UN/CEFACT

Simple, Transparent and Effective Processes
For Global Commerce

REQUIREMENTS SPECIFICATION MAPPING (RSM)

Business Domain: Cross Industry – Supply Chain

Business Process: Remittance Advice

Title: Cross Industry Remittance Advice

UN/CEFACT International Trade and Business Processes Group: TBG1

Version: 1.06.00

Release: 1

Document Summary

Document Item	Current Value
Document Title	Requirements Specification Mapping Cross Industry Remittance Advice
Date Last Modified	26-Jan-2011
Current Document Version	1.06.00
Status	Draft
Document Description (one sentence summary)	Specification that describes the data model and targeted technology solutions for the Remittance Advice.

Contributors

Name	Organization

Log of Changes

Issue No.	Date of Change	Changed By	Summary of Change
1.00.00	26-Oct-2010	TBG1	Provided the RSM in the format as required by ICG.
1.01	29-Oct-10	TBG1	Updated diagrams and Qdts
1.02	05-Nov-2010	TBG1	Added new common Library to Section 11
1.03	4-Dec-10	TBG1	Changed Diagrams, added section 3 for Common RSM
1.04	15-Dec-10	TBG1	Updated embedded Common RSM
1.05	31-Dec-10	TBG1	Updated diagram 6.2.1. Added diagrams for Line Item and Trade Settlement. Added notes in section 6.2 on embedded Common Classes and XMI documents. Added XMI diagrams to section 11
1.06	26-Jan-11	TBG1	Added Business Message Template to Section and updated XMI files to section 11

TABLE OF CONTENTS

1. Preamble 4
2. References 4
3. Objective 4
5. Target technology solutions 4
6. Information payload to be implemented 5
   - 6.1. Conceptual Data Model for the Cross Industry Remittance Advice 5
   - 6.2. Canonical Data Model for the Remittance Advice 6
     - 6.2.1. Cross Industry Remittance Advice 7
     - 6.2.2. CIR_ Exchanged_ Document 7
     - 6.2.3. CIRH_ Supply Chain_Trade Settlement 8
     - 6.2.4. CIRT Supply Chain Trade Transaction 9
     - 6.2.5. CIRT Supply Chain Trade Agreement 9
     - 6.2.6. CIRT_ Supply Chain_Trade Settlement 10
     - 6.2.7. CIRL_ Supply Chain_Trade Line Item 10
     - 6.2.8. CIRL_ Supply Chain Trade Settlement 11
     - 6.2.9. CIR_ Document Line_Document 11
   - 6.3. Common Supply Chain Classes 11
7. Business information entity reference 12
   - 7.1. Basic Business Information Entities section 12
   - 7.2. Aggregate Business Information Entities section 13
     - 7.2.1. Remittance Advice ABIEs 13
8. Core components UN/CEFACT Registry version used 25
9. Draft Core Component reference 25
10. Additional documentation 25
11. Additional information 25

1. Preamble

The current practice of the exchange of business documents by means of telecommunications – usually defined as e-Business presents a major opportunity to improve the competitiveness of companies, especially for Small and Medium Enterprises (SME).

The purpose of this document is to define globally consistent Remittance Advice process for worldwide supply chains, using the UN/CEFACT Modelling Methodology (UMM) approach and Unified Modelling Language to describe and detail the business processes and transactions involved.

The structure of this document is based on the structure of the UN/CEFACT Business Requirements Specification (BRS) document reference CEFACT/ICG/005.

2. References

- UN/CEFACT TBG1 Common Supply Chain BRS, Release 1
- UN/CEFACT TBG2 Buy-Ship-Pay (Including UNeDocs) BRS, version 1.0
- UN/CEFACT Modeling Methodology (CEFACT/TMG/N090R10, November 2001)
- OASIS Universal Business Language (UBL), Version 2.0
- UN/EDIFACT – Remittance advice message

3. Objective

The objective of this document is to standardize the Business processes, the Business transactions and the Information entities of the Remittance process used by the industries in the supply chain.

The business process is the detailed description of the way trading partners intend to play their respective roles, establish business relations and share responsibilities to interact efficiently with the support of their respective information systems.

Each Business transaction is realized by an exchange of Business documents (also called messages). The sequences in which these documents are used, composes a particular instance of a scenario and are presented as activity diagrams in the document.

The business documents are composed of Business Information Entities (BIE), which are preferably taken from libraries of reusable business information entities. The contents of the business documents and the Business Information Entities are presented using class diagrams and/or requirement lists.

4.

