

Business Message Standard (BMS)

for

**Deliver / FTL-LTL Shipment Status
and Inquiry**

BRG: Deliver

Version: 2.0.2

Date: 31/03/2005



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BRAD Version: 0.8.3

BRAD Title:
BRAD Date:
BRAD Version:

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Business Solution Design

1 Business Solution Design

1.1 Business Domain View

1.1.1 Problem Statement / Business Need

Throughout the shipment lifecycle, inquiries are made regarding the status of goods in transit. Standardized inquiry and response messages are required for FTL, LTL and Small Package Carriers (SPC) within the motor carrier industry.

1.1.2 Objective

The incorporation of the Shipment Status Inquiry and Response messages into the EAN.UCC System will address the requirements of having a core transport status inquiry and response for the motor carrier shipping industry.

1.1.3 Audience

The primary audience for this document are Buyers, Suppliers, Carriers and Third Party Logistics Providers (3PL).

1.1.4 Artefacts

Artefact name	State	Artefact / State description
BRW – Shipping Status Inquiry and Response (TTG)		Business Requirements Worksheet for Shipping Status Inquiry and Response (TTG).
CR 01-000067		Change Request for Status Inquiry Message Model and Schema
CR 01-000068		Change Request for Status Response Message Model and Schema.
CR 03-000143		Change Request to Batch CRs 01-000067 and 01-000068

1.1.5 References

Reference Name	Description

1.1.6 Acknowledgements

1.1.6.1 BRG Members

Function	Name	Company
Deliver BRG Chair	D.Noyes	Johnsonville Sausage
Deliver BRG Chair	S. Donarski	Schneider Logistics
Task Group Chair	S. Donarski	Schneider Logistics
Task Group Chair	R. Battista	Roadway, Co-chair
Deliver BRG Manager	Bruno Julien	EAN France - Gencod

1.1.6.2 ITRG Members

Function	Name	Company / organisation
ITRG Chair	None	
ITRG Member	None	
ITRG Member	None	
ITRG Member	None	
...		

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

Function	Name	Company / organisation
Participant	Sue Donarski	Schneider
Participant	Rick Battista	Roadway
Participant	Wayne Gingerich	Werner
Participant	Kari Melhus	Target
Participant	Bob Robertson	Manhattan Associates
Participant	Stef Spaan	EAN Netherlands
Participant	Mike Osiecki	Best Buy
Participant	Scott Keske	Best Buy
Participant	Patrick Pinter	ABF
Participant	Shanda Marvin	Procter & Gamble
Participant	Frank Napoli	LMI
Participant	Jared Andrews	LMI
Participant	Regina De Baker	Watkins
Participant	Doug Anderson	Kleinschmidt
Participant	Roman Gural	UPS
Participant	John Hervey	NACS
Participant	Brian Finale	UPS

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1.1.6.4 Design Team Members

Function	Name	Organisation
Modeller	Eric Kauz	Uniform Code Council
XML Technical Designer		
EANCOM Technical Designer		
Peer Reviewer	Bob Celeste	Uniform Code Council

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1.2 Business Context

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

1.3 Additional Technical Requirements Analysis

1.3.1 Technical Requirements (optional)

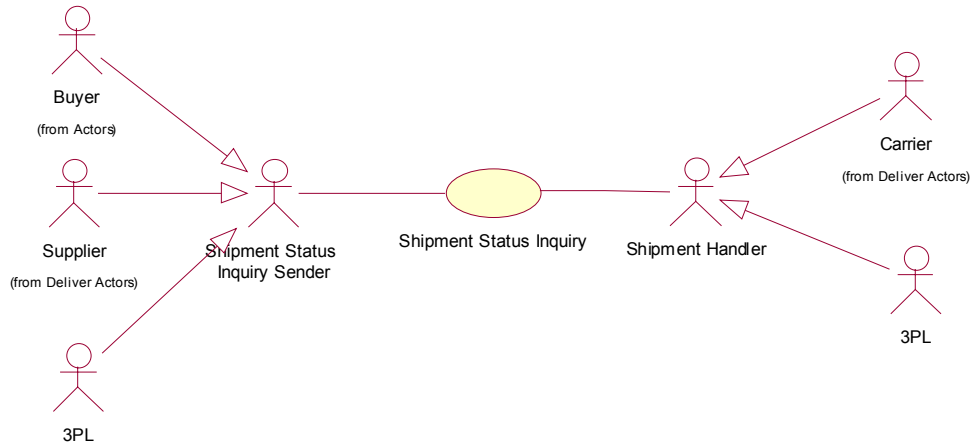
(User Interface, Security, Performance, Quality, etc.)

