

Business Message Standard (BMS)

For

Multi Shipment Order

BRG: Order

BMS Release 2.1

Document version: 0.12.7

Date: 26.08.2005



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CR Submitter(s):	BP on behalf of Order BRG MVC on behalf of RB (NAMM) RK on behalf of Upstream IRT
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Business Requirements Analysis Document (BRAD) Reference

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BRD Title: Multi Ship to Order
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BRD Version: v 0.3.8 A

BRAD Title: Multi Ship to Order
BRAD Date: May 10, 2004
BRAD Version: v 0.3.9

BRAD Title: Enhancements Multi Ship to Order Music Industry
BRAD Date: October 10, 2004
BRAD Version: v 0.0.2

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BRAD Date: November 1, 2004
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Document Summary

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Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
20041208	0.0.1	MVC, RT	Creation of the document	Migration of the BRD Multi Ship to Order approved by Order BRG and ITRG for publication December 2004 Update based on new requirements: - Cross Docking Ordering process - Enhancements for the music Industry	
09/12/2004	0.0.2	RT	Incorporated changes agreed upon during conference call of 08/12/2004	Modified Order Common (locally) to show NameAndAddress class as option coming off ShipToLogistics class. Its association is called shipToNonCommercial to reflect a "DirectTo-Consumer" scenario. Also named the shipTo association from ShipToLogistics to PartyIdentification as shipToCommercial, to differentiate a pure commercial relationship. Both associations are choice relationships. Also, in the Multi Ship To Order class diagram, changed role name from buyerName to buyerI-	

				dentification.	
13/12/2004	0.0.3	RT		Removed note in the changes to common class. Changed shipToCommercial back to shipTo in Order common class. Removed role name from MultiShipToOrder to OrderLogisticalInformation.	
20.12.2004	0.0.4	RT		Incorporated common class diagrams, GDD information and code lists.	

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
27/12/2004	0.0.5	RT		Inserted Party Common class diagram	
02/01/2005	0.0.6	MVC	Finishing the document for public review	Adjustments of GDD definitions according BRADs approved	
26/01/2005	0.0.7	MVC, RT	Modifications on the texts and classes according to the final resolutions on the public review	<ul style="list-style-type: none"> - Use of the terms business message and ultimate consignee in the problem statement. - Inclusion of the ITRG member (liaison), - Format Table of content - Wording use case description. - Modifications to class diagram 	
03/02/2005	0.0.8	MVC, RT	Modifications on the texts and classes according to the final resolutions on the public review	<ul style="list-style-type: none"> - Replace promotional code header and line role by promotional deal role - Change the relation class Contact to Order Party Information with the role Order Contact - Add the mode attribute to Simple Order Line Item - Add Ship to Detail definition 	

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
				<ul style="list-style-type: none"> - Remove data source relation - Formatting in the GDD grid - Change the Ship to non-Commercial definition - Include examples for the different scenarios - Include BRG Participants 	
15/02/2005	0.0.9	RT	Modifications on texts and classes according to BRG comments	<ul style="list-style-type: none"> - Added carrier role to PartyIdentification from SimpleOrderLineItem which puts carrier at the Line level. Mode and requestedQuantity are already at the Line level as attributes of SimpleOrderLineItem. - Added mode and carrier roles at the header level from ShipToLogistics and ShipFromLogistics to PartyIdentification. - Made corresponding text changes in GDD report 	
18/02/2005	0.10.0	JR	<p>Updates</p> <p>Advanced to XML for development</p> <p>Definitions needed for GDD section 1.5.2. GDD platform needs to be updated.</p>	<ul style="list-style-type: none"> - Review Change History Section 1.9 	<p>Model P4CL: 5774</p> <p>BSD P4CL: 5777</p>
14/03/2005	0.10.1	JR	Pasted GDD generated report	Included in section 1.5.2 GDD Report	
14/03/2005	0.10.2	JR and MVC	Updated GDD	Updated the missing or	BSD

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
				"Not Available" definition in section 1.5.2	P4CL: 6034
22/04/2005	0.10.3	JR and MVC	Update section 1.7 Implementation Considerations	Update Section according comments received from TRG	BSD P4CL: 6483
08/03/2005	0.11.1	RK	Incorporating Gap-analysis between Upstream standards Purchase Order and Multi Ship To Order	- Updated the class diagrams according to the gap analysis v 0.1.3 08/03/2005	Model P4CL: BSD P4CL:
14/03/2005	0.11.2	RK	Incorporating feedback from Order BRG Telecon 09/03/2005	- Changed +purchaseConditions from mandatory to optional - Changed BSD name to "Multi Shipment Order" - Changed "MultiShipToOrderLineItem" to "MultiShipmentOrderLineItem" - Changed "ShipToDetail" to "ShipmentDetail"	Model P4CL: 6027 BSD P4CL: 6027
24/03/2005	0.11.3	RK	Incorporating feedback from Peer Review (by JR)	<i>(See for details 1.9 Summary of Changes under 0.1.3)</i>	Model P4CL: 6094 BSD P4CL: 6094
04.04.2005	0.11.4	CJ	Peer review comments.	- Changed document version numbering. 0.10.0 is the version voted on by ITRG for BMS 2.0, 0.10.x will include comments still to be included in BMS 2.0. - Version 0.11.0 is the start for post 2.0 development, such as Upstream Stan-	

