



# Business Message Standard (BMS) Configure to Order

**BMS Release: 3.0.0, BRG Name: eCom BRG**

***Issue 1.0.0, 6-Jan-2012***



## Document Summary

| Document Item        | Current Value                   |
|----------------------|---------------------------------|
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| BMS Name             | Configure to Order              |
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## Change Request Reference

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|--------------------------------|---|---|
| 05-Nov-2009                    | GS1 Australia                               | 09-259                                  |
| 15 Oct 2009                    | GS1 Australia, GS1 Germany, GS1 Netherlands | 09-236                                  |
| 05-May-2009                    | Marcus Moritz, GS1 Germany                  | 09-102                                  |
| 06-May-2009                    | Stef Spaan, GS1 Netherlands                 | 09-000134                               |
| 20-Aug-2008                    | John RYU, GS1 Global Office                 | 08-000209                               |
| 13- Jul -2007                  | John RYU, GS1 Global Office                 | 07-000285                               |
| 21- Mar -2007                  | Stef SPAAN, GS1 Netherlands                 | 07-000098                               |
| 12- Mar -2007                  | Stef SPAAN, GS1 Netherlands                 | 07-000077                               |
| 21- Aug -2002                  | Furnish Net                                 | 02-000179                               |

## Business Requirements Document (BRAD) Reference

| BRAD Title:  | BRAD Date:   | BRAD Version  |
|--|--------------|---------------|
| BRD Configure to Order   | 01- Nov-2003 | 0.1.5         |
| BRAD For Multi Shipment Order Receipt Response and Excise Tax Free | 6-Jun-2007   | 0.0.4         |
| BRAD eCom Maintenance Release 2 BMS 2.6.0                          | 29-Jun-2009  | Version 0.1.1 |
| BRAD for Current Requirements Queue (Major Release 3)              | 23-Nov-2010  | Version 0.2.0 |

## Document Change History

| Date of Change | Version     | Changed By      | Reason for Change                 | Summary of Change   | Model Build #  |
|----------------|-------------|-----------------|-----------------------------------|---|----------------|
| 21-Apr-2011    | 1.0.0 Draft | Mark Van Eeghem | BMS Release 3.0.0 Initial Version | Noted in Summary of Changes   | Not Applicable |
| 9-Jun-2011     | 1.0.0 Draft | Coen Janssen    | Issue resolution                  | Changed sequence of attributes in ConfigureToOrder and ConfigureToOrderLineItem | Not Applicable |
| 18-Jul-2011    | 1.0.0 Draft | Mark Van Eeghem | TSD Development                   | Noted in Summary of Changes   | Not Applicable |
| 18-Oct-2011    | 1.0.0       | Coen Janssen    | BMS Release 3.0 eBallot Approved  | Status updated  | Not Applicable |
| 6-Jan-2012     | 1.0.0       | John Ryu        | Publication updates               | Noted in summary of change section  | Not Applicable |

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# 1. Business Domain View

## 1.1. Problem Statement / Business Need

There is a need to build the business requirements to provide support for configurable items on a purchase order. A configurable item is one that starts with a single structure, but to which a large variety of options may be added in a variety of combinations. A unique product identification code is assigned to the main structure of a configurable item, but due to the variety of combinations of options, it is NOT practical to assign unique product identification to each completed configured item.

The current GS1 XML Standards documents don't permit:

- Ordering a base item with a customer specific combination of options

This scenario applies to many manufacturers and retailers. For manufacturers and retailers who specialize in upholstered furniture, it can apply to the vast majority of their business. For these companies, any model that does not support configured product is not an accurate business model, and any implementation from a model that does not support configured product is not usable. As such, the business benefits of this request are the ability to do business at all.

## 1.2. Objective

To supply the detail design of the (specific) business transaction needed to meet the requirements of the referenced BRAD(s).

The objective is to upgrade the GS1 Order Message standard, according to the requirements of the referenced change request in the document summary.

## 1.3. Audience

The audience for this document is the global business community and the senders/receivers of purchase orders, changes to purchase orders, and responses.

## 1.4. References

| Reference Name   | Description        |
|--|--------------------|
| BRD Configure to Order   | BRD Version 0.1.5  |
| BMS eCom Domain Common Library   | BMS Release 3.0.0  |
| BMS Shared Common Library  | BMS Release 3.0.0  |
| Business Requirements Analysis Document (BRAD)<br>For Multi Shipment Order Receipt Response and<br>Excise Tax Free | BRAD Version 0.0.4 |
| Business Requirements Analysis document (BRAD)<br>for Current Requirements Queue (Major Release 3)                 | BRAD Version 0.2.0 |

## 1.5. Acknowledgements

### 1.5.1. Work Group

| Function           | Name                     | Company / organisation          |
|--------------------|--------------------------|---------------------------------|
| Chair eCom BRG     | Edison, Carol            | General Mills, Inc.             |
| Chair MR3 sub team | Spaan, Stef              | GS1 Netherlands                 |
| Member             | Backert, Veronique       | Dilicom                         |
| Member             | Blankenstein, Kyra       | GS1 Netherlands                 |
| Member             | Bradley, Ardetha         | Georgia Pacific                 |
| Member             | Burke, Miriam            | Procter & Gamble Co.            |
| Member             | Chatagnier, Isabelle     | GS1 France                      |
| Member             | Childs, Justin           | GS1 Global Office               |
| Member             | Chresta, Richard         | GS1 Switzerland                 |
| Member             | Cox, Marc                | Philips Electronics N.V.        |
| Member             | De Flou, Nele            | GS1 Belgium & Luxembourg        |
| Member             | Denyer, Troy             | GS1 Australia                   |
| Member             | Dicks, Arne              | GS1 Germany                     |
| Member             | Dodd, Marilyn            | 3M Company                      |
| Member             | Duvinger, Karina         | GS1 Sweden                      |
| Member             | Earleywine, Sarah        | IDEA (US)                       |
| Member             | Fedoseev, Sergey         | GS1 Russia                      |
| Member             | Foerderer, Klaus         | GS1 Germany                     |
| Member             | Foxvog, Douglas          | DERI, National Univ. of Ireland |
| Member             | Fransen, Wim             | EskoArtwork                     |
| Member             | Gathmann, Stefan         | GS1 Ireland                     |
| Member             | Gilbert, Jean-Christophe | GS1 France                      |
| Member             | Grangard, Anders         | GS1 Global Office               |
| Member             | Herrick, Lisa            | GS1 Global Office               |
| Member             | Hill, Douglas            | GS1 Denmark                     |
| Member             | Hoberg, Peter            | Consafe Lodistics               |
| Member             | Iwicka, Ewa              | GS1 Global Office               |
| Member             | Jin Soon, Tan            | GS1 Singapore                   |
| Member             | Joest, Holger            | SA2 Worldsync GmbH              |
| Member             | Kempkes, Fred            | Unilever N.V.                   |
| Member             | Kidd, Robin              | Nestle                          |
| Member             | Kille, Grant             | SA2 Worldsync GmbH              |
| Member             | Kozovic, Vladimir        | GS1 Serbia                      |

