

Business Message Standard (BMS)

for

Despatch Advice

**BRG: Deliver
IRT: Upstream Standards**

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BRAD Version:	0.1.1

BRAD Title:	BRD Despatch Advice – Business Requirement Document
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Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
31.12.2004	2.0.0	Eric Kauz		Migration of BRD to standard BMS/BSD format	Not Applicable
31.12.2004	2.0.0	Rob Toole		Completed BSD by adding GDD information and updated class diagram	Not Applicable
01.03.2004	2.1.1	Coen Janssen	UIM + ebMeat		Not Applicable
04.03.2004	2.1.2	Coen Janssen	Review comments DTG and IRT	Several changes to chapter 7. Included example in chapter 8.	Not Applicable
25.03.2005	2.1.3	Coen Janssen	Review comments DTG	Several changes to chapters 7 and 8.	Not Applicable
21.04.2005	2.2.0	Coen Janssen	Public review comments including comments made in Vienna meeting.	Changed role names in use cases: Ship To → Receiver, Ship From → Shipper Functional changes: see chapter 12	Not Applicable
02.06.2005	2.2.1	John Ryu	Incorporated Peer Review (6699) model changes Textual and GDD updated still needed based on peer review (6699)	Replaced class diagram in chapter 7.2 Alphabetized attributes per Modelling Best Practices. Aesthetic changes to model.	Model P4CL: 6718 BSD P4CL: 6720
31.05.2005	2.2.1	John Ryu	Peer Review		
17.06.2005	2.2.2	Eric Kauz	Change to data types for measurementUnit-CodeList		

			Change of cardinality of carrier to 0..1 as per requirements.		
21.07.205	2.2.3	Coen Janssen	Technical Design Public Review	Several cosmetic changes. Fixed references to requirements in paragraph 1.5.1.	
07.03.2007	2.2.4	Andrew Hearn	Errata	Update BMS Version Number	

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1 Business Solution

1.1 Business Domain View

1.1.1 Problem Statement / Business Need

(States the business need, establishing the context for the business transactions and information requirements.)

Generally, the Despatch Advice enables one Shipper to provide information about the content of a shipment to one Receiver. Specifically, the Despatch Advice serves as a link to a prior agreement between Shipper and Receiver and is applicable to one or many Receiver destination points from one Shipper launch point. Furthermore, the Despatch Advice may be used to indicate the despatch of goods being returned by the Receiver. The Despatch Advice may be utilized downstream between retailers, suppliers, 3PLs, carriers and manufacturers as well as upstream between manufacturers, 3PLs and material suppliers.

1.1.2 Objective

The objective of the Despatch Advice is:

- To facilitate the receipt of goods
- To make the despatch advice applicable to a replenishment scenario where there is no link to an order but to a contract or other kind of agreement.
- To make the despatch advice applicable to multiple destination points
- To provide more detailed information about the shipment as well as the content of a shipment from a shipper and if applicable the shipper's warehouse to the receiver and his warehouse
- To make the despatch advice applicable for the despatch of goods being returned

(Above is standards text for the objective.)

1.1.3 Audience

(List of expected internal and external users of the BMS expressed as stakeholder.)

Retailers, manufacturers, warehouses, material suppliers, carriers and any other third party such as a logistic service or 3PL provider involved in the despatch and receipt of goods.

1.1.4 Artefacts

Artefact name	State	Artefact / State description
N/A		

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1.1.5 References

	Reference Name	Description
[Ref1]	BRD Exchange Traceability and Processing History Data of Beef Products (Slaughter to Retail) Version 2.50	
[Ref2]	BRAD Upstream Standards – Despatch, Receipt & Consumption Version 0.1.1	
[Ref3]	BRD Despatch Advice Version 1.0.9.3	
[Ref4]	BMS Common Library	The documented design of components that are used in multiple messages.

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 IRT Members

Function	Name	Company / organisation
IRT Chair	Fred Kempkes	Unilever
IRT Participant	Kevin Zeng	Procter & Gamble
IRT Participant	Stephen Bell	CPG Market
IRT Participant	Roland Dachs, Olivier Grienenberger, Don Reed	Crown Cork
IRT Participant	Arthur Doldersum	SCA
IRT Participant	James Kimber	General Mills, Inc.
IRT Participant	Kristen Halwachs	UCCnet
IRT Participant	Nicola Comiotto, Menno Smit	Nestlé
IRT Participant	Pawel Solowinski	Kappa Packaging
IRT Participant	Peter Broend, Johannes Lundgren	Novozymes
IRT Participant	Paul Moodey	Johnson & Johnson
IRT Participant	Wouter Crul	Nspyre
IRT Participant	Thierry Baillif, Gabriel Galeazzi	Firmenich
IRT Participant	Jan Peter Klijn	Royal Sens
IRT Participant	Yasushi Kiyama	Ajinomoto Co.
IRT Participant	Georges Socquet	Givaudan

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1.1.6.2 BRG Members

Function	Name	Company / organisation
BRG Chair	Sue Donarski (Co-chair)	Schneider
BRG Chair	Debra Noyes (Co-Chair)	Johnsonville Sausages
BRG Member	Mike Osiecki	Best Buy
BRG Member	Kari Melhus	Target
BRG Member	Wayne Gingerich	Werner
BRG Member	Jeff Miller	Kraft
BRG Member	Roman Gural	UPS
BRG Member	Bob Robertson	VCF
BRG Member	Shanda Marvin	Procter & Gamble
BRG Member	Regina De Baker	Watkins Motor Line
BRG Member	David Burns	INTTRA
BRG Member	Apostolos Xiradakis	Unilever
BRG Member	Thorsten Kirschner	GS1 Germany
BRG Member	Aart Koning	Albert Heijn
BRG Member	Jean-François Fusco	Aexxdis
BRG Member	Marco Van Der Lee	GS1 Netherlands
BRG Member	Jeofrey Cubillos	IBC Solutions
BRG Member	Tamari Tashiro	GS1 Japan
BRG Member	Tan Jin Soon	GS1 Singapore
BRG Manager	Bruno Julien (BRG Manager)	GS1 France