5. Target technology solutions

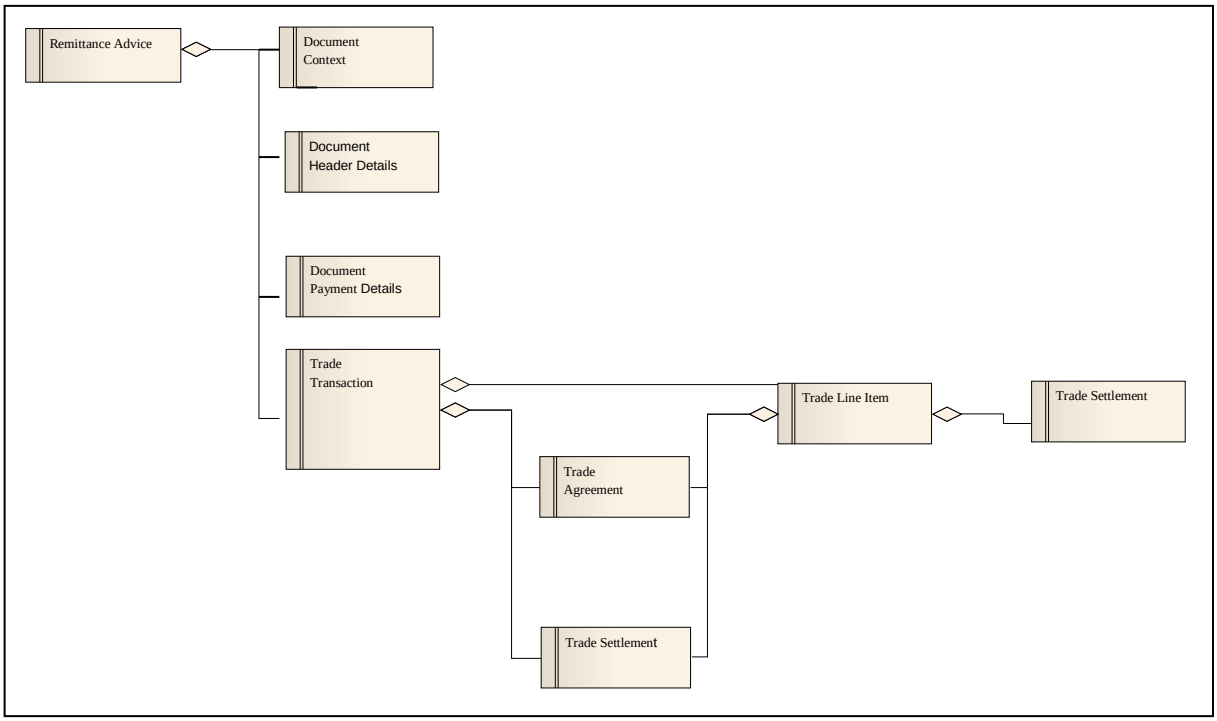
The CIR v1 (Cross Industry Remittance Advice) solution requires a UN/CEFACT XML standard schema.

The CIR v1 (Cross Industry Remittance Advice) solution will not be implemented as a UN/EDIFACT standard message.

6. Information payload to be implemented

6.1. Conceptual Data Model for the Cross Industry Remittance Advice

Figure 5-1 Business message model



Philosophy behind the conceptual design

The conceptual design is based on the assumption that information exchanged in the order-to-pay process tends to have a large degree of similarity. Therefore rather than linking the information to message specific entities two neutral entities have been defined: Trade Agreement and Trade Settlement. These entities contain the main semantic payload for all communication exchanges, on header as well as on line level.

The Trade Transaction and Trade Line Item entities serve to structure the entities mentioned before.

Description of the main entities

- Document Context: Application processing information for the business document.
- Document Heading: Generic document heading information such as Remittance advice number, Issue date.
- Trade Transaction: Information on the trade transaction(s) to which the Remittance advice applies.

- Trade Line Item: Information on the line items that are being shipped..
- Trade Agreement: information on the commercial agreement on which the trade transaction or line is based.
- Trade Settlement: information on the financial settlement of the trade transaction or line.

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6.2. Canonical Data Model for the Remittance Advice

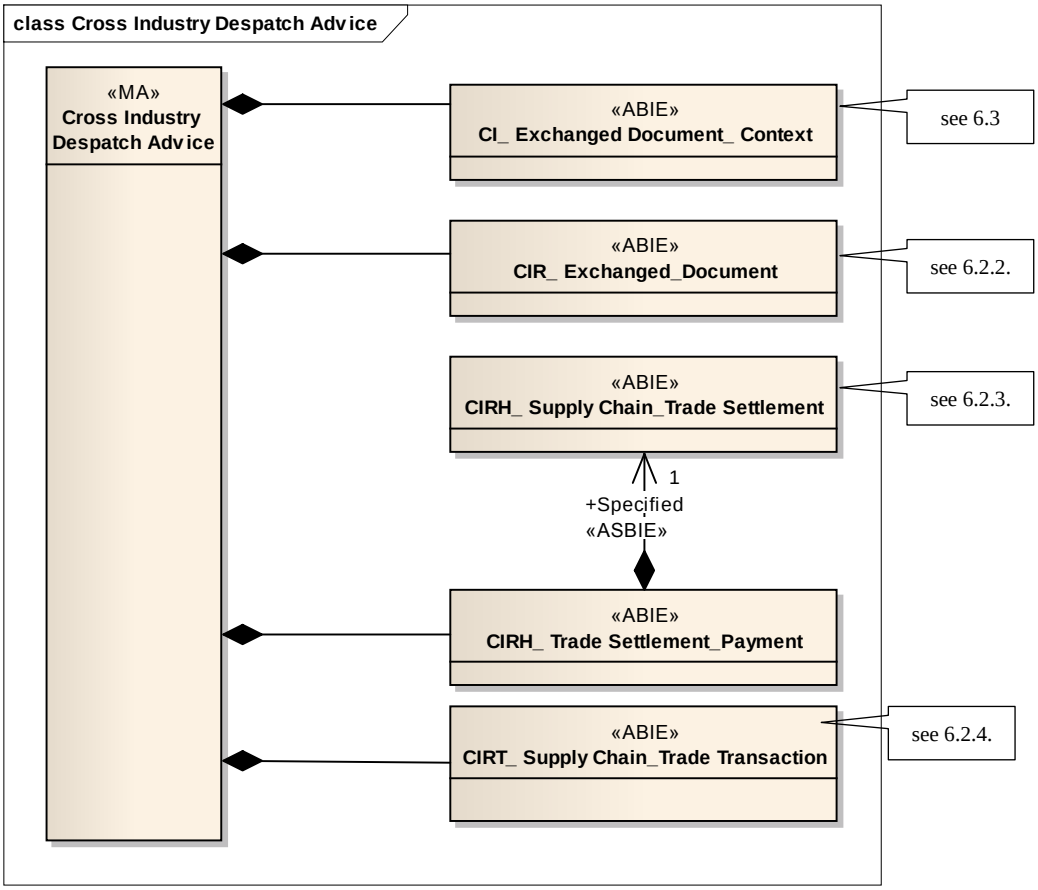
For readability reasons the canonical model is provided in multiple diagrams, each providing a full description of a segment in the Cross Industry Remittance Advice.