Number	Statement	Rationale

Business Solution Design

1.4 Business Transaction View

1.4.1 Business Transaction Use Case Diagram : FTL/LTL Shipment status Inquiry

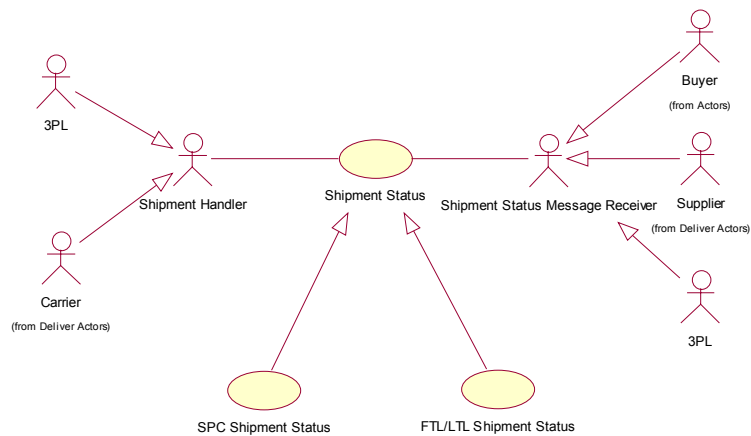


Use Case ID	UC-1
Use Case Name	Send FTL/LTL Shipment Status Inquiry
Use Case Description	A Shipment Status Inquiry Sender (Supplier, Buyer, or 3PL) requests a shipping status from a Shipment Handler. The Shipment Handler is any party involved in the shipment of goods including a carrier or a 3PL.
Actors (Goal)	Shipment Status Inquiry Sender : Party that sends LTL, FTL, or SPC Shipment Status Inquiry Message. This party is a generalization of Buyer, Supplier and 3PL. Shipment Handler : This party is a generalization of Carrier and 3PL. This is the party sending the Shipment Status message.
Performance Goals	<i>Goals related to technical requirements</i> None
Preconditions	An explicit agreement between Carrier, Buyer, Supplier, or 3PL to receive shipment status information in response to query. Shipment Status Inquiry Sender must have shipment reference information including Shipment Reference Number and Carrier Identifier (for LTL and FTL).
Post conditions	Successful End Condition: Shipment Handler receives Shipment Status Inquiry. Failed End Condition: Shipment Handler does not receive Shipment Status Inquiry.
Scenario	Begins when Shipment Status Inquiry Sender sends electronic Shipment Status Inquiry. Continues with... Step # Actor Activity Step

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	Ends when... Shipment Handler receives electronic Shipment Status Inquiry.
Alternative Scenario	There are no alternative scenarios. None
Related Requirements	None
Related Rules	<i>Business rules associated with use case.</i> None

1.4.2 Business Transaction Use Case Diagram : FTL/LTL Shipment status Response



Use Case ID	UC-1
Use Case Name	Send FTL/LTL Shipment Status
Use Case Description	A Shipment Status Message is sent by a Shipment Handler (Carrier, 3PL) to a Shipment Status Message Receiver. A Shipment Status Message Receiver can be a Buyer, Supplier or 3PL. Shipment Status Messages can be in response to a Shipment Status Inquiry Message (solicited). They can also be sent without the receipt of an inquiry (unsolicited).
Actors (Goal)	Shipment Status Inquiry Receiver : Party that receives LTL, FTL, or SPC Shipment

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	<p>Status Message. This party is a generalization of Buyer, Supplier and 3PL.</p> <p>Shipment Handler : This party is a generalization of Carrier and 3PL. This is the party sending the Shipment Status message.</p>
Performance Goals	<p><i>Goals related to technical requirements</i></p> <p>None</p>
Preconditions	<ol style="list-style-type: none"> 1. An explicit agreement between Carrier, Buyer, Supplier, or 3PL to receive shipment status information in response to query. 2. A Shipment Status Inquiry is received by the generator of the response message (solicited scenario only).
Post conditions	<p>Successful End Condition: Shipment Status Receiver receives Shipment Status Message.</p> <p>Failed End Condition: Shipment Status Receiver does not receive Shipment Status Message.</p>
Scenario	<p>Begins when Shipment Status Response Sender sends electronic Shipment Status Message.</p> <p>Continues with...</p> <p style="text-align: center;">Step # Actor Activity Step</p> <p>Ends when... Shipment Status Message Receiver receives electronic Shipment Status Message.</p>
Alternative Scenario	<p>Shipment Status Message is sent without a prerequisite Shipment Status Inquiry (unsolicited).</p> <p style="text-align: center;">Step # Actor Activity Step</p>
Related Requirements	None
Related Rules	<p><i>Business rules associated with use case.</i></p> <p>None</p>

1.4.3 Business Transaction Activity Diagram(s)

1.4.4 Business Transaction Use Case Diagram : FTL/LTL Shipment status Inquiry

Not filled in the previous BRD

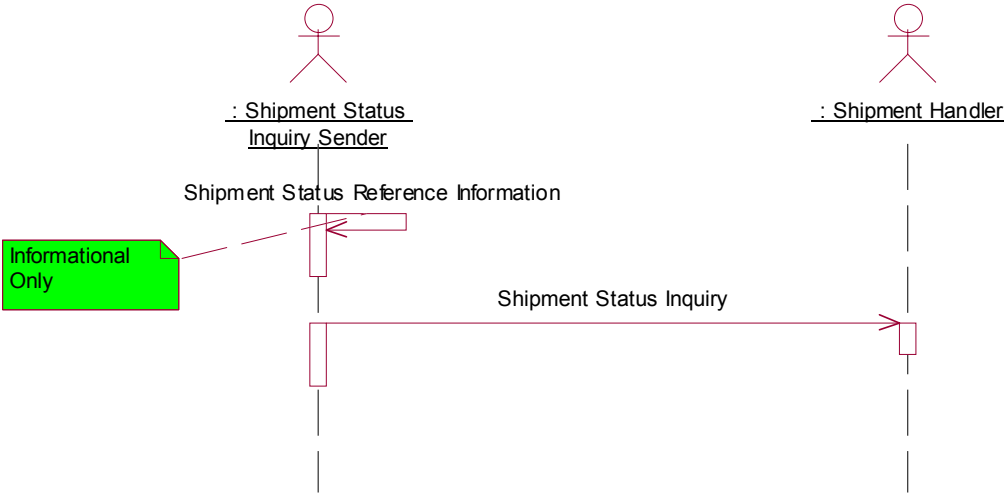
1.4.5 Business Transaction Use Case Diagram : FTL/LTL Shipment status Response

