

# **Business Message Standard (BMS)**

**for**

## **Deliver/Warehouse Shipping Order**

**BRG: Deliver**

**BMS Release: 2.0.2**

**Document Version: 2.0.3**

**Release Date: 31.03.2005**



### Change Request Reference

<b>Refer to Change Request (CR) Number(s):</b>	01-000087
<b>CR Submitter(s):</b>	Deliver BRG
<b>Date of CR Submission to GSMP:</b>	N/A

### Business Requirements Document (BRAD) Reference

<b>BRAD Title:</b> BRD Warehouse Shipping Order – Business Requirement Document
<b>BRAD Date:</b> 30/06/2004
<b>BRAD Version:</b> 1.0.5

<b>BRAD Title:</b>
<b>BRAD Date:</b>
<b>BRAD Version:</b>

### Document Summary

<b>Document Title:</b>	BMS for Deliver/Warehouse Shipping Order				
<b>Document Version</b>	2.0.3				
<b>Owner:</b>	Deliver				
<b>Status:</b>	( <i>Check one box</i> )	DRAFT	✓	Approved	
<b>BMS Template Version:</b>	1.0				
<b>Targeted BMS Release:</b>	2.0.2				

### Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
29.11.2004	2.0.0	Rob Toole	Initial version in BMS/BSD template	Migration of BRD to standard BMS/BSD format	N/A
31.03.2005	2.0.2	Andrew Hearn	Context Update	Updated the context listed within the document	N/A
19.04.2007	2.0.3	Giovanni Biffi	Editorial Updates	Minor Editorial Changes	

# Business Message Standard

---

## Table of contents

---

Chapter	Page
<b>1 Business Solution .....</b>	<b>1</b>
1.1 Business Domain View.....	1
1.1.1 Problem Statement / Business Need.....	1
1.1.2 Objective.....	1
1.1.3 Audience.....	1
1.1.4 Artefacts .....	1
1.1.5 References .....	1
1.1.6 Acknowledgements .....	2
1.1.6.1 BRG Members.....	2
1.1.6.2 ITRG Members .....	3
1.1.6.3 Task/Project Group Participants ( <i>where applicable</i> ) .....	3
1.1.6.4 Design Team Members .....	3
1.2 Business Context .....	4
1.3 Additional Technical Requirements Analysis .....	4
1.3.1 Technical Requirements (optional).....	4
1.4 Business Transaction View .....	5
1.4.1 Business Transaction Use Case Diagram.....	5
1.4.2 Use Case Description.....	5
1.4.3 Business Transaction Activity Diagram(s).....	7
1.4.4 Business Transaction Sequence Diagram(s) (optional) .....	7
1.5 Information Model (including GDD Report) .....	8
1.5.1 Data Description: .....	8
1.5.2 Class Diagrams .....	16
1.5.3 Code Lists.....	18
1.6 Business Document Example .....	20
1.7 Implementation Considerations.....	20
1.8 Testing.....	20
1.8.1 Pass / Fail Criteria .....	20
1.8.2 Test Data .....	20
1.9 Appendices.....	21
1.10 Summary of Changes.....	21
<b>2 2 XML Technical Solution ITRG Packet.....</b>	<b>22</b>

# Business Solution Design

---

---

## 1 Business Solution

### 1.1 Business Domain View

#### 1.1.1 Problem Statement / Business Need

A message is needed to pass order information from a supplier to a warehouse. Typical messages are a request for shipment, a change to a shipment, a modification to a shipment, or the cancellation of a shipment.

#### 1.1.2 Objective

The purpose of the Business Requirements Document is to document a process-to-data approach using the Unified Modelling Language (UML) notation. Processes and their business requirements are clearly understood because of the use of formal modelling with the UML models. Agreed to models permit the application of the data elements to support the processes. The biggest benefit of this process-to-data approach is the alignment of the model to fit the business need.

#### 1.1.3 Audience

The audience for this document includes: supplier and warehouse.