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
				dards. - Changed report layouts in paragraphs 1.5.1 and 1.5.2.	
02.05.2005	0.12.0	CJ	Public review comments	- Several functional changes, see paragraph 1.9. - Changed the format of the examples in paragraph 1.8.2. - Changed the text of paragraph 1.2	
09.05.2005	0.12.1	CJ	CR 05-000084	- Functional changes, see paragraph 1.9.	
23.05.2005	0.12.2	CJ	Peer review comments	- Added BMS Publication to title page.	
30.05.2005	0.12.3	CJ	Peer review comments	- Common library changes	
03.08.2005	0.12.4	JR	Incorporate ITRG Comments	- In ODEN replaced Multi Ship To→ Multi Shipment - In GDD redefined ShipmentDetails - Added Common Library Reference	MDL P4CL 7239
08.08.2005	0.12.5	MVC	Incorporate ITRG Comments on Examples and Test Data	- Modification in Examples and Test Data A and D - Use correct class names on section 1.7	BSD P4CL: 7290
26.08.2005	0.12.6	JR	Final ITRG comment resolution concerning currencyExchnageRate	- Updated class diagram on section 1.7 and GDD. - Detail changes depicted in section 1.8	MDL P4CL 7363 BSD P4CL: 7366
27.04.2007	0.12.7	Giovanni Biffi	Editorial Changes	- Minor Editorial Updates to the Document	N/A

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1 Business Solution

1.1 Business Domain View

1.1.1 Problem Statement / Business Need

The Multi Shipment Order provides the ability to order different quantities of trade items/services originating from multiple locations of the seller shipped to multiple locations of the buyer using one business message.

The multi-shipment order process initiated by the buyer includes the capability to:

- Request shipment from multiple locations
- Request shipment to multiple locations which can include ultimate consignees or inventory locations
- Vary the quantity of the trade item/service by each ship to location
- Vary the quantities to the ship to locations per the order line item
- Specify dates per each ship to location
- Specify dates per the order line item

1.1.2 Objective

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

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.

1.1.4 Artefacts

Artefact name	State	Artefact / State description
Multi Shipment Order	- PREPARED - COMMUNICATED	

1.1.5 References

Ref#	Reference Name	Description
Ref 1	BRD For Multi Ship to Order v0.3.8 A	
Ref 2	BRD For Multi Ship to Order v0.3.9	
Ref 3	BRAD for Enhancements Multi-Ship to Order Music Industry	
Ref 4	BRAD Upstream Standards – Demand & Supply Signals v 0.1.0	
Ref 5	ITRG Comment Resolution Sheet	

1.1.6 Acknowledgements

1.1.7 BRG Members

Function	Name	Company / organisation
BRG Chair	Bill Purnell	Foot Locker
BRG Member	Alice Aguemon	GS1 France
BRG Member	Branko Safaric	GS1 Slovenia
BRG Member	Brendon Beumer	Royal Ahold
BRG Member	Caren Kaegebein	VF Corporation
BRG Member	Don Weston	Pfizer Canada
BRG Member	Dorien Mouthaan	GS1 Netherlands
BRG Member	Frank Kuhlmann	GS1 Germany
BRG Member	Frederico Cunha	GS1 Brazil
BRG Member	Johnny Tang	GS1 Hong Kong
BRG Member	Marcelo Alonso	GS1 Argentina
BRG Member	Massimo Bolchini	GS1 Italy
BRG Member	Naoto Sakamoto	GS1 Japan
BRG Member	Steve Wilhoit	Eveready Battery Company
BRG Member	Thomas Moriarty	JC Penney Co. Inc

1.1.8 ITRG Members

Function	Name	Company / organisation
ITRG Member	Pam Flaten	Target Stores

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

Function	Name	Company / organisation
BRG Participant	Tan Jin Soon	GS1 Singapore

1.1.10 Design Team Members

Function	Name	Organisation
Modeller	Regenald Kramer	GS1
Modeller	Coen Janssen	GS1 Netherlands
XML Technical Designer	Dipan Anarkat	GS1
EANCOM Technical Designer	Marco Schuyt	GS1 Netherlands
Peer Reviewer	John Ryu	GS1