Not filled in the previous BRD

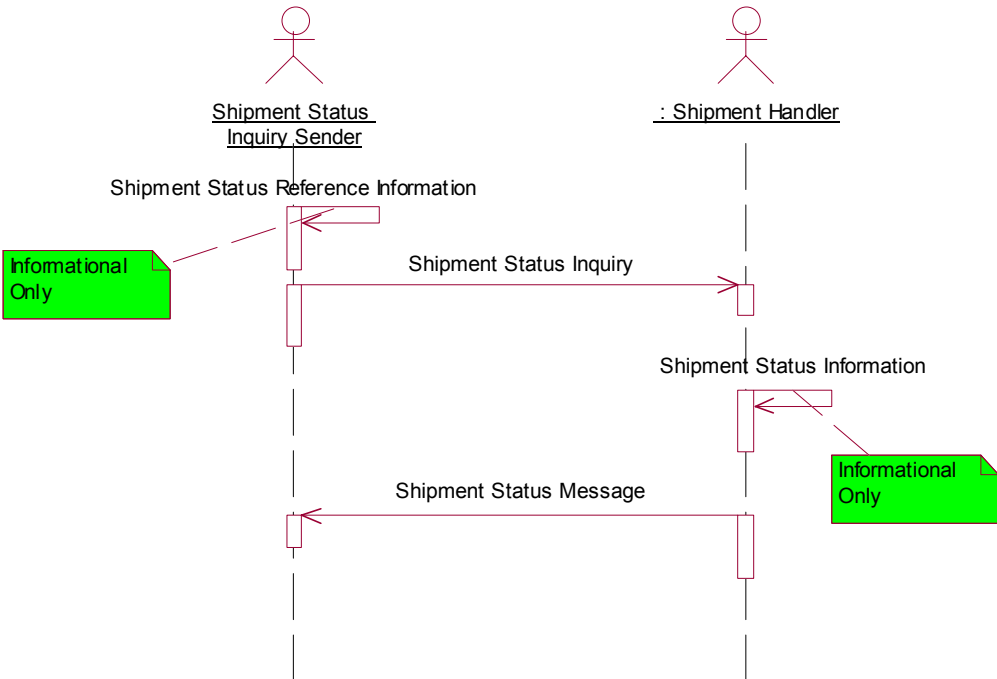
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1.4.6 Business Transaction Sequence Diagram(s) (optional)

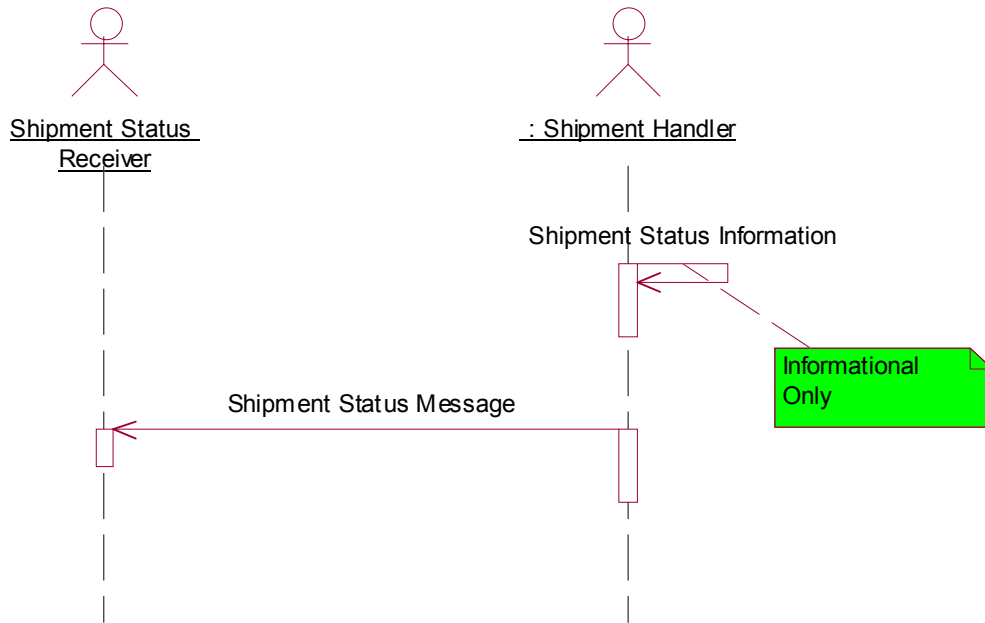
1.4.6.1 Business Transaction Use Case Diagram : FTL/LTL Shipment status Inquiry



1.4.7 Business Transaction Use Case Diagram : FTL/LTL Shipment status Response (Solicited Scenario)



1.4.8 Business Transaction Use Case Diagram : FTL/RTL Shipment status Response (Unsolicited Scenario)



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1.5 Information Model (including GDD Report)

1.5.1 Data Description : FTL/LTL Shipment status Inquiry

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name
FTLLTLShipmentDateCriteria				BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	actualPickupDate			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	plannedShipDate			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
FTLLTLShipmentStatusInquiry				BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	comments			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		None	Document	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		fTLLTLShipmentStatusIn- quiryIdentification	EntityIdentifica- tion	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		None	FTLLTLShipment- DateCriteria	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3

Business Solution Design

1.5.2 Data Description: FTL/LTL Shipment status Response

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
DeliverReference				BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	deliverReferenceIdentification			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	deliverReferenceType			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
FTLLTLShipmentStatus				BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	additionalShipperInformation			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	shipmentIdentificationNumber			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	transportationMethod			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		referenceNumber	DeliverReference	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		shipmentReferenceNumber	DeliverReference	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		None	Document	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		ftlltlShipment-StatusIdentification	EntityIdentification	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		None	FTLLTLShipment-StatusDetail	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		ITLInterlineCarrierInformation	InterlineCarrier	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		carrierIdentification	PartyIdentification	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
FTLLTLShipmentStatusDetail				BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	clarifiedSignature			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	locationPartyRole			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	shipmentStatusCode			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	shipmentStatusDate			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	shipmentStatusDe- scription			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	shipmentStatusReason			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	stopSequence			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		None	None	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		statusReferenceNum- ber	DeliverReference	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		None	FTLShipmentMeas- urements	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		None	LineItem	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		equipmentIdentifier	ShipmentEquip- mentInformation	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		None	ShipmentPur- chaseOrderInforma- tion	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		None	StopLocationInfor- mation	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
FTLShipmentMeasurements				BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	totalShipmentQuantity			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	totalShipmentWeight			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	None			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	None			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	None			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
InterlineCarrier				BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	cityOfTransfer			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	transportationMethod			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		interlineCarrierIdentification	PartyIdentification	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
LTLLoadingExceptionInformation				BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
LTLShipmentMeasurements				BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	loadingQuantityNon-Unitized			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	looseQuantity			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	masterHandlingUnit-PackageForm			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	masterHandlin-			BRD for FTL/LTL Shipment Status Inquiry and Response