| Function | Name                       | Company / organisation                 |
|----------|----------------------------|--|
| Member   | Krid, Anne-Claire          | GS1 France                             |
| Member   | Lai, Keith                 | GS1 Australia                          |
| Member   | Laur, Rita                 | GS1 Canada                             |
| Member   | Lazarkova, Galya           | GS1 Austria                            |
| Member   | Lenman, Mia                | GS1 Sweden                             |
| Member   | Lockhead, Sean             | GS1 Global Office                      |
| Member   | Maniero, Ana Paula         | GS1 Brasil                             |
| Member   | Maree, Eric                | Accenture Supply Chain Services        |
| Member   | Martinko, Michal           | Hewlett-Packard                        |
| Member   | McLeod, Ed                 | Procter & Gamble Co.                   |
| Member   | Melcher, Jeff              | The Exchange (AAFES)                   |
| Member   | Montes de Oca, Alejandra   | GS1 Mexico                             |
| Member   | Moritz, Marcus             | GS1 Germany                            |
| Member   | Mugnier, Norbert           | Dilicom                                |
| Member   | Narbaïts-Jauréguy, Corinne | GS1 France                             |
| Member   | Noyes, Debra               | Johnsonville Sausage, Inc              |
| Member   | Picoito, Joao              | GS1 Portugal                           |
| Member   | Plaksin, Leon              | GS1 Australia                          |
| Member   | Popper, Bret               | Kraft Foods                            |
| Member   | Post, Valerie              | Link Snacks Inc, Jack Links Beef Jerky |
| Member   | Pottier, Natascha          | GS1 France                             |
| Member   | Pujol, Xavier              | GS1 Spain                              |
| Member   | Repetto, Mirko             | GS1 Italy                              |
| Member   | Robba, Steven              | SA2 Worldsync GmbH                     |
| Member   | Rosell, Pere               | GS1 Spain                              |
| Member   | Rosenberg, Steven          | GS1 US                                 |
| Member   | Ryu, John                  | GS1 Global Office                      |
| Member   | Schmidt, Tom Eric          | August Storck KG                       |
| Member   | Schneider, Christian       | GS1 Switzerland                        |
| Member   | Sedano Acosta, Federico    | GS1 Argentina                          |
| Member   | Sharma, Vishal             | General Mills, Inc.                    |
| Member   | Sharratt, Jon              | Target Corporation                     |
| Member   | Shimazaki, Ayako           | GS1 Japan                              |
| Member   | SION, Emilie               | GS1 France                             |
| Member   | Smith, Matthew             | Bunnings Group Limited                 |
| Member   | Sobrinho, Gabriel          | GS1 Netherlands                        |
| Member   | Strand, Roman              | GS1 Germany                            |

| Function | Name               | Company / organisation    |
|----------|--------------------|---------------------------|
| Member   | Takahashi, Akira   | Data Applications Co, Ltd |
| Member   | Tomassi, Gina      | PepsiCo, Inc.             |
| Member   | Trelle, Ute        | SA2 Worldsynchron GmbH    |
| Member   | Voorspuij, Jaco    | DHL                       |
| Member   | Welch, Shan        | GS1 UK                    |
| Member   | Westerkamp, Jan    | GS1 Netherlands           |
| Member   | Windsperger, Bekki | Best Buy Co., Inc.        |

### 1.5.2. Design Team Members

| Function               | Name                                       | Organisation      |
|------------------------|--|-------------------|
| Modeller               | Eric Kauz / Coen Janssen / Mark van Eeghem | GS1 Global Office |
| XML Technical Designer | Dipan Anarkat                              | GS1 Global Office |
| Peer Reviewer          | John Ryu / Eric Kauz                       | GS1 Global Office |

## 2. Business Context

| Context Category     | Value(s)          |
|----------------------|-------------------|
| Industry             | Furniture         |
| Geopolitical         | All               |
| Product              | Configurable Item |
| Process              | Order             |
| System Capabilities  | GS1 System        |
| Official Constraints | None              |