#### 1.1.4 Artefacts

Artefact name	State	Artefact / State description
Change Request #01-000087		

#### 1.1.5 References

Reference Name	Description
Not available	

## Business Solution Design

---

---

### 1.1.6 Acknowledgements

*(List of the individuals—and their companies—who participated in the creation, review and approval of this BMS.)*

#### 1.1.6.1 BRG Members

Doug Harness	Fleming Companies, Inc. Vice Chair
Regina A. De Baker	Watkins Associated Industries
Becky Dettling	3M Company
Sue Donarski	Schneider Logistics
K. Wayne Gingerich	Werner Enterprises
Stephanie Hodge- Daniels	Levi Strauss & Co.
Kent Jamison	Consolidated Freightways
Kari Melhus	Target Corporation
Jeff Miller	Kraft Foods, Inc.
Debra Noyes	Johnsonville Sausage, L.L.C.
Mike Osiecki	Best Buy Company, Inc.
Jamie Rodriguez	GS1 – BRG Manager
Tom Heist	GS1 – Business Process Modeler

## Business Solution Design

---

---

### 1.1.6.2 ITRG Members

Function	Name	Company / organisation
ITRG Chair		
ITRG Member		
ITRG Member		
ITRG Member		
...		

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

Function	Name	Company / organisation
Participant		
Participant		
Participant		
...		

### 1.1.6.4 Design Team Members

Function	Name	Organisation
Modeller		
XML Technical Designer		
EANCOM Technical Designer		
Peer Reviewer		

# Business Solution Design

---

---

## 1.2 Business Context

*(Note: The business context of the business)*

Context Category	Value(s)
Industry	All
Geopolitical	All
Product	All
Process	Deliver
System Capabilities	EAN.UCC
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

# Business Solution Design

---



---

## 1.4 Business Transaction View

### 1.4.1 Business Transaction Use Case Diagram



### 1.4.2 Use Case Description

<b>Use Case ID</b>	UC-1															
<b>Use Case Name</b>	Warehouse Shipping Order															
<b>Use Case Description</b>	The Supplier and the Warehouse must complete all their planning and data alignment activities. Then, together, they must be prepared to send and receive electronic transactions. Goods from the supplier have been placed in a warehouse awaiting the request for shipment from the supplier.															
<b>Actors (Goal)</b>	<p>The Supplier has a need to ship goods from the Warehouse and desires to use an electronic message to do this.</p> <ul style="list-style-type: none"> <li>• Supplier, of which Seller is a specialization</li> <li>• Warehouse, of which Third Party is a specialization</li> </ul>															
<b>Performance Goals</b>	None															
<b>Preconditions</b>	<p>The Warehouse Shipping Order process begins when the following conditions have been met:</p> <ul style="list-style-type: none"> <li>• Goods are available in the warehouse</li> <li>• Both parties have established their trading partner agreement, aligned their data and are capable of sending and receiving transactions</li> </ul>															
<b>Post conditions</b>	<p>Successful post condition: The warehouse receives a Warehouse Shipping Order</p> <p>Failed post condition : The warehouse does not receive a Warehouse Shipping Order</p>															
<b>Scenario</b>	<p><b>Begins when...</b></p> <p>Supplier has a need to ship goods from the warehouse.</p> <p><b>Continues with...</b></p> <table border="1"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Supplier</td> <td>Recognizes a need to ship goods from the warehouse</td> </tr> <tr> <td>2</td> <td>Supplier</td> <td>Prepares the Warehouse Shipping Order</td> </tr> <tr> <td>3</td> <td>Supplier</td> <td>Sends the Warehouse Shipping Order</td> </tr> <tr> <td>4</td> <td>Warehouse</td> <td>Receives the Warehouse Shipping Order</td> </tr> </tbody> </table>	Step #	Actor	Activity Step	1	Supplier	Recognizes a need to ship goods from the warehouse	2	Supplier	Prepares the Warehouse Shipping Order	3	Supplier	Sends the Warehouse Shipping Order	4	Warehouse	Receives the Warehouse Shipping Order
Step #	Actor	Activity Step														
1	Supplier	Recognizes a need to ship goods from the warehouse														
2	Supplier	Prepares the Warehouse Shipping Order														
3	Supplier	Sends the Warehouse Shipping Order														
4	Warehouse	Receives the Warehouse Shipping Order														



