

# **Business Solution Design (BSD)**

**for**

**Order**

**BRG: Order**

**Version: 0.7.1**

**Date: 15/03/2005**  
(dd/mm/ccyy)



### Change Request Reference

<b>Refer to Change Request (CR) Number(s):</b>	CR 01-000094 (Multi Ship to Order) CR 03-000167 (Cross Docking Order) CR 03-000145 (UK Food Service Suite)
<b>CR Submitter(s):</b>	JJ on behalf of OFSCI
<b>Date of CR Submission to GSMP:</b>	20031020

### Business Requirements Document (BRD) Reference

<b>BRD Title:</b> Order
<b>BRD Date:</b> 1.4.4
<b>BRD Version:</b> May 20 <sup>th</sup> , 2004

<b>BRD Title:</b> UK Food servicing Ordering
<b>BRD Date:</b> 0.2
<b>BRD Version:</b> 9 <sup>th</sup> July 2004

### DOCUMENT HISTORY

<b>Document Number:</b>	
<b>Document Version:</b>	0.7.1
<b>Document Date :</b>	20050315

### Document Summary

<b>Document Title:</b>	Business Solution Document (BSD) for Order
<b>Owner:</b>	BRG: ORDER Chairperson: William Purnell (Foot Locker, Inc.) and Steve Wilhoit (Eveready Battery Company)
<b>Status:</b>	( <i>Check one box</i> ) <input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> Approved
<b>BSD Template Version:</b>	0.3

## Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build
20040809	0.1		Incorporation of UK Food Service Requirements	<p>The intention of updating the Order publication is to include the business requirement from the user community that needs the capability to issue a Cross Docking Order and UK Food-service Order using the EAN.UCC XML standards.</p> <p>Cross Dock Order is the process where the buyer sends an Order specifying an intermediate destination in addition to the final destination. The seller packs individually per final destination and ships all the items in the order to one cross-docking destination. For more information, refer to "Guide to use the XML EAN.UCC standards for Cross Docking Order, v 0.3, May, 2004</p> <p>The UK Foodservice Order process provides the ability for a buyer to order variable quantities of trade items/services in the UK Foodservice sector.</p>	
20040816	0.2		Incorporate comments and adjustments on the text and models as a result of Order BRG meeting on 20040811	<p>- Update list of Order BRG members</p> <p>-Adjustments of the Data Description section and Class Diagrams:</p> <ul style="list-style-type: none"> <li>• Consistency with BRD Order 1.4.4</li> <li>• Elimination of Contract reference date</li> <li>• Inclusion of unit of meas-</li> </ul>	

				urement within the attributes of Order Line item.	
20040903	0.3		Incorporate comments and adjustments on the text and models as a result of Order BRG meeting on 20040825	Adjustments of the Data Description section and Class Diagrams: use of Contract reference	
2004-10-11	0.4	MVC	Incorporate decisions on comments received during public review Adjust the document according to new template approved	<ul style="list-style-type: none"> <li>- Update document to BMS template approved 20041001</li> <li>- Adjustments on text for clarifications. Section: 1.1.1,</li> <li>- Adjustments on the data descriptions for clarification. Section 1.5.1</li> <li>- Adjustments on text and diagram agreed after public review comments resolution.</li> </ul>	
20050217	0.5.0	JR	Based on emails from MVC	<ul style="list-style-type: none"> <li>- Harmonized the model</li> <li>- Updated the GDD Platform</li> <li>- For details view section 10 Summary of Changes</li> </ul>	Model P4CL: 5772  BSD P4CL: 5773
20050218	0.6.0	JR and MVC	Updates  Seeking Motion for XML Development.	<ul style="list-style-type: none"> <li>- Updated missing definitions</li> <li>- Updated Test Data</li> </ul>	Model P4CL: 5774  BSD P4CL: 5776
20050315	0.7.0	JR	Copied GDD from GDD platform	<ul style="list-style-type: none"> <li>- Section 1.4.6</li> </ul>	BSD P4CL: 6035
20070423	0.7.1	Giovanni Biffi	Editorial Changes	<ul style="list-style-type: none"> <li>- Minor Editorial Changes to the Document</li> </ul>	

# Business Solution Design

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## 1 Business Solution

### 1.1 Business Domain View

#### 1.1.1 Problem Statement / Business Need

The Order provides the ability for a buyer to order specified quantities of goods and services from a seller for a single shipment to or from a single location.