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
	gUnitQuantity			V0.8.3
	totalShipmentWeight			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
ShipmentEquipmentInformation				BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	equipmentNumber			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		equipmentIdentifier	PartyIdentification	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
ShipmentPurchaseOrderInformation				BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
StopLocationInformation				BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	address1			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	address2			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	address3			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	city			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	countryCode			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	name			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	postalCode			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
	stateOrProvince			BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3
		None	GeographicalCoordinates	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
		locationIdentifier	PartyIdentification	BRD for FTL/LTL Shipment Status Inquiry and Response V0.8.3

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1.5.3 GDD Report :

FTL/LTL Shipment status Inquiry

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
FTLLTLShipmentDateCriteria				Full Truckload_ Less Than Truckload_ Shipment Status Date Criterion. Details	This optional class enables a choice between using Planned Ship Date and Actual Ship date as search criteria for an FLT/LTL Shipment Status Inquiry.	
	actualPickupDate			Full Truckload_ Less Than Truckload_ Shipment Status Date Criterion. Choice_ Actual Pickup Date. Date Time		1..1
	plannedShipDate			Full Truckload_ Less Than Truckload_ Shipment Status Date Criterion. Choice_ Planned Ship Date. Date Time	Date Shipment is expected to ship.	1..1
FTLLTLShipmentStatusInquiry				Full Truckload_ Less Than Truckload_ Shipment Status Inquiry. Details		

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
	comments			Full Truckload_ Less Than Truckload_ Shipment Status Inquiry. Description. Text	The Description Class is included in the model to allow for the addition of comments to an inquiry. This is free-form text	0..*
		None	Document	Full Truckload_ Less Than Truckload_ Shipment Status Inquiry. Inheritance_Association. Electronic_ Document	None	1..1
		FTLLTShipmentStatusInquiryIdentification	EntityIdentification	Full Truckload_ Less Than Truckload_ Shipment Status Inquiry. Shipment Status Inquiry Identification. Entity Identification	None	*..*
		None	FTLLTShipment-DateCriteria	Full Truckload_ Less Than Truckload_ Shipment Status Inquiry. Association. Full Truckload_ Less Than Truckload_ Shipment Status Date Criterion	None	0..1

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FTL/LTL Shipment status Response

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
DeliverReference				Deliver_ Entity Reference. Details	Number used to reference package or shipment for the purposes of status inquiry.	
	deliverReferenceIdentification			Deliver_ Entity Reference. Deliver Reference_ Identification. Text		1..1
	deliverReferenceType			Deliver_ Entity Reference. Deliver Reference_ Type. Deliver Reference_ Code		1..1
FTLLTLShipmentStatus				Full Truckload_ Less Than Truckload_ Shipment Status. Details		
	additionalShipperInformation			Full Truckload_ Less Than Truckload_ Shipment Status. Additional Shipper_ Description. Text		0..*
	shipmentIdentificationNumber			Full Truckload_ Less Than Truckload_ Shipment Status. Shipment_ Identification Number. Text	Identification number assigned to the shipment by the shipper that uniquely identifies the shipment from	0..1

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
					origin to ultimate destination and is not subject to modification	
	transportationMethod			Full Truckload_ Less Than Truckload_ Shipment Status. Transportation Method. Transportation Method Type_ Code	Not Available	0..1
		referenceNumber	DeliverReference	Full Truckload_ Less Than Truckload_ Shipment Status. Reference Number. Deliver_ Entity Reference	Number used to reference package or shipment for the purposes of status in-query.	0..*
		shipmentReferenceNumber	DeliverReference	Full Truckload_ Less Than Truckload_ Shipment Status. Shipment_ Reference Number. Deliver_ Entity Reference	Number used to reference package or shipment for the purposes of status in-query.	1..1
		None	Document	Full Truckload_ Less Than Truckload_ Shipment Status. Inheritance_Association. Electronic_ Document	Number used to reference package or shipment for the purposes of status in-query.	1..1
		fTLLTShipment-StatusIdentification	EntityIdentification	Full Truckload_ Less Than Truckload_	Number used to reference package	1..1

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Shipment Status. Shipment_ Status Identification. Entity Identification	or shipment for the purposes of status in-quiry.	
		None	FTLLTShipment-StatusDetail	Full Truckload_ Less Than Truckload_ Shipment Status. Association. Full Truckload_ Less Than Truckload_ Shipment Status Line	Number used to reference package or shipment for the purposes of status in-quiry.	1..*
		ITLInterlineCarrierInformation	InterlineCarrier	Full Truckload_ Less Than Truckload_ Shipment Status. ITL_ Interline Carrier. Interline_ Shipment Transfer	Number used to reference package or shipment for the purposes of status in-quiry.	0..*
		carrierIdentification	PartyIdentification	Full Truckload_ Less Than Truckload_ Shipment Status. Carrier Identification. Party Identification	Number used to reference package or shipment for the purposes of status in-quiry.	0..1
FTLLTShipmentStatusDetail				Full Truckload_ Less Than Truckload_ Shipment Status Line. Details	Mandatory class containing a shipment status, shipment status reason code and associated modifiers for shipment status (location, date and time). There can be one	

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
					to many statuses associated with a shipment inquiry.	
	clarifiedSignature			Full Truckload_ Less Than Truckload_ Shipment Status Line. Clarified_ Signature. Text	Text version of the signature associated with the receiver of a package.	0..1
	locationPartyRole			Full Truckload_ Less Than Truckload_ Shipment Status Line. Party_ Location Code. Code	This class provides physical address and location information about a stop related to a shipment status.	0..1
	shipmentStatusCode			Full Truckload_ Less Than Truckload_ Shipment Status Line. Shipment_ Status Code. Code	Enumerated list containing the shipment status of a shipment	1..1
	shipmentStatusDate			Full Truckload_ Less Than Truckload_ Shipment Status Line. Shipment_ Status Date. Date Time		1..1
	shipmentStatusDescription			Full Truckload_ Less Than Truckload_ Shipment Status Line. Shipment_ Status Description. Text	Free form text used to add addition detail to status message.	0..*
	shipmentStatusReason			Full Truckload_ Less	Code list designat-	0..1