## Business Solution Design

---



---

	<b>Ends when...</b> The Warehouse receives a Warehouse Shipping Order.				
<b>Alternative Scenario</b>	<i>(any alternatives to the above scenario)</i>				
	<b>Step #</b>	<b>Actor</b>	<b>Activity Step</b>		
<b>Related Requirements</b>	<table border="1"> <tr> <td style="background-color: #cccccc;">1</td> <td></td> </tr> </table>			1	
1					
<b>Related Rules</b>					

## **Business Solution Design**

---

---

### **1.4.3 Business Transaction Activity Diagram(s)**

Not available

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

Not available

## Business Solution Design

### 1.5 Information Model (including GDD Report)

#### 1.5.1 Data Description:

(Contains list of attributes included in the model and the related requirement which led to its inclusion in the design.) .

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
Document				Warehouse Shipping Order BSD
	contentVersion			Warehouse Shipping Order BSD
	creationDate			V 1.0.5 30.06.2004
	documentStatus			Warehouse Shipping Order BSD
	documentStructureVersion			V 1.0.5 30.06.2004
	lastUpdateDate			Warehouse Shipping Order BSD
EntityIdentification				Warehouse Shipping Order BSD
	uniqueCreatorIdentification			V 1.0.5 30.06.2004
		contentOwner	PartyIdentification	Warehouse Shipping Order BSD
LineItem				Warehouse Shipping Order BSD
	number			V 1.0.5 30.06.2004
Measurement				V 1.0.5 30.06.2004
	measurementValue			Warehouse Shipping Order BSD
PartyIdentification				Warehouse Shipping Order BSD
	None			V 1.0.5 30.06.2004
		additionalPartyIdentification	AlternatePartyIdentification	Warehouse Shipping Order BSD
TradeItemIdentification				Warehouse Shipping Order BSD

## Business Solution Design

	globalTradeItemNumber			V 1.0.5 30.06.2004
	globalTradeItemNumber			Warehouse Shipping Order BSD
	None			V 1.0.5 30.06.2004
		additionalTradeItemIdentification	AdditionalTradeItemIdentification	Warehouse Shipping Order BSD
WarehouseShippingOrder				Warehouse Shipping Order BSD
	routingGuide			V 1.0.5 30.06.2004
	shipmentMethodOfPayment			Warehouse Shipping Order BSD
	transportationMethodType			V 1.0.5 30.06.2004
		None	Document	Warehouse Shipping Order BSD
		purchaseOrderIdentification	EntityIdentification	V 1.0.5 30.06.2004
		supplierOrderIdentification	EntityIdentification	Warehouse Shipping Order BSD
		warehouseShippingOrderIdentification	EntityIdentification	V 1.0.5 30.06.2004
		carrier	PartyIdentification	Warehouse Shipping Order BSD
		shipTo	PartyIdentification	V 1.0.5 30.06.2004
		WarehouseShippingOrderDate	WarehouseShippingOrderDate	Warehouse Shipping Order BSD
		None	WarehouseTradeItemDescription	V 1.0.5 30.06.2004
WarehouseShippingOrderDate				V 1.0.5 30.06.2004
		deliverByDate	Date	Warehouse Shipping Order BSD
		shipByDate	Date	V 1.0.5 30.06.2004
WarehouseTradeItemDescription				V 1.0.5 30.06.2004
	lotNumberOfItem			Warehouse Shipping Order BSD
	quantityRequested			V 1.0.5 30.06.2004
		None	LineItem	Warehouse Shipping Order BSD
		None	TradeItemIdentification	V 1.0.5 30.06.2004