The Order may be used alone when the buyer and seller have aligned data such as parties, item, pricing, payment terms, etc., prior to order creation.

The process is simplified by having one order placed for one delivery for one location at one time.

#### 1.1.2 Objective

The objective is to upgrade the EAN.UCC Order Message standard, according to the requirements of the following change request:

- CR 03-0167 Cross Docking
- CR 03-0145 UK Food Service Order

#### 1.1.3 Audience

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

This document is specifically targeted toward the technical teams within implementing companies. For a business view, please refer to the associated Business Requirements Document (BRD) listed in the next section.

#### 1.1.4 Artefacts

Artefact name	State	Artefact / State description
Order BMS v1.3.1	Published November 2003	Order Business Message Standard based on the BRD 1.4.3. This BRD was a global validation of the business requirements of the previous publication.
Cross-Docking Order BRW v 0.7 (Order BRG)	Approved BRW	Contains the business requirements of the Cross Docking Ordering process based on a CR (03-000167) submitted by the Chair on behalf of the group.
Order BRD 1.4.4 (Order BRG)	Approved BRD	This BRD is the updated version of the BRD published on November 2003 that contains the requirements on Cross Docking Order.
UK Foodservice BRD 0.3	Approved BRD	Contains the business requirements of the UK food service ordering process based on a CR (03-000145) submitted by John Jackson on behalf of OFSCI.
Guide to Use the XML EAN.UCC Standards for Cross Docking Ordering v 2.1	In progress	The purpose of this document is to guide the user of the XML EAN.UCC messages Order and Multi Ship to Order according to the business requirements and scenarios approved and

	are described on the BRD Order 1.4.4 and on the Multi Ship to Order v 0.3.9
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### 1.1.5 References

Reference Name	Description
Order Business Requirements Document	EAN.UCC specification of the Order message.
Cross-Docking Order Business Requirements Worksheet	EAN.UCC specification of an Order message depicting where items are received in a facility or Cross Docking Destination, occasionally married with other items going to the same final destination.
UK Foodservice Order Business Requirements Document	EAN.UCC specification of an Order message within the UK Foodservice industry



### 1.1.6 Acknowledgements

### 1.1.7 BRG Members

Function	Name	Company / organisation
BRG Chair	Bill Purnell	Foot Locker
BRG Co-Chair	Steve Wilhoit	Levi Strauss & Co
BRG Member	Alice Aguemon	GENCOD – EAN France
BRG Member	Ang Wee Ngee	EAN Singapore
BRG Member	Brendon Beumer	Royal Ahold
BRG Member	Caren Kaegebein	VF Corporation
BRG Member	Don Weston	Pfizer Canada
BRG Member	Dorien Mouthaan	EAN Netherlands
BRG Member	Frank Kuhlmann	CCG – EAN Germany
BRG Member	Frederico Cunha	EAN Brazil
BRG Member	John Jackson	Unilever UK
BRG Member	Johnny Tang	HKANA – EAN Hong Kong
BRG Member	Marcelo Alonso	CODIGO – EAN Argentina
BRG Member	Massimo Bolchini	INDICOD – Ean Italy
BRG Member	Naoto Sakamoto	DCC - EAN Japan
BRG Member	Paula Bustos	IBC Solutions
BRG Member	Thomas Moriarty	JC Penney Co. Inc

### 1.1.8 ITRG Members

Function	Name	Company / organisation
ITRG Chair		
ITRG Member		

### 1.1.9 Task/Project Group Participants (*where applicable*)

Function	Name	Company / organisation
Participant		
Participant		

### 1.1.10 Design Team Members

Function	Name	Organisation
Modeller	John Ryu	GS1 HO
XML Technical Designer		
EANCOM Technical Designer		
Peer Reviewer	Eric Kauz	GS1 HO