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1.2 Business Context

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

1.3 Additional Technical Requirements Analysis

1.3.1 Technical Requirements (optional)

Number	Statement	Rationale
	<i>No technical requirements</i>	

1.4 Business Transaction View

1.4.1 Business Transaction Use Case Diagram

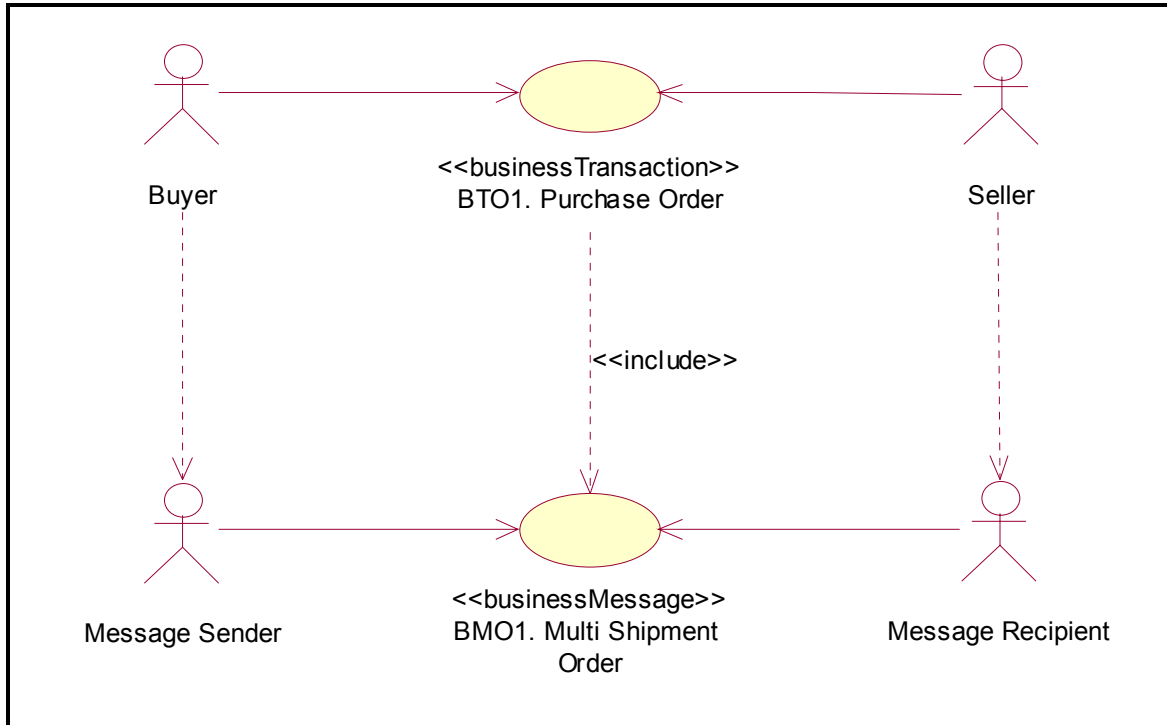


Figure 1 – Multi Shipment Order Use Case Diagram

1.4.2 Use Case Description

Use Case ID	BTO1
Use Case Name	(Multi Shipment) Purchase Order
Use Case Description	This use case provides the ability to order different quantities of trade items/ services originating from multiple locations of the seller shipped to multiple locations of the buyer using one business message.
Actors (Goal)	Buyer: to send the (Multi Shipment) Purchase Order Seller: to receive the (Multi Shipment) Purchase Order
Performance Goals	
Preconditions	(Multi Shipment) Purchase Order: PREPARED <ul style="list-style-type: none"> • The Buyer and Seller have aligned Party and Item information. • The Buyer and Seller have established their trading partner agreements • The trading partners (Buyer and Seller) must exchange and have aligned

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	<p>their basic business data such as trading partner names, addresses, locations (Party Information), Item information and Price information.</p> <ul style="list-style-type: none"> The Buyer and Seller have agreed that each can produce and process a purchase order with multiple ship-to locations with varied quantities and dates of trade items/services per ship-to location. The Buyer and Seller have agreed on whether a Receipt Acknowledgement or Order Confirmation messages are required, as an option based on the pre-determined trading partner agreements. Purchase conditions have been agreed upon.
Post conditions	<p>(Multi Shipment) Purchase Order: COMMUNICATED</p> <ul style="list-style-type: none"> The Seller has received the Multi Shipment Order sent by the Buyer
Scenario	<p>Begins when the Buyer sends the Multi Shipment Order to the seller indicating multiple ship-to locations with respective trade items/services and quantities.</p> <p>Ends when the Seller receives the Multi Shipment Order for processing.</p>
Alternative Scenario	

1.4.3 Business Transaction Activity Diagram(s)

No Activity Diagram

1.4.4 Business Transaction Sequence Diagram(s) (optional)

No Sequence Diagram

Information Model (including GDD Report)

1.4.5 Data Description:

The related requirement ties back to the original BRD/BRAD. The [...] refers to the specific BRD/BRAD and those are listed in section 1.1.5, and the specific section is depicted in the {...}

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirement
MultiShipmentOrder				
		None	AllowanceCharge	
		None	CurrencyExchangeRateInformation	[Ref 5] comment #20
		None	Document	[Ref 4] {7.4.1-2}, {7.4.1-3}
		orderIdentification	EntityIdentification	[Ref 4] {7.4.1-1}
		None	MultiShipmentOrderLineItem	
		None	OrderLogisticalInformation	[Ref 4] {7.4.1-7}, {7.4.1-8}, {7.4.1-9}, {7.4.1-16}, {7.4.1-17}, {7.4.1-18}, {7.4.1-19},

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirement
				{7.4.1-20}
		None	OrderPartyInformation	{7.4.1-5}, {7.4.1-6}, {7.4.1-10}
		None	PaymentTerms	[Ref 4] {7.4.1-23}
		promotionalDeal	TradeAgreement	[Ref 3]
MultiShipmentOrderLineItem				[Ref 4] {7.4.1-4}, {7.4.1-13}
		None	AllowanceCharge	[Ref 1], [Ref 2]
		None	ShipmentDetail	[Ref 1], [Ref 2]
		None	SimpleOrderLineItem	[Ref 4] {7.4.1-11}, {7.4.1-12}, {7.4.1-14}, {7.4.1-15}, {7.4.1-21}, {7.4.1-22}
		materialSpecification	Reference	
		promotionalDeal	TradeAgreement	
		purchaseConditions	DocumentOrDocumentLineReference	
ShipmentDetail				[Ref 4] {7.4.1-7}, {7.4.1-8}, {7.4.1-9}, {7.4.1-14}, {7.4.1-15}
	requestedQuantity			
		None	OrderLogisticalDateGroup	
		inventoryLocation	PartyIdentification	
		purchaseConditions	DocumentOrDocumentLineReference	
		shipFrom	PartyIdentification	
		shipTo	PartyIdentification	
		ultimateConsignee	PartyIdentification	
		None	ShipmentTransportationInformation	[Ref 3]