## Business Solution Design

---

### GDD Report :

#### Warehouse Shipping Order

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
Document				Electronic_ Document. Details	Used to specify basic information about the content of the message including version number, creation date and time.	
	contentVersion			Electronic_ Document. Content_ Version. Identifier	N/A	0..1
	creationDate			Electronic_ Document. Creation_ Date. Date Time	N/A	1..1
	documentStatus			Electronic_ Document. Status. Identifier	Indicates if the document is a copy or an original.	1..1
	documentStructureVersion			Electronic_ Document. Document Structure_ Version. Identifier	Not defined in BRD	0..1
	lastUpdateDate			Electronic_ Document. Last Update_ Date. Date Time	Not defined in BRD	0..1
EntityIdentification				Entity Identification. Details	The unique identification of a document.	
	uniqueCreatorIdentification			Entity Identification. Identification. Identifier	N/A	1..1
		contentOwner	PartyIdentification	Entity Identification.	N/A	1..1

## Business Solution Design

				Content Owner. Party Identification		
LineItem				Line Item. Details	N/A	
	number			Line Item. Number. Integer_ Numeric	N/A	1..1
Measurement				Multi-unit Measure. Details	N/A	
	measurementValue			Multi-unit Measure. Measure. Measure	N/A	1..*
PartyIdentification				Party Identification. Details	Unique location number identifying the Party for which the rest of the message defines.	
	None			Party Identification. Primary_ Identification. GLN_ Identifier		1..1
		additionalPartyIdentification	AlternatePartyIdentification	Party Identification. Additional. Non GLN_ Party Identification	None	0..*
TradeItemIdentification				Trade Item Identification. Details	N/A	
	globalTradeItem-Number			Trade Item Identification. Primary_ Identification. GTIN_ Identifier		1..1
	globalTradeItem-Number			Trade Item Identification. GTIN. GTIN_ Identifier	A particular Global trade item Number, a numerical value used to uniquely identify a trade item. A trade item is any trade item (trade item or service) upon which there is a need to retrieve pre-defined information and that may be planned,	1..1

## Business Solution Design

					priced, ordered, delivered and or invoiced at any point in any supply chain.	
	None			Trade Item Identification. Identification. Identifier		0..*
		additionalTrade-ItemIdentification	AdditionalTrade-ItemIdentification	Trade Item Identification. Additional. Non GTIN_ Trade Item Identification	None	0..*
WarehouseShippingOrder				Warehouse Shipping Order. Details	This is the root class for the Warehouse Shipping Order Message.	
	routingGuide			Warehouse Shipping Order. Routing Guide. Language_ Text	This external class originates from Description in the common library. This is an optional class and is used to identify the routing guide.	0..1
	shipmentMethodOfPayment			Warehouse Shipping Order. Warehouse Payment Method. Warehouse_ Payment Method_ Code	N/A	1..1
	transportation-MethodType			Warehouse Shipping Order. Transportation Method Type. Transportation Method_ Code	N/A	1..1
		None	Document	Warehouse Shipping Order. Inheritance_ Association. Electronic_ Document	None	1..1
		purchaseOrderIdentification	EntityIdentification	Warehouse Shipping Order. Purchase Order Identification. Entity Identification	This external class originates from Entity Identification in the common library. It provides for the reporting of reference numbers. For the Warehouse Shipping	0..1

## Business Solution Design

					Order, it is used to identify the supplier's order identification, a purchase order identification and the warehouse shipping order identification. The warehouse shipping order identification and the supplier's order identification are mandatory, and the purchase order identification is optional.	
		supplierOrderIdentification	EntityIdentification	Warehouse Shipping Order. Supplier Order Identification. Entity Identification	This external class originates from Entity Identification in the common library. It provides for the reporting of reference numbers. For the Warehouse Shipping Order, it is used to identify the supplier's order identification, a purchase order identification and the warehouse shipping order identification. The warehouse shipping order identification and the supplier's order identification are mandatory, and the purchase order identification is optional.	1..1
		warehouseShippingOrderIdentification	EntityIdentification	Warehouse Shipping Order. Warehouse Shipping Order Identification. Entity Identification	This external class originates from Entity Identification in the common library. It provides for the reporting of reference numbers. For the Warehouse Shipping Order, it is used to identify the supplier's order identification, a purchase order identification and the warehouse shipping order identification. The warehouse shipping order identification and the supplier's order identification are mandatory, and the purchase order identification is optional.	1..1
		carrier	PartyIdentification	Warehouse Shipping Order. Carrier. Party Identification	n.a.	0..1



