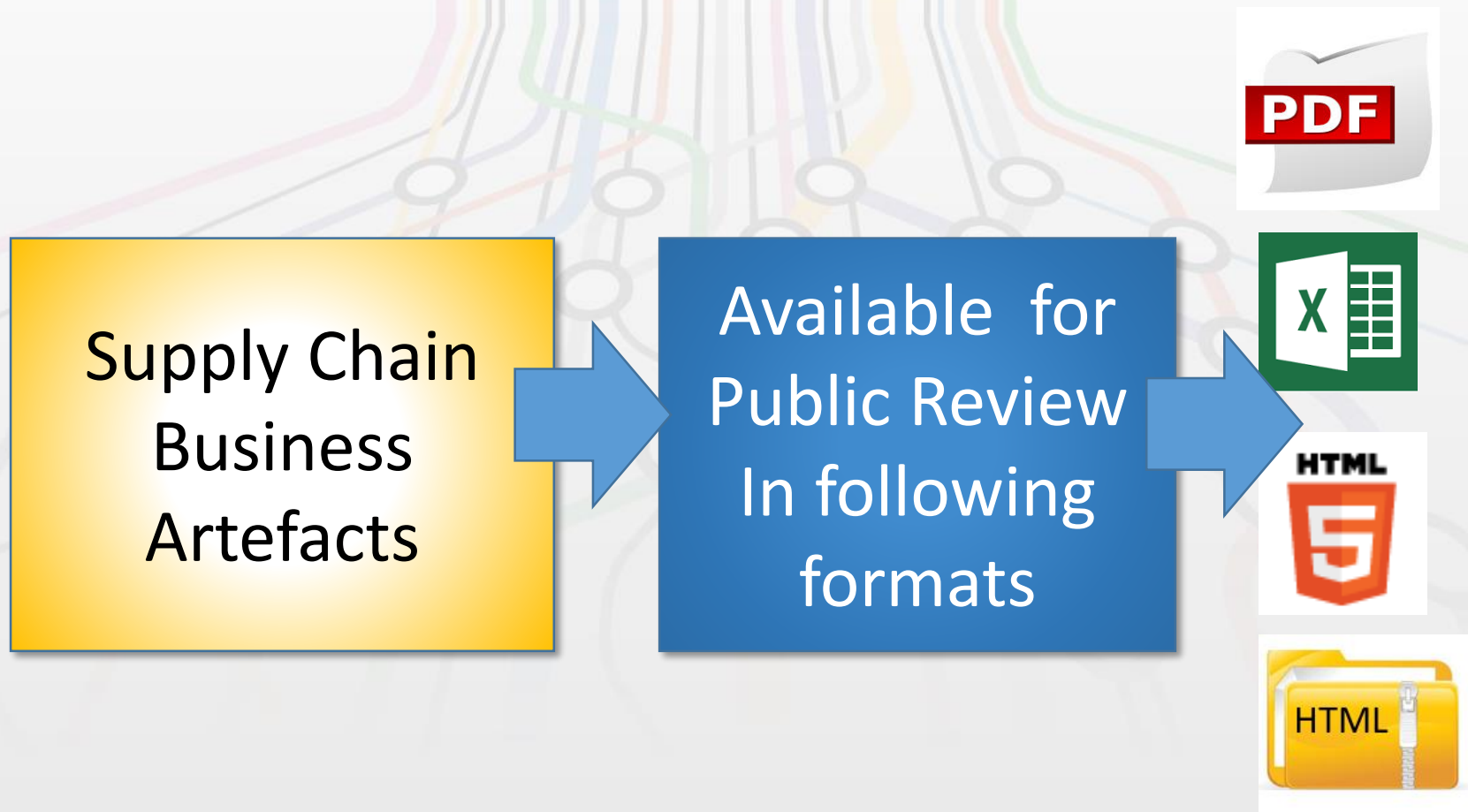
1. Select a chapter for example '1. New objects', by clicking on it (top of page)
2. Open the Draft SCRDM CCL based on CCL 15Bv2.0.xls
3. If applicable you can search on subject/issue in the excel file column A (just filter - contains - subject number - eg. 2.2)
4. Read the proposal text of the subject/issue.
5. Vote for : **Approved** (*No further discussion needed*) or **Not approved** (*Further discussion needed*) ; you are entitled to *Undo* your answer and change it anytime before the deadline (17th April 2016) is reached.
6. **(Optional)** Share the reasons for your choice (Approved / Not Approved) using the discussion items in yellow at the right of each question.