Note: The two entities Trade Agreement and Trade Settlement have been depicted as identical on header and line level, since these entities are meant to support the entire Order-to-Pay process. In the individual steps of the process further refinements can be made on what is communicated on header and line level. Therefore in the canonical model for the Remittance Advice message the two conceptual entities are realized as 4 message specific entities, two for the header and two for the line.

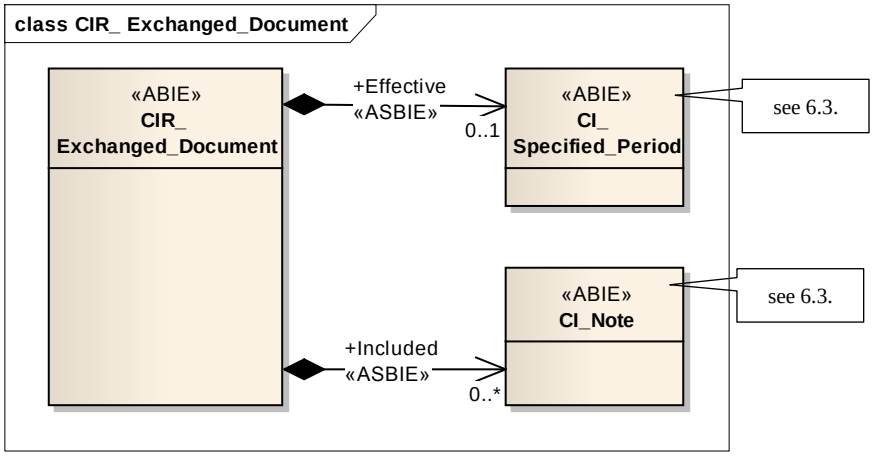
Note: The Common Supply Chain Classes – section 6.3 promotes interoperability across Supply Chain Messages. It also provides easier maintenance / reduces errors and therefore diagrams in section 6.2 only point to the entities in the common classes. The detail of how the entities relate to each other is contained only in the embedded document in section 6.3. and therefore you should refer to this document for all relationships between common entities.

Note: XMI documents that comply with the XMI standard version 2.1 are embedded in section 11. These documents will allow you to upload the diagrams into many diagramming / code generation applications.