## Business Solution Design

		shipTo	PartyIdentification	Warehouse Shipping Order. Ship To. Party Identification	!! This external class originates from Party Identification in the common library. It provides the identification of the carrier, which are optional, and the identification of the ship to location, which is mandatory. It has no attributes but provides for identification by use of the GLN. It also provides a list of alternate types of identification.	1..1
		WarehouseShippingOrderDate	WarehouseShippingOrderDate	Warehouse Shipping Order. Association. Warehouse Shipping Order_ Date Group	n.a. [1..2]	1..*
		None	WarehouseTradeItem-Description	Warehouse Shipping Order. Association. Warehouse_ Trade Item Description	None	1..*
WarehouseShippingOrderDate				Warehouse Shipping Order_ Date Group. Details	This class is used to provide the choice for the allowable dates of deliver by date and/or ship by date. The class is mandatory and can be repeated once, and this class has no attributes.	
		deliverByDate	Date	Warehouse Shipping Order_ Date Group. Choice_ Deliver By Date. Date	This external class originates from Data Type in the common library. This class is used with the warehouse shipping order to identify the deliver by date and/or the ship by date. The use of at least one date is mandatory and determined by the trading partner agreement. This class contains no attributes.	1..1
		shipByDate	Date	Warehouse Shipping Order_ Date Group. Choice_ Ship By Date. Date	This external class originates from Data Type in the common library. This class is used with the warehouse shipping order to identify the deliver by date and/or the ship by date. The use of at least one	1..1

## Business Solution Design

					date is mandatory and determined by the trading partner agreement. This class contains no attributes.	
WarehouseTrade-ItemDescription				Warehouse_ Trade Item Description. Details	!! This class is used to provide the details of the trade items in the Warehouse Shipping Order by holding the Lot Numbers of trade Item (if applicable) by having associations with the Trade Item Identification, Line Item and Measurement Value.	
	lotNumberOfItem			Warehouse_ Trade Item Description. Lot Number Of Item. Text	Not defined in BRD.	1..*
	quantityRequested			Warehouse_ Trade Item Description. Quantity Requested. Quantity	This external class originates from Measurement and is a class that is used in many class diagrams. This class includes the number of units (quantity) and unit of measure being reported as the quantity requested. This class is mandatory.	1..1
		None	LineItem	Warehouse_ Trade Item Description. Inheritance_ Association. Line Item	n.a.	1..1
		None	TradeItemIdentification	Warehouse_ Trade Item Description. Association. Trade Item Identification	None	1..1