Please look at our work: SCRDM Public Review package

<https://www2.unece.org/cefact/pages/viewpage.action?pageId=9601777>

#	Item	Description
01	SCRDM Master Structure and Subset of CCL D16A.1 (Context CCL) (Public Draft v1.0)	Reference Data Model
	- 01_SCRDM Subset of CCL D16A.1) (Excel) (Public Draft v1.0)	Idem Excel format
	- 01_SCRDM_Subset_of_CCL_D16A.1 (HTML) (Public Draft v1.0)	Idem HTML format
	- 01_SCRDM Subset of CCL D16A.1 (CHM) (Public Draft v1.0)	Idem Compressed HTML
02	BRS-SCRDM (Public Draft v1.0)	High level specification
03	RSM-SCRDM (Public Draft v1.0)	High level specification
04	Green Paper Reference Data Model (Public Draft v1.0)	High level explanation.
05	Reference Data Model Guideline (Public Draft v1.0)	Guideline

The result: Supply Chain artefacts subset



Supply Chain artefacts in PDF



Semantic Links



Occurrence	Element/Attribute	Business Name	TDED	QDT
	ABIE	Transport_Cargo.		
		Details		
0 .. 1	BBIE Definition:	Transport_Cargo. Type. Code The code, such as UNECE Recommendation 21 single digit codes, specifying the type of transported cargo.	Type Code	UN02000096
0 .. 1	BBIE Definition:	Transport_Cargo. Identification. Text The identification, expressed as text, of this transport cargo that is sufficient to identify it for customs, statistical or transport purposes.	Shipping Description	7002
0 .. 1	BBIE Definition:	Transport_Cargo. Operational Category. Code The code specifying the operational category for this transport cargo, such as obnoxious or military.	Operational Category Code	7085 UN02000077
0 .. 1	BBIE Definition:	Transport_Cargo. Statistical Classification. Code The code specifying a statistical classification for this transport cargo.	Statistics Classification Code	7357 UN02000053

Supply Chain artefacts in Excel



Semantic Links

	A	B	C	D	E	F	P	S	T
	Based on Unique UN Assigned ID	ABIE/BBIE/ASBIE	Dictionary Entry Name	Definition	Business Name	TDED	Qualified Data Type UID	Occurrence Min	Occurrence Max
1									
2		ABIE		Aggregate Business Information Entity					
3		BBIE		Basic Business Information Entity contained within the ABIE					
4		ASBIE		Associated (Aggregate) Business Information Entity, associated with the ABIE					
1354	UN01004757	ABIE	Transport_Cargo. Details	Information about goods being transported identifying their nature for customs, statistical or transport purposes.	Cargo Identification				
1355	UN01004758	BBIE	Transport_Cargo. Type. Code	The code, such as UNECE Recommendation 21 single digit codes, specifying the type of transported cargo.	Type Code		UN02000096	0	1
1356	UN01004759	BBIE	Transport_Cargo. Identification. Text	The identification, expressed as text, of this transport cargo that is sufficient to identify it for customs, statistical or transport purposes.	Shipping Description	7002		0	1
1357	UN01004760	BBIE	Transport_Cargo. Operational Category. Code	The code specifying the operational category for this transport cargo, such as obnoxious or military.	Operational Category Code	7085	UN02000077	0	1
1358	UN01004761	BBIE	Transport_Cargo. Statistical Classification. Code	The code specifying a statistical classification for this transport cargo.	Statistics Classification Code	7357	UN02000053	0	1

Supply Chain artefacts in HTML



SCRDM Master

file:///C:/Data/gegeg/scrmd/Excel/HTML/Pages16/041.htm?file:///C:/Data/gegeg/scrmd/Excel/HTML/Pages16/045.htm

M SCRDM Master

- SCRDM Master. Details
- Supporting objects
 - CCL16A uDT2-3::Amount. Type
 - CCL16A uDT2-3::Binary Object. Type
 - CCL16A uDT2-3::Code. Type
 - CCL16A uDT2-3::Date Time. Type
 - CCL16A uDT2-3::Date. Type
 - CCL16A uDT2-3::Identifier. Type
 - CCL16A uDT2-3::Indicator. Type
 - CCL16A uDT2-3::Measure. Type
 - CCL16A uDT2-3::Numeric. Type
 - CCL16A uDT2-3::Percent. Type
 - CCL16A uDT2-3::Quantity. Type
 - CCL16A uDT2-3::Rate. Type
 - CCL16A uDT2-3::Text. Type
 - CCL16A uDT2-3::Value. Type
 - CCL16A.1 CCL::ABIE::Acknowledgement_
 - CCL16A.1 CCL::ABIE::Acquisition_ Contrac
 - CCL16A.1 CCL::ABIE::Advance_ Payment.
 - CCL16A.1 CCL::ABIE::Applied_ Allowance
 - CCL16A.1 CCL::ABIE::Applied_ Tax. Detail
 - CCL16A.1 CCL::ABIE::Available_ Period. D
 - CCL16A.1 CCL::ABIE::Basic_ Work Item. D
 - CCL16A.1 CCL::ABIE::Branch_ Financial In
 - CCL16A.1 CCL::ABIE::Calculated_ Price. D
 - CCL16A.1 CCL::ABIE::Contact_ Person. D
 - CCL16A.1 CCL::ABIE::Creditor_ Financial /
 - CCL16A.1 CCL::ABIE::Creditor_ Financial I
 - CCL16A.1 CCL::ABIE::Debtor_ Financial Ar
 - CCL16A.1 CCL::ABIE::Debtor_ Financial In
 - CCL16A.1 CCL::ABIE::Delivery_ Adjustmer
 - CCL16A.1 CCL::ABIE::Delivery_ Instruction
 - CCL16A.1 CCL::ABIE::Disposal_ Instrutor
 - CCL16A.1 CCL::ABIE::Document Context_
 - CCL16A.1 CCL::ABIE::Document Line_ Do
 - CCL16A.1 CCL::ABIE::Document_ Authenti
 - CCL16A.1 CCL::ABIE::Document_ Version.