1.1.6.3 ITRG Members

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

1.1.6.4 Design Team Members

Function	Name	Organisation
Modeller	Coen Janssen	GS1 Netherlands
XML Technical Designer		

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EANCOM Technical Designer	Marco Schuyt	GS1 Netherlands
Peer Reviewer	John Ryu	GS1 Head Office

1.2 Business Context

(Note: The context of the business)

Context Category	Value(s)
Industry	All, Consumer Packaged Goods All
Geopolitical	All, Global, Europe, Unites States, Japan, UK Global
Product	All, Direct Materials, Food, Non-Food, Hard lines, Apparel All
Process	All, Order (Direct To Consumer), Order (Direct Store Delivery), Order, Pay (Self Billing), Deliver (Direct Store Delivery) Deliver
Official Constraints	None, Value Added Tax, Sales Tax None
Roles	Buyer, Seller, Ship From, Ship To, Payer Payee, Data Source, Data Recipient Shipper, Ship From, Receiver, Ship To
System Capabilities	All, EANCOM, XML, AIDC, EPC-network EAN.UCC System, EANCOM, XML

1.3 Additional Technical Requirements Analysis

1.3.1 Technical Requirements (optional)

(User Interface, Security, Performance, Quality, etc.)

Number	Statement	Rationale
1.	No Technical Requirements	

1.4 Business Transaction View

1.4.1 Business Transaction GENERATE DESPATCH ADVICE

The Despatch Advice must contain certain information, in line item format, to convey comparative information to the Receiver. The Despatch Advice therefore will provide for the identification of the individual lines within the Despatch Advice by line sequence number. The Despatch Advice may provide for a reference to other related documents, such as the Order, Delivery Note and Consignment. The Despatch Advice may also include a reference to a contract and may include the line sequence numbers from the documents Order, Delivery Note, Consignment and Contract.

1.4.2 Business Transaction Use Case Diagram

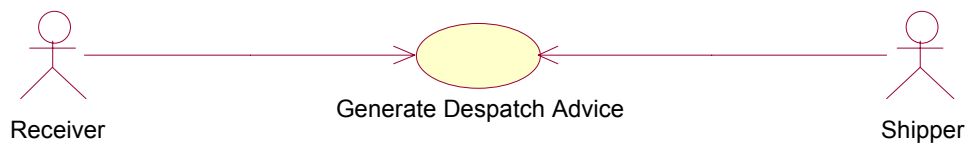


Figure 1 – Use Case Diagram: Business Transaction

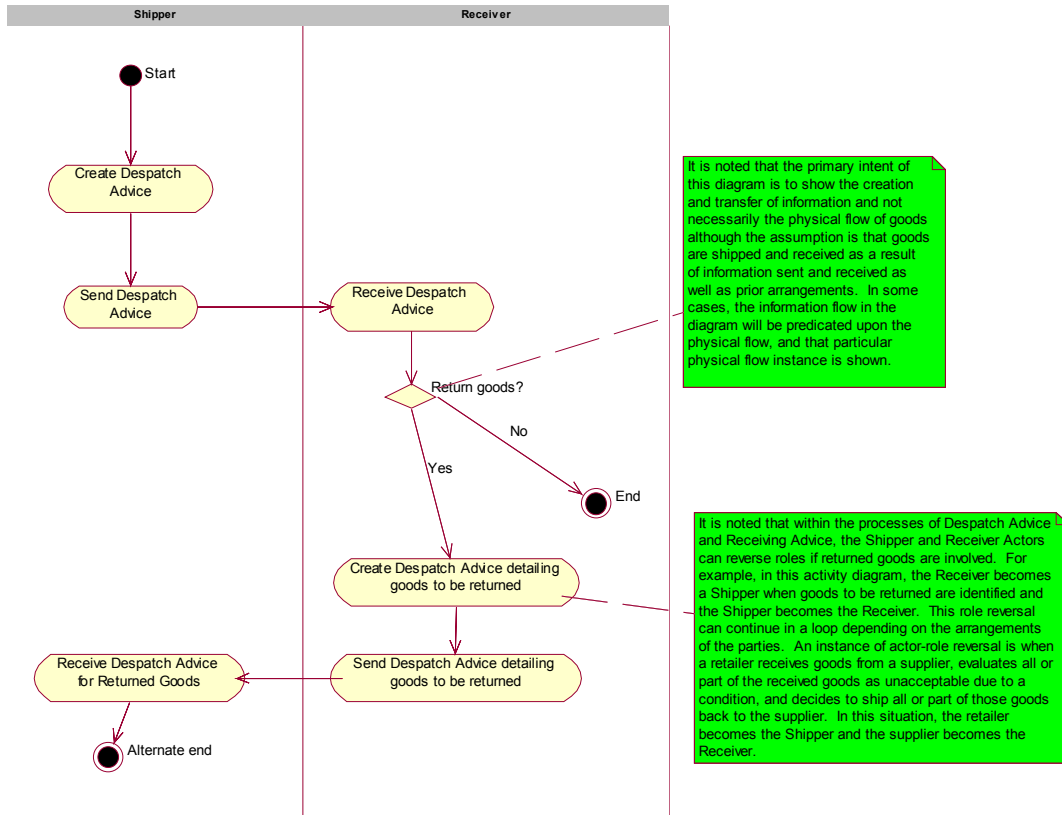
1.4.3 Use Case Description

Use Case ID										
Use Case Name	Generate Despatch Advice									
Use Case Description	Describes a complete process whereby a Shipper generates a Despatch Advice based on information about the order and the product.									
Actors (Goal)	Receiver and Shipper									
Performance Goals	None									
Preconditions	Master data alignment of locations (GLNs) and products (GTINs).									
Post conditions	Check of the received physical goods with the information of the Despatch Advice and the check of the state of the goods themselves.									
Scenario	<p>Begins when:</p> <p>The Receiver receives a shipment of goods accompanied or preceded by the Despatch Advice or Shipping Documents.</p> <p>Continues with:</p> <table border="1"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Shipper</td> <td>Shipper issues the Despatch Advice containing the information of the actual physical shipment.</td> </tr> <tr> <td>2.</td> <td>Re-</td> <td>Receiver receives Despatch Advice.</td> </tr> </tbody> </table>	Step #	Actor	Activity Step	1.	Shipper	Shipper issues the Despatch Advice containing the information of the actual physical shipment.	2.	Re-	Receiver receives Despatch Advice.
Step #	Actor	Activity Step								
1.	Shipper	Shipper issues the Despatch Advice containing the information of the actual physical shipment.								
2.	Re-	Receiver receives Despatch Advice.								

