

EAN.UCC XML  
Business Message  
Standard For

PRICE BRACKET

Version 1.3.1

November 2003



## TABLE OF CONTENTS

<b>PURPOSE .....</b>	<b>4</b>
BACKGROUND .....	5
<b>BUSINESS REQUIREMENTS DOCUMENT FOR PRICE BRACKET .....</b>	<b>6</b>
PREFACE: .....	10
BUSINESS OPPORTUNITY: .....	11
1.1 Problem Statement: .....	11
1.2 Audience: .....	11
1.3 References: .....	12
1.4 Acknowledgements: .....	12
2.0 PROCESS VIEW – GENERAL REQUIREMENTS: .....	14
2.1 Use Case Scenario: .....	15
2.2 Sequence of Communications .....	17
3.0 LOGICAL VIEW - .....	18
3.1 Price Bracket Data Attributes: .....	18
4.1 Amount Range .....	20
4.2 Bracket Range .....	20
4.3 Description .....	21
4.4 Document .....	21
4.5 Entity Identification .....	21
4.6 Measurement Range .....	21
4.7 Party Identification .....	22
4.8 Price Bracket .....	22
4.9 Price Bracket Document .....	22
4.10 Price Date .....	22
4.11 Price Date Type List .....	23
4.12 Range .....	23
5.0 IMPLEMENTATION CONSIDERATIONS AND CONCERNS: .....	24
APPENDIX A: CLASS DIAGRAM PRICE BRACKET .....	30
APPENDIX B: CLASS DIAGRAM DOCUMENT .....	31
APPENDIX C: CLASS DIAGRAM PARTY IDENTIFICATION .....	31
APPENDIX D: CLASS DIAGRAM ENTITY IDENTIFICATION .....	32
APPENDIX E: CLASS DIAGRAM PRICE COMMON .....	32
APPENDIX F: CLASS DIAGRAM RANGE .....	33
APPENDIX G: CLASS DIAGRAM DESCRIPTION .....	33
APPENDIX H: CLASS DIAGRAM MEASUREMENT .....	34
APPENDIX I: CLASS DIAGRAM AMOUNT .....	35
APPENDIX J: CLASS DIAGRAM EXTENDED DATA TYPE .....	36
HARMONIZATION SUMMARY .....	37
VERSION 1.14 HARMONIZATION SUMMARY .....	37
<b>STYLE SHEET .....</b>	<b>38</b>
DESCRIPTION .....	38
HTML EXAMPLE .....	38
<b>GLOBAL DATA DICTIONARY .....</b>	<b>40</b>
1.0 PRICE BRACKET CLASS DATA DESCRIPTIONS V1.3.1 .....	40
<b>INSTANCE FILE .....</b>	<b>42</b>

---

DESCRIPTION.....	42
INSTANCE FILE EXAMPLE.....	42

## **Purpose**

The purpose of this Business Message Standard is to provide the necessary information to implement this message as part of the EAN.UCC System. The information contained within this document is a direct result of the work conducted by the EAN.UCC's Align Business Requirements Group.

The content of this document is actually a collection of material from several different sources to create a single source of information that will provide the necessary basics to understand and implement this EAN.UCC Business Message Standard. The core of this document originates from the Business Requirements Document that is created by the Business Requirements Groups to define the business needs that are to be addressed by this Message. The document then provides the technical details needed to implement the message: a report from the Global Data Dictionary, StyleSheet and Instance File.

This Business Message Standard is meant to be used in conjunction with the EAN.UCC XML Schemas that are available on the EAN and UCC websites. The implementer of these standards needs to be aware of the interrelationship amongst the XML Schemas and the importance of using only interoperable versions.

The reader will notice as they progress through this document that there are several different 'levels' of information that is presented. We begin with the business rationale for the message and then move into the technical details of how and what is needed to exchange this message. This design is deliberate to reach the broadest audience and to meet their needs. Based upon the reader's experience and intentions, specific sections of this document may be more valuable than others. This design and content of this document is based upon the direct feedback from our user community and as such, we are constantly revising and refining how and what we present.

## Background

<b>EAN.UCC Business Message Standard:</b>	<b>Price Bracket</b>	
<b>Business Requirement Group:</b>	<b>Align</b>	
<b>Business Requirement Document:</b>	<b>Price Bracket</b>	
<b>Business Requirements Group Manager:</b>	<b>Jack Eggert</b>	<b>Uniform Code Council</b>
<b>Global Data Dictionary:</b>	<b>EAN.UCC Global Data Dictionary v1.3.1</b>	
<b>Schemas:</b>	<b>EAN.UCC Schemas v1.3.1</b>	

***Business Requirements Group  
(BRG)***

**Business Requirements  
Document For  
PRICE BRACKET**

Version 1.15

April 17, 2003

## DOCUMENT HISTORY

<b>Document Number:</b>	1.15
<b>Document Version:</b>	1.15
<b>Document Issue Date</b>	April 17, 2003

<b>Document Title</b>	Price Bracket – Business Requirement Document
<b>Owner</b>	Price Project Team Jan Ewing, Co-Chair David Nutt, Co-Chair UCC - <a href="mailto:Jeggert@uc-council.org">Jeggert@uc-council.org</a> UCC – <a href="mailto:mschneider@uc-council.org">mschneider@uc-council.org</a>
<b>Status</b>	BRG & ITRG Approved

### Document Summary

Date of Change	Version	Reason for Change	Summary of Change	CCR #
05.08.2002	1.1			02-000088
06.06.2002	1.2	Update	Conference Call of 6/6/2002	
06.25.2002	1.3	Update	Conference Call of 6/20/2002	
07.23.2002	1.4	First Draft BRD	Convert BRW-→BRD	
08.01.2002	1.5	Updates	Conference Call of 8/01/2002	
08.28.2002	1.6	Update to Model	Change to Range	
09.09.2002	1.7	Incorporate sample bracket and range qualifiers	Conference Call of 08/29/2002	
09.17.2002	1.8	Conference call 09.12.2002	Modification to model. Added Use Case of Price Bracket within EAN.UCC System. Added line numbers.	
09.19.2002	1.9	Updates	Conference call 09.19.2002	
09.26.2002	1.10	Updates	Conference call 09.26.2002	
11.18.2002	1.11	Comments from Public Review	Modifications based on eRoom comments during Public Review phase (see attached).	
11.21.2002	1.12	Price Project Team Review	Modifications from final review	
12.11.2002	1.13	Model Harmonization	Impact on Appendix B Document Appendix C Party Identification	
03.12.2003	1.14	Model Harmonization	Version 1.14 Harmonization Summary	
04.17.2003	1.15	ITRG Review	See Comment Resolution Document	

**Approvals**

<b>Name</b>	<b>Signature</b>	<b>Date</b>
Align BRG	Electronic Vote	December 4, 2002
ITRG	Electronic Vote	May 2, 2003



PREFACE: .....	10
BUSINESS OPPORTUNITY: .....	11
1.1 Problem Statement: .....	11
1.2 Audience: .....	11
1.3 References: .....	12
1.4 Acknowledgements: .....	12
2.0 PROCESS VIEW – GENERAL REQUIREMENTS: .....	14
2.1 Use Case Scenario: .....	15
2.2 Sequence of Communications .....	17
3.0 LOGICAL VIEW - .....	18
3.1 Price Bracket Data Attributes: .....	18
4.1 Amount Range .....	20
4.2 Bracket Range .....	20
4.3 Description .....	21
4.4 Document .....	21
4.5 Entity Identification .....	21
4.6 Measurement Range .....	21
4.7 Party Identification .....	22
4.8 Price Bracket .....	22
4.9 Price Bracket Document .....	22
4.10 Price Date .....	22
4.11 Price Date Type List .....	23
4.12 Range .....	23
5.0 IMPLEMENTATION CONSIDERATIONS AND CONCERNS: .....	24
APPENDIX A: CLASS DIAGRAM PRICE BRACKET .....	30
APPENDIX B: CLASS DIAGRAM DOCUMENT .....	31
APPENDIX C: CLASS DIAGRAM PARTY IDENTIFICATION .....	31
APPENDIX D: CLASS DIAGRAM ENTITY IDENTIFICATION .....	32
APPENDIX E: CLASS DIAGRAM PRICE COMMON .....	32
APPENDIX F: CLASS DIAGRAM RANGE .....	33
APPENDIX G: CLASS DIAGRAM DESCRIPTION .....	33
APPENDIX H: CLASS DIAGRAM MEASUREMENT .....	34
APPENDIX I: CLASS DIAGRAM AMOUNT .....	35
APPENDIX J: CLASS DIAGRAM EXTENDED DATA TYPE .....	36
HARMONIZATION SUMMARY .....	37
VERSION 1.14 HARMONIZATION SUMMARY .....	37
<b>STYLE SHEET .....</b>	<b>38</b>
DESCRIPTION .....	38
STYLE SHEET EXAMPLE .....	38
<b>GLOBAL DATA DICTIONARY .....</b>	<b>40</b>
1.0 PRICE BRACKET CLASS DATA DESCRIPTIONS v1.3.1 .....	40
<b>INSTANCE FILE .....</b>	<b>42</b>
DESCRIPTION .....	42
INSTANCE FILE EXAMPLE .....	42

## Preface:

This Price Bracket Business Requirements Document (BRD) is the result of a Price Project Team defining the business requirements and the implementation considerations for additional information to Price. This represents the first effort to support the business rules associated with price communication.