SCRDM: Subset of CCL D16A.1 (Context CCL)

Start Structure Components

Cargo Identification

Qualified ABIE Transport_Cargo. Details

Cargo Identification	
Type Code	
Shipping Description	
Operational Category Code	
Statistics Classification Code	

Documentation

Business Name	Cargo Identification
CCTS	
Type	ABIE
Dict Entry Name	Transport_Cargo. Details
Definition	Information about goods being transported identifying their nature for customs, statistical or transport purposes.
Obj. ClassQual.	Transport
Obj. ClassTerm	Cargo
Prop. TermQual.	
Prop. Term	
Repr. TermQual.	
Repr. Term	
Assoc. Obj. ClassQual.	
Assoc. Obj. Class	
Occurrence	

Publication

UN Identifier	UN01004757
---------------	------------

Attributes

Attribute name	Status	Description/Data Type
Transport_Cargo. Type. Code	0	Cargo Category Code Type The code, such as UNECE Recommendation 21 single digit codes, specifying the type of transported cargo.
Transport_Cargo. Identification. Text	0	Text Type The identification, expressed as text, of this transport cargo that is sufficient to identify it for customs, statistical or transport purposes.
Transport_Cargo. Operational Category. Code	0	Cargo Operational Category Code Type The code specifying the operational category for this transport cargo, such as obnoxious or military.
Transport_Cargo. Statistical Classification. Code	0	Cargo Commodity Category Code Type The code specifying a statistical classification for this transport cargo.

Supply Chain artefacts in HTML



SCRDM Master

file:///C:/Data/gefeg/scrdm/Excel/HTML/Pages16/041.htm?file:///C:/Data/gefeg/scrdm/Excel/HTML/Pages16/045.htm

SCRDM Master

- SCRDM Master. Details
- Supporting objects
 - CCL16A uDT2-3::Amount. Type
 - CCL16A uDT2-3::Binary Object. Type
 - CCL16A uDT2-3::Code. Type
 - CCL16A uDT2-3::Date Time. Type
 - CCL16A uDT2-3::Date. Type
 - CCL16A uDT2-3::Identifier. Type
 - CCL16A uDT2-3::Indicator. Type
 - CCL16A uDT2-3::Measure. Type
 - CCL16A uDT2-3::Numeric. Type
 - CCL16A uDT2-3::Percent. Type
 - CCL16A uDT2-3::Quantity. Type
 - CCL16A uDT2-3::Rate. Type
 - CCL16A uDT2-3::Text. Type
 - CCL16A uDT2-3::Value. Type
 - CCL16A.1 CCL::ABIE::Acknowledgement_
 - CCL16A.1 CCL::ABIE::Acquisition_Contra
 - CCL16A.1 CCL::ABIE::Advance_Payment.
 - CCL16A.1 CCL::ABIE::Applied_Allowance
 - CCL16A.1 CCL::ABIE::Applied_Tax_Detail
 - CCL16A.1 CCL::ABIE::Available_Period. D
 - CCL16A.1 CCL::ABIE::Basic_Work Item. D
 - CCL16A.1 CCL::ABIE::Branch_Financial Ir
 - CCL16A.1 CCL::ABIE::Calculated_Price. D
 - CCL16A.1 CCL::ABIE::Contact_Person. De
 - CCL16A.1 CCL::ABIE::Creditor_Financial /
 - CCL16A.1 CCL::ABIE::Creditor_Financial I
 - CCL16A.1 CCL::ABIE::Debtor_Financial A
 - CCL16A.1 CCL::ABIE::Debtor_Financial In
 - CCL16A.1 CCL::ABIE::Delivery_Adjustmer
 - CCL16A.1 CCL::ABIE::Delivery_Instruction
 - CCL16A.1 CCL::ABIE::Disposal_Instructor
 - CCL16A.1 CCL::ABIE::Document Context_
 - CCL16A.1 CCL::ABIE::Document Line_Do
 - CCL16A.1 CCL::ABIE::Document_Authenti
 - CCL16A.1 CCL::ABIE::Document_Version.
 - CCL16A.1 CCL::ABIE::F...

SCRDM: Subset of CCL D16A.1 (Context CCL)

Start Structure Components

Cargo Identification

Qualified ABIE Transport_Cargo_Details

Cargo Identification	
Type Code	
Shipping Description	
Operational Category Code	
Statistics Classification Code	

Documentation

Business Name	Cargo Identification
CCTS	
Type	ABIE
Dict EntryName	Transport_Cargo_Details
Definition	Information about goods being transported identifying their nature for customs, statistical or transport purposes.
Obj ClassQual	Transport
Obj ClassTerm	Cargo
Prop TermQual	
Prop Term	
Repr TermQual	
Repr Term	
Assoc Obj ClassQual	
Assoc Obj Class	
Occurrence	

Publication

UN Identifier	UN01004757
---------------	------------

Attributes

Attribute name	Status	Description/Data Type
Transport_Cargo_Type.Code	0	Cargo Category Code Type The code, such as UNECE Recommendation 21 single digit codes, specifying the type of transported cargo.
Transport_Cargo_Identification.Text	0	Text Type The identification, expressed as text, of this transport cargo that is sufficient to identify it for customs, statistical or transport purposes.
Transport_Cargo_Operational Category.Code	0	Cargo Operational Category Code Type The code specifying the operational category for this transport cargo, such as obnoxious or military.
Transport_Cargo_Statistical Classification.Code	0	Cargo Commodity Category Code Type The code specifying a statistical classification for this transport cargo.