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Than Truckload_ Shipment Status Line. Shipment Status Reason_ Code. Code	ing specific reason associated with Shipment Status.	
	stopSequence			Full Truckload_ Less Than Truckload_ Shipment Status Line. Stop_ Sequence Number. Numeric	An integer identifying the sequential order of the stop.	0..1
		None	None	Full Truckload_ Less Than Truckload_ Shipment Status Line. Association. Lading Exception Line	Not Available	1..*
		statusReferenceNumber	DeliverReference	Full Truckload_ Less Than Truckload_ Shipment Status Line. Status_ Reference Number. Deliver_ Entity Reference	Number used to reference an object for a status detail record. To be used if status relates to an object other than the shipment referred to in the header record.	0..*
		None	FTLShipmentMeasurements	Full Truckload_ Less Than Truckload_ Shipment Status Line. Association. Full Truckload_ Shipment	Number used to reference an object for a status detail record. To be used if status	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Containment	relates to an object other than the shipment referred to in the header record.	
		None	LineItem	Full Truckload_ Less Than Truckload_ Shipment Status Line. Inheritance_Association. Line Item	Number used to reference an object for a status detail record. To be used if status relates to an object other than the shipment referred to in the header record.	1..1
		equipmentIdentifier	ShipmentEquipmentInformation	Full Truckload_ Less Than Truckload_ Shipment Status Line. Association. Shipment_ Equipment Identification	None	0..*
		None	ShipmentPurchaseOrderInformation	Full Truckload_ Less Than Truckload_ Shipment Status Line. Association. Full Truckload_ Less Than Truckload_ Shipment Stat_ Purchase Order Information	None	0..*
		None	StopLocationInformation	Full Truckload_ Less Than Truckload_	None	0..1

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Shipment Status Line. Association. Stop_ Transport Location		
FTLShipmentMeasurements				Full Truckload_ Shipment Containment. Details	FTL specific class containing weight and quantity details associated with a package shipment.	
	totalShipmentQuantity			Full Truckload_ Shipment Containment. Shipment_ Total Quantity. Quantity	The total number of units associated with a shipment including the unit of measure.	0..1
	totalShipmentWeight			Full Truckload_ Shipment Containment. Shipment_ Total Weight. Measure	Total Weight of commodity being shipped including Unit of Measure.	0..1
	None			Full Truckload_ Shipment Containment. Package Form Type. Code		0..*
	None			Full Truckload_ Shipment Containment. Text. Text		0..*
	None			Full Truckload_ Shipment Containment. Value. Amount		0..*
InterlineCarrier				Interline_ Shipment Transfer. Details		

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
	cityOfTransfer			Interline_ Shipment Transfer. Transfer_ City_ Location. Text	City where freight transferred to next carrier	0..1
	transportationMethod			Interline_ Shipment Transfer. Transporta- tion_ Method. Trans- portation Method_ Code	e.g. Truck, rail, ocean	0..1
		interlineCarrierIden- tification	PartyIdentification	Interline_ Shipment Transfer. Interline_ Carrier Identifica- tion_ Association. Party Identification	None	0..1
LTLadingExceptionInformation				Lading_ Exception Line. Details	This class provides identifiers for the equipment used in the shipment.	
LTLShipmentMeasurements				Less Than Truck- load_ Shipment Containment. Details	LTL specific class containing weight and quantity de- tails associated with a package shipment.	
	ladingQuantityNon- Unitized			Less Than Truck- load_ Shipment Containment. Non Unitized Lading_ Quantity. Quantity		0..1
	looseQuantity			Less Than Truck- load_ Shipment Containment. Loose_ Quantity. Quantity	# of units not on the Master han- dling unit	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
	masterHandlingUnit- PackageForm			Less Than Truck- load_ Shipment Containment. Master Handling Unit_ Pack- age Form Type. Code	Type of packaging associated with Master H/U Quan- tity. For example: pallet, skid, slip sheet	0..1
	masterHandlin- gUnitQuantity			Less Than Truck- load_ Shipment Containment. Master Handling Unit_ Quan- tity. Quantity	Number of units unitised	0..1
	totalShipmentWeight			Less Than Truck- load_ Shipment Containment. Ship- ment_ Total Weight. Measure	Total Weight of commodity being shipped including Unit of Measure.	0..1
ShipmentEquipmentInformation				Shipment_ Equip- ment Identification. Details	Not Available	
	equipmentNumber			Shipment_ Equip- ment Identification. Equipment Identifica- tion. Text	Equipment identifi- cation number	0..1
		equipmentIdentifier	PartyIdentification	Shipment_ Equip- ment Identification. Equipment Identifier_ Association. Party Identification	Identification number for equipment being used. In North America, SCAC must be used for this attribute.	0..1
ShipmentPurchaseOrderInforma- tion				Full Truckload_ Less Than Truckload_		

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Shipment Status_ Purchase Order Information. Details		
	purchaseOrderNumber			Full Truckload_ Less Than Truckload_ Shipment Status_ Purchase Order Information.Purchase Order Number.Text	A Reference Number used to identify a purchase order.	
	purchaseOrderDepartment			Full Truckload_ Less Than Truckload_ Shipment Status_ Purchase Order Information.Purchase Order Department.Text	Department Number associated with Purchase Order.	
	purchaseOrderQuantity			Full Truckload_ Less Than Truckload_ Shipment Status_ Purchase Order Quantity.Purchase Order Number.Measure	The number of cartons on the Purchase Order	
	purchaseOrderType			Full Truckload_ Less Than Truckload_ Shipment Status_ Purchase Order Information.Purchase Order Type.Text	Purchase Order type identifier	
	purchaseOrderWeight			Full Truckload_ Less Than Truckload_ Shipment Status_	The total weight of the cartons on the purchase order.	