It was the GCI Business Process Work Group that provided an original input to the Business Modeling Groups based upon the philosophy of Simple E-Business (Simpl-eb). Simpl-eb is an approach to business processes and a major input to the EAN.UCC Global Standards Management Process. A brief explanation is included below.

### **What are the principles of Simpl-eb?**

- To remove complexity from the core business process
  - USE common core definitions
  - STOP exchanging unnecessary information
- To synchronize master data between trading partners
  - ensures data integrity across processes
  - facilitates transaction processing
- To move data from the transaction to the master data
  - unnecessary data in the transaction is:
    - redundant
    - adds complexity
    - stable or static
- To be consistent across plans, transactions, and history
  - past, present & future

### **What are the benefits of Simpl-eb?**

- Ensures a simple and common definition of Electronic Business (eb) data and processes.
- Core data is pre-aligned prior to any subsequent business process. This means that the EAN.UCC keys of GTIN's, GLN's, GSRN, GRAI, GIAI and all elements that are important

to a key, such as an item's dimensions and price, are in alignment between trading partners as a basis of doing business.

- Once all master data is synchronized prior to any business transaction, then subsequent transactions need only the most basic of information, such as the purchase order's (PO) number, GLN, GTIN, quantity and price (which may be optional). The same would hold true for other transactions, such as the invoice and despatch advice (ASN's).
- Keep the complexity of the process outside the exchange of messages.
- If all retailers conform to these standards, then a vendor would not have to re-map information based on each retailer's needs and possibly different legacy systems.
- Since Simpl-eb is simple, it facilitates greater involvement from the tier 2 and 3 vendors in the trading communities.

## **Business Opportunity:**

Price bracket communication can be transmitted as additional information to Price or as a stand-alone document. This business requirements document discusses price bracket communication and its place within the price data alignment process.

### **1.1 Problem Statement:**

Price bracket communication is the process of communicating the basic price bracket criteria between the seller, buyer and any third party following communication of the core data elements of item and party, as well as any subsequent maintenance messages. The price bracket communication process reflects the required activity of a manufacturer or supplier that wishes to provide a trade item for global trade. Price communicates either a generic global price or the agreed upon negotiated price between trading partners.

The Price Bracket provides the ability to communicate the business rules associated with the criteria required to qualify for varying levels of pricing for a trade item. It may accompany, precede or follow the communication of a price.

This Price Bracket definition intentionally does not support additional "business rules based" price communication, e.g. temporary price reductions/promotions, variable measure pricing, efficiency criteria associated with the trading partnership, allowances and charges, etc. These will be addressed in separate business requirement documents.

### **1.2 Audience:**

The audience of the standards would be any participant in the global supply chain. This would include retailers, manufacturers, service providers and other third parties.

### 1.3 References:

- Price Business Requirements Document, Version 3.4 November 21, 2002
- Core Party Business Requirements Document, Version 7.1 November 21, 2002
- Core Item and Extension of Relationship Dependent Data, Version 7.1 November 21, 2002
- EAN.UCC Global Business Model (Process and Data), October 1999
- Java Framework for SIMPL-EDI Requirements Specification, April 2000
- Simple eb(electronic business), March 2000
- BPAWG Model of the International Supply Chain Domain (interim report), January 2000

Additionally, the existing Electronic Data Interchange messages in widespread use were mined for their business content.

- GEDI PRICAT
- UCS 879 Price Information
- UCS 888 Item Maintenance
- VICS EDI 832 Price Sales Catalog
- I/C EDI 832 Price Sales Catalog
- EANCOM® PRICAT

Acknowledgement is also due to the work going on in the XML environment.

ebXML/SOAP  
eCo Framework (Common Business Library)  
Rosettanet  
W3C

### 1.4 Acknowledgements:

Aguemon, Alice	EAN France
Atkins, Mickey	Ahold
Bohning, Joe	Nestle Purina Pet Care
Bowers, Lee	Springs Industries Inc.
Elvin, Frank	Elvin Safety Supply Inc
Costello, Aidan	QRS
Ewing, Jan	Hershey Foods Co.
Goodrich, MaryAnn	Unilever Home & Personal Care USA
Holden, Julia	Nordstrom
Holowienka, Ray	J & J
Jerrod, Phillip	EAN e-centre
Karp, Nancy	Transora
Kidd, Robin	Nestle
Kille, Grant	WWRE
Lavender, Jennifer	Unilever
Moenning, Martina	Metro
Nutt, David	Home Depot
Patel, Umang	e-centre

Qadeer, Nasir	Transora
Robba, Steve	J & J
Rodriguez, Julie	Levi Strauss & Co
Southall, Michele	UCCnet
Spofford, Peggy	3M Company
Toeppner, Jeff	Coca-Cola Enterprises
Vessey, Patricia	Best Buy
Wolfson, John	Kraft

**Support**

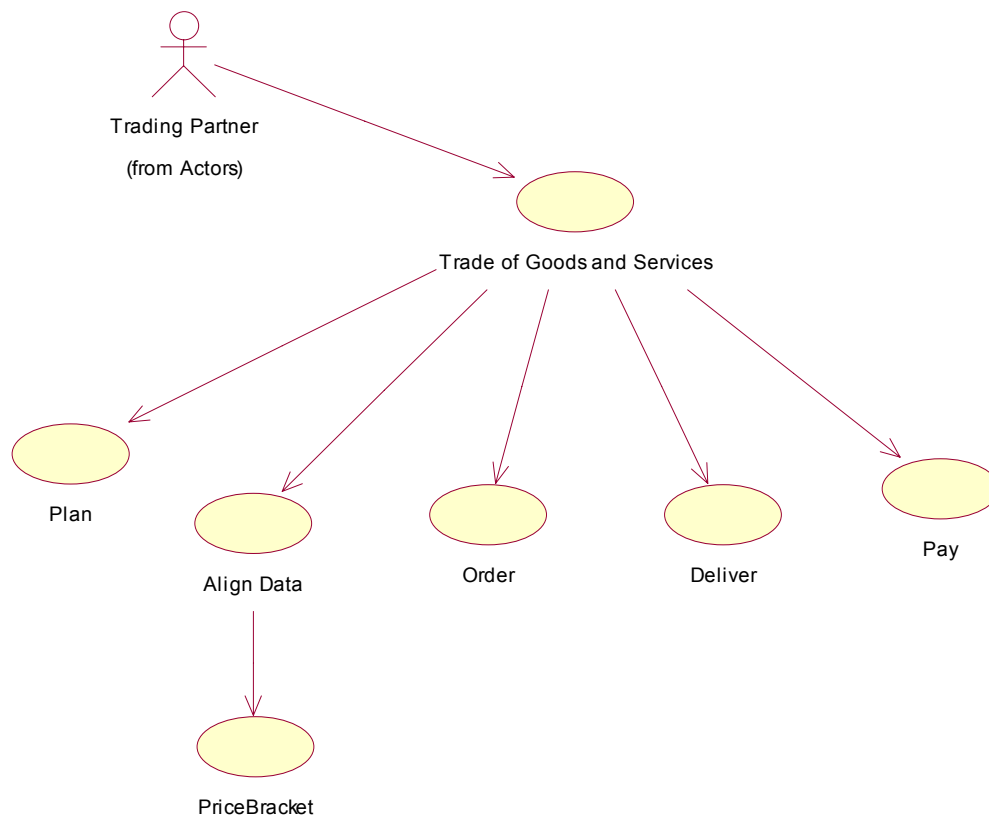
Eggert, Jack	UCC
Schneider, Maria	UCC
Ryu, John	UCC Modeler

## 2.0 Process View – General Requirements:

The buyer and seller must make contact and set up a business relationship before trade can proceed. This is a prerequisite to all of the other steps. This initial contact can be made in many different ways. Following the establishment of the trading agreement the parties must exchange their basic business data such as trading partner names, addresses, locations, item attributes, price lists, contracts and trading partner agreements. Specifically, the price data can be communicated as part of the Item alignment data or in a subsequent separate message.