## 1.2 Business Collaboration Business Context

Context Category	Value(s)
Industry	All
Geopolitical	Global
Product	All
Process	Order
System Capabilities	All (EAN.UCC System)
Official Constraints	None

## 1.3 Additional Technical Requirements Analysis

None

### 1.3.1 Technical Requirements (optional)

Num-ber	Statement	Rationale

## 1.4 Business Transaction View

### 1.4.1 Business Transaction Use Case Diagram

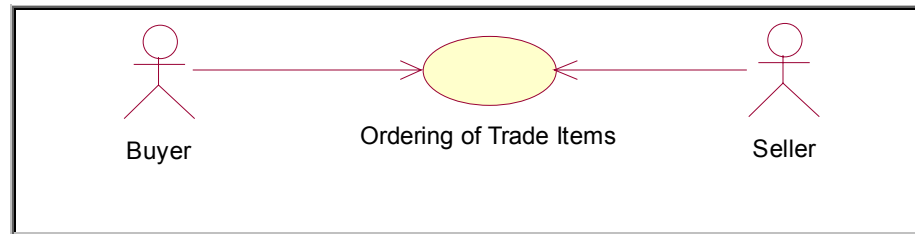


Figure 1- Use Case Diagram: Order

### 1.4.2 Use Case Description

Use Case Name	Ordering of Trade Items
Use Case Description	This Use Case provides the ability for a buyer to order specified quantities of goods and services from a seller for a single shipment to or from a single location.
Actors	Buyer, Seller
Preconditions	The Buyer and Seller have aligned Party and Item information.
Post conditions	Success: The Seller has received the Order sent by the Buyer. Failure: The Seller hasn't received the Order sent by the Buyer.
Scenario	<b>Begins when...</b> the Buyer sends the Order to the Seller. <b>Ends when...</b> the Seller receives the Order.
Alternative Scenario	

### 1.4.3 Business Transaction Activity Diagram(s)

No Activity Diagram.

#### 1.4.4 Business Transaction Sequence Diagram (s)

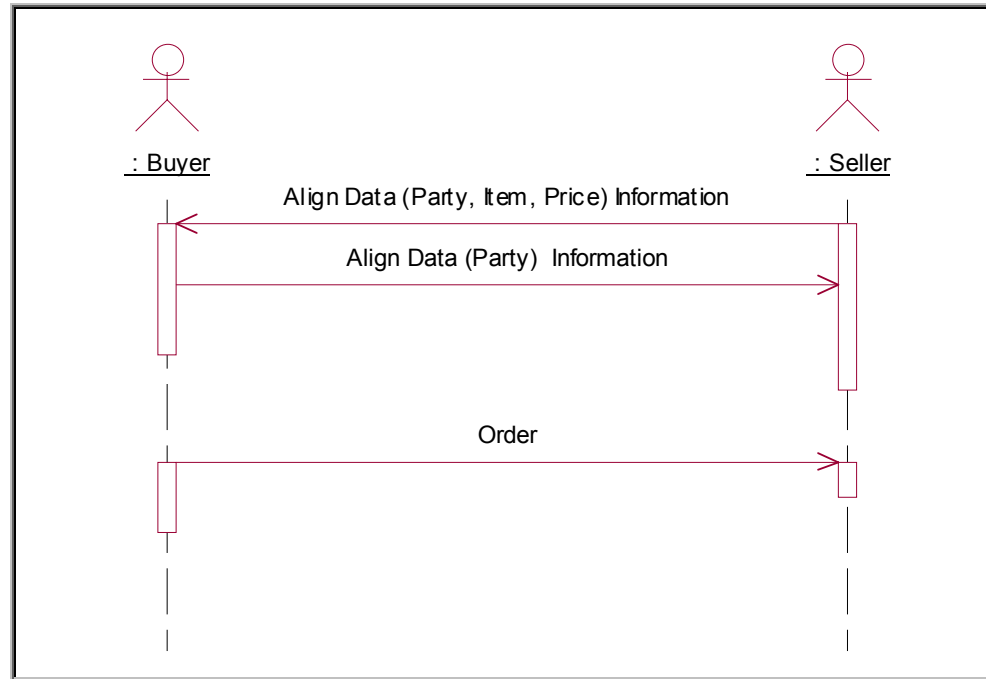


Figure 2 - Ordering of Trade Items Sequence Diagram

### 1.4.5 Data Description: Order

#### Order

Class (ABIE)	Related Requirement
Order	BRD For Order V 1.4.4
Order-LinItem	BRD For Order V 1.4.4
TradeAgreement	BRD For UK Foods Service Ordering V0.2 – BR4