Business Solution Design

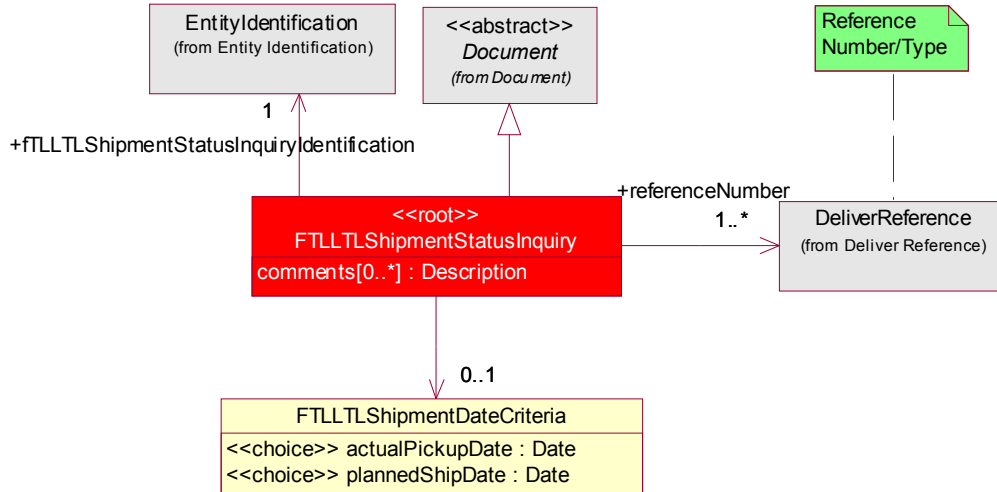
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Purchase Order Quantity.Purchase Order Weight.Measure		
StopLocationInformation				Stop_ Transport Location. Details	Information per- taining to the name and address information for a specific stop loca- tion.	
	address1			Stop_ Transport Location. 1_ Address. Text	Text to provide street address information for a location.	0..1
	address2			Stop_ Transport Location. 2_ Address. Text	Text to provide street address information for a location where status event took place.	0..1
	address3			Stop_ Transport Location. 3_ Address. Text	Text to provide street address information for a location where status event took place	0..1
	city			Stop_ Transport Location. City. Text	City where status event took place	0..1
	countryCode			Stop_ Transport Location. Country. ISO3166_1_ Code	ISO Country Code of location where status event took	0..1

Business Solution Design

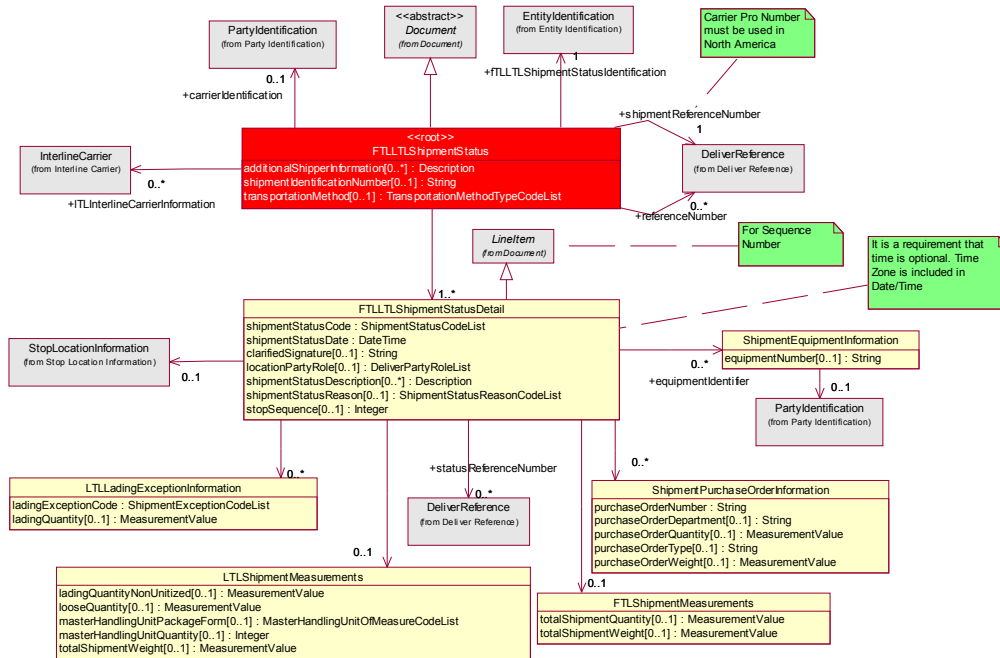
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
					place.	
	name			Stop_ Transport Location. Name. Text		0..1
	postalCode			Stop_ Transport Location. Postal Code. Text	Postal Code/Zip Code of location where status event took place.	0..1
	stateOrProvince			Stop_ Transport Location. State Or Province. Text	State where status event took place.	0..1
		None	GeographicalCoordinates	Stop_ Transport Location. Association. Geographical Coordinate	None	0..1
		locationIdentifier	PartyIdentification	Stop_ Transport Location. Location_ Identification. Party Identification	None	0..1