Price data alignment is the process of communicating the price data elements between the seller, buyer, and other relevant parties. **This process is not intended to be used as an electronic negotiation tool.**

The diagram below illustrates the position of the Price Bracket within the overall EAN.UCC General Business Model.

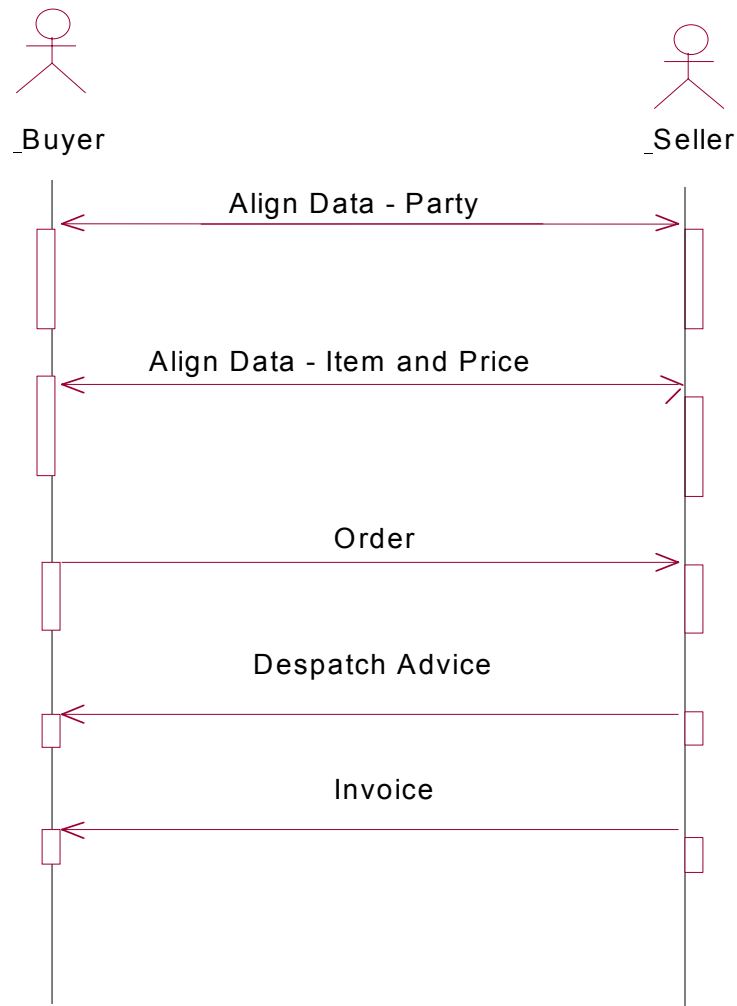


## 2.1 Use Case Scenario:

There are two scenarios in the price bracket communication process as described in problem statement of section 1.1. Price bracket data alignment is considered part of the price data communication. The price bracket data communication scenarios follow:

1. Scenario 1 – Reference to one or more price brackets within the Price communication.
2. Scenario 2 – Price Bracket definition sent independently (as a standalone document).

NOTE: An acknowledgement that there are industry specific criteria that are used to define price brackets. These attributes can be used across several business processes. (May be used within scenario 1 or 2.)



### 2.1.1 Business Opportunity/Problem Statement

The objective of this document is to elaborate the price data alignment process including price bracket data in enough detail to support the construction of standards. It is assumed that the players, seller, buyer, and other parties have established a business understanding of the trading partner relationship. The challenge is to provide the data elements necessary to support ordering / invoicing / payment processes with an unambiguous description of price brackets.

### 2.1.2 Actors

The primary actors in the price bracket data alignment process are the "seller" and the "buyer". Depending on the specific nature of the relationship other actors may have a role. The seller identifies price bracket data and sends the price data message(s). The data recipient acknowledges the price data to complete the price data alignment activities. Ensuring the price data is aligned facilitates other processes such as ordering, despatch advice and invoicing.

Actor's Name	Description	Buyer	Seller	3 <sup>rd</sup> Party
<b>Seller</b>	<b>Manufacturer or supplier of the item.</b>		<b>X</b>	
<b>Buyer</b>	<b>Retailer or distributor of the item</b>	<b>X</b>		
<b>Third Party</b>	<b>Other parties that somehow influence the item and may include creation, distribution, publication, and/or maintenance of the item, serving as an agent for a seller or a buyer.</b>	<b>X</b>	<b>X</b>	<b>X</b>

### 2.1.3 Preconditions

The price data alignment process begins when the following conditions have been met.

- A trading relationship exists between buyer and seller
- Party information is aligned between buyer and seller
- Scenario 1 - Reference to one or more price brackets within the Price communication. Item information has been aligned between buyer and seller.
- Scenario 2 - Price Bracket definition sent independently (as a standalone document). The Item information does not have to be aligned between buyer and seller because standalone price bracket definitions are not defined to specific item(s).

### 2.1.4 Process Start

The start-state of the price data alignment process is an outcome of the agreed upon prices or price bracket definitions between the trading partners. This process is to communicate the results of that agreement.

### 2.1.5 Process End

The data recipient, upon receipt of the price data communication, acknowledges as defined in the Global Data Synchronization Business Requirement Document.



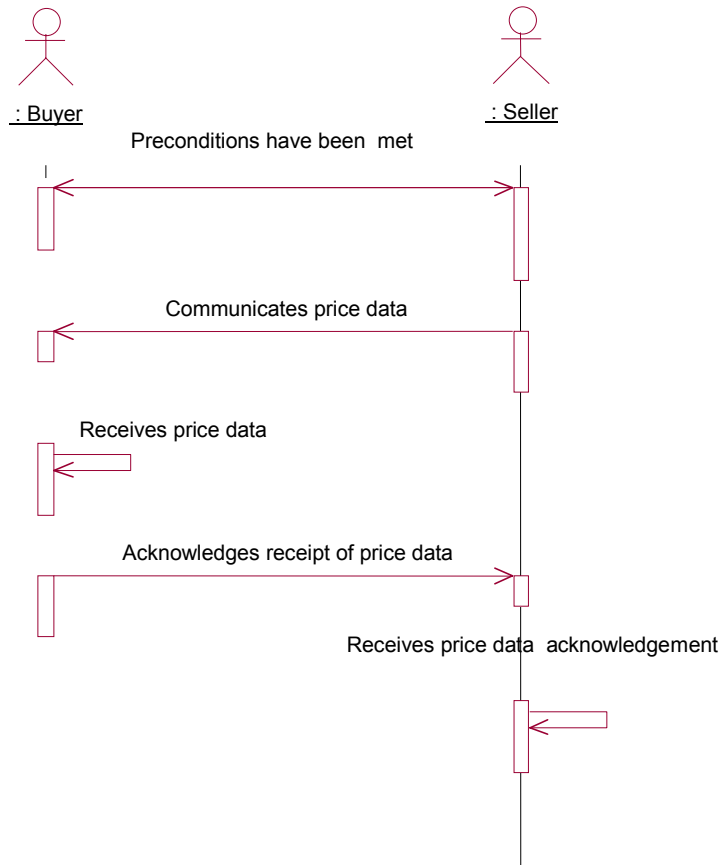
### 2.1.6 Post Conditions

The end-state of the price data alignment process occurs when the parties have achieved price data alignment

### 2.1.7 Process Activities

Step #	Actor	Activity Step
1	All	All preconditions have been met.
2	Seller	Communicates the price data.
3	Buyer	Receives the price data.
4	Buyer	Acknowledges the receipt of price data.
5	Seller	Receives the price data acknowledgement to end the process

## 2.2 Sequence of Communications



### 3.0 Logical View -

A price bracket message includes the data as defined below.