End of Report

### 1.4.6 GDD Report

#### Order

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
Order				Purchase Order. Details	The Order provides the ability for a buyer to order specified quantities of goods and services from a seller for a single shipment to or from a single location.	
	specialDeliveryNote			Purchase Order. Special Delivery Note_ Description. Text	Specify delivery instructions for the order that cannot be categorized into predefined values. Free text.	0..1
		None	AllowanceCharge	Purchase Order. Association. Allowance Charge	Contains the information related with the allowance charge involved in the order process.	0..*
		None	Document	Purchase Order. Inheritance_ Association. Electronic_ Document	Contains the information related with the document in the Order.	1..1
		orderIdentification	EntityIdentification	Purchase Order. Association. Entity Identification	The unique identification of the Order	1..1
		None	OrderLineItem	Purchase Order. Line	Specify the information related	1..*

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Item. Purchase Order Line	to each line item within the order.	
		None	OrderLogisticalInformation	Purchase Order. Association. Order_ Logistical Information Group	Contains the information related with the dates and destinations of the goods or services.	1..1
		None	OrderPartyInformation	Purchase Order. Association. Order_ Party Group	Contains the information related with the parties involved in the order process	1..1
		None	PaymentTerms	Purchase Order. Association. Payment Terms	Contains the information related with the payment terms in the Order.	0..*
		None	TradeAgreement	Purchase Order. Association. Trade Agreement	Specify the trade agreement that the order is referring to.	0..1
Order-LineItem				Purchase Order Line. Details	!! Order Line Item inherits attributes from the Simple Order Line Item class.	
		None	AllowanceCharge	Purchase Order Line. Association. Allowance Charge	Contains the information related with the allowance charge in the detail order level.	0..*
		None	SimpleOrder-LineItem	Purchase Order Line. Inheritance_ Association. Simple_ Purchase Order Line	Specify the information related to each line item within the order.	1..1
TradeAgreement				Trade Agreement. Details	Contains the trade agreement reference number and the trade agreement reference date.	