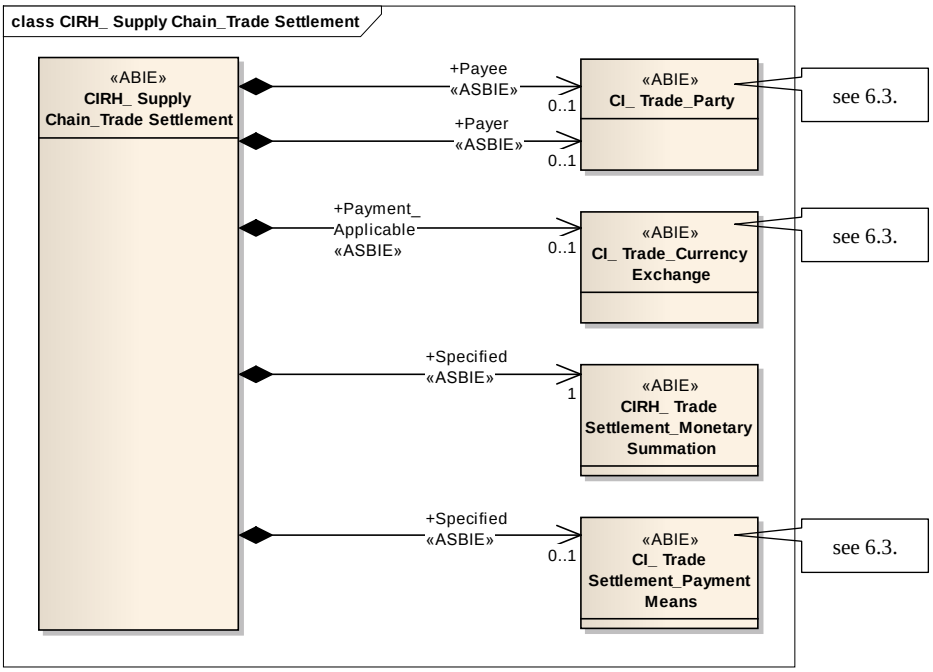
6.2.1. Cross Industry Remittance Advice



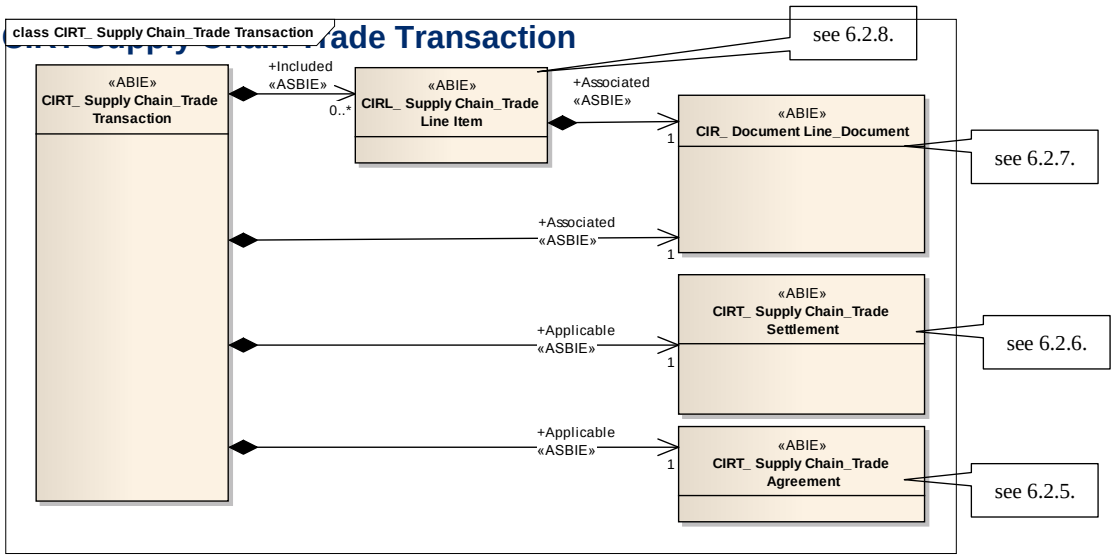
6.2.2. CIR_ Exchanged_ Document



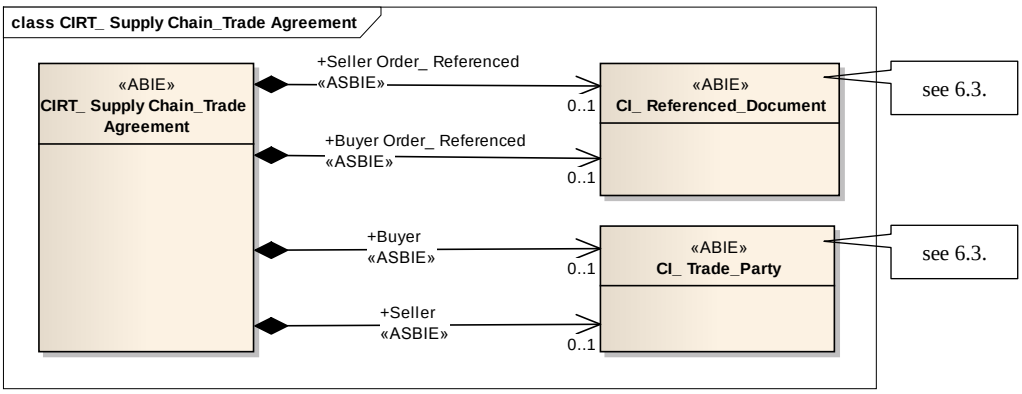
6.2.3. CIRH_ Supply Chain_Trade Settlement



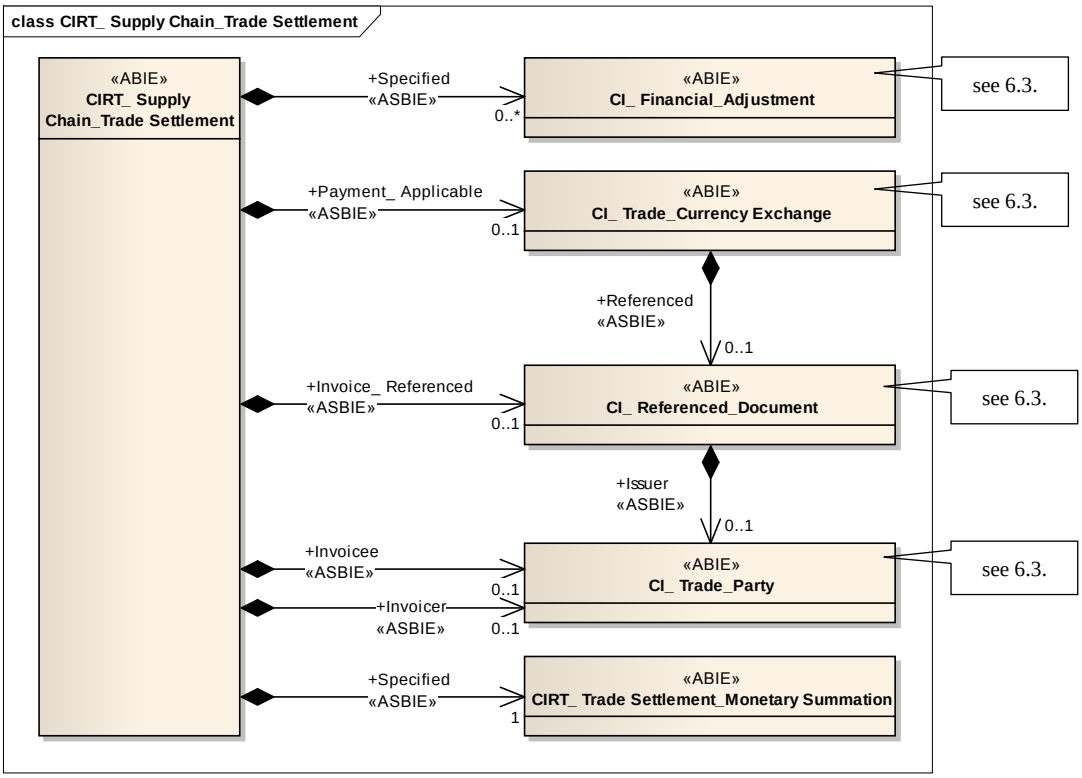
6.2.4. CIRT Supply Chain Trade Transaction