It should be noted that the process of price alignment requires the recipient to acknowledge receipt of the price information as noted in Section 2.2 Sequence of Communications. This process has been addressed in Section 3.0 Logical View of Price (with the trading partner relationship) and will be addressed further with the Data Synchronization Project Team.

#### 3.1 Price Bracket Data Attributes:

Data Name	Definition	Mandatory/Optional
<b>Party Identification</b>	A unique identification of owner and/or recipient of the price bracket data. It is recommended to use the Global Location Number (GLN) as the primary party identification. <ol style="list-style-type: none"> <li>1. There is one mandatory role of seller used to uniquely identify the owner of the document.</li> <li>2. There is one optional role (based on the value of the privacy indicator) of buyer which can be used to uniquely identify for whom the price is intended.</li> </ol>	<b>Mandatory</b>
<b>Price Bracket Identification</b>	A document identification of the price bracket document that can be used as reference with the Price document.	<b>Mandatory</b>
<b>Privacy Indicator</b>	Boolean value of Yes indicating the price bracket information is unique to a trading partner relationship. Yes requires the party identification role of buyer.	<b>Mandatory</b>
<b>Bracket Description</b>	The owner's description of the Price Bracket with two attributes: <ul style="list-style-type: none"> <li>• Text</li> <li>• Language</li> </ul>	<b>Optional</b>
<b>Bracket Range - Minimum</b>	Defines the lower limit required to qualify for the price amount. This attribute may occur multiple times within the same Price Bracket Identification to describe different range criteria. Bracket Range Minimum and/or Bracket Range Maximum is mandatory.	<b>Dependent</b>
<b>Bracket Range - Maximum</b>	Defines the upper limit required to qualify for the price amount. This attribute may occur multiple times within the same Price Bracket Identification to describe different range criteria. Bracket Range Minimum and/or Bracket Range Maximum is mandatory.	<b>Dependent</b>

<b>Bracket Range - Qualifier</b>	The Bracket Range qualifier describes the values represented by the Bracket Range Minimum and/or the Bracket Range Maximum with the unit of measure or monetary value & ISO currency code or other descriptor, such as case, pallet, pound, each, dimensions, or logistics units. This attribute may occur multiple times within the same Price Bracket Identification to describe different range criteria.	<b>Optional</b>
<b>Price Date</b>	<ul style="list-style-type: none"> <li>There is a mandatory attribute of effective Start Date. This is the effective start date of the price in the Price document agreed to by the trading partners. This start date is mandatory and, if no end date is communicated, then implies that the price is effective until further notice. Various types of dates may be pre-aligned between buyer and seller and reflected in the Date Type List.</li> <li>There is an optional attribute of effective End Date. The effective end date of the price is optional based upon the agreement by the trading partners. If no effective end date is communicated, then it is implied that the price is effective until further notice.</li> <li>Price Date Type List is a mandatory association with a role of Price Date Type.</li> <li>There is a date format of CCYYMMDD.</li> </ul>	<b>Mandatory</b>
<b>Price Date Type</b>	<p>The role Price Date Type is a mandatory association with the Price Date Type List when using the class Price Date.</p> <p>One of the following values must be selected from the enumerated list:</p> <ol style="list-style-type: none"> <li>Arrival Date</li> <li>Order Date</li> <li>Ship Date</li> </ol>	<b>Mandatory</b>

#### **4.0 Price and Price Bracket Class Summary:**

This section refers to the class diagram for the Price Bracket scenario. The color-coding on the diagram is as follows:

- Red indicates that the class is the root class for the diagram.
- Grey indicates that the class is outside of or external to the root class.
- Yellow indicates that the class pertains specifically to the root class.
- Green indicates notes.

The root class Price Bracket Document includes or inherits the following data classes:

1. Amount Range
2. Bracket Range
3. Description
4. Document
5. Entity Identification
6. Measurement Range
7. Party Identification
8. Price Bracket
9. Price Bracket Document
10. Price Date
11. Price Date Type List
12. Range

A detailed definition of the data classes listed follows alphabetically by class name. Some attributes or classes may be reused in the Price Bracket process from the Price Document. Not all attributes or classes have been reused from Price. Price and Price Bracket are two separate documents.

#### **4.1 Amount Range**

1. This external class originates from the common library as Range.
2. This is a possible choice for the Bracket Range class.
3. Amount range includes a float value and the currency ISO 4217 code.
4. This amount range class contains two attributes
  - Maximum (external class of amount)
  - Minimum (external class of amount)

#### **4.2 Bracket Range**

1. The bracket range will identify the ordering type of ranges.
2. Bracket Range is mandatory with a role name of type of range and allows for multiple ranges.
3. There is a choice between three different types of ranges
  - Amount Range which contains currency

- Measurement Range which contains unit of measure
- Range, which contains free text to define additional types of qualifications.

#### **4.3 Description**

1. This external class originates from the common library as Description.
2. This is an optional class with a role name of bracket description.
3. It contains two attributes.
  - Language
  - Text

#### **4.4 Document**

1. This external class originates from the common library as Document.
2. It contains four attributes.
  - Content Version: This is a version number for the content of the document.
  - Creation Date: This is the date the message was created. The format is CCYYMMDDTHHMMSS
  - Document Structure Version: This is a version number for the structure of the document
  - Last Update Date: This is the last update date for the specific document. The format is CCYYMMDD

#### **4.5 Entity Identification**

1. This external class originates from the common library as Entity Identification.
2. There is a mandatory role of price bracket identification, which uniquely identifies the price bracket document.
3. Entity Identification contains one attribute and inherits content owner from Party Identification.
  - Unique Creator Identification

#### **4.6 Measurement Range**

1. This external class originates from the common library as Range.
2. This is a possible choice for the Bracket Range class.
3. Measurement range includes a float value and the unit of measure.
4. This Measurement Range class contains two attributes
  - Maximum (external class Measurement Value)
  - Minimum (external class Measurement Value)

#### **4.7 Party Identification**

1. This external class originates from the common library as Party Identification.
2. There is a mandatory role name of seller. It is recommended to use Global Location Number (GLN) as the primary party identification to ensure uniqueness.
3. There is an optional role name of buyer that is required when Is Price Bracket Private is Yes. It is recommended to use Global Location Number (GLN) as the primary party identification to ensure uniqueness.
4. It contains no attributes.

#### **4.8 Price Bracket**

1. Price Bracket has three mandatory associations and one optional association.
  - The first mandatory association exists to Party Identification class with role name of seller.
  - The second mandatory association exists to Price Date class.
  - The third mandatory with possible multiple occurrence association exists to Bracket Range.
  - The one optional association exists to Party Identification class with a role name of buyer based on a positive value of Yes with the Is Price Bracket Private attribute.
2. The Price Bracket class contains one attribute:
  - Is Price Bracket Private: Boolean data type indicating the price bracket information being communicated is unique to a trading partnership. A positive value of Yes requires the role of Buyer as Party Identification to be mandatory.

#### **4.9 Price Bracket Document**

1. The Price Bracket Document class is the root class of the Price Bracket Document message.
2. This Price Bracket Document class inherits attributes from the Document class.
3. There is a mandatory association to Entity Identification class with a role name of price bracket identification, which uniquely identifies the price bracket.
4. There is a second mandatory association to Price Bracket.
5. It contains no attributes.

#### **4.10 Price Date**

1. This external class originates from the common library as Price Common.
2. There is a mandatory association to Price Date Type List class with a role name of Price Date Type.
3. This class contains two attributes with a date format of CCYYMMDD.
  - Effective Start Date: This is the effective start date of the price agreed to by the trading partners. This start date is mandatory and, if no end date is communicated, then implies that the price is effective until further notice. Various types of dates may be pre-aligned between buyer and seller and reflected in the Date Type List.

- **Effective End Date:** The effective end date of the price is optional based upon the agreement by the trading partners. If no effective end date is communicated, then it is implied that the price is effective until further notice.