1.5.4 Class Diagrams

1.5.5 Class Diagram for FTL/LTL Shipment Status Inquiry



1.5.6 Class Diagram for FTL/LTL Shipment Status



Business Solution Design

1.5.7 Code Lists

1.5.8 Code Lists : FTL/LTL Shipment Status

Code List Name	Code List Description
ShipmentStatusCodeList	
Code Name	Code Description
ARRIVED_AT_CUSTOMS	N/A
ARRIVED_AT_DELIVERY_LOCATION	N/A
ARRIVED_AT_DELIVERY_LOCATION_LOADING_DOCK	N/A
ARRIVED_AT_PICKUP_LOCATION	N/A
ARRIVED_AT_PICKUP_LOCATION_LOADING_DOCK	N/A
ARRIVED_AT_TERMINAL_LOCATION	N/A
ATTEMPTED_DELIVERY	N/A
AVAILABLE_FOR_DELIVERY	N/A
CARRIER_DEPARTED_DELIVERY_LOCATION	N/A
CARRIER_DEPARTED_PICKUP_LOCATION_WITH_SHIPMENT	N/A
COMPLETED_LOADING_AT_PICKUP_LOCATION	N/A
COMPLETED_SHIPMENT	N/A
COMPLETED_UNLOADING_AT_DELIVERY_LOCATION	N/A
CONNECTING_LINE_OR_CARTAGE_PICKUP	N/A
DELIVER_NO_EARLIER_THAN_DATE_AND_OR_TIME	N/A
DELIVER_NO_LATER_THAN_DATE_AND_OR_TIME	N/A
DELIVERED_TO_CONNECTING_LINE	N/A
DELIVERY_APPOINTMENT_DATE_AND_OR_TIME	N/A
DELIVERY_APPOINTMENT_SECURED_ON_THIS_DATE_OR_TIME	N/A
DELIVERY_NOT_COMPLETED	N/A
DEPARTED_TERMINAL_LOCATION	N/A
DIVERTED_TO_AIR_CARRIER	N/A
EN_ROUTE_TO_DELIVERY_LOCATION	N/A
ESTIMATED_DATE_AND_OR_TIME_OF_ARRIVAL_AT_CONSIGNEE_LOCATION	N/A
ESTIMATED_DELIVERY	N/A
ESTIMATED_DELIVERY_APPOINTMENT_DATE_AND_OR_TIME	N/A
ESTIMATED_TO_ARRIVE_AT_CARRIER_TERMINAL	N/A
ESTIMATED_TO_DEPART_TERMINAL_LOCATION	N/A
FINAL_PART_OF_PARTIAL_SHIPMENT_DELIVERED_TO_CUSTOMER	N/A
IN_GATE	N/A
LOADED_ON_TRUCK	N/A
LOADING	N/A
ONLY_A_PORTION_OF_HANDLING_UNITS_FOR_SHIPMENT_DELIVERED_TO_CUSTOMER	N/A
OUT_GATE	N/A
PAPERWORK_RECEIVED_DID_NOT_RECEIVE_SHIPMENT_OR_EQUIPMENT	N/A
PARTIAL_SHIPMENT	N/A

Business Solution Design

PICKUP APPOINTMENT DATE AND OR TIME	N/A
PICKUP APPOINTMENT SECURED ON DATE AND OR TIME	N/A
PICKUP NO EARLIER THAN DATE AND OR TIME	N/A
PICKUP NO LATER THAN DATE AND OR TIME	N/A
RAIL ARRIVAL AT DESTINATION INTERMODAL RAMP	N/A
RAIL DEPARTURE FROM ORIGIN INTERMODAL RAMP	N/A
RECEIVED FROM PRIOR CARRIER	N/A
REFUSED BY CONSIGNEE	N/A
SHIPMENT ACKNOWLEDGED	N/A
SHIPMENT CANCELLED	N/A
SHIPMENT DAMAGED	N/A
SHIPMENT DELAYED	N/A
SHIPMENT HAS BEEN RECONSIGNED	N/A
SHIPMENT RETURNED TO SHIPPER	N/A
STORAGE IN TRANSIT	N/A
TENDERED FOR DELIVERY	N/A
TRAILER CLOSED OUT	N/A
TRAILER SPOTTED AT CONSIGNEES LOCATION	N/A
US CUSTOMS HOLD AT IN BOND LOCATION	N/A

Code List Name	Code List Description
ShipmentStatusReasonCodeList	
Code Name	Code Description
ACCIDENT	N/A
ADDRESS CORRECTED DELIVERY ATTEMPTED	N/A
ALTERNATE CARRIER DELIVERED	N/A
AWAITING EXPORT	N/A
BORDER CLEARANCE	N/A
CARRIER DISPATCH ERROR	N/A
CARRIER KEYING ERROR	N/A
CARTAGE AGENT	N/A
CASH NOT AVAILABLE FROM CONSIGNEE	N/A
CIVIL EVENT RELATED DELAY	N/A
COLLECT ON DELIVERY REQUIRED	N/A
CONSIGNEE CLOSED	N/A
CONSIGNEE RELATED	N/A
CREDIT HOLD	N/A
CUSTOMER REQUESTED FUTURE DELIVERY	N/A
CUSTOMER STRIKE	N/A
CUSTOMER VACATION	N/A
CUSTOMER WANTED EARLIER DELIVERY	N/A
CUSTOMS IMPORT OR EXPORT	N/A
DAMAGED REWRAPPED IN HUB	N/A
DELIVERY SHORTAGE	N/A
DRIVER NOT AVAILABLE	N/A
DRIVER RELATED	N/A
EXCEEDS SERVICE LIMITATIONS	N/A
FAILED TO RELEASE BILLING	N/A
FLAT CAR SHORTAGE	N/A