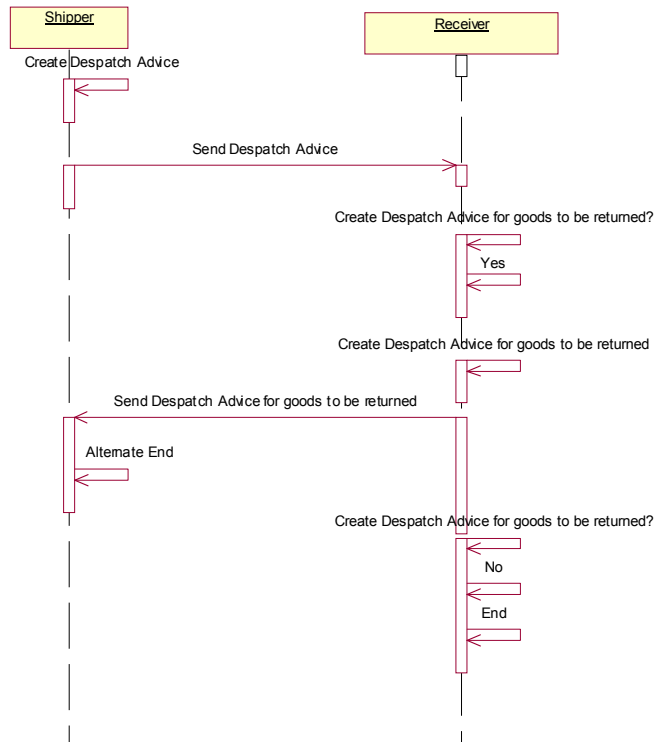
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		ceiver	
	3.	Re-ceiver	If necessary, Receiver creates and sends Despatch Advice to Shipper indicating returned goods. *See role reversal note in activity and sequence diagrams.
Ends when:			
Alternative Scenario	<i>(any alternatives to the above scenario)</i>		
	Step #	Actor	Activity Step
	1.		
	2.		
Business Transaction Rules	1.		

1.4.4 Business Transaction Activity Diagram(s)



1.4.5 Business Transaction Sequence Diagram(s) (optional)



It is noted that the primary intent of this diagram is to show the creation and transfer of information and not necessarily the physical flow of goods although the assumption is that goods are shipped and received as a result of information sent and received as well as prior arrangements. In some cases, the information flow in the diagram will be predicated upon the physical flow, and that particular physical flow instance is shown.

It is noted that within the processes of Despatch Advice and Receiving Advice, the Shipper and Receiver Actors can reverse roles if returned goods are involved. For example, in this activity diagram, the Receiver becomes a Shipper when goods to be returned are identified and the Shipper becomes the Receiver. This role reversal can continue in a loop depending on the arrangements of the parties.

1.4.6 Business Transaction DISPATCH NOTIFICATION

1.4.7 Business Transaction Use Case Diagram

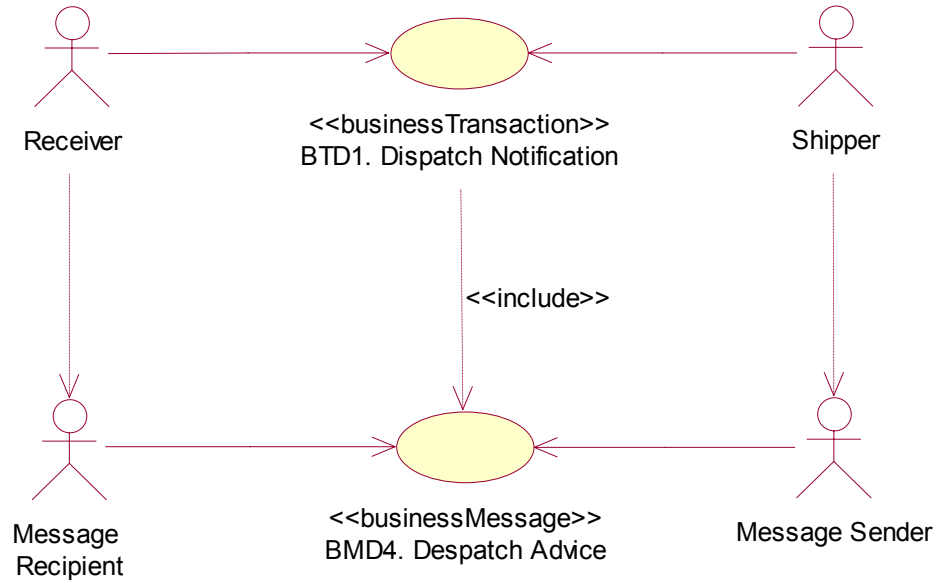


Figure 2 – Use Case Diagram: Business Transaction

1.4.8 Use Case Description

Use Case ID	BTD1
Use Case Name	Dispatch Notification
Use Case Description	<p>The Dispatch Notification enables the supplier / carrier to provide detailed information about the content of a shipment and enables a buyer to reconcile or confirm the physical shipment against the order; it provides a mirror of the shipment that is to be made in terms of package details and in terms of structure of the delivery.</p> <p>The Dispatch Notification is sent by the Ship From party to the Ship To party when the goods are sent - goods being sent being considered as in transit.</p>
Actors (Goal)	<p>Shipper: To notify the receiver in advance of the contents of a shipment.</p> <p>Receiver: To be informed in advance about the contents of a shipment.</p>
Performance Goals	The information must be received prior to the arrival of the actual shipment.
Preconditions	DISPATCH NOTIFICATION TO BE SENT
Post conditions	DISPATCH NOTIFICATION RECEIVED
Scenario	Begins when:

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	<p>After the shipment has been picked, packed, labelled and loaded in order to guarantee that the information sent is correct.</p> <p>Continues with:</p> <table border="1"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Ship From</td> <td>Sends Despatch Advice to the Ship To party.</td> </tr> <tr> <td>2.</td> <td>Ship To</td> <td>Receives the Despatch Advice.</td> </tr> </tbody> </table> <p>Ends when:</p>	Step #	Actor	Activity Step	1.	Ship From	Sends Despatch Advice to the Ship To party.	2.	Ship To	Receives the Despatch Advice.
Step #	Actor	Activity Step								
1.	Ship From	Sends Despatch Advice to the Ship To party.								
2.	Ship To	Receives the Despatch Advice.								
Alternative Scenario	<p><i>(any alternatives to the above scenario)</i></p> <table border="1"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td></td> <td></td> </tr> <tr> <td>2.</td> <td></td> <td></td> </tr> </tbody> </table>	Step #	Actor	Activity Step	1.			2.		
Step #	Actor	Activity Step								
1.										
2.										
Business Transaction Rules	<table border="1"> <tbody> <tr> <td>1.</td> <td></td> </tr> <tr> <td>2.</td> <td></td> </tr> </tbody> </table>	1.		2.						
1.										
2.										

1.4.9 Business Transaction Activity Diagram(s)

Not applicable.

1.4.10 Business Transaction Sequence Diagram(s) (optional)

Not applicable.

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1.5 Information Model

1.5.1 Data Description

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirement
ActualShipping				
	actualShipDateTime			[ref2] {7.1.1-18, 19}
	estimatedDelivery-DateTime			
		estimatedDeliveryPeriod	TimePeriodOrDateTimePeriod	[ref2] {7.1.1-14, 15, 16, 17}
ConsignedItemWeight				
		none	TradeItemIdentification	[ref1]
		none	UnitMeasurement	[ref1]
ConsignmentInformation				
		consignmentIdentification	Reference	[ref1]
		none	PackageInformation	[ref1]
		none	ConsignedItemWeight	[ref1]
		none	UnitMeasurement	
DeliveryAndTransportInformation				[ref1]
	licensePlate			
	modeOfTransport			
	deliveryOrTransport-Terms			[ref2] {7.1.1-13}
		billOfLadingNumber	Reference	[ref2] {7.1.1-12}
DespatchAdvice				
			ConsignmentInformation	
			DeliveryAndTransportInformation	[ref2] {7.1.1-10, 11}
		<<choice>>	DespatchAdviceItemContainmentLineItem	
		<<choice>>	DespatchAdviceLogisticUnitLineItem	
			DespatchInformation	
		<<is a>>	Document	[ref2] {7.1.1-1, 2, 3}
		purchaseOrder	DocumentReference	

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirement
		purchaseConditions	DocumentReference	
		despatchAdviceIdentification	EntityIdentification	
		carrier	PartyIdentification	[ref2] {7.1.1-9 (opt) }
		inventoryLocation	PartyIdentification	[ref2] {7.1.1-8}
		pickUpLocation	PartyIdentification	
		receiver	PartyIdentification	[ref2] {7.1.1-4}
		shipper	PartyIdentification	[ref2] {7.1.1-5}
		shipFrom	PartyIdentification	[ref2] {7.1.1-7}
		shipTo	PartyIdentification	[ref2] {7.1.1-6}
		contract	Reference	[ref1]
		declarantsCustomsIdentity	Reference	[ref1]
		deliveryNote	Reference	[ref1]
		productCertification	Reference	[ref1]
		specification	Reference	[ref1]
DespatchAdviceItem-ContainmentLineItem				
		<<is a>>	ItemContainment	[ref2] {7.1.1-20, 24, 25, 26, 29}
	quantityContained			[ref2] {7.1.1-27, 28}
	requestedQuantity			[ref1]
	freeGoodsQuantity			[ref1]
			QuantityVariance	
DespatchAdviceLogisticUnitLineItem				
		<<is a>>	LogisticUnits	[ref2] {7.1.1-20, 22, 23}
			DespatchAdviceItemContainmentLineItem	
DespatchInformation				
		<<choice>>	EstimatedDelivery	
		<<choice>>	ActualShipping	
	despatchDateTime			[ref1]
	releaseDateTimeOfSupplier			[ref1]

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirement
	loadingDateTime			[ref1]
	PickUpDateTime			[ref1]
EstimatedDelivery				
	estimatedDelivery-DateTime			[ref3]
	actualShipDateTime			[ref1] {2.1.1-5}
		estimatedDeliveryPeriod	TimePeriodOrDateTimePe- riod	[ref2] {7.1.1-14, 15, 16, 17}
PackageInformation				
	numberOfUnits			[ref1]
	packageType			[ref1]
QuantityVariance				
	changeReason		ChangeReasonCodeList	[ref1]
	varianceQuantity			[ref1]

