

Business Message Standard (BMS)

for

Order

BRG: Order

BMS Release: 2.1

Document Version: 0.8.1

Date: 06.04.2006

(dd.mm.ccy example 27.10.2004)



Change Request Reference

Refer to Change Request (CR) Number(s):	CR 01-000094 (Multi Ship to Order) CR 03-000167 (Cross Docking Order) CR 03-000145 (UK Food Service Suite) CR-06-000039 (GS1)
CR Submitter(s):	Andrew Hearn GS1 John Jackson/Unilever
Date of CR Submission to GSMP:	Various

Business Requirements Document (BRAD) Reference

BRD Title: Order
BRD Date: 20.05.2004
BRD Version: 1.4.4

BRD Title: UK Food servicing Ordering
BRD Date: 09.07.2004
BRD Version: 0.2

BRAD Title: Common Library
BRAD Date: 21.03.2006
BRAD Version: 0.2.21

Document Summary

Document Title:	Business Solution Document (BSD) for Order		
Document Version	0.8.1		
Owner:	Order BRG		
Status:	(<i>Check one box</i>)	DRAFT	x Approved
BMS Template Version:	0.4		
Targeted BMS Publication Version	2.1		

Document Change History

Note: During development include revisions in history. Upon Approval, eliminate revisions and include only delta from previous version.

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build
09.08.2004	0.1		Incorporation of UK Food Service Requirements	The intention of updating the Order publication is to include the business requirement from the user community that needs the	

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build
				<p>capability to issue a Cross Docking Order and UK Foodservice 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>	
16.08.2004	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"> • Consistency with BRD Order 1.4.4 • Elimination of Contract reference date • Inclusion of unit of measurement within the attributes of Order Line item. 	
03.09.2004	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	
11.10.2004	0.4	Vicky-Caro	Incorporate decisions on comments received during public review Adjust the document according	<p>- Update document to BMS template approved 20041001</p> <p>- Adjustments on text for clarifications. Section: 1.1.1,</p>	

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build
			to new template approved	<ul style="list-style-type: none"> - Adjustments on the data descriptions for clarification. Section 1.5.1 - Adjustments on text and diagram agreed after public review comments resolution. 	
17.02.2005	0.5.0	John Ryu	Based on emails from MVC	<ul style="list-style-type: none"> - Harmonized the model - Updated the GDD Platform - For details view section 10 Summary of Changes 	Model P4CL: 5772 BSD P4CL: 5773
18.02.2005	0.6.0	JR and VC	Updates Seeking Motion for XML Development.	<ul style="list-style-type: none"> - Updated missing definitions - Updated Test Data 	Model P4CL: 5774 BSD P4CL: 5776
15.03.2005	0.7.0	JR	Copied GDD from GDD platform	<ul style="list-style-type: none"> - Section 1.4.6 	BSD P4CL: 6035
06.04.2006	0.8.0	JR	Upgrade for BMS Version 2.1 release	Upgraded Order for BSM Release version 2.1	BSD P4CL: 8242
25.04.2007	0.8.1	Giovanni Biffi	Editorial Changes	Minor Editorial Updates to the Document	N/A

Business Message Standard

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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 GS1 Order Message standard, according to the requirements of the following change request:

- CR 03-0167 Cross Docking
- CR 03-0145 UK Food Service Order
- CR 06-39 GS1 Publication Team

Upgrade the Order Message to be part of the V2.1 Suite of Messages.

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 0.4	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 described on the BRW. The technical solutions 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	GS1 specification of the Order message.
Cross-Docking Order Business Requirements Worksheet	GS1 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	GS1 specification of an Order message within the UK Foodservice industry

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1.1.6 Acknowledgements

1.1.6.1 BRG Members

Function	Name	Company / organisation
BRG Chair	Bill Purnell	Foot Locker
BRG Co-Chair	Steve Wilhoit	Levi Strauss & Co
BRG Member	Marcelo Alonso	GS1 Argentina
BRG Member	Frederico Cunha	GS1 Brazil
BRG Member	Alice Aguemon	GS1 France
BRG Member	Frank Kuhlmann	GS1 Germany
BRG Member	Johnny Tang	GS1 Hong Kong
BRG Member	Massimo Bolchini	GS1 Italy
BRG Member	Naoto Sakamoto	GS1 Japan
BRG Member	Dorien Mouthaan	GS1 Netherlands
BRG Member	Ang Wee Ngee	GS1 Singapore
BRG Member	Paula Bustos	IBC Solutions
BRG Member	Thomas Moriarty	JC Penney Co. Inc
BRG Member	Don Weston	Pfizer Canada
BRG Member	Brendon Beumer	Royal Ahold
BRG Member	John Jackson	Unilever UK
BRG Member	Caren Kaegebein	VF Corporation