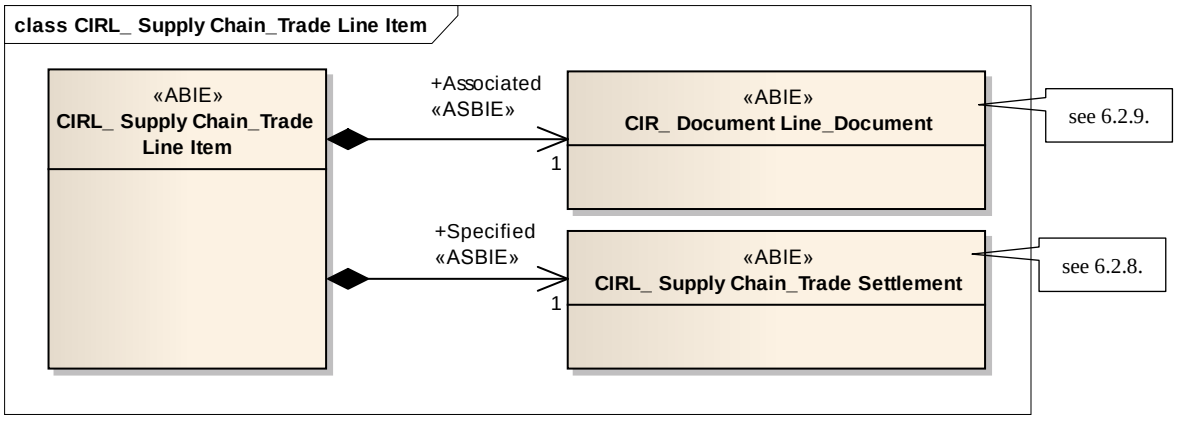
6.2.5. CIRT Supply Chain Trade Agreement



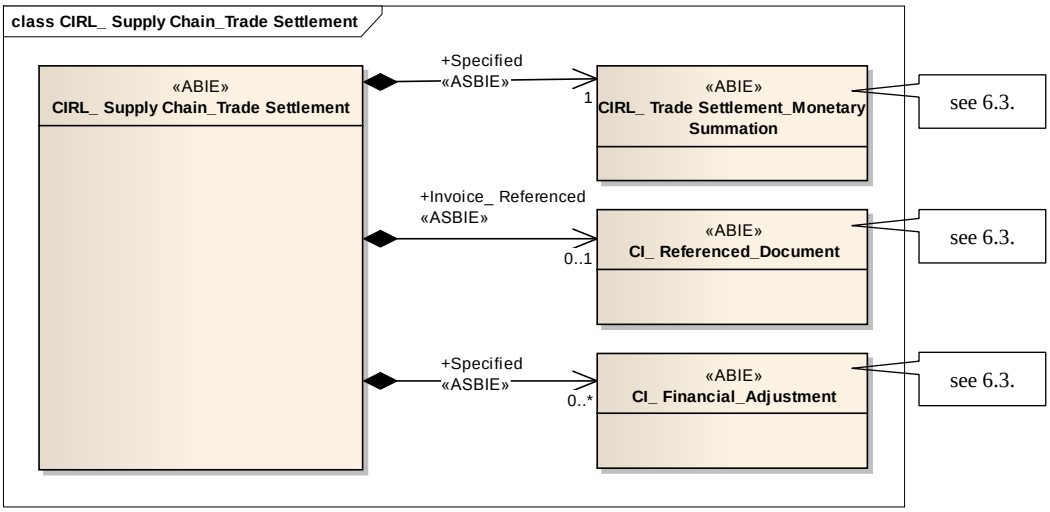
6.2.6. CIRT_ Supply Chain_Trade Settlement



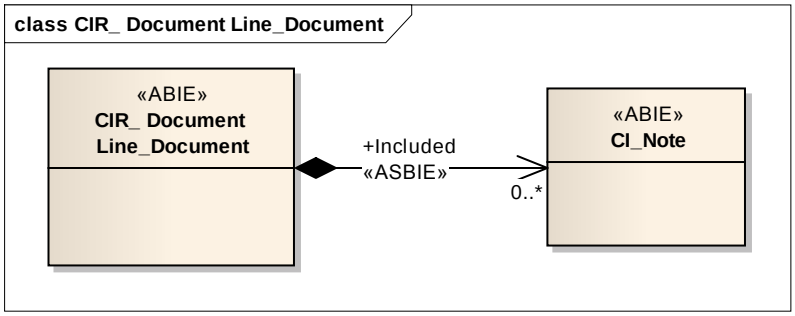
6.2.7. CIRL_ Supply Chain_Trade Line Item



6.2.8. CIRL_ Supply Chain Trade Settlement



6.2.9. CIR_ Document Line_Document



6.3. Common Supply Chain Classes

The following embedded Document contains the details and UML diagrams of the reusable common information elements classes covering the requirements for the cross industry supply chain processes as described in the Common Supply Chain BRS v 1.00.05 - for reuse in TBG1 RSMs

Specification TBG1 RSM Common Supply

7. Business information entity reference

This section contains the list of all the Business Information Entities that are both used within the canonical data model and are variations from the standard Core Components, including the UN/CEFACT Registry version that served as the reference point

7.1. Basic Business Information Entities section

This section identifies any restrictions that have to be applied to the BBIE in the context in which it is being used.