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1.5.2 GDD Report

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Mult.
ActualShipping				Actual Shipping. Details		
	actualShip-DateTime			Actual Shipping. Actual Ship Date Time. Date Time	DateTime- The date and time the goods were shipped. The format is ISO 8601 CCYY-MM-DD "T" HH:MM:SS for all Date Time types.	1..1
	estimatedDeliveryDateTime			Actual Shipping. Estimated Delivery Date Time. Date Time	Date and/or time when the shipper of the goods expects delivery will take place.	0..1
		estimatedDeliveryPeriod	TimePeriodOr-DateTimePeriod	Actual Shipping. Estimated Delivery Period. Time Period Or Date Time Period	The estimated time frame in which the goods will be delivered at the ship to location.	1..1
ConsignedItem-Weight				Consigned Item Weight. Details	Total weight of a trade item within a consignment (across logistic units).	
		none	TradeItemIdentification	Consigned Item Weight. Association. Trade Item Identification		1..1
		none	UnitMeasurement	Consigned Item Weight. Association. Unit Measurement		1..*
ConsignmentInformation				Consignment Information. Details		0..1
		consignmentIdentification	Reference	Consignment Information. Consignment Identification. Reference	Number that identifies the consignment. (In case consignment consists of one shipment, it coincides with the shipment number). The Consignment Number, AI (401), is allocated by a freight forwarder, (or a carriers acting as a freight forwarder), or a consignor, but only if the prior agreement of the freight forwarder is given. Consignment: A logical group-	0..1

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Mult.
					ing of goods (one or more physical entities) that is intended to be transported as a whole from a Shipper (Consignor) to a Receiver (Consignee) by a carrier or freight forwarder.	
		none	PackageInformation	Consignment Information. Association. Package Information		1..1
		none	ConsignedItemWeight	Consignment Information. Association. Consigned Item Weight		0..*
		none	UnitMeasurement	Consignment Information. Association. Unit Measurement		0..*
DeliveryAndTransportInformation				Delivery And Transport Information. Details		
	licensePlate			Delivery And Transport Information. License Plate. String_ Text	Vehicle licence plate/Aircraft number identifying a means of transport.	0..1
	modeOfTransport			Delivery And Transport Information. Mode Of Transport. Transportation Method Type Code List_ Code	Code specifying the name of a mode of transport.	0..1
	deliveryOrTransportTerms			Delivery And Transport Information. Delivery Or Transport Terms. Incoterm Code List_ Code	Code specifying the terms of delivery or transport.	0..1
		billOfLadingNumber	Reference	Delivery And Transport Information. Bill Of Lading Number. Reference	Bill of lading: A document which evidences a contract of carriage and the taking over or loading of goods by the carrier, and by which the carrier undertakes to deliver the goods against surrender of the document.	0..1
DespatchAdvice				Despatch Advice. Details	The DespatchAdvice class is the data class that creates the advice message that the Ship-	

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Mult.
					per sends to the Receiver. This class inherits data directly from the class called document, which means it inherits the attributes contentVersion, creation-Date, document-StructureVersion and lastUpdateDate. DespatchAdvice has relationships with other classes as well, that allow the DespatchAdvice message to have meaning when sent to the Receiver. It is important to note that every class serves the root class – DespatchAdvice. The classes that DespatchAdvice directly “touches” are in turn served by other classes that provide intelligence through direct and indirect relationships to the root class.	
			ConsignmentInformation	Despatch Advice. Association. Consignment Information		0..1
			DeliveryAndTransportInformation	Despatch Advice. Association. Delivery And Transport Information		0..1
		<<choice>>	DespatchAdviceItemContainmentLineItem	Despatch Advice. Choice_Association. Despatch Advice Item Containment Line Item		1..*
		<<choice>>	DespatchAdviceLogisticUnitLineItem	Despatch Advice. Choice_Association. Despatch Advice Logistic Unit Line Item		1..*
			DespatchInformation	Despatch Advice. Association. Despatch Information		1..1
		<<is a>>	Document	Despatch Advice. Inheritance_Association. Document. Details		
		purchaseOrder	DocumentReference	Despatch Advice. Purchase Order. Document Refer-	The identification for the order assigned by the buyer.	0..1

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Mult.
				ence		
		purchaseConditions	DocumentReference	Despatch Advice. Purchase Conditions. Document Reference		0..1
		despatchAdviceIdentification	EntityIdentification	Despatch Advice. Identification. Entity Identification	Despatch Advice number assigned by the document sender.	1..1
		carrier	PartyIdentification	Despatch Advice. Carrier. Party Identification	Carrier charged with delivery of goods.	0..1
		inventoryLocation	PartyIdentification	Despatch Advice. Inventory Location. Party Identification	Identification of the location where the goods will be or have been stored.	0..1
		pickUpLocation	PartyIdentification	Despatch Advice. Pick Up Location Party Identification	Party where goods are collected or taken over by the carrier (i.e. if other than consignor).	0..1
		receiver	PartyIdentification	Despatch Advice. Receiver. Party Identification	A party who engages in receiving goods. Examples: the buyer, freight forwarder, consolidator.	1..1
		shipper	PartyIdentification	Despatch Advice. Shipper. Party Identification	A party who engages in shipping goods. Examples: the seller, freight forwarder, consolidator.	1..1
		shipFrom	PartyIdentification	Despatch Advice. Ship From. Party Identification	Identification of the location from where goods will be or have been shipped.	0..1
		shipTo	PartyIdentification	Despatch Advice. Ship To. Party Identification	Identification of the location to where goods will be or have been shipped.	1..1
		contract	Reference	Despatch Advice. Contract. Reference	For DespatchAdvice class: the specific contract referenced by the Despatch Advice.	0..1
		declarantsCustomsIdentity	Reference	Despatch Advice. Declarants Customs Identity. Reference	Reference to the party whose posted bond or security is being declared in order to accept responsibility for a goods declaration and the applicable duties and taxes.	0..1
		deliveryNote	Reference	Despatch Advice. Delivery Note. Reference	For DespatchAdvice class: note accompanying the despatch advice.	0..1