## 3. Additional Technical Requirements Analysis

Not Applicable

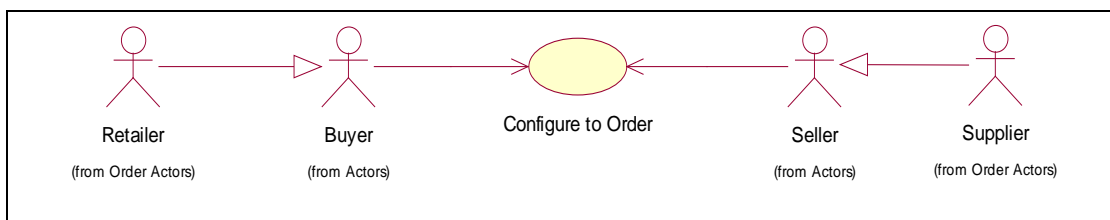
### 3.1. Technical Requirements

Not Applicable



## 4. Business Transaction View

### 4.1. Business Transaction Use Case Diagram



### 4.2. Use Case Description

|                             |   |
|-----------------------------|---|
| <b>Use Case ID</b>          | UC -1   |
| <b>Use Case Name</b>        | Ordering of Configurable Items specifying ship to location  |
| <b>Use Case Description</b> | <p>This Use Case provides the ability for a buyer can create one order for one or more configurable items.</p> <p>One order can contain order lines for configurable items as well as order lines for stock items.</p>  |
| <b>Actors (Goal)</b>        | Buyer, Seller, Consumer   |
| <b>Performance Goals</b>    | Not Applicable  |
| <b>Preconditions</b>        | <ul style="list-style-type: none"> <li>■ The Buyer and Seller have aligned Party and Item information, with the exception of the values of the consumer's options for the configurable item.</li> <li>■ During data alignment, the retailer has received from the manufacturer item definition information that defines exactly which options are available on each configurable item, and which values may be used in each of those options.</li> <li>■ The Buyer and Seller agree that each can produce and process an order with configurable items.</li> <li>■ The Buyer and Seller agree on whether an Order Response message is required, as an option based on the pre-determined trading partner agreements.</li> </ul> |
| <b>Post conditions</b>      | The Seller has received the Configure to Order sent by the Buyer  |

|                      |   |                   |   |
|----------------------|---|-------------------|---|
| Scenario             | <b>Begins when...</b> An end-consumer walks into a retail store and buys a configurable item (e.g. sofa). |                   |   |
|                      | <b>Continues with...</b>  |                   |   |
|                      | <b>Step #</b>   | <b>Actor</b>      | <b>Activity Step</b>  |
|                      | 1   | Consumer/Retailer | In the process of ordering, makes many decisions about the finished piece, choosing from a wide variety options (e.g. fabric). The options that can be selected are all totally defined with the publication of the item identification, as offered by the manufacturer.                              |
|                      | 2   | Consumer/Retailer | Sends the order to the manufacturer with instructions on which base item to start with (e.g. frame), which options to include, and with which values each option should be constructed. The resulting piece may literally be a "one-of-a-kind" piece, depending on what options the customer chooses. |
|                      | <b>Ends when...</b> the Seller receives the Configure to Order for processing                             |                   |   |
| Alternative Scenario | Not Applicable  |                   |   |
| Related Requirements | Not Applicable  |                   |   |
| Related Rules        | Not Applicable  |                   |   |

### 4.3. Business Transaction Activity Diagram

Not Applicable

### 4.4. Business Transaction Sequence Diagram

Not Applicable

## 5. Information Model (Including GDD Report)

### 5.1. GDD Configure To Order

| Content          | Attribute / Role                                    | Datatype /Secondary class      | Multipl<br>icity | Definition  | Requirements       |
|------------------|---|--------------------------------|------------------|---|--------------------|
| ConfigureToOrder |   |                                |                  | The Configure to Order provides the ability for a buyer to order configurable items, that starts with a base item, but to which a large variety of options may be added in a variety of combinations.                 |                    |
| Association      | orderIdentification                                 | EntityIdentification           | 1..1             | Provides the unique identification for the Configure To Order.  |                    |
| Association      | buyer   | TransactionalParty             | 1..1             | Identifies the party to which products or services are sold.  |                    |
| Association      | seller  | TransactionalParty             | 1..1             | Identifies the party which sells products or services to a buyer.   |                    |
| Association      | billTo  | TransactionalParty             | 0..1             | Identifies the party which receives the invoice.  |                    |
| Association      |   | ConfigureToOrderLine Item      | 1..*             | The line item details of the Configure To Order message.  |                    |
| Association      |   | OrderLogisticalInforma<br>tion | 1                | Contains the information related with the dates and destinations of the goods or services.  |                    |
| Generalization   |   | Document                       |                  | Contains the information related with the document in the Order.  |                    |
| Attribute        | orderInstructionCode                                | OrderInstructionCode           | 0..*             | Provides special order conditions   | BRAD<br>CRQ.10-019 |
| Attribute        | additionalOrderInstruc<br>tion                      | Description1000                | 0..1             | Additional order instruction captures information that has not been previously synchronised and is ad-hoc in nature. This field should only be used in exception circumstances if the information cannot be codified. |                    |
| Attribute        | isApplicationReceiptA<br>cknowledgementRequ<br>ired | boolean                        | 0..1             | A buyer's requirement to receive an order receipt acknowledgement from the seller's application system to ensure the seller received the order message.   |                    |

| Content   | Attribute / Role           | Datatype /Secondary class | Multiplicity | Definition   | Requirements     |
|-----------|----------------------------|---------------------------|--------------|--|------------------|
| Attribute | isOrderFreeOfExciseTaxDuty | boolean                   | 0..1         | An excise tax is a tax applied to the consumption of a particular type of good, such as alcohol or tobacco. Excise taxes apply at the same rates to domestic or imported goods. They must not be confused with customs duties which apply to imports only. |                  |
| Attribute | note                       | Description500            | 0..1         | Free text used to convey information that is not processed by applications. Only meant to present the information to a user as on a screen, in a browser, etc.   | BRAD RQ 09.236.F |
| Attribute | orderTypeCode              | OrderTypeCode             | 0..1         | Identifies the kind of purchase order, enabling the recipient of the order to determine the appropriate processing   | BRAD CRQ.09.259  |

## 5.2. GDD Configure To Order Line Item

| Content                  | Attribute / Role | Datatype /Secondary class         | Multiplicity | Definition  | Requirements |
|--------------------------|------------------|-----------------------------------|--------------|---|--------------|
| ConfigureToOrderLineItem |                  |                                   |              | Specifies the information related to each line item. Each Configure To Order will contain one or more line items. |              |
| Association              |                  | TransactionalTradeItem            | 1..1         | The trade item associated to the Configure To Order Line Item.  |              |
| Association              |                  | ConfigureToOption                 | 0..*         | A configure to option associated with a Configure To Order.   |              |
| Association              |                  | LeviedDutyFeeTax                  | 0..1         | The tax applicable to the Configure To Order Line Item.   |              |
| Association              |                  | ShipmentTransportationInformation | 0..1         | Contains the identification of the carrier and mode associated with the transportation of the goods or services.  |              |
| Attribute                | lineItemNumber   | positiveInteger                   | 1..1         | Provides the line number associated to the Configure To Order Line Item.  |              |