1.4.6 GDD Report:

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name (ODEN)	Definition	Multiplicity
MultiShipmentOrder				Multi Shipment_ Purchase Order. Details	The Multi Shipment Order provides the ability for a buyer to order variable quantities of trade items/services shipped from and to multiple locations using one business message	
		None	AllowanceCharge	Multi Shipment_ Purchase Order. Association. Allowance Charge	Contains the information related with the allowance charge in the Multi Shipment Order.	0..*
		None	CurrencyExchangeRateInformation	Multi Shipment_ Purchase Order. Association. Currency Exchange Rate Information	Rate at which one currency may be converted into another. Generally, one unit of the home currency is expressed in terms of another currency. For example, a North American bank may quote the exchange rate between the dollar and the Euro as the number of dollars needed to buy one Euro.	0..1
		None	Document	Multi Shipment_ Purchase Order. Inheritance. Electronic_ Document	Contains the information related with the document in the Multi Shipment Order.	1..1
		orderIdentification	EntityIdentification	Multi Shipment_ Purchase Order. Order Identification_ Association. Entity Identification	The unique identification of the Order	1..1
		None	MultiShipmentOrderLineItem	Multi Shipment_ Purchase Order. Association. Multi Shipment_ Purchase Order Line	Specify the information related to each line item. Multi Shipment Order will contain one or more line items	1..*

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name (ODEN)	Definition	Multiplicity
		None	OrderLogisticalInformation	Multi Shipment_ 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	Multi Shipment_ Purchase Order. Association. Order_ Party Group	Contains the information related with the parties involved in the order process.	1..1
		None	PaymentTerms	Multi Shipment_ Purchase Order. Association. Payment Terms	Contains the information related with the parties involved in the order process.	0..*
		promotionalDeal	TradeAgreement	Multi Shipment_ Purchase Order. Promotional Deal_ Association. Trade Agreement	Number assigned by a vendor to a special promotion activity.	0..1
MultiShipmentOrderLineItem				Multi Shipment_ Purchase Order Line. Details	Specify the information related to each line item. Each Multi Ship to Order will contain one or more line items.	
		None	AllowanceCharge	Multi Shipment_ Purchase Order Line. Association. Allowance Charge	Contains the information related with the allowance charge in the detail order level.	0..*
		None	ShipmentDetail	Multi Shipment_ Purchase Order Line. Association. Multi Shipment_ Purchase Order Sub Line	Allows the identification of various shipping details by line item.	0..*
		None	SimpleOrderLineItem	Multi Shipment_ Purchase Order Line. Inheritance. Simple_ Purchase Order Line	Specify the information related to each line item within the order.	1..1
		materialSpecification	Reference	Multi Shipment_ Purchase Order Line. Material Specification_ Asso-	A reference to a material specification. The reference is associated with specific items in the order.	0..1

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name (ODEN)	Definition	Multiplicity
				Multi Shipment_ Purchase Order Line. Promotion. Reference		
		promotionalDeal	TradeAgreement	Multi Shipment_ Purchase Order Line. Promotional Deal_ Association. Trade Agreement	A reference to a trade agreement related to a promotional deal. The reference is associated with specific items in the order.	0..1
		purchaseConditions	DocumentOrDocumentLineReference	Multi Shipment_ Purchase Order Line. Purchase Conditions_ Association. Document Or Document Line Reference	A reference to the purchase conditions. The reference is associated with specific items in the order.	0..1
ShipmentDetail				Multi Shipment_ Purchase Order Sub Line. Details	Allows the identification of various shipping details by MultiShipmentOrder-LinItem.	
	requestedQuantity			Multi Shipment_ Purchase Order Sub Line. Requested_ Quantity. Quantity	The quantity which has been requested.	1..1
		None	OrderLogisticalDate-Group	Multi Shipment_ Purchase Order Sub Line. Association. Order Logistical_ Date Group	The date/time on which the goods are requested, to be delivered, pickup or shipped.	0..1
		inventoryLocation	PartyIdentification	Multi Shipment_ Purchase Order Sub Line. Inventory location_ Association. Party Identification	The location where the goods are stored.	0..1
		purchaseConditions	DocumentOrDocumentLineReference	Multi Shipment_ Purchase Order Sub Line. Purchase Conditions_ Association. Document Or Document Line Reference	A reference to the purchase conditions. The reference is associated with specific items in the order.	0..1

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name (ODEN)	Definition	Multiplicity
		shipFrom	PartyIdentification	Multi Shipment_ Purchase Order Sub Line. Ship From_ Association. Party Identification	The location from which goods will be shipped.	0..1
		shipTo	PartyIdentification	Multi Shipment_ Purchase Order Sub Line. Ship To_ Association. Party Identification	The location destination to which goods will be shipped.	0..1
		ultimateConsignee	PartyIdentification	Multi Shipment_ Purchase Order Sub Line. Ultimate Consignee_ Association. Party Identification	The final destination to which goods will be shipped.	0..1
		None	ShipmentTransportationInformation	Multi Shipment_ Purchase Order Sub Line. Association. Transportation Mode	Contains the identification of the carrier and mode associated with the transportation of the goods or services.	0..1