Reference Data Model Guideline

- Steps for using



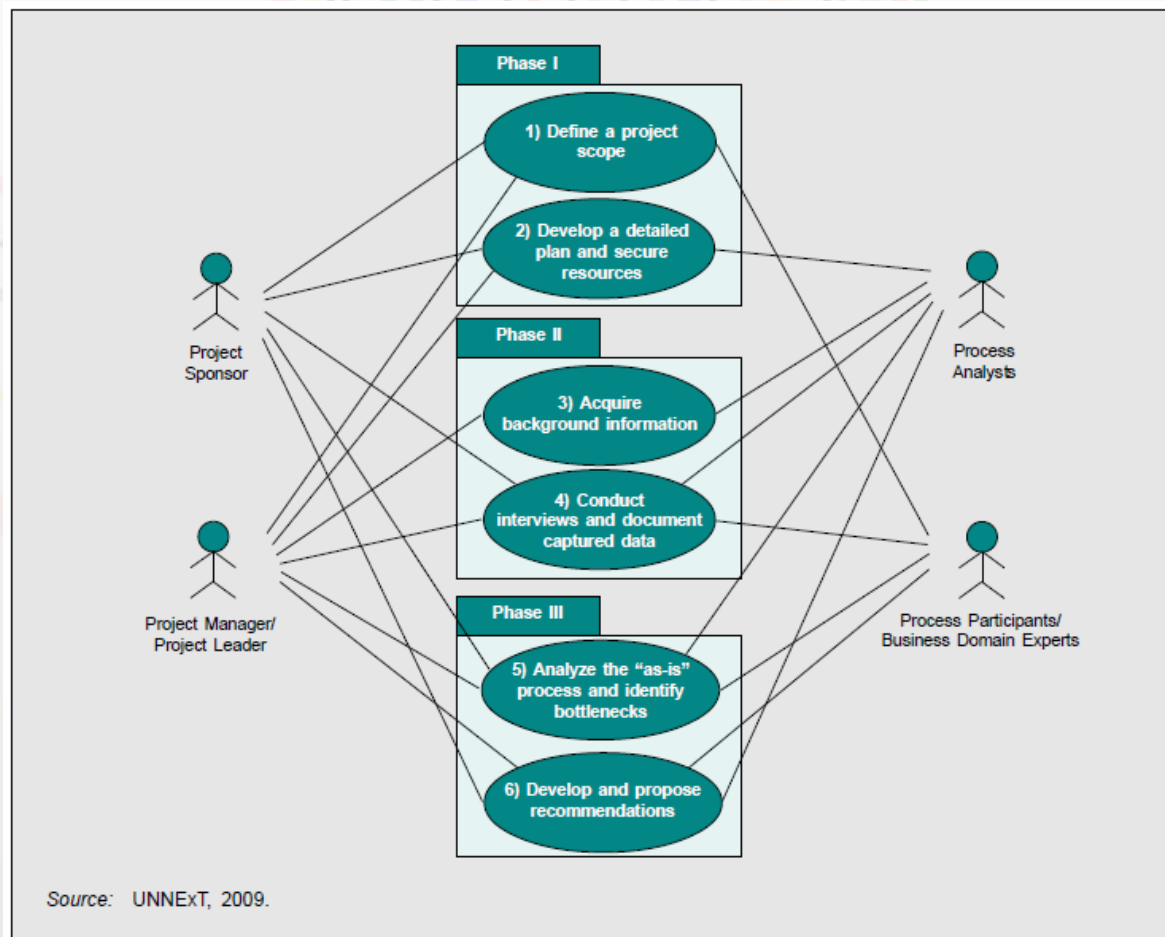
- Steps for updating



- Steps for creating



Common step: Business Process Analysis



Common methodology: UMM/UML

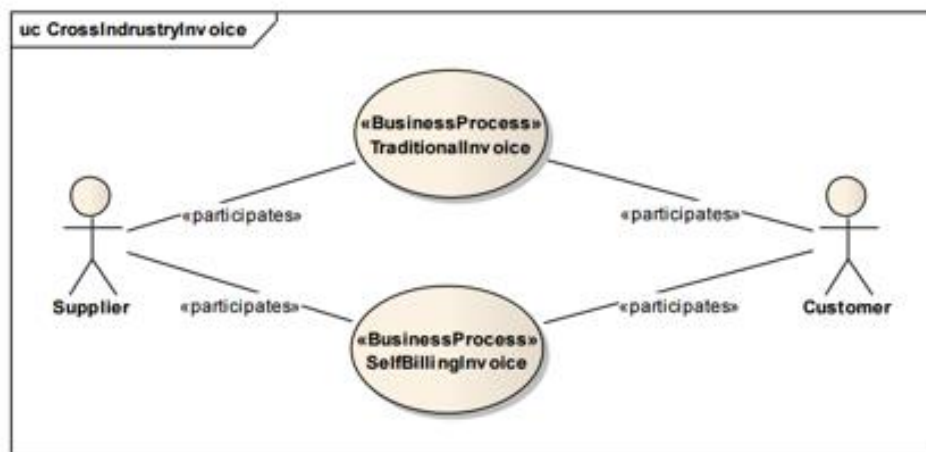


Figure 4 Use Case Diagram: process and actors

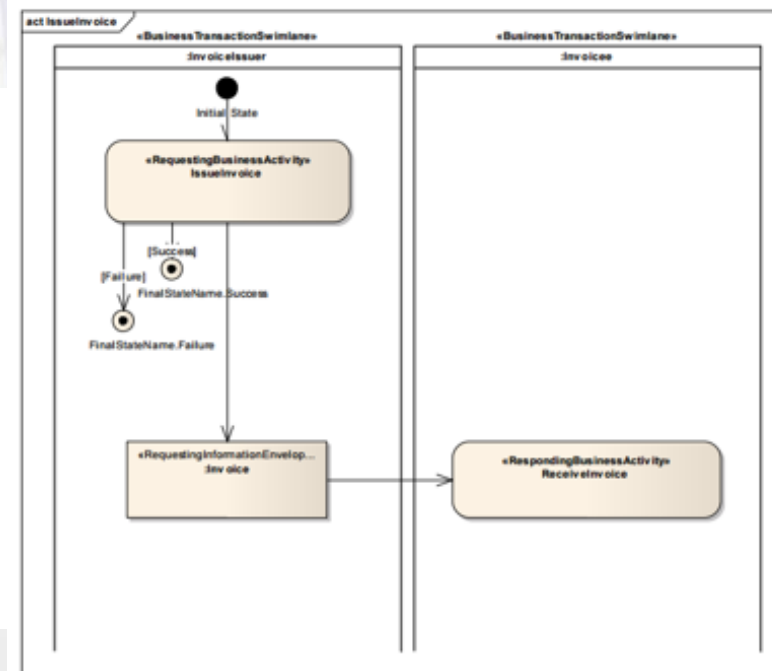


Figure 5 Use Case Activity Diagram

Common step: list of documents / data requirements

1. Proforma Invoice
2. Purchase Order
3. Application for Permission to Export Rice
4. Sales Report
5. Application for the Collection of the Permit for the Export of Rice
6. Permit for the Export of Rice
7. Application for Certificate of Standards of Product
8. Rice Quality Certificate
9. Certificate of Standards of Products
10. Application for Phytosanitary Certificate
11. Booking Request Form – Border Crossing
12. Booking Confirmation – Border Crossing
13. Booking Request Form – Inland Transport
14. Booking Confirmation – Inland Transport
15. Cargo Insurance Application Form
16. Commercial Invoice
17. Letter of Credit
18. Packing List
19. Cover Note
20. Bill of Lading
21. Insurance Policy
22. Export Declaration
23. Good Transition Control List
24. TKT 308.2
25. Equipment Interchange Report (EIR)
26. Container Loading List
27. Container List Message
28. Outward Container List
29. Manifest
30. Phytosanitary Certificate
31. Certificate Origin
32. Application for Certificate of Origin
33. Application for Letter of Credit
34. Credit Advice
35. Debit Advice
36. Remittance Advice

Source: UNNEXT, 2009

Common step: categorize & compile data

Process	UNLK Document Family	Documents
Buy	Commercial Transaction	<ul style="list-style-type: none"> All documents exchanged between partners in international trade for the invitation to tender, through the exchange between prospective seller and prospective buyer to the inclusion of contract, i.e., Enquiry/Request for Quotation/Offer Invitation; Offer/Quotation; Order; Acknowledgement of Order/Pro-forma Invoice; Dispatch Advice