#### **4.11 Price Date Type List**

1. This external class originates from the common library as Price Common.
2. Price Date Type List is mandatory when using the Price Date class.
3. One of the three values must be selected from the enumerated list:
  - Arrival Date
  - Order Date
  - Ship Date

#### **4.12 Range**

1. This external class originates from the common library as Range.
2. This is a possible choice for the Bracket Range class.
3. Range includes the float values and a type string as additional range qualifications from unit of measure and currency.
4. This Range class contains four attributes
  - Maximum
  - Maximum Type
  - Minimum
  - Minimum Type

## 5.0 Implementation Considerations and Concerns:

Price attributes may be transmitted alone without the Price Brackets attributes.

The Price Bracket is intended to provide a means of communicating basic criteria associated with the definition of price brackets. The data communicated represents data applicable only to price brackets. Other attributes that further define pricing criteria and may apply to one or more other business processes will be published in separate documents. This Price Bracket may apply to a trade item or to the partnership between a seller and the buyer.

The Price Bracket may be referenced in the Price message as shown in scenario 5.1, or may be sent as a standalone message as shown in scenario 5.2. If Price Bracket is sent as a standalone message with the intent of reference in the Price message, it must be sent prior to the Price Message. Refer to the Price Business Requirements document for the implementation considerations and concerns for the communication of the price message data. Examples of both scenarios are provided in Sections 5.1 and 5.2 below.

In addition, there are three scenarios that may need further clarification as to the preferred method of communicating price bracket information. Examples of these scenarios are provided in sections 5.3 through 5.5.

5.1 Examples of Price Bracket Scenario 1: This scenario involves sending the Price Bracket in conjunction with the Price message.

Price		Sample Value
Class		
Party Identification (Role of Seller)	M	0521760000005
Party Identification (Role of Buyer)	M	0821620000009 Note: Value of Is Price Private is Yes, Buyer Party Identification is mandatory.
Trade Item Identification	M	
GTIN (attribute)		00052176123452
Target Market Information	O	
Target Market Country Code (attribute)		FR
Target Market Subdivision Code (attribute)		U
Target Market Description (attribute)		
Price Date	M	
Effective Start Date (attribute)		20030101
Price Date Type	M	Arrival
Price		
Is Price Private (attribute)	M	Yes Note: Value of boolean field is Yes, Buyer Party Identification is required.



Price (Monetary Amount) (external class)	M	
Float value (attribute)		10.50
Currency (attribute)		EUR
Price Type	M	Net Calculated by Supplier
Entity Identification (Role of Price Bracket Identification)	M	12345

Price Bracket		Sample Value
<b>Class</b>		
Party Identification (Role of Seller) (*see below)	M	0521760000005
Entity Identification (Role of Price Bracket Identification)	M	12345
Price Bracket	M	
Is Price Bracket Private (attribute)	M	No
Bracket Description	O	
Text (attribute)		Standard Weight
Language (attribute)		EN
Bracket Range	M	
Measurement Range (external class)		
Minimum Measurement Value (attribute)		100
Minimum Unit of Measure (attribute)		kg
Maximum Measurement Value (attribute)		250
Maximum Unit of Measure (attribute)		kg
Price Date	M	
Effective Start Date (attribute) (** see below)		20030101
Price Date Type	M	Arrival

**\*The combination of the Party Identification and Price Bracket Identification must be unique.**

**\*\* The effective start date can be in the past if aligning on existing data.**

5.2 Examples of Price Bracket Scenario 2: This scenario involves sending the Price Bracket as a standalone message. When sent as a standalone message Price Bracket Definition must be sent prior to using the price bracket identification reference in Price.

Price Bracket		Sample Value
<b>Class</b>		
Party Identification (Role of Seller)	M	0521760000005
Entity Identification (Role of Price Bracket Identification)	M	12345
Price Bracket	M	
Is Price Bracket Private (attribute)	M	No
Bracket Description	O	
Text (attribute)		Standard Weight
Language (attribute)		EN
Bracket Range	M	
Measurement Range (external class)		
Minimum Measurement Value (attribute)		100
Minimum Unit of Measure (attribute)		kg
Maximum Measurement Value (attribute)		250
Maximum Unit of Measure (attribute)		kg

Price Date	M	
Effective Start Date (attribute)		20030101
Price Date Type	M	Arrival

5.3 Bracket Range Minimum and Maximum attributes: At least one of the Bracket Range Minimum or Bracket Range Maximum attributes is required to send the Price Bracket. This allows for three possible combinations, as described below:

If the Price Bracket is sent with the minimum criteria only to describe the lower limit of the price bracket, the following attributes would be used

Price Bracket Identification  
Bracket Range Minimum  
Bracket Range Qualifier  
Effective Start Date

If the Price Bracket is sent with the maximum criteria only to describe the upper limit of the price bracket, the following attributes would be used:

Price Bracket Identification  
Bracket Range Maximum  
Bracket Range Qualifier  
Effective Start Date

If the Price Bracket is sent with both the minimum and maximum criteria to describe both lower and upper limits of the price bracket, the following attributes would be used

Price Bracket Identification  
Bracket Range Minimum  
Bracket Range Maximum  
Bracket Range Qualifier  
Effective Start Date

5.4 Changing the Effective Start Date: There are two methods of changing the Effective Start Date of a price bracket.

If the Price Bracket is sent with the Price message, the following attributes would be required:

From Price

Price (monetary amount including amount (value) and currency code)

Effective Start Date  
Price Bracket Identification  
From Price Bracket  
Price Bracket Identification  
Effective Start Date

If the Price Bracket is sent as a standalone message, the required attributes are:

From Price Bracket  
Price Bracket Identification  
Effective Start Date

5.5 Communicating more than one qualifier for a bracket to create an OR condition: A single Price Bracket may have more than one Bracket Range definition to provide multiple methods for calculating a single price (monetary amount). In other words, two sets of Bracket Ranges may be applicable to the same price creating an OR condition. For example:

Price Bracket		Sample Value
<b>Class</b>		
Party Identification (Role of Seller)	M	0521760000005
Entity Identification (Role of Price Bracket Identification)	M	12345
Price Bracket	M	
Is Price Bracket Private (attribute)	M	No
Bracket Description	O	
Text (attribute)		Standard Weight
Language (attribute)		EN
Bracket Range	M	
Measurement Range (external class)		
Minimum Measurement Value (attribute)		5,000
Minimum Unit of Measure (attribute)		Pounds
Maximum Measurement Value (attribute)		14,999
Maximum Unit of Measure (attribute)		Pounds
Range (external class)		
Minimum float (attribute)		100
Minimum Type (attribute)		Each
Maximum float (attribute)		250
Maximum Type (attribute)		Each
Price Date	M	
Effective Start Date (attribute)		20030101
Price Date Type	M	Arrival

5.6 Creating an AND condition for the price (monetary amount) within the Price document: To create an AND condition for the single price (monetary amount) in a Price document, two separate Price Bracket documents may be defined and referenced in the Price document with the role of Price Bracket Identification.

The example below portrays the seller's intent for the buyer to receive the price of 10.50, the buyer's order criteria must meet the ranges in Price Bracket Id #12345 AND Price Bracket Id #67890.

Price		Sample Value
<b>Class</b>		
Party Identification (Role of Seller)	M	0521760000005
Party Identification (Role of Buyer)	M	0821620000009 Note: Value of Is Price Private is Yes, Buyer Party Identification is mandatory.
Trade Item Identification	M	
GTIN (attribute)		00052176123452
Target Market Information	O	

Target Market Country Code (attribute)		FR
Target Market Subdivision Code (attribute)		U
Target Market Description (attribute)		
Price Date	M	
Effective Start Date (attribute)		20030101
Price Date Type	M	Arrival
Price		
Is Price Private (attribute)	M	Yes Note: Value of boolean field is Yes, Buyer Party Identification is required.
Price (Monetary Amount) (external class)	M	
Float value (attribute)		10.50
Currency (attribute)		EUR
Price Type	M	Net Calculated by Supplier
Entity Identification (Role of Price Bracket Identification)	O	12345
Entity Identification (Role of Price Bracket Identification)	O	67890

Price Bracket		Sample Value
<b>Class</b>		
Party Identification (Role of Seller)	M	0521760000005
Entity Identification (Role of Price Bracket Identification)	M	12345
Price Bracket	M	
Is Price Bracket Private (attribute)	M	No
Bracket Description	O	
Text (attribute)		Standard Weight
Language (attribute)		EN
Bracket Range	M	
Measurement Range (external class)		
Minimum Measurement Value (attribute)		100
Minimum Unit of Measure (attribute)		kg
Maximum Measurement Value (attribute)		250
Maximum Unit of Measure (attribute)		kg
Price Date	M	
Effective Start Date (attribute)		20030101
Price Date Type	M	Arrival