| Content   | Attribute / Role               | Datatype /Secondary class | Multiplicity | Definition   | Requirements     |
|-----------|--------------------------------|---------------------------|--------------|--|------------------|
| Attribute | requestedQuantity              | Quantity                  | 1..1         | The quantity which has been requested.   |                  |
| Attribute | additionalOrderLineInstruction | Description200            | 0..1         | Additional Order Line Instruction captures information that has not been previously synchronised and is ad-hoc in nature. This field should only be used in exception circumstances if the information cannot be codified. |                  |
| Attribute | baseItemUnitPrice              | Amount                    | 0..1         | Provides the base item unit price.   |                  |
| Attribute | lineItemActionCode             | LineItemActionCode        | 0..1         | Provides the activity required by the recipient on the line item of this order line item.  |                  |
| Attribute | netAmount                      | Amount                    | 0..1         | Identifies the total net amount of the line item.  |                  |
| Attribute | netPrice                       | Amount                    | 0..1         | Identifies the net price of the item.  |                  |
| Attribute | note                           | Description500            | 0..1         | Free text used to convey information that is not processed by applications. Only meant to present the information to a user as on a screen, in a browser, etc.   | BRAD RQ 09.236.F |

### 5.3. GDD Configure To Option

| Content           | Attribute / Role              | Datatype /Secondary class | Multiplicity | Definition  | Requirements |
|-------------------|-------------------------------|---------------------------|--------------|---|--------------|
| ConfigureToOption |                               |                           |              | Specify the identification for each of the options of the configurable item, its value, quantity and price. |              |
| Association       | optionTradeItemIdentification | TradeItemIdentification   | 1..1         | The trade item associated with this configure to option.  |              |
| Association       |                               | SubConfigureToOption      | 0..*         | A sub-option associated with a configure to option.   |              |

| Content   | Attribute / Role        | Datatype /Secondary class | Multipl<br>icity | Definition   | Requirements |
|-----------|-------------------------|---------------------------|------------------|--|--------------|
| Attribute | optionValue             | string                    | 1..1             | The value that the buyer has chosen for the Configure To Option.           |              |
| Attribute | requestedOptionQuantity | Quantity                  | 1..1             | The number of units that the buyer has ordered of the Configure To Option. |              |
| Attribute | optionUnitPrice         | Amount                    | 0..1             | The unit price associated with the configure to option.                    |              |

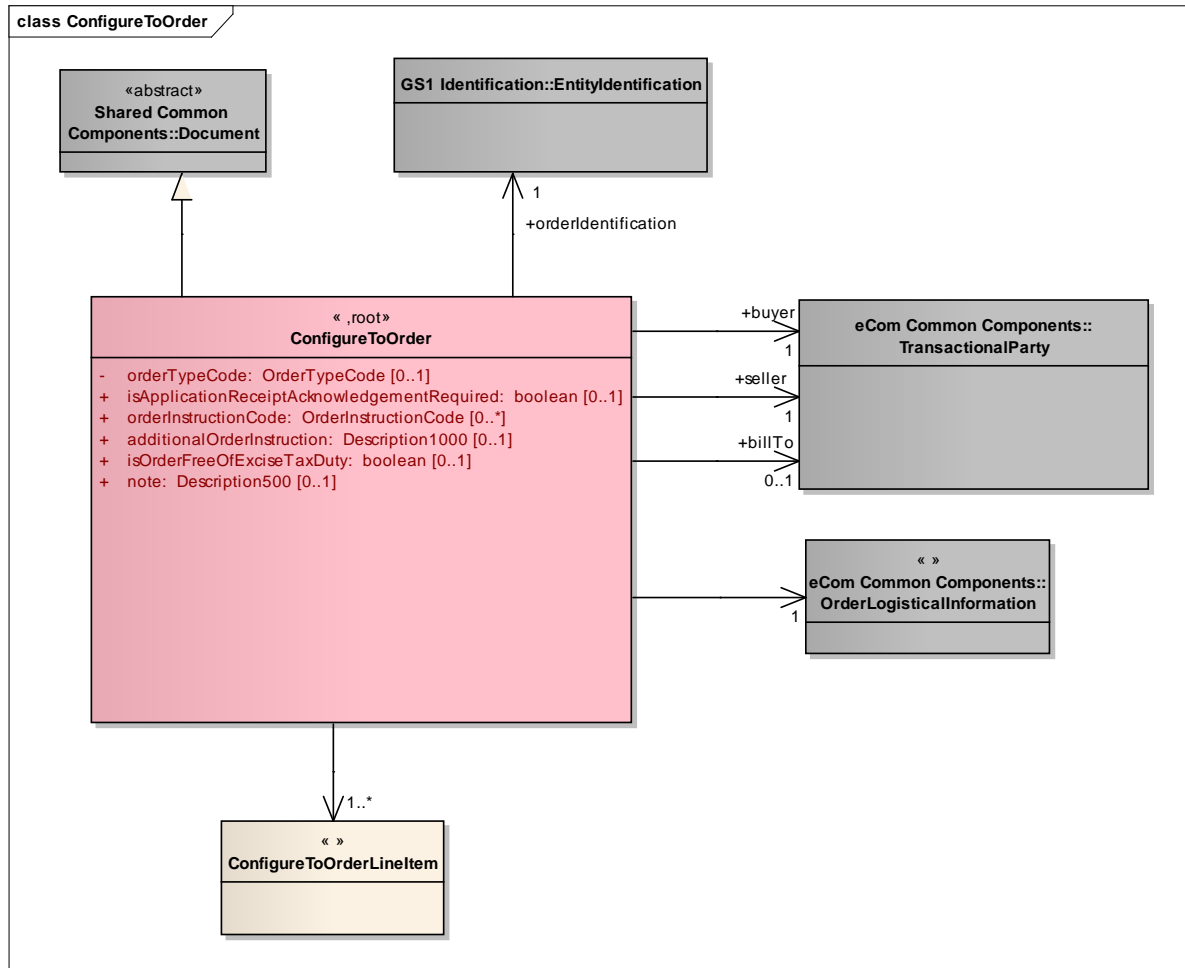
## 5.4. GDD Sub Configure To Option

| Content              | Attribute / Role                 | Datatype /Secondary class | Multipl<br>icity | Definition   | Requirements |
|----------------------|----------------------------------|---------------------------|------------------|--|--------------|
| SubConfigureToOption |                                  |                           |                  | Specify the identification for each of the sub options of the option of the configurable item and its value. |              |
| Association          | subOptionTradeItemIdentification | TradeItemIdentification   | 1                | The trade item associated with this sub configure to option.   |              |
| Association          |                                  | SubConfigureToOption      | 0..*             | Another (more detailed) sub option contained within the sub option.  |              |
| Attribute            | optionValue                      | string                    | 1..1             | The value that the buyer has chosen for the Configure To Option.   |              |