Pay	Payment	<ul style="list-style-type: none"> Instructions (or applications) from customers to banks, i.e., Instruction for bank transfer; Application for banker's draft; Application for banker's guarantee; Collection order; Documentary credit application Advice or information from banks to customers or to beneficiaries of payment, i.e., Collection payment advice; Documentary credit payment; Acceptance or negotiation advice; Documentary credit; Banker's guarantee Information exchanged between banks

Figure 7 Example of document categorization

ASEAN ATIGA FORM D A Certificate of Origin certifies expressly that the goods to which the certificate relates originate in a the specific country. Issuing Authorities, Thailand	Permit for the Export of Rice (A. 4) Permit for the Export of Rice (A. 4) is only given to rice exporters who follow the Ministry of Commerce's Regulation for Rice Exportation 1997. Department of Foreign Trade, Ministry of Commerce, Thailand	Certificate of Standards of Products (MS. 24) Certificate of Standards of Products (MS. 24) certifies that rice to be exported has the quality set by importer. Board of Trade of Thailand
	11 Place of departure TDED 3214: Name of the port, airport or other type of location from which a means of transport is scheduled to depart or has departed an.. 256 (Min = 1, Max = 1)	20 Place of departure TDED 3214: Name of the port, airport or other type of location from which a means of transport is scheduled to depart or has departed an.. 256 (Min = 1, Max = 1)
11-2 Country of Exportation TDED 3229: Country subdivision where goods begin their journey to export location an..9 (Min=1, Max=1)	5 Destination country TDED 3216:Name of the country to which the goods are to be delivered to the final consignee or buyer an..35 (Min = 1, Max = 1)	21 Country of destination of goods TDED 3014: Name of the country to which a consignment of goods is to be or has been delivered an..35 (Min = 1, Max = 1)