1.1.6.2 ITRG Members

Function	Name	Company / organisation
ITRG Chair	Carol Edison	General Mills

1.1.6.3 Task/Project Group Participants (*where applicable*)

Function	Name	Company / organisation
Participant	Not Applicable	

1.1.6.4 Design Team Members

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

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1.2 Business Context

(Note: The business context of the business)

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

If no value use, the default of "All" except for Official Constraints where default is "None".

1.3 Additional Technical Requirements Analysis

1.3.1 Technical Requirements (optional)

Number	Statement	Rationale
	No Technical Requirements	

1.4 Business Transaction View

1.4.1 Business Transaction Use Case Diagram

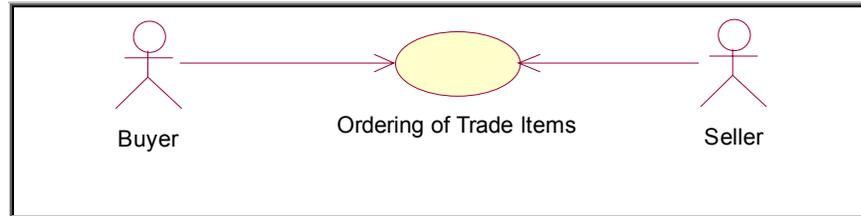


Figure 1- Use Case Diagram: Order

1.4.2 Use Case Description

Use Case ID	UC-1								
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 (Goal)	Buyer, Seller								
Performance Goals	The seller has received the order sent by the buyer.								
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	Begins when... the Buyer sends the Order to the Seller. Continues with... <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Step #</th> <th style="width: 15%;">Actor</th> <th style="width: 75%;">Activity Step</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> </tr> </tbody> </table> Ends when... the Seller receives the Order.			Step #	Actor	Activity Step	1		
Step #	Actor	Activity Step							
1									
Alternative Scenario	No Alternative Scenario <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Step #</th> <th style="width: 15%;">Actor</th> <th style="width: 75%;">Activity Step</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Step #	Actor	Activity Step			
Step #	Actor	Activity Step							
Related Requirements	No Related Requirements								
Related Rules	No Related Rules								

1.4.3 Business Transaction Activity Diagram(s)

No Activity Diagram

1.4.4 Business Transaction Sequence Diagram(s) (optional)

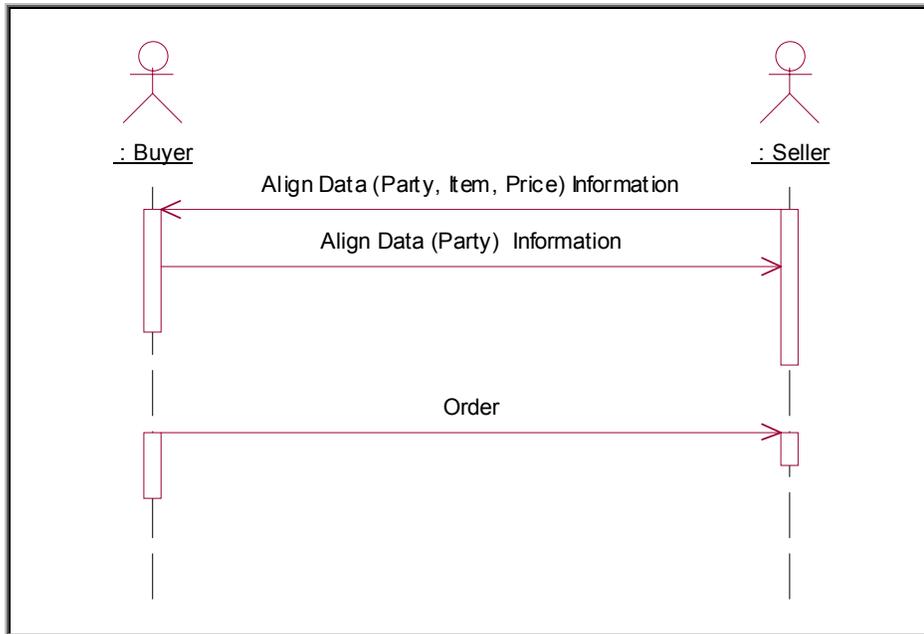


Figure 2 - Ordering of Trade Items Sequence Diagram

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1.5 Information Model (including GDD Report)