## 5.5. Class Diagrams

### 5.5.1. Class Diagram: Configure To Order

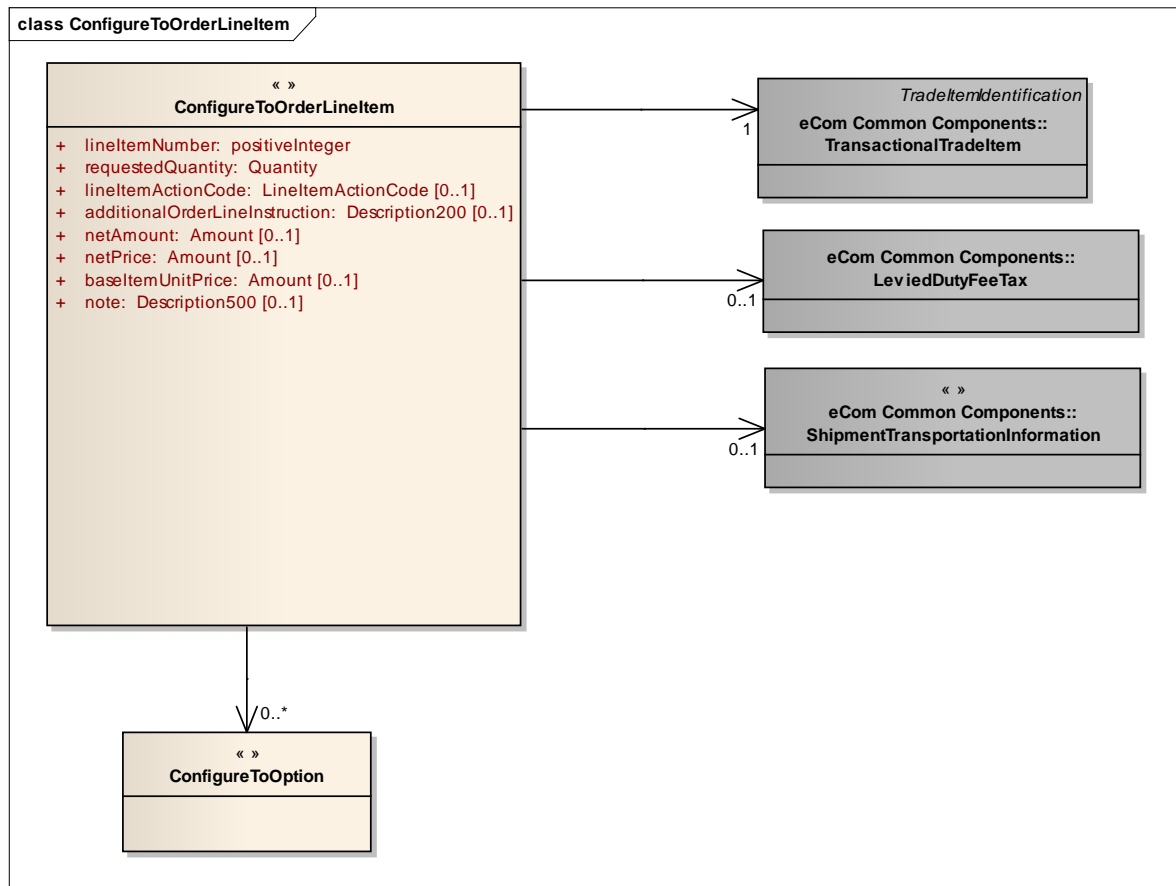
Figure 5-1 Class Diagram: Configure To Order



**Note:** Reference Shared Common Library Business Message (BMS) Release 3.0.0 and eCom Domain Common Library Business Message (BMS) Release 3.0.0 for all common information.