BBIE Dictionary Entry Name	Qualified Data Type	Core Component DEN	CC Restriction Type	CC Restriction	SC Restriction Type	SC Restrict-ions	UNCL TDED
CIRH_ Supply Chain_ Trade Settlement. Payment_ Currency. Code	Currency	Trade Settlement. Payment_ Currency. Code	Enumeration	UNCL 6345 list	None	None	6345
CIRT_ Supply Chain_ Trade Settlement. Payment_ Currency. Code	Currency	Trade Settlement. Payment_ Currency. Code	Enumeration	UNCL 6345 list	None	None	6345
CIR_ Document Line_ Document. Line Status. Code	Line Status	Document. Line Status. Code	Enumeration	UNCL 1229 list	None	None	1229
CIR_ Exchanged_ Document. Purpose. Code	Message Function	Document. Purpose. Code	Enumeration	UNCL 1225 list	None		1225
CIR_ Exchanged_ Document. Type. Code	Remittance_ Document	Remittance_ Document_ Code. Type	Enumeration	481 Remittance Advice	None	None	1001

7.2. Aggregate Business Information Entities section

7.2.1. Remittance Advice ABIEs

Occurrence	Element/Attribute	
	ABIE	**CIRH_ Supply Chain_ Trade Settlement. Details**
0 .. 1	BBIE	CIRH_ Supply Chain_ Trade Settlement. Payment_ Currency. Code
	Definition:	The code specifying the payment currency for this CIRH supply chain trade settlement.
0 .. 1	**ASBIE**	**CIRH_ Supply Chain_ Trade Settlement. Payee. CI_ Trade_ Party**
	Definition:	The payee party for this CIRH supply chain trade settlement.
0 .. 1	**ASBIE**	**CIRH_ Supply Chain_ Trade Settlement. Payer. CI_ Trade_ Party**
	Definition:	The payer party for this CIRH supply chain trade settlement.
0 .. 1	**ASBIE**	**CIRH_ Supply Chain_ Trade Settlement. Payment_ Applicable. CI_ Trade_ Currency Exchange**
	Definition:	The currency exchange applicable to the payment of this CIRH supply chain trade settlement.
1 .. 1	**ASBIE**	**CIRH_ Supply Chain_ Trade Settlement. Specified. CIRH_ Trade Settlement_ Monetary Summation**
	Definition:	The monetary summation specified for this CIRH supply chain trade settlement.
0 .. 1	**ASBIE**	**CIRH_ Supply Chain_ Trade Settlement. Specified. CI_ Trade Settlement_ Payment Means**
	Definition:	The payment means specified for this CIRH supply chain trade settlement.

Occurrence	Element/Attribute	
	ABIE	**CIRH_ Trade Settlement_ Monetary Summation. Details**
0 .. unbounded	BBIE	CIRH_ Trade Settlement_ Monetary Summation. Equivalent Transfer Total. Amount
	Definition:	A monetary value that constitutes an equivalent amount of a credit transfer payment for this CIRH trade settlement monetary summation, such as the amount transferred between debtor and creditor, before deduction of charges, expressed in the currency of the debtor's account, and transferred into a different currency.
0 .. unbounded	BBIE	CIRH_ Trade Settlement_ Monetary Summation. Payment Total. Amount
	Definition:	A monetary value of a payment total reported in this CIRH trade settlement monetary summation.

Occurrence	Element/Attribute	
	ABIE	**CIRH_ Trade Settlement_ Payment. Details**
0 .. 1	BBIE	CIRH_ Trade Settlement_ Payment. End-To-End_ Identification. Identifier
	Definition:	The unique identifier for the end-to-end processing of this CIRH trade settlement payment, such as an identifier assigned by an initiating party to unambiguously identify the transaction.
0 .. 1	BBIE	CIRH_ Trade Settlement_ Payment. Instruction. Identifier
	Definition:	The unique identifier of the instruction for this CIRH trade settlement payment.
0 .. 1	BBIE	CIRH_ Trade Settlement_ Payment. Requested Execution. Date Time
	Definition:	The date, time, date time or other date time value of the requested execution of this CIRH trade settlement payment.
1 .. 1	**ASBIE**	**CIRH_ Trade Settlement_ Payment. Specified. CIRH_ Supply Chain_ Trade Settlement**
	Definition:	The trade settlement specified for this CIRH trade settlement payment.

Occurrence	Element/Attribute	
	ABIE	**CIRL_ Supply Chain_ Trade Line Item. Details**
1 .. 1	**ASBIE**	**CIRL_ Supply Chain_ Trade Line Item. Associated. CIR_ Document Line_ Document**
	Definition:	The document line associated with this CIRL supply chain trade line item.
1 .. 1	**ASBIE**	**CIRL_ Supply Chain_ Trade Line Item. Specified. CIRL_ Supply Chain_ Trade Settlement**
	Definition:	The trade settlement specified for this CIRL supply chain trade line item.

Occurrence	Element/Attribute	
	ABIE	**CIRL_ Supply Chain_ Trade Settlement. Details**
0 .. 1	BBIE	CIRL_ Supply Chain_ Trade Settlement. Invoice Issuer_ Reference. Text
	Definition:	The invoicer reference, expressed as text, for this CIRL supply chain trade settlement.
0 .. 1	BBIE	CIRL_ Supply Chain_ Trade Settlement. Payer_ Reference. Text
	Definition:	The payer reference, expressed as text, for this CIRL supply chain trade settlement.
0 .. unbounded	**ASBIE**	**CIRL_ Supply Chain_ Trade Settlement. Specified. CI_ Financial_ Adjustment**
	Definition:	A financial adjustment specified for this CIRL supply chain trade settlement.
0 .. 1	**ASBIE**	**CIRL_ Supply Chain_ Trade Settlement. Invoice_ Referenced. CI_ Referenced_ Document**
	Definition:	The invoice document referenced from this CIRL supply chain trade settlement.
1 .. 1	**ASBIE**	**CIRL_ Supply Chain_ Trade Settlement. Specified. CIRL_ Trade Settlement_ Monetary Summation**
	Definition:	The trade settlement monetary summation specified for this CIRL supply chain trade settlement.