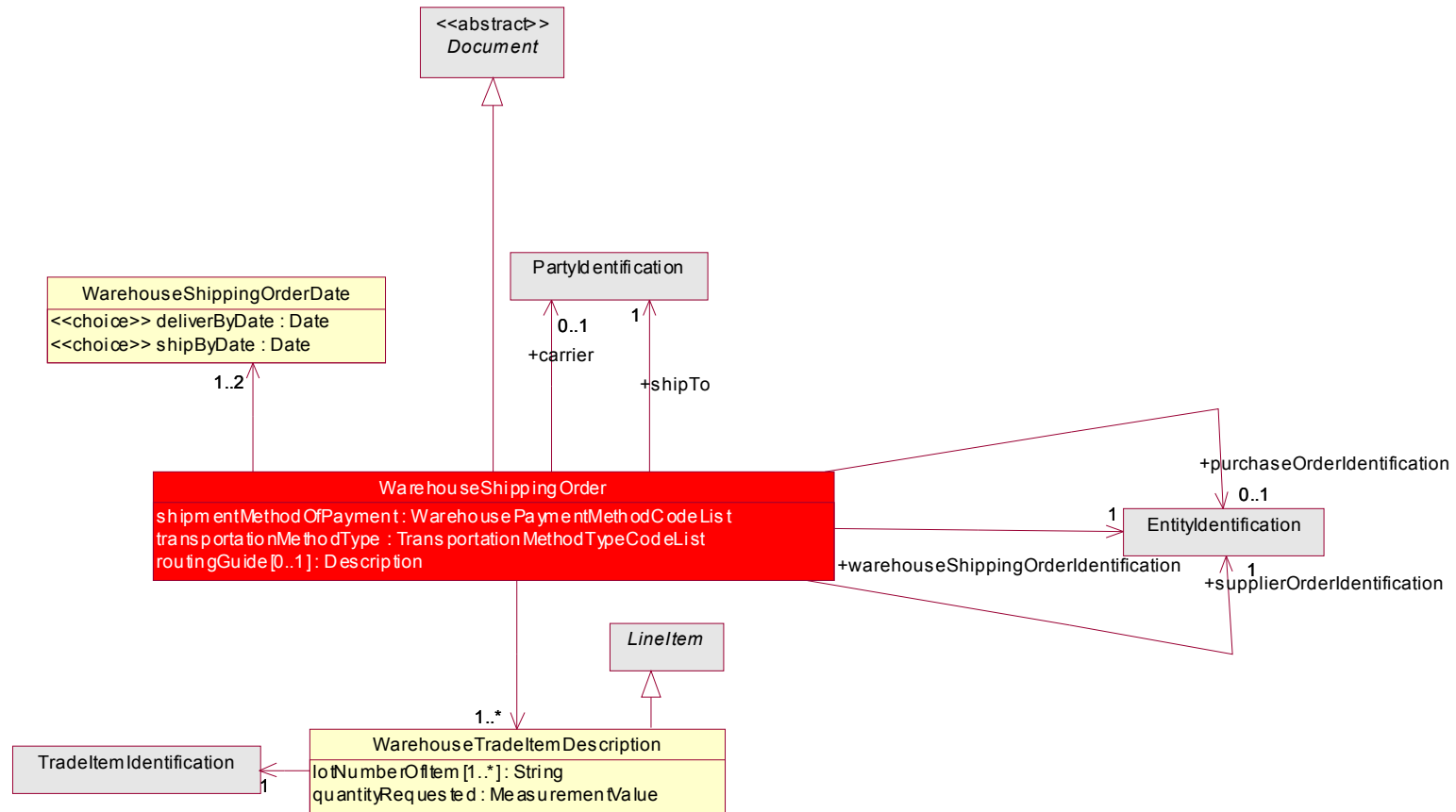
## **Business Solution Design**

---

---

### **1.5.2 Class Diagrams**

# Business Solution Design



## Business Solution Design

### 1.5.3 Code Lists

(Output from GDD should be pasted in this section.)

Code List Name	Code List Description
Transportation Method Type Code List	This code list provides list for a transportation method type code to the Warehouse Shipping Order.
Code Name	Code Description
AIR	Not available
AIR_CHARTER	Not available
AIR_EXPRESS	Not available
AIR_FREIGHT	Not available
BEST_WAY_SHIPPERS_OPTION	Not available
BOOK_POSTAL	Not available
BUS	Not available
CAB	Not available
CONSOLIDATION	Not available
CONTRACT_CARRIER	Not available
CUSTOMER_PICKUP	Not available
CUSTOMER_PICKUP_AT_CUSTOMERS_EXPENSE	Not available
EXPEDITED_TRUCK	Not available
GEOGRAPHIC_RECEIVING	Not available
GEOGRAPHIC_RECEIVING_SHIPPING	Not available
GEOGRAPHIC_SHIPPING	Not available
INLAND_WATERWAY	Not available
INTERMODAL_PIGGYBACK	Not available
LESS_THAN_TRUCK_LOAD	Not available
MOTOR	Not available
MOTOR_COMMON_CARRIER	Not available
MOTOR_FLATBED	Not available
MOTOR_PACKAGE_CARRIER	Not available
MOTOR_TRUCKLOAD	Not available
MOTOR_VAN	Not available
MUTUALLY_DEFINED	Not available
OCEAN	Not available
PARCEL_POST	Not available
PIPELINE	Not available
POOL_TO_POOL	Not available
POOLED_AIR	Not available
POOLED_PIGGYBACK	Not available
POOLED_RAIL	Not available
POOLED_TRUCK	Not available
PRIVATE_CARRIER	Not available
PRIVATE_PARCEL_SERVICE	Not available
PRIVATE_VESSEL	Not available
RAIL	Not available
ROADTRAILER	Not available
SEA_AIR	Not available
STEAM_SHIP	Not available