1.5.1 Data Description:

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	RELATED REQUIREMENT
Order				BRD For Order V 1.4.4
	specialDeliveryNote			BRD For Order V 1.4.4
		None	AllowanceCharge	BRD For Order V 1.4.4
		None	Document	BRD For Order V 1.4.4
		orderIdentification	EntityIdentification	BRD For Order V 1.4.4
		None	OrderLineItem	BRD For Order V 1.4.4
		None	OrderLogisticalInformation	BRD For Order V 1.4.4
		None	OrderPartyInformation	BRD For Order V 1.4.4
		None	PaymentTerms	BRD For Order V 1.4.4
		None	TradeAgreement	BRD For Order V 1.4.4
Order-LineItem				BRD For Order V 1.4.4
		None	AllowanceCharge	BRD For Order V 1.4.4
		None	SimpleOrderLineItem	BRD For Order V 1.4.4
TradeAgreement				BRD For UK Foods Service Ordering V0.2 – BR4
	tradeAgreementReferenceDate			BRD For UK Foods Service Ordering V0.2 – BR4
	tradeAgreementReferenceNumber			BRD For UK Foods Service Ordering V0.2 – BR4

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1.5.2 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 Item. Purchase Order Line	Specify the information related to each line item within the order.	1..*

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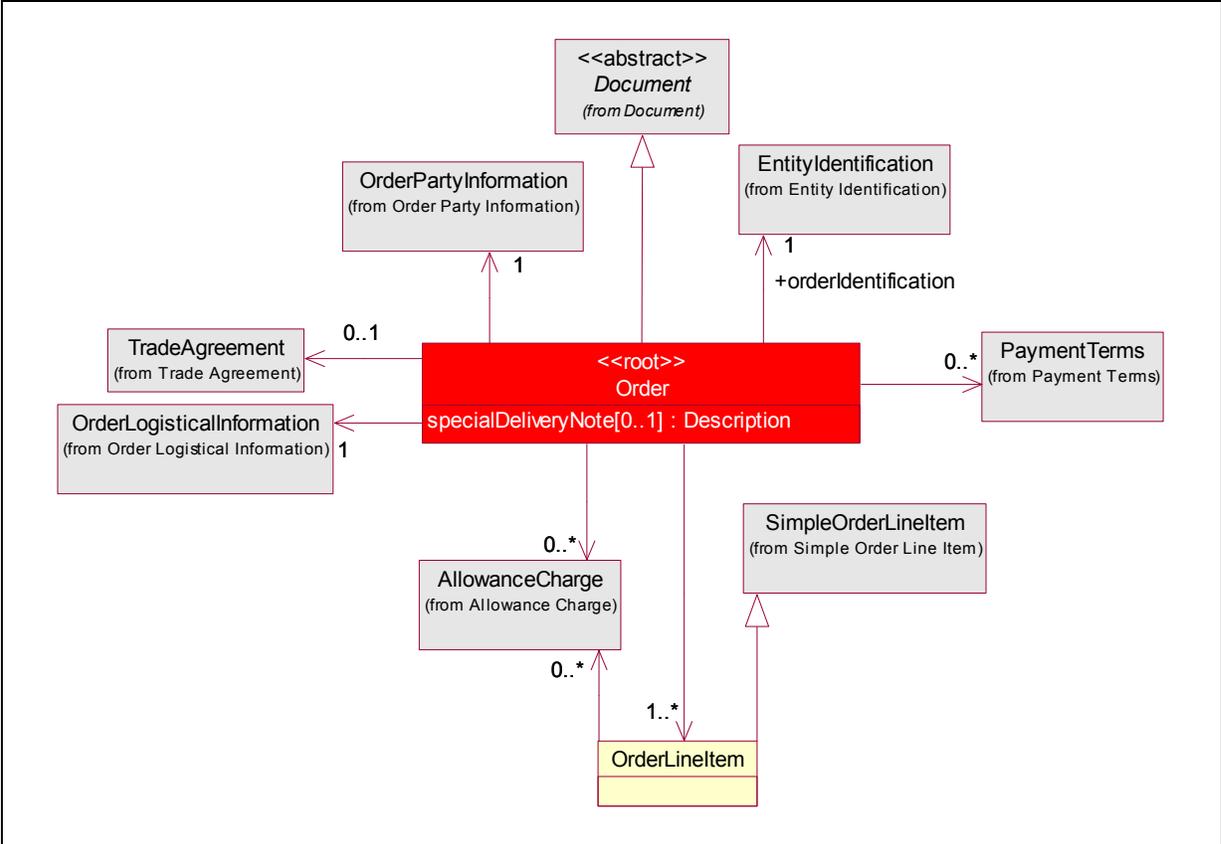
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
		None	OrderLogisticalInformation	Purchase Order. Association. Order_ Logistical Information Group	Contains the information related with the dates and destinations of the goods or 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.	
	tradeAgreementReferenceDate			Trade Agreement. Date_ Reference. Date	Unique date identifying a trade agreement that the order is	0..1