Occurrence	Element/Attribute	
	ABIE	**CIRL_ Trade Settlement_ Monetary Summation. Details**
0 .. unbounded	BBIE	CIRL_ Trade Settlement_ Monetary Summation. Due Payable. Amount
	Definition:	A monetary value that is an amount due and payable for this CIRL trade settlement monetary summation, such as the amount due to the creditor.
0 .. unbounded	BBIE	CIRL_ Trade Settlement_ Monetary Summation. Payment Total. Amount
	Definition:	A monetary value of a payment total reported in this CIRL trade settlement monetary summation.

Occurrence	Element/Attribute	
	ABIE	**CIRT_ Supply Chain_ Trade Agreement. Details**
0 .. 1	**ASBIE**	**CIRT_ Supply Chain_ Trade Agreement. Buyer. CI_ Trade_ Party**
	Definition:	The buyer party for this CIRT supply chain trade agreement.
0 .. 1	**ASBIE**	**CIRT_ Supply Chain_ Trade Agreement. Seller. CI_ Trade_ Party**
	Definition:	The seller party for this CIRT supply chain trade agreement.
0 .. 1	**ASBIE**	**CIRT_ Supply Chain_ Trade Agreement. Buyer Order_ Referenced. CI_ Referenced_ Document**
	Definition:	The buyer order document referenced from this CIRT supply chain trade agreement.
0 .. 1	**ASBIE**	**CIRT_ Supply Chain_ Trade Agreement. Seller Order_ Referenced. CI_ Referenced_ Document**
	Definition:	The seller order document referenced from this CIRT supply chain trade agreement.

Occurrence	Element/Attribute	
	ABIE	**CIRT_ Supply Chain_ Trade Settlement. Details**
0 .. 1	BBIE	CIRT_ Supply Chain_ Trade Settlement. Payment_ Currency. Code
	Definition:	The code specifying the payment currency for this CIRT supply chain trade settlement.
0 .. 1	BBIE	CIRT_ Supply Chain_ Trade Settlement. Invoice Issuer_ Reference. Text
	Definition:	The invoicer reference, expressed as text, for this CIRT supply chain trade settlement.
0 .. 1	BBIE	CIRT_ Supply Chain_ Trade Settlement. Payer_ Reference. Text
	Definition:	The payer reference, expressed as text, for this CIRT supply chain trade settlement.
0 .. 1	**ASBIE**	**CIRT_ Supply Chain_ Trade Settlement. Invoicee. CI_ Trade_ Party**
	Definition:	The party to whom an invoice was issued for this CIRT supply chain trade settlement.
0 .. 1	**ASBIE**	**CIRT_ Supply Chain_ Trade Settlement. Invoicer. CI_ Trade_ Party**
	Definition:	The party who issued the invoice for this CIRT supply chain trade settlement.
0 .. unbounded	**ASBIE**	**CIRT_ Supply Chain_ Trade Settlement. Specified. CI_ Financial_ Adjustment**
	Definition:	A financial adjustment specified for this CIRT supply chain trade settlement.
0 .. 1	**ASBIE**	**CIRT_ Supply Chain_ Trade Settlement. Payment_ Applicable. CI_ Trade_ Currency Exchange**
	Definition:	The currency exchange applicable to the payment of this CIRT supply chain trade settlement.
0 .. 1	**ASBIE**	**CIRT_ Supply Chain_ Trade Settlement. Invoice_ Referenced. CI_ Referenced_ Document**
	Definition:	The invoice document referenced from this CIRT supply chain trade settlement.
1 .. 1	**ASBIE**	**CIRT_ Supply Chain_ Trade Settlement. Specified. CIRT_ Trade Settlement_ Monetary Summation**
	Definition:	The monetary summation specified for this CIRT supply chain trade settlement.

Occurrence	Element/Attribute	
	ABIE	**CIRT_ Supply Chain_ Trade Transaction. Details**
1 .. 1	**ASBIE**	**CIRT_ Supply Chain_ Trade Transaction. Associated. CIR_ Document Line_ Document**
	Definition:	The document line associated with this CIRT supply chain trade transaction.
1 .. 1	**ASBIE**	**CIRT_ Supply Chain_ Trade Transaction. Applicable. CIRT_ Supply Chain_ Trade Agreement**
	Definition:	The trade agreement applicable to this CIRT supply chain trade transaction.
1 .. 1	**ASBIE**	**CIRT_ Supply Chain_ Trade Transaction. Applicable. CIRT_ Supply Chain_ Trade Settlement**
	Definition:	The trade settlement applicable to this CIRT supply chain trade transaction.
0 .. unbounded	**ASBIE**	**CIRT_ Supply Chain_ Trade Transaction. Included. CIRL_ Supply Chain_ Trade Line Item**
	Definition:	A Cross Industry Remittance Line (CIRL) trade line item included in this CIRT supply chain trade transaction.