1.4.7 Class Diagram

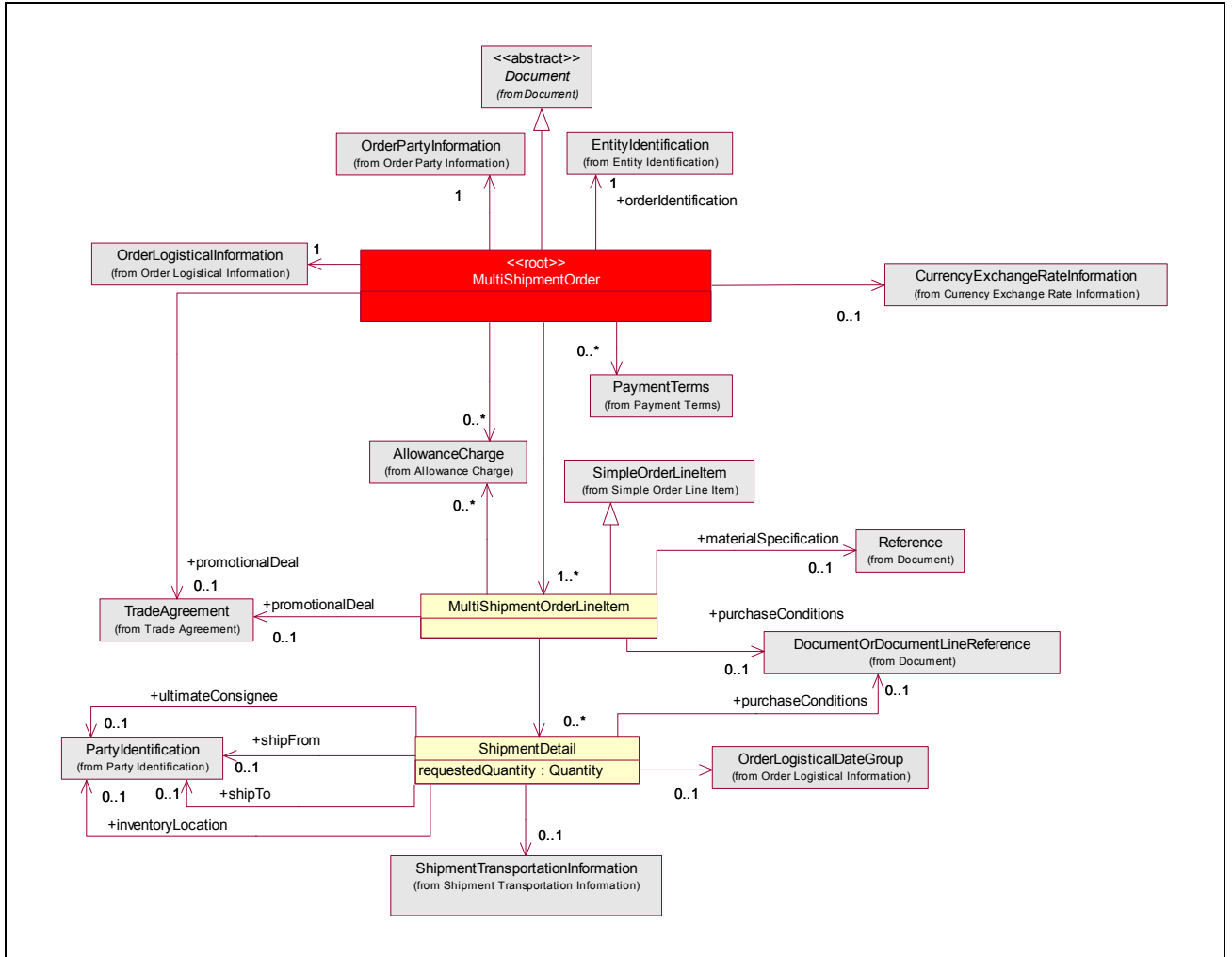


Figure 2 – Multi Shipment Order Class Diagram

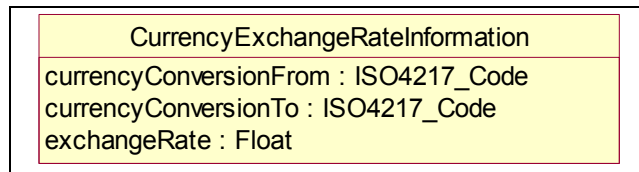


Figure 3 – Currency Exchange Rate Information Class Diagram

**Incorporated into Process Common Components as Currency Exchange Rate Information into Common Library for BMS doc version 0.2.9

1.4.8 Code Lists

Not applicable

1.5 Business Document Examples

Example A:

The following is an example of the use of the Multi Shipment Order Message.

The buyer identified by the EAN.UCC Global Location Number 7594567000014 places an order to the supplier identified by the EAN.UCC Global Location Number 8431472300015.

The order identification is PO0222 and is placed on 21st of July 2004 at 10:00 AM.

The main distribution center is identified by the EAN.UCC Global Location Number 7594567000090 where the goods should be shipped to and delivered on 23rd July 2004 (if no other specification is given).

The buyer orders the following:

EAN.UCC Global Trade Item Number	Quantity	Location
08431472300053	25	7594567000090
08431472300053	14	7594567000083

Example B:

The following is an example of the use of the Multi Shipment Order Message for Cross Docking Order with multiple cross docking destinations and multiple final destinations.