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Mult.
		productCertification	Reference	Despatch Advice. Product Certification. Reference	Number assigned by a governing body (or their agents) to a product which certifies compliance with a standard.	0..1
		specification	Reference	Despatch Advice. Specification. Reference	N/A	0..1
DespatchAdviceItemContainmentLineItem				Despatch Advice Item Containment Line Item. Details		
		<<is a>>	ItemContainment	Despatch Advice Item Containment Line Item. Inheritance_ Association. Item Containment		1..1
	quantityContained			Despatch Advice Item Containment Line Item. Quantity Contained. Quantity	The number of units shipped of the order unit or associated item. The unit of measure for the quantity is assumed to be the same as for the associated item. Thus the quantity must be specified in the same unit of measure as the item, e.g. case, each, etc...	1..1
	requestedQuantity			Despatch Advice Item Containment Line Item. Requested Quantity. Quantity	The quantity that was ordered or planned to be delivered.	0..1
	freeGoodsQuantity			Despatch Advice Item Containment Line Item. Free Goods Quantity. Quantity	Quantity of goods which are free of charge.	0..1
			QuantityVariance	Despatch Advice Item Containment Line Item. Association. Quantity Variance		0..*
DespatchAdviceLogisticUnitLineItem				Despatch Advice Logistic Unit Line Item. Details		
		<<is a>>	LogisticUnits	Despatch Advice Logistic Unit Line Item. Inheritance_ Association. Logistic Units		
			DespatchAdviceItemCon-	Despatch Advice Logistic Unit Line Item. Association.		0..*

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Mult.
			mentLineItem	Despatch Advice Item Containment Line Item		
DespatchInformation				Despatch Information. Details		
		<<choice>>	EstimatedDelivery	Despatch Information. Choice_Association. Estimated Delivery		1..1
		<<choice>>	ActualShipping	Despatch Information. Choice_Association. Actual Shipping		1..1
	despatch-DateTime			Despatch Information. Despatch Date Time. Date Time	Date/time on which the goods are or are expected to be despatched or shipped.	0..1
	release-DateTimeOfSupplier			Despatch Information. Release Date Time Of Supplier. Date Time	<i>Date when the supplier released goods.</i>	0..1
	loading-DateTime			Despatch Information. Loading Date Time. Date Time	The date/time on which the stuffing of a container is to take place, or has taken place.	0..1
	PickUp-DateTime			Despatch Information. Pick Up Date Time. Date Time	Date/time at which the cargo is picked up.	0..1
EstimatedDelivery				Estimated Delivery. Details	EstimatedDelivery has a choice association with the DespatchAdvice class. It also contains the attributes actualShipDateTime and estimatedDeliveryDateTime.	
	estimatedDeliveryDateTime			Estimated Delivery. Estimated Delivery Date Time. Date Time	Date and/or time when the shipper of the goods expects delivery will take place.	1..1
	actualShip-DateTime			Estimated Delivery. Actual Ship Date Time. Date Time	The date and time the goods were shipped.	0..1
		estimatedDeliveryPeriod	TimePeriodOr-DateTimePeriod	Estimated Delivery. Estimated Delivery Period. Time Period Or Date Time Period	The estimated time frame in which the goods will be delivered at the ship to location.	1..1
PackageInformation				Package Information. Details	To specify amount and type of logistic unit(s).	
	numberOfUnits			Package Information. Number Of Units. Integer_		1..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Mult.
				Numeric		
	packageType			Package Information. Package Type. Package Type Description Code List_ Code		0..1
QuantityVariance				Quantity Variance. Details		
	changeReason		ChangeReason-CodeList	Quantity Variance. Change Reason. Change Reason Code List_ Code	To specify the reason for a change of the quantity.	1..1
	varianceQuantity			Quantity Variance. Variance Quantity. Quantity	To specify any variances between what was ordered and what is ready for or has been despatched.	1..1