Business Solution Design

HELD FOR CONSIGNEE	N/A
HELD FOR FULL CARRIER LOAD	N/A
HELD FOR PAYMENT	N/A
HELD FOR PROTECTIVE SERVICE	N/A
HELD PENDING APPOINTMENT	N/A
HELD PER SHIPPER	N/A
HOLD DUE TO CUSTOMS DOCUMENTATION PROBLEMS	N/A
HOLIDAY CLOSED	N/A
IMPROPER INTERNATIONAL PAPERWORK	N/A
IMPROPER UNLOADING FACILITY OR EQUIPMENT	N/A
INCORRECT ADDRESS	N/A
INDIRECT DELIVERY	N/A
INSUFFICIENT DELIVERY TIME	N/A
INSUFFICIENT PICKUP TIME	N/A
INSUFFICIENT TIME TO COMPLETE DELIVERY	N/A
INTERNATIONAL NON CARRIER DELAY	N/A
LOAD SHIFTED	N/A
MECHANICAL BREAKDOWN	N/A
MIS SORT	N/A
MISSED DELIVERY	N/A
MISSED PICKUP	N/A
MISSING DOCUMENTS	N/A
NO REQUESTED ARRIVAL DATE PROVIDE BY SHIPPER	N/A
NO REQUESTED ARRIVAL TIME PROVIDED BY SHIPPER	N/A
NON EXPRESS CLEARANCE DELAY	N/A
NORMAL APPOINTMENT	N/A
NORMAL STATUS	N/A
OTHER	N/A
OTHER CARRIER RELATED	N/A
PAST CUTOFF TIME	N/A
PRE ARRANGED APPOINTMENT	N/A
PREVIOUS STOP	N/A
PROCESSING DELAY	N/A
PRODUCTION FALLDOWN	N/A
RAILROAD FAILED TO MEET SCHEDULE	N/A
RECEIVING TIME RESTRICTED	N/A
RECIPIENT UNAVAILABLE DELIVERY DELAYED	N/A
RECONSIGNEED	N/A
REFUSED BY CUSTOMER	N/A
RESTRICTED ARTICLES UNACCEPTABLE	N/A
RETURNED TO SHIPPER	N/A
ROAD CONDITIONS	N/A
SHIPMENT OVERWEIGHT	N/A
SHIPPER RELATED	N/A
SUSPENDED AT CUSTOMER REQUEST	N/A
TRACTOR CONVENTIONAL NOT AVAILABLE	N/A
TRACTOR WITH SLEEPER CAR NOT AVAILABLE	N/A
TRAILER CLASS NOT AVAILABLE	N/A
TRAILER NOT AVAILABLE	N/A
TRAILER NOT USABLE DUE TO PRIOR PRODUCT	N/A

Business Solution Design

TRAILER_VOLUME_NOT_AVAILABLE	N/A
TRAIN_DERAILMENT	N/A
TRAP_FOR_CUSTOMER	N/A
UNABLE_TO_CONTACT_RECIPIENT_FOR_BROKER_INFORMATION	N/A
UNABLE_TO_LOCATE	N/A
WAITING_FOR_CUSTOMER_PICKUP	N/A
WAITING_FOR_CUSTOMER_SPECIFIED_CARRIER	N/A
WAITING_INSPECTION	N/A
WAITING_SHIPPING_INSTRUCTIONS	N/A
WEATHER_OR_NATURAL_DISASTER_RELATED	N/A

Code List Name	Code List Description
MasterHandlingUnitOfMeasureCodeList	
Code Name	Code Description
BUNDLE	N/A
CARTON	N/A
PALLET	N/A
PIECES	N/A
SKID	N/A
SLIP_SHEET	N/A

Code List Name	Code List Description
ShipmentExceptionCodeList	
Code Name	Code Description
ALL_SHORT	N/A
DAMAGED	N/A
ENTIRE_SHIPMENT_REFUSED	N/A
LOST_OR_STOLEN	N/A
OVERAGE	N/A
PARTIAL_SHIPMENT	N/A
WRONG_PRODUCT	N/A

Business Solution Design

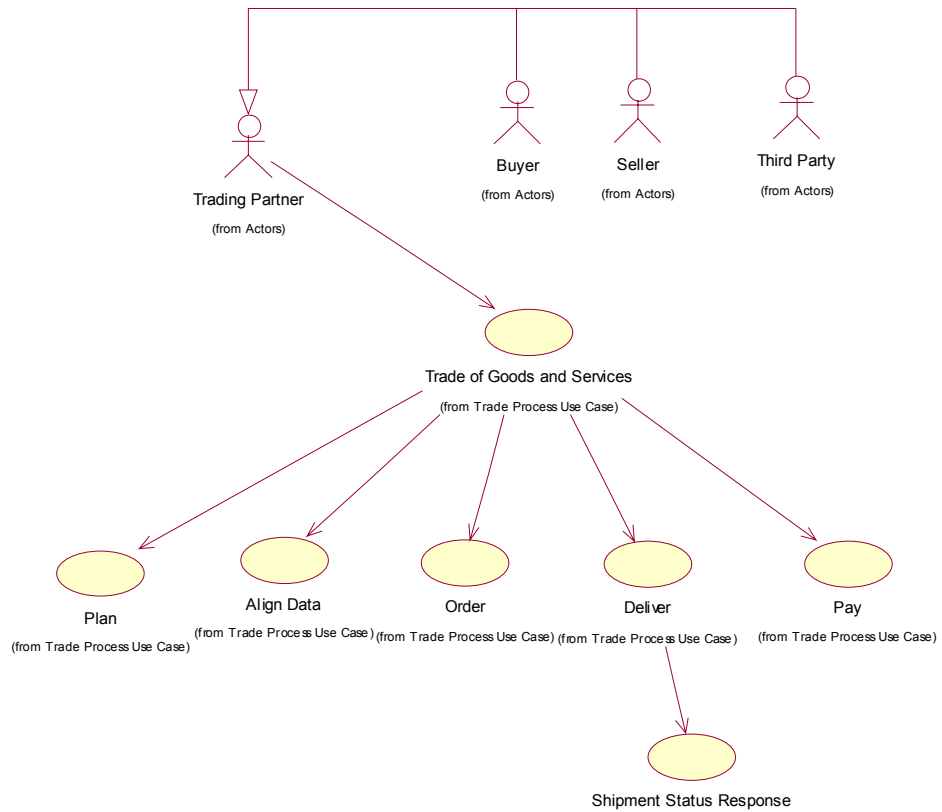
Code List Name	Code List Description
DeliverPartyRoleList	
Code Name	Code Description
BILL_TO_PARTY	N/A
CONSIGNEE	N/A
DESTINATION_TERMINAL	N/A
ORIGIN_TERMINAL	N/A
PARTY_TO_RECEIVE_FREIGHT_BILL	N/A
PARTY_WHO_SIGNED_DELIVERY_RECEIPT	N/A
SHIP_FROM	N/A

1.6 Business Document Example

Not filled in the previous version

1.7 Implementation Considerations

The following diagram illustrates the position of the BRD Freight Invoice within the GBM:



Business Solution Design

1.8 Testing

1.8.1 Pass / Fail Criteria

Unit testing criteria for business solution.

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

1.8.2 Test Data

Test data is detailed in section 1.7.

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.

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

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