The buyer identified by the EAN.UCC Global Location Number 7704567000017 places an order to the supplier identified by the EAN.UCC Global Location Number 8881472300018.

The order identification is PO0341 and is placed on 4th of March 2004 at 10:00 AM.

The main distribution center is identified by the EAN.UCC Global Location Number 7704567000024 where the goods should be shipped to and delivered the 15th of March 2004 (if no other specification is given).

The buyer orders the following:

EAN.UCC Global Trade Item Number	Quantity	Warehouse	Store	Delivery Date
08881472300049	8	-	-	-
08881472300025	15	7704567000031	7704567000063	2004-03-12 (Store)
08881472300032	10	7704567000031	7704567000079	2004-03-13 (Store)

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Example C:

The following is an example of the use of the Multi Shipment Order Message with additional information used within the music industry.

The buyer identified by the EAN.UCC Global Location Number 0079452000319 places an order to the supplier identified by the EAN.UCC Global Location Number 0074562000457. The person responsible for issuing the order is Joe Smith.

The order identification is PO00759, is placed on the 3rd of February 2005 at 10:00 AM makes reference to the promotional deal number AHK00765.

The goods have to be shipped directly to the consumer by a carrier identified by the EAN.UCC Global Location Number 0078245000635 by air (4th February 2005).

The buyer orders the following:

EAN.UCC Global Trade Item Number	Quantity	Consumer information	Delivery Date
00074562000525	2	Carol Johnson 1900 NW 150 Ave Pembroke Pines FL 33028 US	2005-02-04

Example D:

The following is an example of the use of the Multi Shipment Order Message between a manufacturer (Buyer) and his material supplier (Seller) (so the Upstream Supply Chain) with one ship to location and multiple inventory locations at this ship to location.

The buyer, identified by the EAN.UCC Global Location Number 8713145000034 places an order to the supplier is identified by the EAN.UCC Global Location Number 8612423005669.

The order identification is PO-FK23491 and is placed on 9th of March 2005 at 10:30 AM. The reference to the purchase conditions is done by the number CT2005-Q1. The order contact is Mr. Kramer the goods requirements planner involved is Mr. Kempkes.

The ship-to address which is the plant of the manufacturer is identified by the EAN.UCC Global Location Number 8712423005778 where the 2 items should be delivered the 15th of March 2004 at 2 specific inventory locations for storage. One of the items is specifically shipped from the materials supplier site 8612423005612 (ship-from).

The buyer orders the following:

Item GTIN	Ship From GLN	Quantity	Plant GLN	Inventory Location GLN
05411100203461	8612423005612	350 KGM	8712423005778	8712423000339
01234550123456		210 KGM	8712423005778	8712423000322

1.6 Implementation Considerations

In the business case scenario where there is the ship to location that is present at the order line item level (use of Shipment Detail class), it overrides the ship to location specified for the entire Multi Shipment Order. Once it is used, it is recommended, but not mandatory, to identify ship to locations per the total quantity ordered per line item. In that scenario, the quantities in the shipment detail level should equal the total order quantity at the line item level (Refer to Example A).

Depending on the business case scenario (Upstream or Downstream), the identification of Inventory location or Ultimate Consignee are mutually exclusive.

In the business scenario where the ship to location and the inventory location roles are used, it means that the goods are going to be delivered to the ship to location and the goods will be stored at the inventory location.

1.7 Testing

None

1.7.1 Pass / Fail Criteria

Number	Test Criteria	Related Requirement	Design Element	Pass Criteria	Fail Criteria

1.7.2 Test Data

Example A:

MultiShipmentOrder	
<i>Document</i>	
<i>creationDateTime</i>	2004-07-21T10:00:00
<i>documentStatus</i>	ORIGINAL
EntityIdentification (+orderIdentification)	
<i>uniqueCreatorIdentification</i>	PO0222
PartyIdentification (+contentOwner)	
<i>gLN</i>	7594567000014
OrderPartyInformation	
PartyIdentification (+seller)	
<i>gLN</i>	8431472300015
PartyIdentification (+buyer)	
<i>gLN</i>	7594567000014
OrderLogisticalInformation	
ShipToLogistics	
PartyIdentification (+shipTo)	
<i>gLN</i>	7594567000090
OrderLogisticalDateGroup	
LogisticalDate (+requestedDeliveryDate)	
<i>date</i>	2004-07-23
MultiShipmentOrderLineItem	
SimpleOrderLineItem	
<i>LineItem</i>	
<i>lineItemNumber</i>	1
<i>requestedQuantity</i>	39
TradeItemIdentification	
<i>gTIN</i>	08431472300053
ShipmentDetail	
<i>requestedQuantity</i>	25
PartyIdentification (+shipTo)	
<i>gLN</i>	7594567000090
ShipmentDetail	
<i>requestedQuantity</i>	14
PartyIdentification (+shipTo)	
<i>gLN</i>	7594567000083

Business Solution Design

Example B:

	Value
Document	
<i>creationDateTime</i>	2004-03-04 10:00
<i>documentStatus</i>	ORIGINAL
Entity Identification (+orderIdentification)	
<i>uniqueCreatorIdentification</i>	PO0341
PartyIdentification (+contentOwner)	
<i>gLN</i>	7704567000017
OrderPartyInformation	
PartyIdentification (+seller)	
<i>gLN</i>	8881472300018
PartyIdentification (+buyer)	
<i>gLN</i>	7704567000017
OrderLogisticalInformation	
ShipToLogistics	
PartyIdentification (+shipTo)	
<i>gLN</i>	7704567000024
OrderLogisticalDateGroup	
LogisticalDate (+requestedDeliveryDate)	
<i>date</i>	2004-03-15
MultiShipmentOrderLineItem	
SimpleOrderLineItem	
LineItem	
<i>lineItemNumber</i>	1
<i>requestedQuantity</i>	8
TradeItemIdentification	
<i>gTIN</i>	08881472300049
MultiShipmentOrderLineItem	
SimpleOrderLineItem	
LineItem	
<i>lineItemNumber</i>	2
<i>requestedQuantity</i>	15
TradeItemIdentification	
<i>gTIN</i>	08881472300025
ShipmentDetail	
<i>requestedQuantity</i>	15
PartyIdentification (+shipTo)	
<i>gLN</i>	7704567000031
PartyIdentification (+ultimateConsignee)	
<i>gLN</i>	7704567000063
OrderLogisticalDateGroup	
LogisticalDate (+requestedDeliveryDateAtUltimateConsignee)	

Business Solution Design

	Date	2004-03-12
MultiShipmentOrderLineItem		
SimpleOrderLineItem		
<i>LineItem</i>		
	<i>lineItemNumber</i>	3
	requestedQuantity	10
TradeItemIdentification		
	gTIN	08881472300032
ShipmentDetail		
	requestedQuantity	10
PartyIdentification (+shipTo)		
	gLN	7704567000031
PartyIdentification (+ultimateConsignee)		
	gLN	7704567000079
OrderLogisticalDateGroup		
LogisticalDate (+requestedDeliveryDateAtUltimateConsignee)		
	Date	2004-03-13

Example C:

MultiShipmentOrder		
<i>Document</i>		
	<i>creationDateTime</i>	2005-02-03 10:00
	<i>documentStatus</i>	ORIGINAL
EntityIdentification (+orderIdentification)		
	uniqueCreatorIdentification	PO00759
PartyIdentification (+contentOwner)		
	gLN	0079452000319
TradeAgreement (+promotionalDeal)		
	tradeAgreementReferenceNumber	AHK00765
OrderPartyInformation		
PartyIdentification (+seller)		
	gLN	0074562000457
PartyIdentification (+buyer)		
	gLN	0079452000319
Contact (+orderContact)		
MultiDescription (+personOrDepartmentName)		
	description (language, text)	EN, Joe Smith
OrderLogisticalInformation		
ShipToLogistics		
NameAndAddress (+ShipToNonCommercial)		
	name	Carol Johnson
	streetAddressOne	1900 NW 150 Ave

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city	Pembroke Pines
state	FL
postalCode	33028
countryISOCode	US
ShipmentTransportationInformation	
transportationMethodType	AIR
PartyIdentification (+carrier)	
gLN	0078245000635
OrderLogisticalDateGroup	
LogisticalDate (+requestedDeliveryDate)	
date	2005-02-04
MultiShipmentOrderLineItem	
SimpleOrderLineItem	
LineItem	
lineItemNumber	1
requestedQuantity	2
TradeItemIdentification	
gTIN	00074562000525

Business Solution Design

Example D:

MultiShipmentOrder	
<i>Document</i>	
<i>creationDateTime</i>	2005-03-09 10:30
<i>documentStatus</i>	ORIGINAL
EntityIdentification (+orderIdentification)	
<i>uniqueCreatorIdentification</i>	PO-FK23491
PartyIdentification (+contentOwner)	
<i>gLN</i>	8713145000034
OrderPartyInformation	
PartyIdentification (+seller)	
<i>gLN</i>	8612423005669
PartyIdentification (+buyer)	
<i>gLN</i>	8713145000034
Contact (+orderContact)	
MultiDescription (+personOrDepartmentName)	
<i>description (language, text)</i>	EN, Mr. Kramer
Contact (+goodsRequirementsPlanner)	
MultiDescription (+personOrDepartmentName)	
<i>description (language, text)</i>	EN, Mr. Kempkes
OrderLogisticalInformation	
ShipToLogistics	
PartyIdentification (+shipTo)	
<i>gLN</i>	8712423005778
OrderLogisticalDateGroup	
LogisticalDate (+requestedDeliveryDate)	
<i>date</i>	2005-03-15
MultiShipmentOrderLineItem	
SimpleOrderLineItem	
<i>LineItem</i>	
<i>lineItemNumber</i>	1
<i>requestedQuantity</i>	350 KGM
TradeItemIdentification	
<i>gTIN</i>	05411100203461
DocumentOrDocumentLineReference (+purchaseConditions)	
DocumentReference	
EntityIdentification	
<i>uniqueCreatorIdentification</i>	CT2005-Q1
ShipmentDetail	
<i>requestedQuantity</i>	350 KGM
PartyIdentification (+shipFrom)	