1.5.3 Class Diagrams

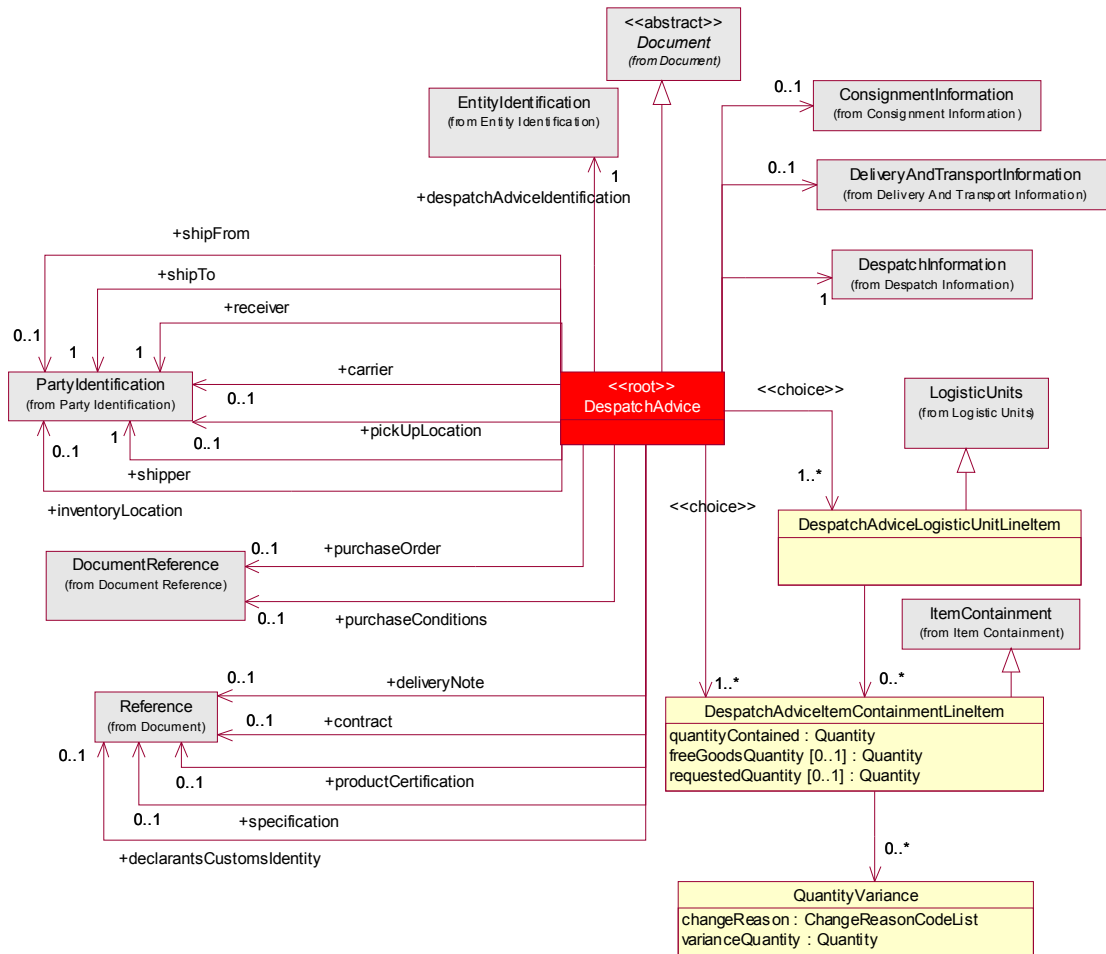


Figure 3 – Class Diagram: Despatch Advice

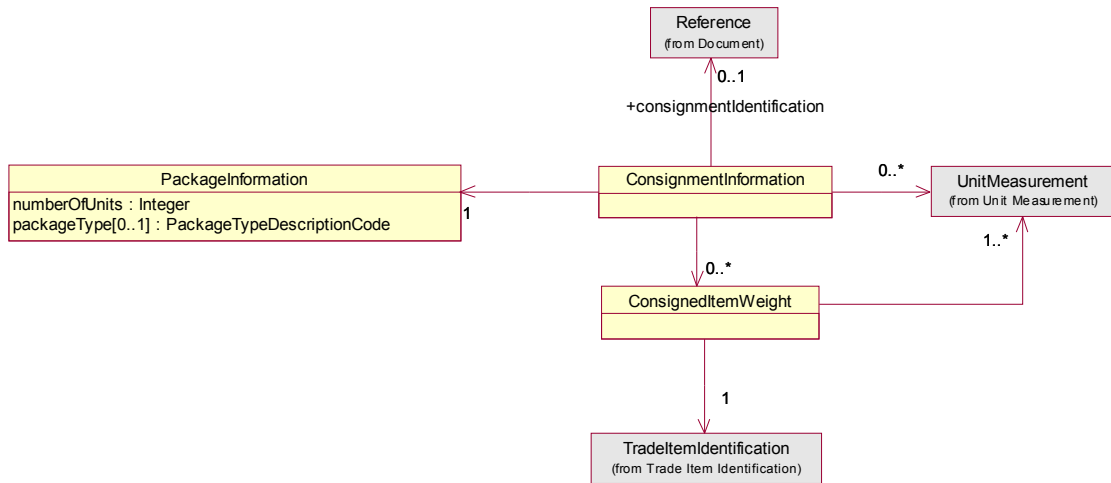


Figure 4 – Class Diagram: Consignment Information

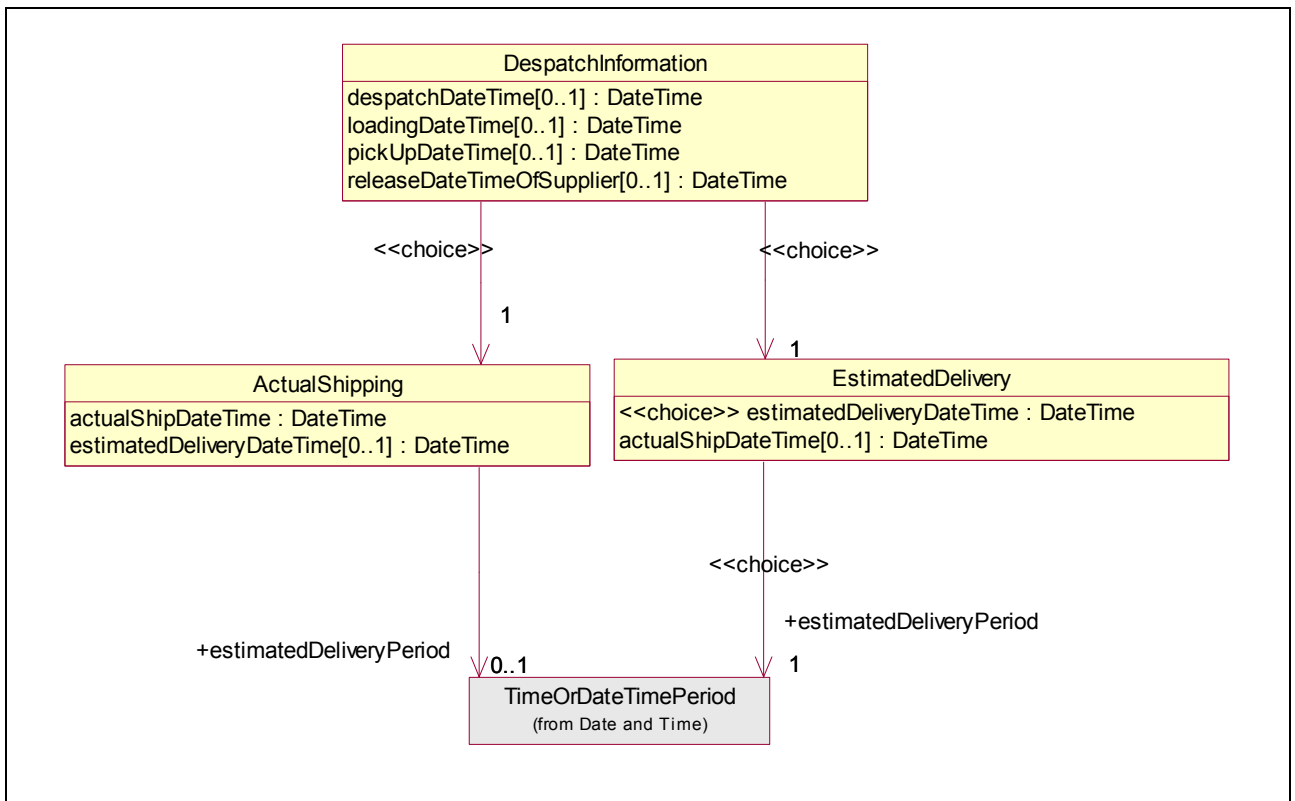


Figure 5 – Class Diagram: Despatch Information

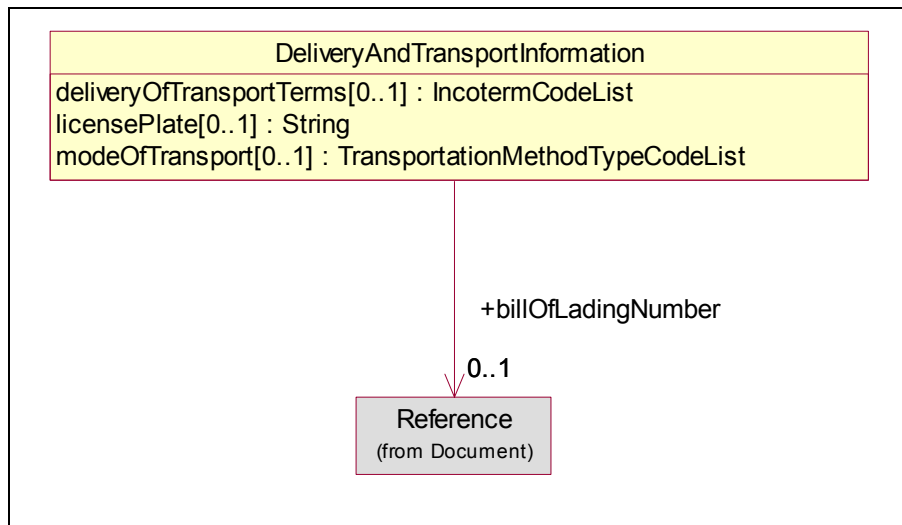


Figure 6 – Class Diagram: Delivery And Transport Information

1.5.4 Code Lists

Code List Name	Code List Description
ChangeReasonCodeList	
Code Name	Code Description
ARTICLE_CODE_UNKNOWN	N/A
DAMAGED	N/A
ITEM_NOT_ORDERED	N/A
OUT_OF_INVENTORY	N/A
PACK_DIFFERENCE	N/A

Business Solution Design

1.6 Business Document Example

The following is an example of a despatch advice message. The message is sent out on February 9th at 11 AM. The message is identified with the unique identifier 200540001. The content owner is the sending party, in this case the material supplier (Shipper 8812345678903).

The despatch advice is sent by the material supplier (Shipper 8812345678903) to the manufacturer (Receiver 8712345678913).

The reported despatch consists of

DespatchAdvice	
- creationDateTime	2005-02-09T11:00:00
- documentStatus	ORIGINAL
EntityIdentification (+despatchAdviceIdentification)	
- uniqueCreatorIdentification	200540001
PartyIdentification (+contentOwner)	
- gLN	8812345678903
PartyIdentification (+shipper)	
- gLN	8812345678903
PartyIdentification (+receiver)	
- gLN	8712345678913
PartyIdentification (+shipTo)	
- gLN	8712345678921
PartyIdentification (+inventoryLocation)	
- gLN	8712345678922
DocumentReference (+purchaseConditions)	
EntityIdentification	
- uniqueCreatorIdentification	2004000012
PartyIdentification (+contentOwner)	
- gLN	8812345678903
Reference (+billOfLadingNumber)	
- referenceDateTime	2005-02-09T10:00:00
- referenceIdentification	88021
DespatchInformation	
ActualShipping	
- actualShipDateTime	2005-02-09T11:10:00
DespatchAdviceLogisticUnitLineItem *1	
- packageType	PE (pallet, modular)

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LogisticUnitIdentification	
serialShipmentContainerCode	881234567000010112