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Time	referring to.	
	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

1.5.3 Class Diagrams



1.5.4 Code Lists

No Code Lists

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1.6 Business Document Example

One store, identified by the GS1 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 GS1 Global Location Number 5412345000013, and the supplier is identified by the GS1 Global Location Number 4098765000010.

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

The buyer (5412345000013) orders the following:

GS1 Global Trade Item Number	Quantity
4098765000027	48
4098765000034	24

The entire order has to be shipped to the warehouse identified by the GS1 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.

1.7 Implementation Considerations

No Implementation Consideration

1.8 Testing

1.8.1 Pass / Fail Criteria

Unit testing criteria for business solution.

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

1.8.2 Test Data

Order	
Document	
Creation Date Time	2003 -11- 03 11:00
Document Status List	ORIGINAL

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

1.9 Appendices

No Appendix

1.10 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"> • Added LineItemCount class • Contains attribute: number • Added LineItemCount class to New Order Class diagram <p>Order class diagram (Business Process: Order: Order)</p> <ul style="list-style-type: none"> • Added Reference class to New Order class diagram (Roles: contractReferenceNumber, contractReferenceDate) <p>Order class diagram (Business Process: Order: Order)</p> <ul style="list-style-type: none"> • Added TextDescription class to New Order class diagram (SpecialDeliveryNotes) <p>Order Common Class Diagram</p> <ul style="list-style-type: none"> • Added Measurement class relating to SimpleOrderLineItem class • Contains UnitOfMeasure attribute 	Version 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"> • Consistency with BRD Order 1.4.4 • Elimination of Contract reference date • Inclusion of unit of measurement within the attributes of Order Line item. 	Version 0.2	
<p>Adjustments of the Data Description section and Class Diagrams: use of Contract reference</p>	Version 0.3	

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<ul style="list-style-type: none"> - Update document to BMS template approved 20041001 - Adjustments on text for clarifications. Section: 1.1.1, - Adjustments on the data descriptions for clarification. Section 1.5.1 - Adjustments on text and diagram agreed after public review comments resolution. 	Version 0.4	
<ol style="list-style-type: none"> 1. Copied the GDD platform into the BSD. (Need definitions for all definitions with either None or Not Available). 2. Replaced Contract Reference class with Trade Agreement class. Trade Agreement class is reused from the MultiShipTo Order work. Note the tradeAgreementReferenceDate attribute is now optional as it was mandatory in the previous version. 3. Deleted association from Trade Agreement class to Order Party Information class. 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. 5. Updated footer copyright as 2003-2005 	Version 0.5.0	
<ol style="list-style-type: none"> 1. Updated missing definitions in GDD 2. Included Test Data or Sample Data 	Version 0.6.0	
Copied GDD platform output into BSD.	Version 0.7.0	
Upgrade BMS document using BMS Template version 0.4 and sourced BSD Version 0.7.0	Version 0.8.0	06-000039

2 Technical Solution Design

This section provides the specifications for the standards content ITRG approves. It is called the Technical Solution Design (TSD).

Business Solution Design

The Technical Solution Design contains:

- TSD Zip file Table of Contents
- Business Message Standard Section Technical Level GDD Report
- XSD (XML Schema Documents)
- XML Instance File and HTML Form View (XML and HTML files containing sample data specified in Section 1.6)

In the process of approving the Technical Solution Design, the ITRG will be provided the following artifacts:

- Any relevant Business Requirements Analysis Document (BRAD)
- Any relevant Business Requirements Document (BRD)
- Section 1 of Business Message Standard (Business Solution Design)
- Comment Resolution Template from Technical Public Review
- XML Test Report
- Change Request
- Other informative or reference documents