Business Solution Design

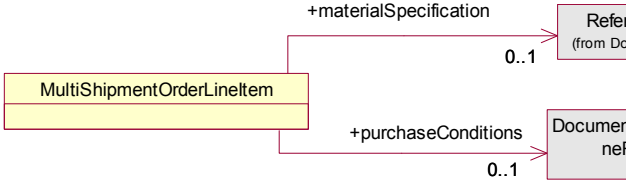
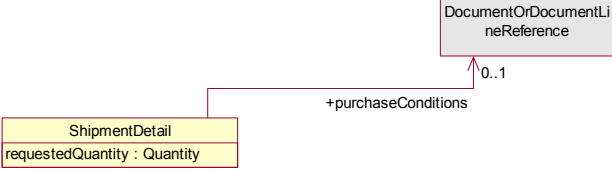
	gLN	8612423005612
PartyIdentification (+inventoryLocation)		
	gLN	8712423000339
MultiShipmentOrderLineItem		
SimpleOrderLineItem		
LineItem		
	lineItemNumber	2
	requestedQuantity	210 KGM
TradeItemIdentification		
	gTIN	01234550123456
DocumentOrDocumentLineReference (+purchaseConditions)		
DocumentReference		
EntityIdentification		
	uniqueCreatorIdentification	CT2005-Q1
ShipmentDetail		
	requestedQuantity	210 KGM
PartyIdentification (+inventoryLocation)		
	gLN	8712423000322

1.8 Summary of Changes

Change	BMS Version	Associated CR Number
<p>Removed external class diagrams. External class diagrams should be referenced in the Common Library BSD.</p> <p>Updated MultiShipToOrder class diagram</p> <p>Added an optional association from ShipToDetail to TransporationMode.</p> <p>Added an optional association from ShipToLogistics to TransporationMode.</p> <p>Added an optional association from SimpleOrderLineItem to TransporationMode.</p> <p>Added optional association from Transportaion-Mode to PartyIdentificaiton with role of +carrier</p> <p>Still need definitions in GDD and updates needed to GDD Platform to generated the Official Dictionary Entry Name.</p> <p>Updated footer</p>	0.10.0	
<p>GDD platform has been updated, and the output copied in section 1.5.2 GDD Report.</p> <p>Vicky and Order BRG needs to validate the definitions and provide definitions for "Not Available".</p>	0.10.1	
<p>MVC and JR updated the missing definition in 1.5.2 GDD report</p>	0.10.2	
<p>MVC and JR updated section 1.7 according to comments received on ITRG review</p>	0.10.3	

<p>Updated GTIN data in examples and test data to 14 digits (leading zero's)</p> <p>Various errata in examples and test data</p> <p>Added example D in examples and test data</p> <p>Changed "Multi Ship To Order" to "Multi Shipment Order"</p> <p>Incorporated Upstream solution in section 1.1 "Business Domain View" and section 1.4 "Business Transaction View"</p> <p>Added Upstream requirements to table in section 1.5.1</p> <p>Added Upstream elements to GDD report in section 1.5.2 and class diagram in section 1.5.3:</p> <ul style="list-style-type: none"> - +materialSpecification [0..1] - +purchaseConditions [0..1] - +shipFrom [0..1] - +inventoryLocation [0..1] - Quantity (Datatype) 	0.11.0	04-000212
<p>BSD Template version 1.1</p> <p>Target BMS Publication Version: Post Version 2.0.1</p> <p>Table of Contents updated</p> <p>GUSI is spelled out</p> <p>System Capabilities: All</p> <p>Added text "No Technical Requirements"</p> <p>Removed "for" in Use Case Description (typo)</p> <p>(M) is removed from Class Diagram (in Transportation-Mode)</p> <p>+inventoryLocation association is re-drawn</p> <p>Removed "List" from Document Status (in examples)</p> <p>Added MoU (KGM) in example D</p>	0.11.1	04-000212

Business Solution Design

<p>Changed some associations from MultiShipmentOrderLineItem → TradeAgreement:</p> <ul style="list-style-type: none"> • +purchaseConditions now associates to the DocumentOrDocumentLineReference class. • +materialSpecification now relates to the Reference class.  <p>Added association</p> 	0.12.0	04-000212
<p>Changed name of TransportationMode class into TransportationInformation. The structure of the class also has changed (see the class diagram in the common library):</p> <ul style="list-style-type: none"> • Added attributes serviceLevelCode and shipmentSpecialHandlingCode • Changed cardinality of association to PartyIdentification (+carrier) from 1..1 into 0..1. 	0.12.1	05-000084
<p>Changed name of TransportationInformation class into ShipmentTransportationInformation.</p>	0.12.3	05-000084
<ul style="list-style-type: none"> - In ODEN replaced Multi Ship To → Multi Shipment - In GDD redefined ShipmentDetails - Added currencyExchangeRate[0..1]:ISO4217_Code in MultiShipmentOrder class and the GDD. - Changed file location to match common library ShipmentTransportationInformation (from ShipmentTransportationInformation). 	0.12.4	
<ul style="list-style-type: none"> - Modification in Examples and Test Data A and D - Use correct class names on section 1.7 	0.12.5	05-00084

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<ul style="list-style-type: none">- Removed currencyExchangeRate[0..1] : ISO4217_Code in MultiShipmentOrder class. and replaced with association- From: MultiShipmentOrder- TO: [0..1] CurrencyExchangeRateInformation-- Added into common library BSD P4CL: 7365 Doc Version: 0.2.9- CurrencyExchangeRateInformation- currencyConversionFrom : ISO4217_Code- currencyConversionTo : ISO4217_Code- exchangeRate : Float	0.12.6	Based on ITRG Comment Resolution Feedback.
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2 Technical Solution Design

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

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 artefacts:

- 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