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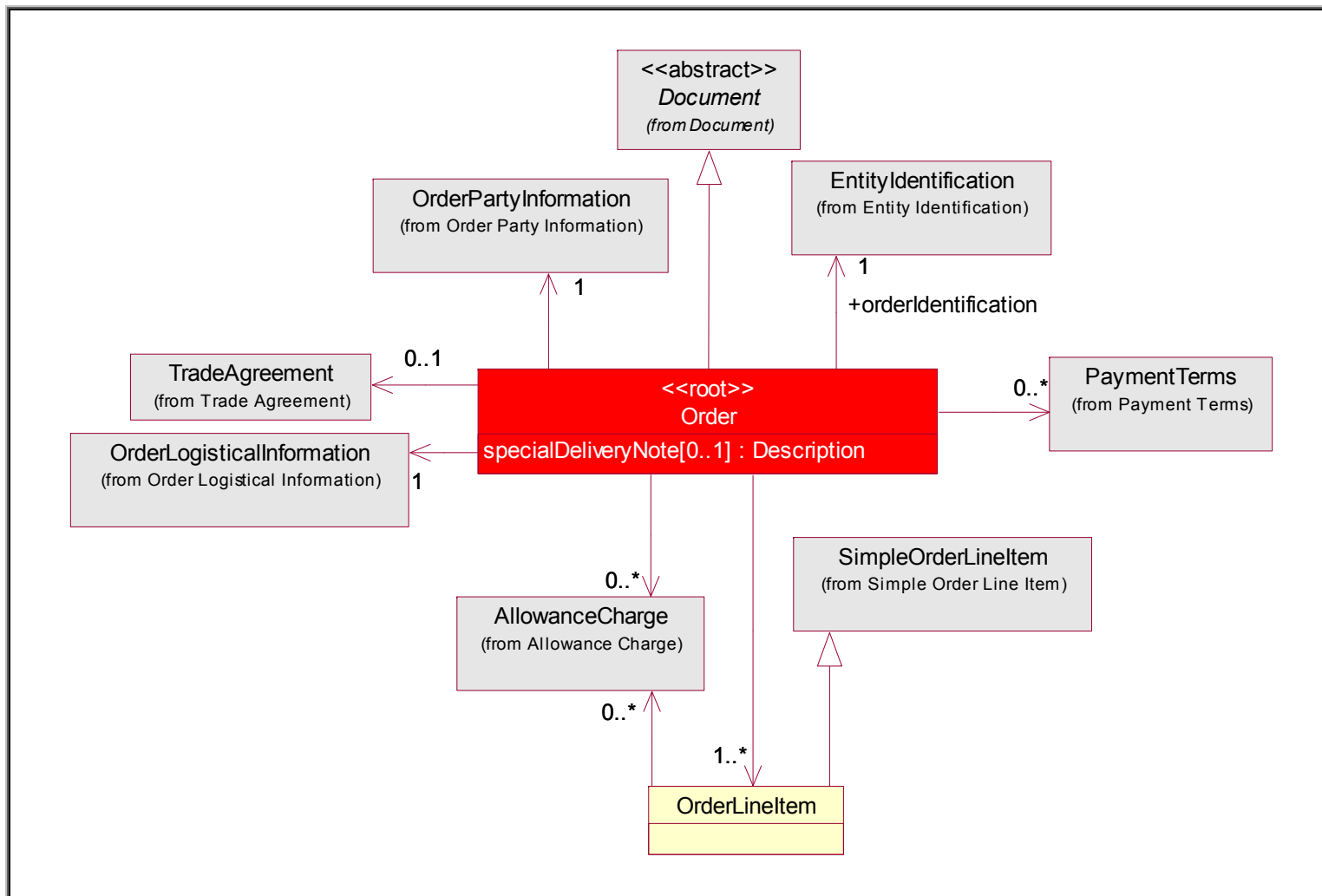
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
	tradeAgreementReferenceDate			Trade Agreement. Date_ Reference. Date Time	Unique date identifying a trade agreement that the order is referring to.	0..1
	tradeAgreementReferenceNumber			Trade Agreement. Number_ Reference. Text	Unique number identifying a trade agreement that the order is referring to. A number of different trading agreements may exist.	1..1

End of Rep



### 1.4.7 Class Diagrams

Class Diagram for Business Document: Order (Figure 3 – New Class Diagram: Order)



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### 1.4.8 Code Lists

*(Note: Code Lists are taken from the GDD though a GDD report.*

No Code Lists in Order.

### 1.5 Business Document Example

One store, identified by the EAN.UCC Global Location Number 5412345000020 placed an order; it is transmitted to the central system of the retailer and then is sent to the supplier.

The buyer is identified by the EAN.UCC Global Location Number 5412345000013, and the supplier is identified by the EAN.UCC Global Location Number 4098765000010.

The order identification is PO 02109, and the order is placed on the 3<sup>rd</sup> of November 2003 at 11:00 AM.

The buyer (5412345000013) orders the following:

EAN.UCC Global Trade Item Number	Quantity
4098765000027	48
4098765000034	24

The entire order has to be shipped to the warehouse identified by the EAN.UCC Global Location Number 5412345000037, it would use the Cross Dock facility and then will be distributed it to the store where was originally placed. For the store, the delivery date is the 10th of November 2003. at 8:00 AM.