## Business Solution Design

---

---

SUPPLIER_TRUCK	Not available
AIR	Not available

Code List Name	Code List Description
Warehouse Payment Method Code List	This code lists provides a list to identify the method of payment for shipments
Code Name	Code Description
COLLECT	Not available
COLLECT_FREIGHT_CREDITED_BACK_TO_CUSTOMER	Not available
CUSTOMER_PICKUP_OR_BACKHAUL	Not available
DEFINED_BY_BUYER_AND_SELLER	Not available
FOB_PORT_OF_CALL	Not available
HALF_PREPAID	Not available
MIXED	Not available
PREPAID_BUT_CHARGED_TO_CUSTOMER	Not available
PREPAID_BY_SELLER	Not available
PREPAID_ONLY	Not available
THIRD_PARTY_PAY	Not available

## Business Solution Design

---

---

### 1.6 Business Document Example

Not available

### 1.7 Implementation Considerations

Not available

### 1.8 Testing

#### 1.8.1 Pass / Fail Criteria

Not available

*Unit testing criteria for business solution.*

Number	Test Criteria	Related Requirement	Design Element	Pass Criteria	Fail Criteria
1					
2					
3					

#### 1.8.2 Test Data

Not available

Attribute	Value

## Business Solution Design

---

---

### 1.9 Appendices

#### 1.10 Summary of Changes

*(Details changes to BMS for each version by BMS Section)*

Change	BMS Version	Associated CR Number
•		



### 2 XML Technical Solution ITRG Packet

The Technical Representation of the Business process is documented in a Technical Solution ITRG Packet containing all supplemental XML artefacts and is used by the Information Requirements Group (ITRG) to evaluate the solution. Upon approval from the Information Technical Requirements Group (ITRG), the Technical Solution ITRG Packet is updated to the Technical Solution Implementers Packet and published with the Business

Message Standard at:

[http://www.ean-ucc.org/global\\_smp/ean.ucc\\_standards.htm](http://www.ean-ucc.org/global_smp/ean.ucc_standards.htm).

Technical Solution ITRG Packet Content:

- Business Message Standard (BMS)
- ITRG Review Packet
  - Style Sheet: This HTML has been created using a Style Sheet that is a visual representation of the data. It is not an actual Style Sheet, but an ex-ample of what a Style Sheet may look like.
  - Instance File: The Instance File is an example of what the schema may look like when it includes live data. This can be used as comparison to a completed schema and can serve as a point of reference for development.
  - Technical Level GDD Report

Technical Solution Implementers Packet Content:

Contains all the message specific.XSD files required to implement

Example:

- AS2Envelope
- Command.xsd
- DocumentCommand.xsd
- Proxy.xsd
- ComponentLibrary.xsd

Both the Business Message Standard and the Implementers Packet are available during the ITRG Review Period in the working documents section of the ITRG eRoom:

[http://eroom.uncouncil.org/eRoom/facility/InformationTechnicalAssessmentGroupITAG/0\\_14f7](http://eroom.uncouncil.org/eRoom/facility/InformationTechnicalAssessmentGroupITAG/0_14f7)

All documents for review will be in this folder listed by name of the Change Request and Change Request Number. The Business Message Standard is not open for review, but offered as the basis for determining the suitability of the technical solutions.

This eRoom may be accessed by using the following User Name and Password:

User Name: guest

Password: guest