## 5.5.2. Class Diagram: Configure To Order Line Item

Figure 5-2 Class Diagram: Configure To Order Line Item

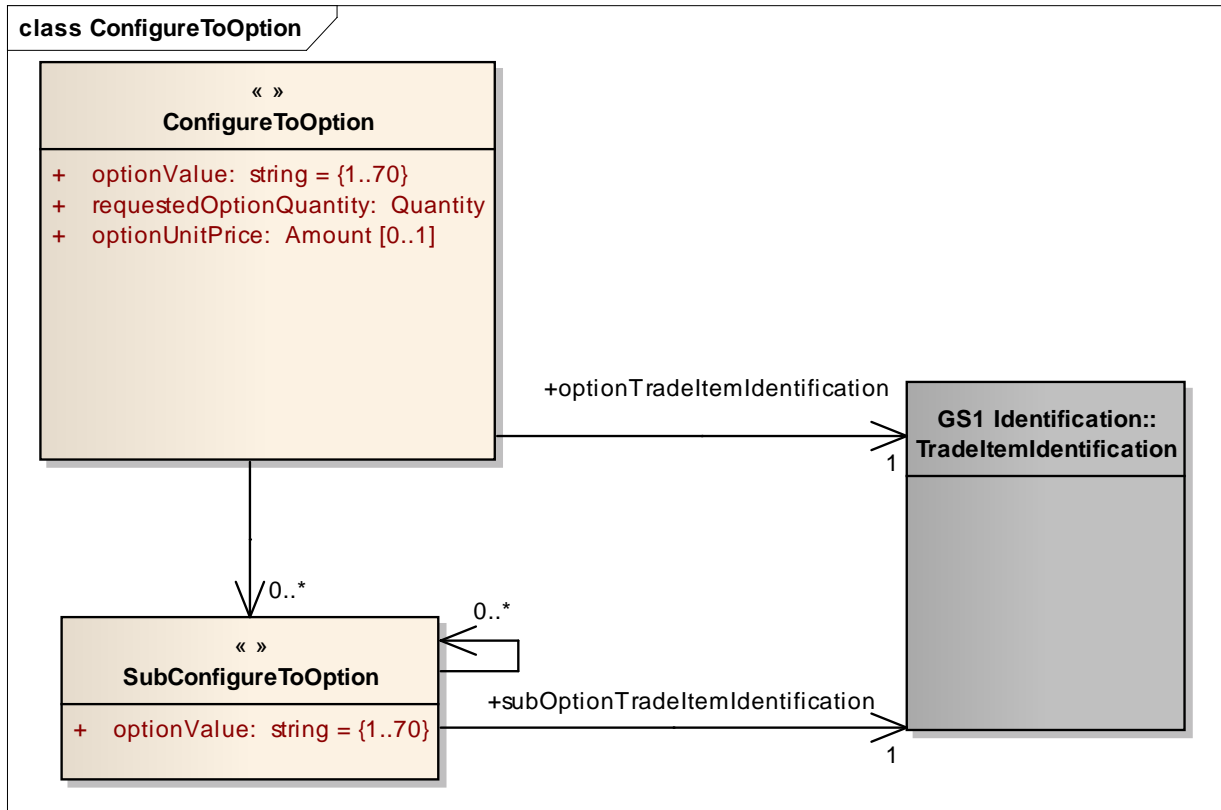


**Note:** Reference Shared Common Library Business Message (BMS) Release 3.0.0 and eCom Domain Common Library Business Message (BMS) Release 3.0.0 for all common information.



### 5.5.3. Class Diagram: Configure To Option & Sub Configure To Option

**Figure 5-3** Class Diagram: Configure To Option & Sub Configure to Option



✓ **Note:** Reference Shared Common Library Business Message (BMS) Release 3.0.0 and eCom Domain Common Library Business Message (BMS) Release 3.0.0 for all common information.

## 5.6. Code Lists

✓ **Note:** Reference Shared Common Library Business Message (BMS) Release 3.0.0 and eCom Domain Common Library Business Message (BMS) Release 3.0.0 for all Code Lists

| Class                    | Codelist             | Referenced in   |
|--------------------------|----------------------|---|
| ConfigureToOrder         | OrderInstructionCode | eCom Domain Common Library Business Message (BMS) Release 3.0.0 |
| ConfigureToOrder         | OrderTypeCode        | eCom Domain Common Library Business Message (BMS) Release 3.0.0 |
| ConfigureToOrderLineItem | LineItemActionCode   | eCom Domain Common Library Business Message (BMS) Release 3.0.0 |

## 6. Business Document Example

### EXAMPLE 1 ORDER LINE – FURNITURE LINE ITEM

A company orders on 2007-07-04 11 am, Order number CTO4454, furniture. No acknowledgement of receipt is required and the goods are not free from tax.

They order 1 sofa (GTIN 00052800483200), a trade item identified by the buyer as 11-212. The price of the base unit is 500 USD, but the total including all options is 1000 USD.

The following are the options they require:

The primary fabric (GTIN: 00614141006601), which the seller has assigned the trade item identification of 50579L44, is velvet (option value 456abc). The cost for this option is 250 USD.

The secondary fabric (GTIN: 00614141005501), which the seller has assigned the trade item identification of 20295L12, has the value of 09884. This option has 4 suboptions:

- The seat cushion (option value 98098, GTIN: 00614141004401, identifying the placement, which has been assigned the trade item identification of 9987V45 by the seller).
- The orientation (option value: Railroad, GTIN 00614141003301, identifying the orientation, which has been assigned the trade item identification 54309854 by the seller)
- Customer owned material (option value: True, GTIN 00614141002201, identifying the fact that the material is owned by the customer, which has been assigned the trade item identification 809854 by the seller)
- Return to customer (option value: Return to Customer, GTIN 00614141001101, indicating excess material instruction, which has been assigned the trade item identification 85245 by the seller).

| ConfigureToOrder                            |                  |
|---|------------------|
| isApplicationReceiptAcknowledgementRequired | FALSE            |
| isOrderFreeOfExciseTaxDuty                  | FALSE            |
| <b>Document</b>                             |                  |
| creationDateTime                            | 2007-07-04 11:00 |
| documentStatusCode                          | ORIGINAL         |
| <b>Entity Identification (+orderId)</b>     |                  |
| entityIdentification                        | CTO4454          |
| <b>ConfigureToOrderLineItem</b>             |                  |
| lineItemNumber                              | 1                |
| requestedQuantity                           | 1                |
| netPrice                                    | 1000 USD         |
| baseItemUnitPrice                           | 500 USD          |
| <b>TransactionalTradeItem</b>               |                  |
| gtin  | 00052800483200   |
| additionalTradeItemClassification           | 11-212           |
| (additionalTradeItemIdentificationTypeCode) | BUYER_ASSIGNED   |
| tradeItemQuantity                           | 1                |
| <b>ConfigureToOption</b>                    |                  |