Occurrence	Element/Attribute	
	ABIE	**CIRT_ Trade Settlement_ Monetary Summation. Details**
0 .. unbounded	BBIE	CIRT_ Trade Settlement_ Monetary Summation. Due Payable. Amount
	Definition:	A monetary value that is an amount due and payable for this CIRT trade settlement monetary summation, such as the amount due to the creditor.
0 .. unbounded	BBIE	CIRT_ Trade Settlement_ Monetary Summation. Grand Total. Amount
	Definition:	A monetary value of the grand total of this CIRT trade settlement monetary summation which includes addition and subtraction of individual summation amounts.
0 .. unbounded	BBIE	CIRT_ Trade Settlement_ Monetary Summation. Payment Total. Amount
	Definition:	A monetary value of a payment total reported in this CIRT trade settlement monetary summation.
0 .. unbounded	BBIE	CIRT_ Trade Settlement_ Monetary Summation. Total Discount. Amount
	Definition:	A monetary value of a total discount reported in this CIRT trade settlement monetary summation.
0 .. unbounded	BBIE	CIRT_ Trade Settlement_ Monetary Summation. Total Discount Basis. Amount
	Definition:	A monetary value of a total discount basis reported in this CIRT trade settlement monetary summation.

Occurrence	Element/Attribute	
	ABIE	**CIR_ Document Line_ Document. Details**
0 .. 1	BBIE	CIR_ Document Line_ Document. UUID_ Line. Identifier
	Definition:	The Universally Unique IDentifier (UUID) of this CIR document line.
0 .. 1	BBIE	CIR_ Document Line_ Document. Line. Identifier
	Definition:	The unique identifier of this CIR document line.
0 .. 1	BBIE	CIR_ Document Line_ Document. Line Status. Code
	Definition:	The code specifying the status of this CIR document line.
0 .. 1	BBIE	CIR_ Document Line_ Document. Line Status Reason. Code
	Definition:	The code specifying the line status reason for this CIR document line.
0 .. unbounded	**ASBIE**	**CIR_ Document Line_ Document. Included. CI_ Note**
	Definition:	A Cross Industry (CI) note included in this CIR document line.

Occurrence	Element/Attribute	
	ABIE	**CIR_ Exchanged_ Document. Details**
0 .. 1	BBIE	CIR_ Exchanged_ Document. Global_ Identification. Identifier
	Definition:	The unique global identifier for this CIR exchanged document.
0 .. 1	BBIE	CIR_ Exchanged_ Document. Previous Revision_ Identification. Identifier
	Definition:	The unique identifier of the previous revision of this CIR exchanged document.
0 .. 1	BBIE	CIR_ Exchanged_ Document. Revision_ Identification. Identifier
	Definition:	The unique identifier of the revision of this CIR exchanged document.
0 .. 1	BBIE	CIR_ Exchanged_ Document. Version_ Identification. Identifier
	Definition:	The unique identifier for the version of this CIR exchanged document.
0 .. 1	BBIE	CIR_ Exchanged_ Document. Identification. Identifier
	Definition:	The unique identifier of this CIR exchanged document.
0 .. unbounded	BBIE	CIR_ Exchanged_ Document. Language. Identifier
	Definition:	An identifier for a language used in this CIR exchanged document.
0 .. 1	BBIE	CIR_ Exchanged_ Document. Purpose. Code
	Definition:	The code specifying the purpose of this CIR exchanged document, such as request or reminder.
0 .. 1	BBIE	CIR_ Exchanged_ Document. Type. Code
	Definition:	The code specifying the type of CIR exchanged document.
0 .. 1	BBIE	CIR_ Exchanged_ Document. Issue. Date Time
	Definition:	The date, time, date time or other date time value for the issuance of this CIR exchanged document.
0 .. 1	BBIE	CIR_ Exchanged_ Document. Revision. Date Time
	Definition:	The date, time, date time or other date time value for the revision of this CIR exchanged document.
0 .. 1	BBIE	CIR_ Exchanged_ Document. Name. Text
	Definition:	The name, expressed as text, of this CIR exchanged document.
0 .. 1	BBIE	CIR_ Exchanged_ Document. Purpose. Text
	Definition:	The purpose, expressed as text, of this CIR exchanged document.
0 .. 1	BBIE	CIR_ Exchanged_ Document. Copy. Indicator
	Definition:	The indication of whether or not this CIR exchanged document is a copy.
0 .. 1	**ASBIE**	**CIR_ Exchanged_ Document. Effective. CI_ Specified_ Period**
	Definition:	The Cross Industry (CI) specified period within which this CIR exchanged document is effective.
0 .. unbounded	**ASBIE**	**CIR_ Exchanged_ Document. Included. CI_ Note**
	Definition:	A Cross Industry (CI) note included in this CIR exchanged document.

Occurrence	Element/Attribute

8. Core components UN/CEFACT Registry version used

The CIR v1 model described in this document and submitted by the Trade and Business Process Group for Supply Chain, TBG1, has been harmonized with models and submissions of other Trade and Business Process Groups. It re-uses core components extensively. Therefore this document is based on the draft UN/CEFACT Core Component Library CCL010A,

9. Draft Core Component reference

All the new (draft) Core Components, Business Information Entities, and Qualified Data Types that have been used in this RSM have been submitted for registration in the UN/CEFACT Registry version 10A.

10. Additional documentation

This section identifies any additional documentation that will be registered with the canonical model in respect to the BCCs or ACCs that have been provided for registration in the UN/CEFACT Registry.

Not applicable at this point in time.

11. Additional information

All ABIEs from CCL	ABIEs.xmi
CIR Class diagrams	CIR.xmi
Business Message Templates	CCL10A TBG1 CIR MA Template.xls