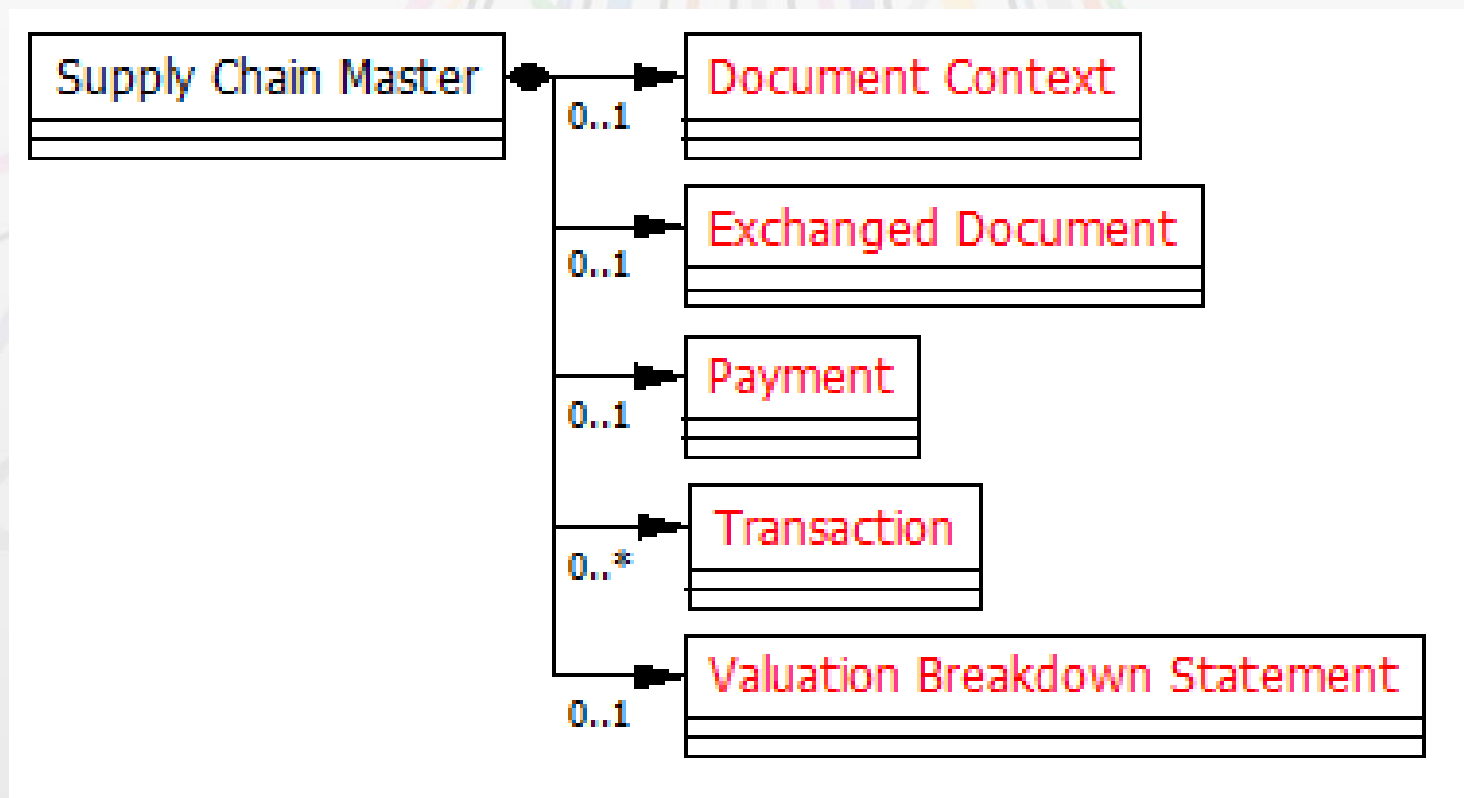
Figure 8 Example of data dictionary compilation