|  |                             |
|--|-----------------------------|
| <b>ConfigureToOrder</b>  |                             |
| optionValue  | 456abc                      |
| requestedOptionQuantity  | 1                           |
| optionUnitPrice  | 250 USD                     |
| <b>TradeltemIdentification(+optionTradeltemIdentification)</b>                   |                             |
| gtin   | 00614141006601              |
| additionalTradeltemClassification<br>(additionalTradeltemIdentificationTypeCode) | 50579L44<br>SELLER_ASSIGNED |
| <b>ConfigureToOption</b>   |                             |
| optionValue  | 09884                       |
| requestedOptionQuantity  | 1                           |
| optionUnitPrice  | 250 USD                     |
| <b>TradeltemIdentification(+optionTradeltemIdentification)</b>                   |                             |
| gtin   | 00614141005501              |
| additionalTradeltemIdentification<br>(additionalTradeltemIdentificationTypeCode) | 20295L12<br>VENDOR_ASSIGNED |
| <b>SubConfigureToOption</b>  |                             |
| optionValue  | 98098                       |
| <b>TradeltemIdentification(+subOptionTradeltemIdentification)</b>                |                             |
| gtin   | 00614141004401              |
| additionalTradeltemIdentification<br>(additionalTradeltemIdentificationTypeCode) | 9987V45<br>SELLER_ASSIGNED  |
| <b>SubConfigureToOption</b>  |                             |
| optionValue  | Railroad                    |
| <b>TradeltemIdentification(+subOptionTradeltemIdentification)</b>                |                             |
| gtin   | 00614141003301              |
| additionalTradeltemIdentification<br>(additionalTradeltemIdentificationTypeCode) | 54309854<br>SELLER_ASSIGNED |
| <b>SubConfigureToOption</b>  |                             |
| optionValue  | True                        |
| <b>TradeltemIdentification(+subOptionTradeltemIdentification)</b>                |                             |
| gtin   | 00614141002201              |
| additionalTradeltemIdentification<br>(additionalTradeltemIdentificationTypeCode) | 809854<br>SELLER_ASSIGNED   |
| <b>SubConfigureToOption</b>  |                             |
| optionValue  | Return to Customer          |
| <b>TradeltemIdentification(+subOptionTradeltemIdentification)</b>                |                             |
| gtin   | 00614141001101              |
| additionalTradeltemIdentification<br>(additionalTradeltemIdentificationTypeCode) | 85245<br>SELLER_ASSIGNED    |

## EXAMPLE 2 ORDER LINE – AUTOMOBILE LINE ITEM

A company orders automobile line items on 2007-07-04 11 am, Order number CTO4444. No acknowledgement of receipt is required and the goods are not free from tax.

They order 1 seat (GTIN 8436518390545). The price of the base unit is 20000 EUR, but the total including all options is 25000 EUR.

The following are the options they require:

The primary seat cover (GTIN: 00514141006601), which the seller has assigned the trade item identification of 88098L, is leather (option value 786876). The cost for this option is 2000 USD.

This option has 1 sub option:

- Protection (option value: True, GTIN: 00333141006601, identifying the protection, which has been assigned the trade item identification 9098905 by the seller).

The second option is the exterior colour (option value: 8797, indicating White, GTIN: 003333330066001, identifying the exterior colour, which has been assigned the trade item identification of 20295L12 by the seller).

This option has 1 sub option:

- The finish (option value: Perlized, GTIN 00848141006601, identifying the finish, which has been assigned the trade item identification 843651839802 by the seller)

| ConfigureToOrder   |                  |
|--|------------------|
| isApplicationReceiptAcknowledgementRequired                    | FALSE            |
| isOrderFreeOfExciseTaxDuty                                     | FALSE            |
| <b>Document</b>  |                  |
| creationDateTime   | 2007-07-04 11:00 |
| documentStatusCode   | ORIGINAL         |
| <b>Entity Identification (+orderIdentification)</b>            |                  |
| entityIdentification   | CTO4444          |
| <b>ConfigureToOrderLineItem</b>                                |                  |
| lineItemNumber   | 1                |
| requestedQuantity  | 1                |
| netPrice   | 25000 EUR        |
| baseItemUnitPrice  | 20000 EUR        |
| <b>TransactionalTradeItem</b>                                  |                  |
| gtin   | 8436518390545    |
| tradeItemQuantity  | 1                |
| <b>ConfigureToOption</b>                                       |                  |
| optionValue  | 786876           |
| requestedOptionQuantity  | 1                |
| optionUnitPrice  | 2000 EUR         |
| <b>TradeItemIdentification(+optionTradeItemIdentification)</b> |                  |
| gtin   | 00514141006601   |
| additionalTradeItemIdentification                              | 88098L           |

|  |  |
|--|--|
| <b>ConfigureToOrder</b>  |  |
| (additionalTradeltemIdentificationTypeCode)  | SELLER_ASSIGNED                                    |
| <b>SubConfigureToOption</b>  |  |
| optionValue  | True   |
| <b>TradeltemIdentification(+subOptionTradeltemIdentification)</b>                        |  |
| gtin<br>additionalTradeltemIdentification<br>(additionalTradeltemIdentificationTypeCode) | 00333141006601<br>9098905<br>SELLER_ASSIGNED       |
| <b>ConfigureToOption</b>   |  |
| optionValue  | 8797   |
| requestedOptionQuantity  | 1  |
| optionUnitPrice  | 3000 EUR   |
| <b>TradeltemIdentification(+optionTradeltemIdentification)</b>                           |  |
| gtin<br>additionalTradeltemIdentification<br>(additionalTradeltemIdentificationTypeCode) | 00333333006601<br>20295L12<br>SELLER_ASSIGNED      |
| <b>SubConfigureToOption</b>  |  |
| optionValue  | Perlized   |
| <b>TradeltemIdentification(+subOptionTradeltemIdentification)</b>                        |  |
| gtin<br>additionalTradeltemIdentification<br>(additionalTradeltemIdentificationTypeCode) | 00848141006601<br>8436518393802<br>SELLER_ASSIGNED |