### 1.6 Implementation Considerations

### 1.7 Testing

#### 1.7.1 Pass / Fail Criteria

*Unit testing criteria for business solution.*

Number	Test Criteria	Related Requirement	Design Element	Pass Criteria	Fail Criteria
1	No Test Criteria				

#### 1.7.2 Test Data

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<b>Document</b>	
<b>Creation Date Time</b>	2003 -11- 03 11:00
<b>Document Status List</b>	ORIGINAL
<b>Order Identification – Entity Identification</b>	
<b>Unique Creator Identification</b>	PO02109
<b>Content Owner</b>	5412345000013
<b>Order Party Information</b>	
<b>Seller (GLN)</b>	4098765000010
<b>Buyer (GLN)</b>	5412345000013
<b>Order Logistical Information</b>	
<b>Ship to Logistics</b>	
<b>Ship to (GLN)</b>	5412345000037
<b>Ultimate Consignee (GLN)</b>	5412345000020
<b>Order Logistical Date Group</b>	
<b>Requested Delivery Date Ultimate Consignee – Logistical Date</b>	
<b>Date</b>	2003 – 11 – 03
<b>Time</b>	08:00
<b>Order Line Item</b>	
<b>Simple Order Line Item</b>	
<b>Line Item</b>	1
<b>Trade Item Identification (GTIN)</b>	4098765000027
<b>Requested Quantity</b>	48
<b>Order Line Item</b>	
<b>Simple Order Line Item</b>	
<b>Line Item</b>	2
<b>Trade Item Identification (GTIN)</b>	4098765000034
<b>Requested Quantity</b>	24

### 1.8 Appendices

### 1.9 Summary of Changes

Change	BSD Version	Associated CR number
<p>Document class diagram (Common Library: Common: Components: Document)</p> <ul style="list-style-type: none"><li>• Added LineltemCount class</li><li>• Contains attribute: number</li><li>• Added LineltemCount class to New Order Class diagram</li></ul> <p>Order class diagram (Business Process: Order: Order)</p> <ul style="list-style-type: none"><li>• Added Reference class to New Order class diagram (Roles: contractReferenceNumber, contractReferenceDate)</li></ul> <p>Order class diagram (Business Process: Order: Order)</p> <ul style="list-style-type: none"><li>• Added TextDescription class to New Order class diagram (SpecialDeliveryNotes)</li></ul> <p>Order Common Class Diagram</p> <ul style="list-style-type: none"><li>• Added Measurement class relating to SimpleOrderLineltem class</li><li>• Contains UnitOfMeasure attribute</li></ul>	V 0.1	CR 03-000145 CR 03-000167
<p>- Update list of Order BRG members</p> <p>-Adjustments of the Data Description section and Class Diagrams:</p> <ul style="list-style-type: none"><li>• Consistency with BRD Order 1.4.4</li><li>• Elimination of Contract reference date</li><li>• Inclusion of unit of measurement within the attributes of Order Line item.</li></ul>	V 0.2	
Adjustments of the Data Description section and Class Diagrams: use of Contract reference	V 0.3	

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<ul style="list-style-type: none"><li>- Update document to BMS template approved 20041001</li><li>- Adjustments on text for clarifications. Section: 1.1.1,</li><li>- Adjustments on the data descriptions for clarification. Section 1.5.1</li><li>- Adjustments on text and diagram agreed after public review comments resolution.</li></ul>	V 0.4	
<ol style="list-style-type: none"><li>1. Copied the GDD platform into the BSD. (Need definitions for all definitions with either None or Not Available).</li><li>2. Replaced Contract Reference class with Trade Agreement class. Trade Agreement class is reused from the MultiShipTo Order work. Note the tradeAgreementReference-Date attribute is now optional as it was mandatory in the previous version.</li><li>3. Deleted association from Trade Agreement class to Order Party Information class.</li><li>4. Replaced specialDeliveryNotes as an attribute inside the Order class. The modified attribute specialDeliveryNote[0..1]:Description allows for the text and the associated language code.</li><li>5. Updated footer copyright as 2003-2005</li></ol>	Version 0.5.0	
<ol style="list-style-type: none"><li>1. Updated missing definitions in GDD</li><li>2. Included Test Data or Sample Data</li></ol>	Version 0.6.0	
Copied GDD platform output into BSD.	Version 0.7.0	