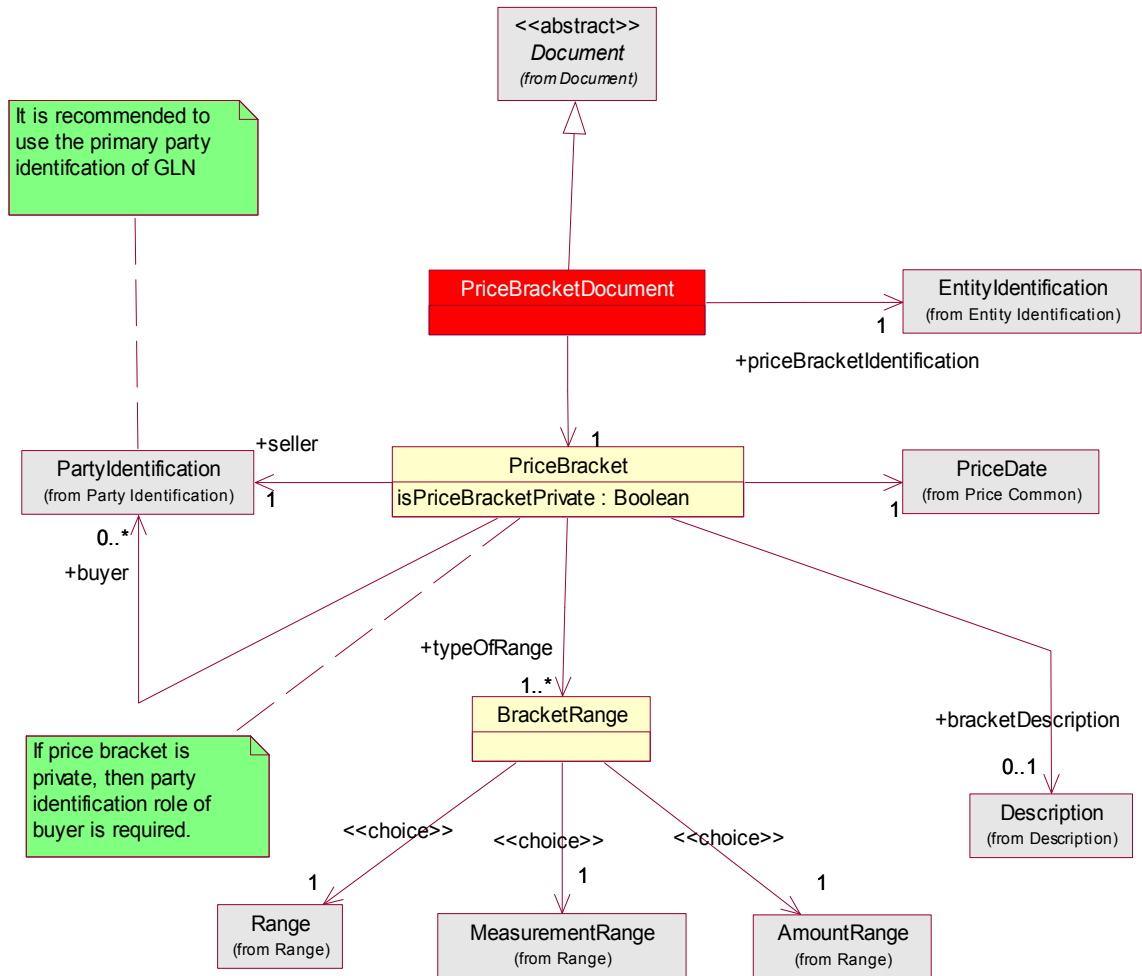
Price Bracket		Sample Value
<b>Class</b>		
Party Identification (Role of Seller)	M	0521760000005
Entity Identification (Role of Price Bracket Identification)	M	67890
Price Bracket	M	
Is Price Bracket Private (attribute)	M	No
Bracket Description	O	
Text (attribute)		Minimum Each
Language (attribute)		EN

---

Bracket Range	M	
Range (external class)		
Minimum Float (attribute)		100
Minimum Type (attribute)		Each
Price Date	M	
Effective Start Date (attribute)		20030101
Price Date Type	M	Arrival

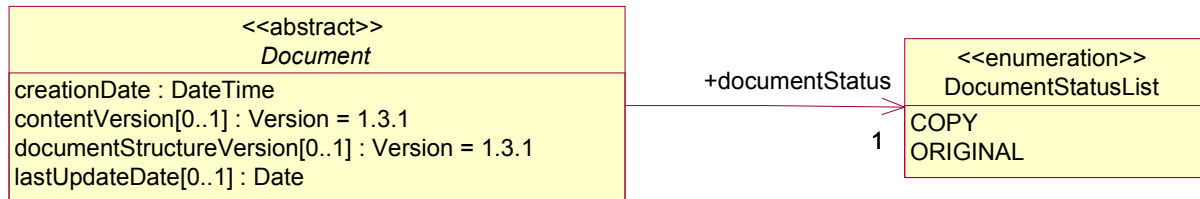
## Appendix A: Class Diagram Price Bracket

### Business Process: ALIGN: Price: Price Bracket



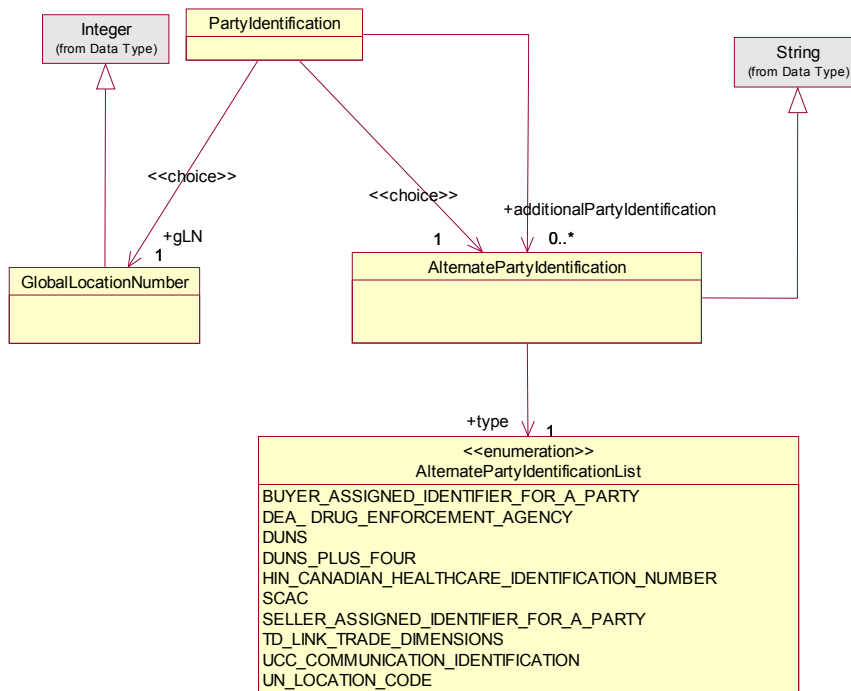
## Appendix B: Class Diagram Document

### Common Library: Common: Components: Document



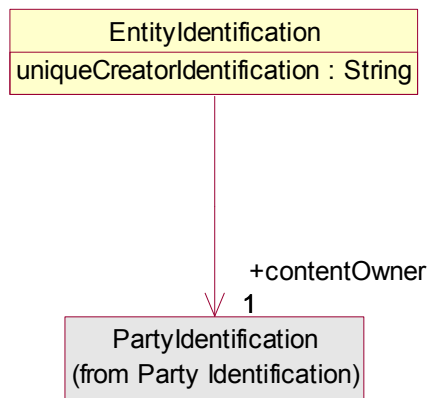
## Appendix C: Class Diagram Party Identification

### Common Library: Common: Identification: Party Identification



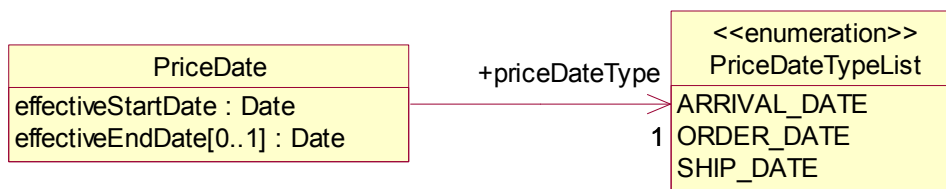
## Appendix D: Class Diagram Entity Identification