## 7. Implementation Considerations

Not Applicable

## 8. Testing

Not Applicable

### 8.1. Pass / Fail Criteria

Not Applicable

### 8.2. Test Data

Not Applicable

## 9. Appendices

Not Applicable

## 10. Architectural Principles

| #   | AG Principle   | BSD Adherence Statement   | Does BSD Adhere?                    | Comment |
|-----|--|---|-------------------------------------|---------|
| 2.1 | The GS1 Architecture shall be fully aligned to GS1 Strategy, Vision, & Mission   | The solution in the BSD is aligned with the business problem as defined in the CR and BCD.  | <input checked="" type="checkbox"/> |         |
| 2.2 | The GS1 Architecture shall leverage the use of GS1 Keys  | The solution maintains the GS1 keys as the primary, mandatory identifiers.  | <input checked="" type="checkbox"/> |         |
| 2.3 | The GS1 Architecture shall leverage the common GS1 Global Data Dictionary (GDD)  | The solution does not alter the formats of primary identifiers and complies with data elements as defined in the Global Data Dictionary.  | <input checked="" type="checkbox"/> |         |
| 2.4 | The GS1 Architecture shall be forward-looking, provide for migration strategies and backward compatibility, and support adaptable and flexible solutions | The solution is backwards compatible according to the stated scope in the document. The solution takes into consideration the potential impact of the standard, especially with respect to implementation and maintenance. Any potential known impact is documented.                    | <input checked="" type="checkbox"/> |         |
| 2.5 | The GS1 Architecture shall support business processes tied to trading partner needs, relevant, and committed to demonstrable business value              | All business requirements contained in the related BRAD come from trading partners or representatives with a genuine intention to implement the standards when developed. All requirements are driven by the business needs of the trading partners.                                    | <input checked="" type="checkbox"/> |         |
| 2.6 | The GS1 Architecture shall enable security where appropriate   | Security solutions are included where appropriate.  | <input checked="" type="checkbox"/> |         |
| 2.7 | The GS1 Architecture shall be consistent   | The solution does not violate consistency of the data architecture within each layer and between each layer of the GS1 System. For example, requirements do not alter a key used across GS1 standards or alter a reusable object without applying this change across related standards. | <input checked="" type="checkbox"/> |         |
| 2.8 | The GS1 Architecture shall be royalty-free   | The solution supports this principle where possible. The solution may include the use of other standards organizations that may not be royalty free.  | <input checked="" type="checkbox"/> |         |
| 3.1 | The GS1 Architecture should promote the achievement of the best overall value at the lowest total cost of ownership                                      | The solution promotes the achievement of the best overall value at the lowest total cost of ownership.  | <input checked="" type="checkbox"/> |         |

| #   | AG Principle  | BSD Adherence Statement   | Does BSD Adhere?                    | Comment |
|-----|---|---|-------------------------------------|---------|
| 3.2 | The GS1 Architecture should promote scalability   | The solution takes into consideration the potential scalability of the standard. Any potential known impact to scalability is documented.   | <input checked="" type="checkbox"/> |         |
| 3.3 | The GS1 Architecture should promote seamless integration  | The BSD promotes seamless integration with other GS1 Standards if in scope.   | <input checked="" type="checkbox"/> |         |
| 3.4 | The GS1 Architecture should promote interoperability and compliance   | The solution takes into consideration data and process interoperability. For example, any shared objects between interoperable messages must remain consistent. Any potential known impact to interoperability is documented. | <input checked="" type="checkbox"/> |         |
| 3.5 | The GS1 Architecture should promote simplicity and standard interfaces  | The solution does not threaten the standardisation of the interfaces of the GS1 System. Interfaces are not limited to references to technology but also include such ideas as business interfaces and process interfaces.     | <input checked="" type="checkbox"/> |         |
| 3.6 | The GS1 Architecture should avoid duplication   | The solution does not create duplications with existing GS1 components. If there are potential duplications, these are documented with a stated rationale for the duplication.  | <input checked="" type="checkbox"/> |         |
| 3.7 | The GS1 Architecture should promote technology independence and a layered approach  | The solution does not impose implicit or explicit restrictions of any technology.   | <input checked="" type="checkbox"/> |         |
| 3.8 | The GS1 Architecture should promote global cross-sector definitions and leverage the best of global and the best of local | The solution takes into account a global perspective.   | <input checked="" type="checkbox"/> |         |
| 3.9 | The GS1 Architecture shall leverage a common strategy for extensibility   | This solution uses consistent and common, extensibility approaches, methodologies and technology where available and applicable.  | <input checked="" type="checkbox"/> |         |
| 4.1 | In support of a common GS1 Architecture, GS1 shall leverage work of other standards bodies wherever possible.             | This solution utilizes works of other standards bodies wherever possible.   | <input checked="" type="checkbox"/> |         |
| 4.2 | In support of a common GS1 Architecture, GS1 shall strive to eliminate exceptions and variances wherever possible         | The solution strives to eliminate exceptions and variances wherever possible and does not create new variances.   | <input checked="" type="checkbox"/> |         |

## 11. Summary of Changes

| Change  | BSD Version | Associated CR Number                 |
|---|-------------|--------------------------------------|
| <b>For BMS Release 3.0.0:</b> <ul style="list-style-type: none"> <li>Added name, address and contact information for all parties identified.</li> <li>Added indicator for purchase order type at header level</li> <li>Added a free text note field at both header and line item level</li> <li>Updated BMS template to 1.9</li> <li>Updated Sections GDD Report, Class Diagrams and Test Data.</li> </ul> <b>After Peer review:</b> <ul style="list-style-type: none"> <li>Included the code lists and enumerations and referenced where they can be found (eCom or Shared Common).</li> <li>The version of the document changed to 1.0.0.</li> <li>Document change history wiped clean except for the latest version.</li> <li>In context, Geopolitical set to "All" instead of "Global".</li> <li>In GDD report, added missing definitions for "orderTypeCode" and "orderInstructionCode".</li> <li>Random order issue in GDD Report fixed.</li> <li>Summary of Changes wiped clean except for the version for release 3.0.</li> </ul> | Issue 1.0.0 | CR 09-201<br>CR 09-259<br>CR 09-236F |
| <b>After TSD Development:</b> <ul style="list-style-type: none"> <li>pages 23-26, ConfigureToOption and SubConfigureToOption have attributes of type TradeItemIdentification. However, TradeItemIdentification does not have additionalTradeItemClassificationCodeListCode. Instead, it has AdditionalTradeItemIdentificationType, which in turn has additionalTradeItemIdentificationTypeCode. additionalTradeItemClassificationCodeListCode belongs to AdditionalTradeItemClassificationCodeType. Also, there is no tradeItemQuantity attribute in TradeItemIdentification. Updated example to reflect this.</li> </ul>   | Issue 1.0.0 | Not Applicable                       |
| <b>For Publication</b> <ul style="list-style-type: none"> <li>Added Copyright R in GS1 Logo</li> <li>Changed Status to Approved</li> <li>Removed year reference in footer copyright statement</li> <li>Replaced Section 10 with updated AG Principles</li> </ul>  | 1.0.0       | Not Applicable                       |