Data requirement mapped to SCRDM artefacts

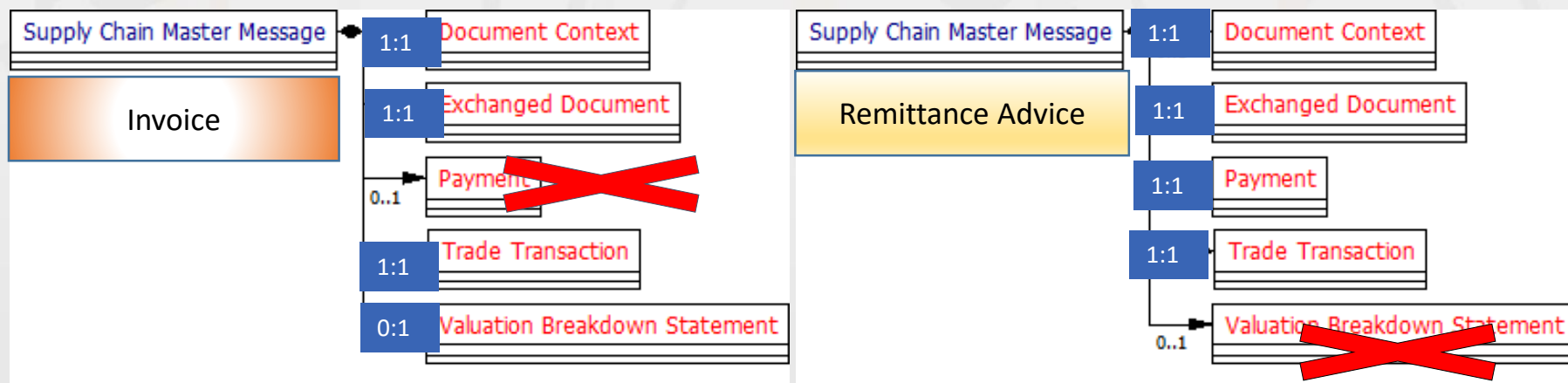
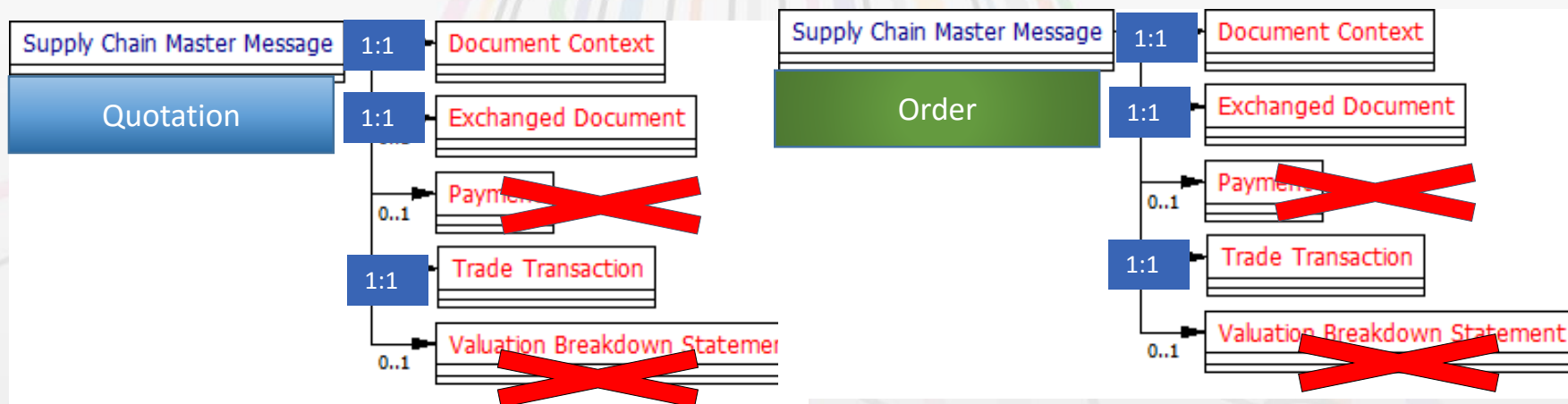
Compiled data dictionary ID	Business Name	Unique UN Assigned ID	ABIE/ BBIE/ ASBIE/ACC/BCC/ASCC/DT/CC/SC	Dictionary Entry Name (auto generated)	Definition Mandatory
	Header Agreement	UN01011547	ABIE	Header_ Trade Agreement. Details	The contractual terms of a header trade agreement.
10001	Seller	UN01011551	ASBIE	Header_ Trade Agreement. Seller. Trade_ Party	The seller party for this header trade agreement.
10002	Buyer	UN01011552	ASBIE	Header_ Trade Agreement. Buyer. Trade_ Party	The buyer party for this header trade agreement.
10010	Delivery Terms	UN01011560	ASBIE	Header_ Trade Agreement. Applicable. Trade_ Delivery Terms	The terms of delivery applicable to this header trade agreement.
10011	Payment Terms	UN01011561	ASBIE	Header_ Trade Agreement. Applicable. Trade_ Payment Terms	The payment terms applicable to this header trade agreement.

Figure 9 Data dictionary mapped to Context CCL (RDM)