### Common Library: Common: Identification: Entity Identification



## Appendix E: Class Diagram Price Common

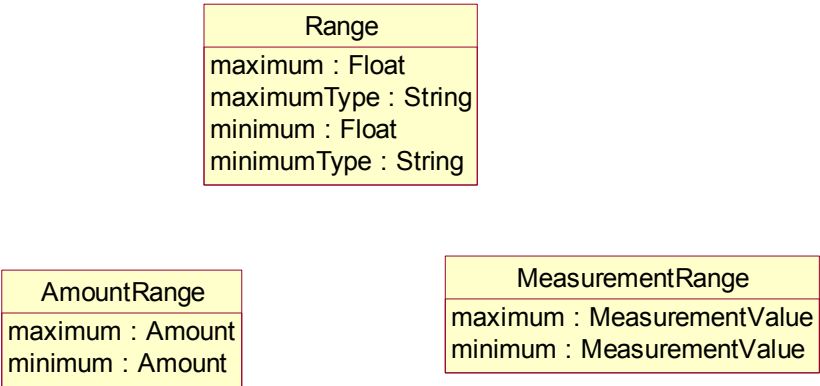
### Business Process: ALIGN: Price: Price Common





Appendix F: Class Diagram Range

Common Library: Common: Components: Range



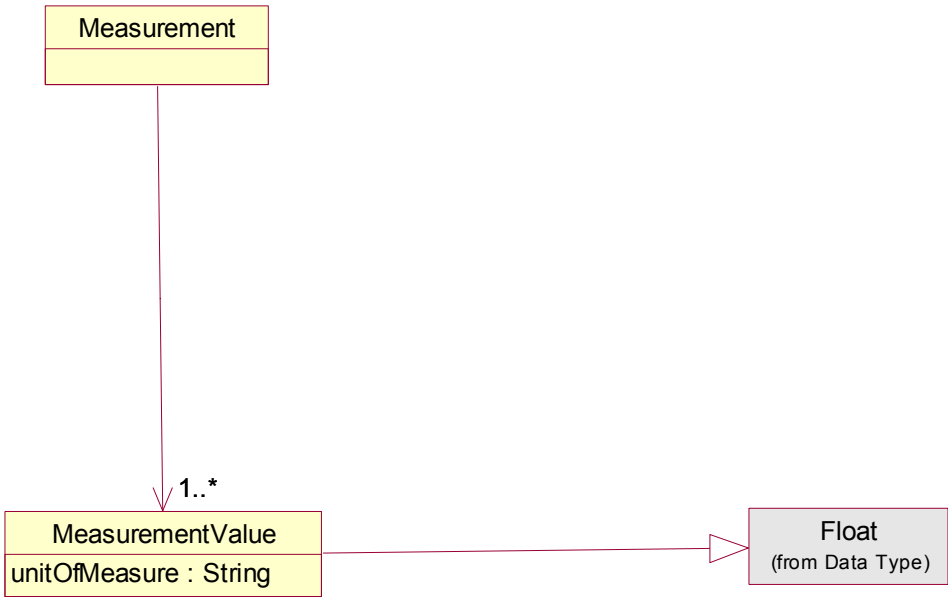
Appendix G: Class Diagram Description

Common Library: Common: Components :Description



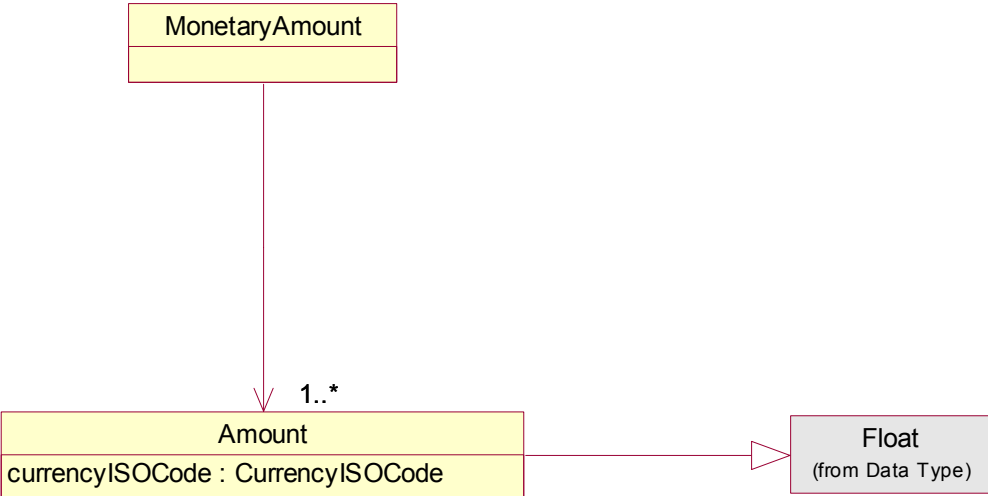
Appendix H: Class Diagram Measurement

Common Library: Common: Components :Measurement



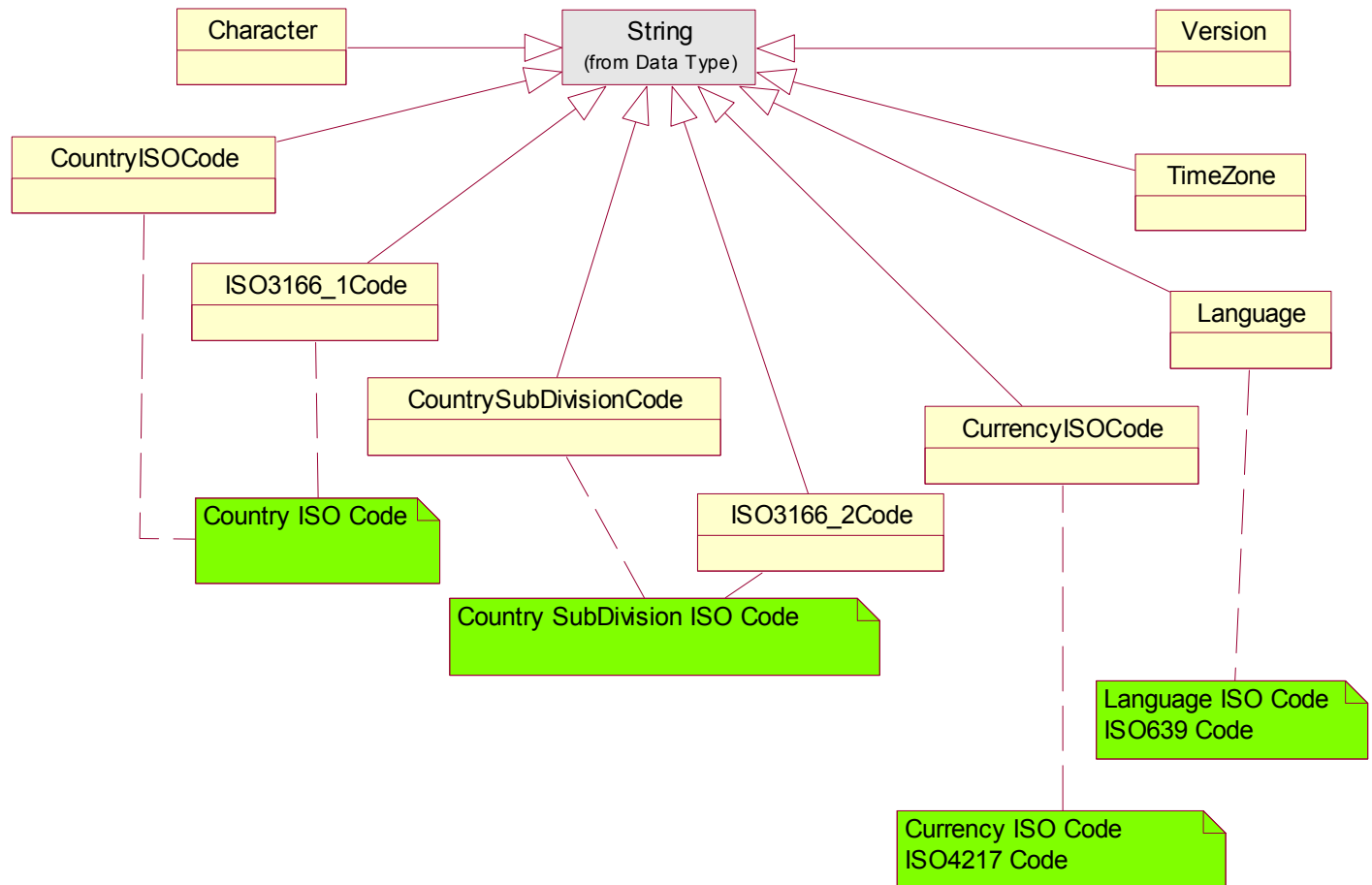
Appendix I: Class Diagram Amount

Common Library: Common: Components: Amount



## Appendix J: Class Diagram Extended Data Type

### Common Library: Common: Extended Data Type



## **Harmonization Summary**

### Appendix B Document

- Role name of documentStatus was added to be compliant to ebMethodology.