DespatchAdviceItemContainmentLineItem *1.1	
- lineItemNumber	1
- quantityContained (value, unitOfMeasure)	700
TradeItemIdentification (+containedItemIdentification)	
- gTIN	08712345678906
DetailLevelReference (+deliveryNote)	
- lineItemNumber	001
Reference	
- referenceDateTime	2005-02-09T11:00:00
- referenceIdentification	2400021
TransactionItemData	
- lotNumber	ASD00012
- bestBeforeDate	2005-08-01

1.7 Implementation Considerations

One of the requirements specified in the BRW Version 0.3 of 8 December, 2003 is as follows:

The Despatch Advice should also include the line sequence numbers (UML: number) from the documents (Order, Delivery Note, Consignment and Contract) that can be referenced to. These line sequence numbers for referenced documents are optional.

For example:

Despatch Advice line nbr	Reference Identification and Date	Reference Document line nbr
1	Order 933, Date 2004-04-12	25
2	Order 934, Date 2004-05-12	9
3	Order 990, Date 2004-06-12	1

The idea behind this is that if a dispatch advice refers to one order or contract or dispatch note or consignment note the reference is identified at the header level and that then applies to all item lines.

If a dispatch advice is referring to more than one order or contract or dispatch note or consignment note then the reference is identified at the detail level through the DetailLevelReference.

1.8 Testing

Business Solution Design

1.8.1 Pass / Fail Criteria

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

Attribute	Value

1.9 Appendices

1.10 Summary of Changes

Change	BMS Ver- sion	Associated CR Number
DespatchAdvice → DocumentReference: <ul style="list-style-type: none">• Changed role name orderReference into purchaseOrder• Changed role name purchaseCondition-Reference into purchaseConditions	0.2.2	
<ul style="list-style-type: none">• Change to data types for measurementUnitCodeList in class diagrams• Change of cardinality of carrier to 0..1 as per requirements in Dispatch Advice Class Diagram and GDD Report.	2.2.2	

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