Check the master structure

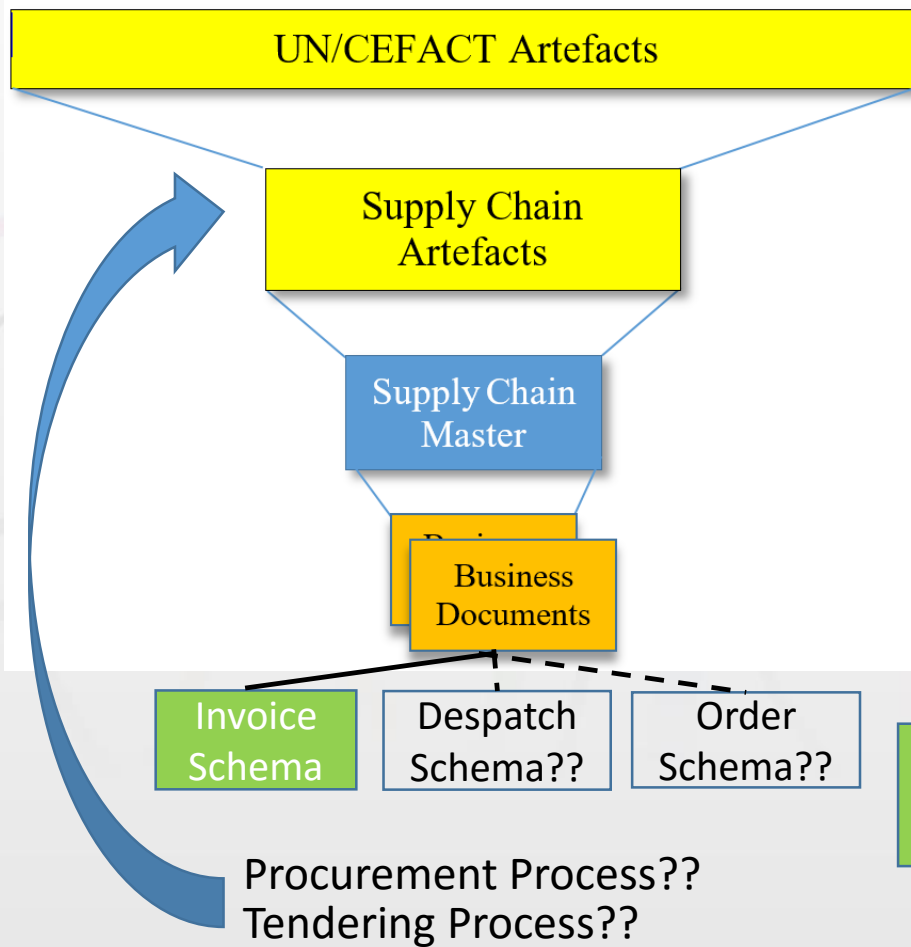


Sample SCRDM CCBDA Subset Message Structures

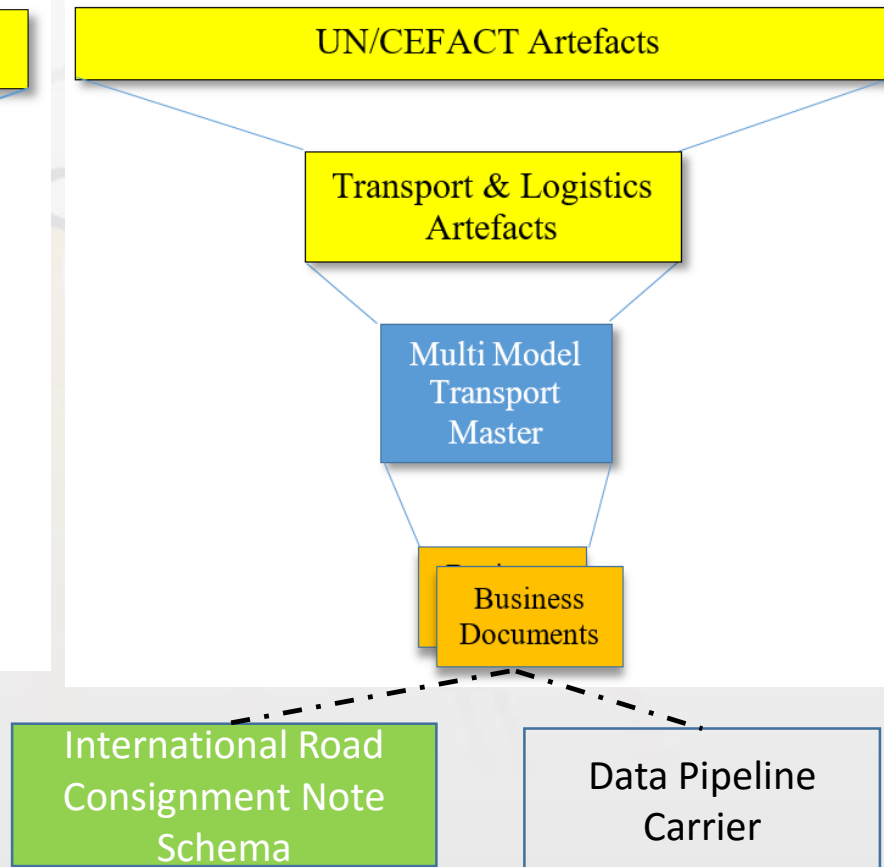


What's next?

SCRDM



MMT



You are invited for the next step....

Further developments depend on your interest and on the support of your UN/CEFACT Heads of Delegation (HoDs)

End of PM2 Part 2 Technical Details

Questions?



Thank you for your attention!

For further information on:

Supply Chain Management Reference Data Model (SCRDM)

- Project Leader : Rolf Wessel
E-mail : r.wessel@seeburger.de

- Lead Editor : Gerhard Heemskerk
E-mail : gerhard.heemskerk@kpnmail.nl

- Editor : Ian Watt
E-mail : iwatt@aecitrade.com

Multimodal Transport Data Reference Model (MMT)

- Lead Editor : Sue Probert
E-mail : sue.probert@dial.pipex.com

End of presentation