### Appendix C Party Identification

- Party Identification class diagram has been harmonized. AlternatePartyIdentificationList class has new attributes from the Party BRD.

## **Version 1.14 Harmonization Summary**

### Appendix B Document

- Data Type Version has been changed to Version=1.3.1

### Appendix E: Price Common

- File or package structure has been revised.

### Appendix J: Extended Data Type

- Class Diagram added to illustrate the ISO Codes.

## Style Sheet

### Description

This HTML has been created using a Style Sheet that is a visual representation of the data. It is not an actual Style Sheet, but an example of what a Style Sheet may look like.

### HTML Example

#### Message MSG-123

<b>Creation Date</b>	March 05, 2003 09:30:00	<b>Representing Party</b>	0521760000005
<b>Msg From Party</b>	0521760000005	<b>Msg To Party</b>	0821620000009

<b>Transaction</b>	<b>Creator ID = OJGROWER-12345</b>	<b>Content Owner = 0521760000005</b>
--------------------	------------------------------------	--------------------------------------

<b>Command ADD</b>	<b>Creator ID = OJGROWER-12345</b>	<b>Content Owner = 0521760000005</b>
--------------------	------------------------------------	--------------------------------------

<b>Price Bracket Document</b>	<b>Creator ID = PRICE BRACKET - 12345</b>	<b>Content Owner = 0521760000005</b>
-------------------------------	---	--------------------------------------

#### Document Information

<b>Creation Date</b>	March 05, 2003 09:30:00+01:00	<b>Last Update Date</b>	March 05, 2003
<b>Content Version</b>	1.3.1	<b>Doc Structure Version</b>	1.3.1
<b>Status</b>	COPY		

**Price Bracket Information**

<b>Private</b>	yes	<b>Description</b>	(en-us) Standard Weight
<b>Seller</b>	0521760000005	<b>Buyer</b>	0821620000009

**Ranges**

<b>Minimum</b>	<b>Maximum</b>
100 KG	250 KG

**Price Date**

<b>Effective Start Date</b>	2003-01-01	<b>Effective End Date</b>
<b>Price Date Type</b>	ARRIVAL_DATE	

## GLOBAL DATA DICTIONARY

### 1.0 Price Bracket Class Data Descriptions v1.3.1

Class Name	Role Name	Enumerated Value for List Class	Attribute Name	Description	Min/Max Size	M/O	EAN.UCC XSD
BracketRange	typeOfRange			The bracket range will identify the type of ranges that qualify the price with a "choice" of Amount Range, Measurement Range, or Range.		M	PriceBracket.xsd
Description	bracketDescription			A text description of that includes the language identifier.		O	Components.xsd
Document				This class is used to specify the basic information about the content of the message.		M	Components.xsd
EntityIdentification	priceBracketIdentification			This class contains a unique identification of the document.		M	Identification.xsd
PartyIdentification	buyer			Either a GlobalLocationNumber (GLN) or an AlternatePartyIdentification may identify parties.		O	Identification.xsd
	seller			Either a GlobalLocationNumber (GLN) or an AlternatePartyIdentification may identify parties.		M	Identification.xsd
PriceBracket				This class identifies the detail of information regarding the bracket definitions for Price		M	PriceBracket.xsd
			isPriceBracket Private	Boolean data type indicating the price bracket information being communicates is unique to a trading partnership.		M	PriceBracket.xsd
PriceBracketDocument				The Price Bracket Document class is the root class of the Price Bracket Document Message.			PriceBracket.xsd
PriceDate				A class of information to identify the effective start and/or end dates.		M	PriceComponents.xsd
Amount Range				This class identifies the minimum and maximum values for an amount.			Components.xsd
Measurement Range				This class identifies the minimum and maximum values for a measurement.			Components.xsd
Range				This class identifies the minimum and maximum values for other descriptors such as product type, dimensions, logistics units, etcetera.			Components.xsd



			maximum	Defines the upper limit required to qualify.			Components.xsd
			maximumType	Defines the values represented by the Maximum.			Components.xsd
			minimum	Defines the lower limit required to qualify.			Components.xsd
			minimumType	Defines the values represented by the Minimum.			Components.xsd

## Instance File

### Description

The Instance File is an example of what the schema may look like when it includes live data. This can be used as comparison to a completed schema and can serve as a point of reference for development.

### Instance File Example

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href=" ../4_XSL/Main.xsl"?>
<!-- This is a sample file-->
<eanucc:envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:eanucc="http://www.ean-ucc.org/schemas/1.3.1/eanucc" xsi:schemaLocation="http://www.ean-ucc.org/schemas/1.3.1/eanucc ../2_XSD_PROXY/PriceBracketProxy.xsd" communicationVersion="1.3.1">
  <messageHeader creationDate="2003-03-05T09:30:00">
    <userId>OJGROWER-12345</userId>
    <password>SECRET</password>
    <messageIdentifier>MSG-123</messageIdentifier>
    <to>
      <gln>0821620000009</gln>
    </to>
    <from>
      <gln>0521760000005</gln>
    </from>
    <representingParty>
      <gln>0521760000005</gln>
    </representingParty>
  </messageHeader>
  <body>
    <eanucc:transaction>
      <entityIdentification>
        <uniqueCreatorIdentification>OJGROWER-12345</uniqueCreatorIdentification>
        <contentOwner>
          <gln>0521760000005</gln>
        </contentOwner>
      </entityIdentification>
      <command>
        <eanucc:documentCommand>
          <documentCommandHeader type="ADD">
            <entityIdentification>
              <uniqueCreatorIdentification>OJGROWER-12345</uniqueCreatorIdentification>
              <contentOwner>
                <gln>0521760000005</gln>
              </contentOwner>
            </entityIdentification>
          </documentCommandHeader>
          <documentCommandOperand>
            <eanucc:priceBracketDocument contentVersion="1.3.1" documentStructureVersion="1.3.1" lastUpdateDate="2003-03-05" creationDate="2003-03-05T09:30:00+01:00" documentStatus="COPY">
              <priceBracketIdentification>
                <uniqueCreatorIdentification>PRICE BRACKET - 12345</uniqueCreatorIdentification>
                <contentOwner>
                  <gln>0521760000005</gln>
                </contentOwner>
              </priceBracketIdentification>
            </eanucc:priceBracketDocument>
          </documentCommandOperand>
        </eanucc:documentCommand>
      </command>
    </transaction>
  </body>
</eanucc:envelope>
```

```
</priceBracketIdentification>
<priceBracket>
  <isPriceBracketPrivate>true</isPriceBracketPrivate>
  <bracketDescription language="en-us">
    <text>Standard Weight</text>
  </bracketDescription>
  <buyer>
    <gln>0821620000009</gln>
  </buyer>
  <seller>
    <gln>0521760000005</gln>
  </seller>
  <typeOfRange>
    <measurementRange>
      <maximum unitOfMeasure="KG">250</maximum>
      <minimum unitOfMeasure="KG">100</minimum>
    </measurementRange>
  </typeOfRange>
  <priceDate>
    <priceDateType>ARRIVAL_DATE</priceDateType>
    <effectiveStartDate>2003-01-01</effectiveStartDate>
  </priceDate>
</priceBracket>
</eanucc:priceBracketDocument>
</documentCommandOperand>
</eanucc:documentCommand>
</command>
</eanucc:transaction>
</body>
</eanucc:envelope>
```