

# **Business Message Standard (BMS)**

**for**

**Deliver / SPC Shipment Status and  
Inquiry**

**BRG: Deliver**

**Version: 2.0.2**

**Date: 31/03/2005**





### Change Request Reference

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### Business Requirements Document (BRAD) Reference

<b>BRAD Title:</b> SPC Shipment Status and Inquiry – Business Requirement Document
<b>BRAD Date:</b> 12/08/2004
<b>BRAD Version:</b> 0.8.3

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

### Document Summary

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31/03/2005	2.0.1	Alice Aguemon	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 Changes	Minor Editorial Changes to the Document	



## Business Message Standard

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### 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



### 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

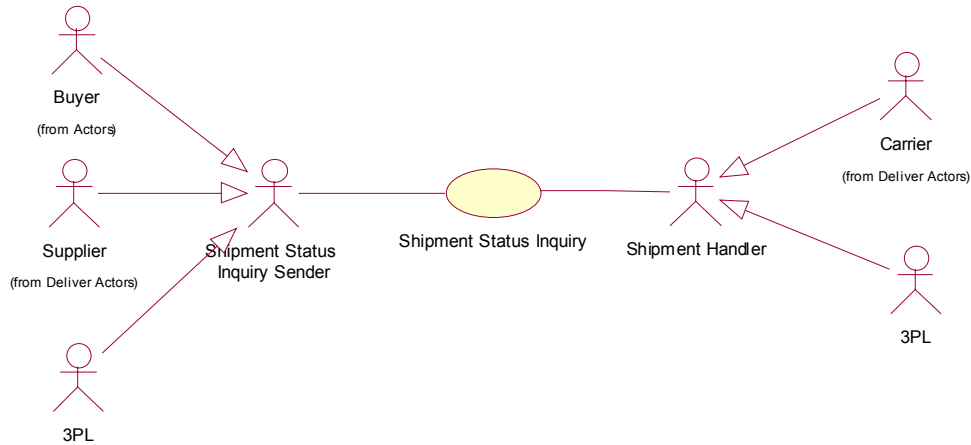
#### 1.3.1 Technical Requirements (optional)

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

Number	Statement	Rationale

1.4 Business Transaction View

1.4.1 Business Transaction Use Case Diagram : SPC Shipment status Inquiry

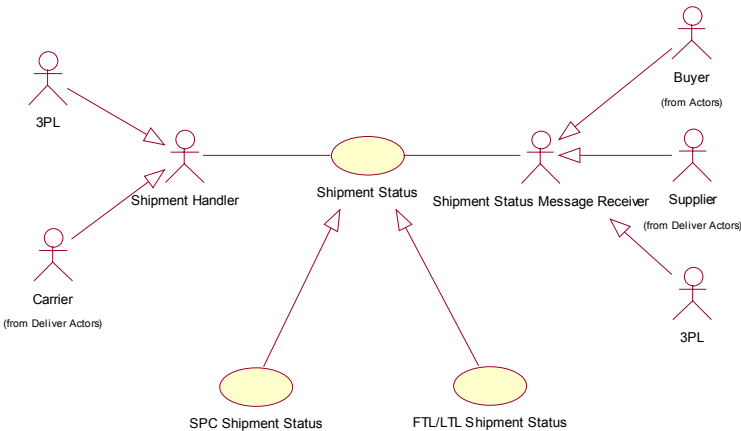


Use Case ID	UC-1
Use Case Name	Send Shipment Status Inquiry
Use Case Description	A Shipment Status Inquiry Sender (Supplier, Buyer, or 3PL) requests a shipping status from a Shipment Handler. The Shipment Handler is any party involved in the shipment of goods including a carrier or a 3PL.
Actors (Goal)	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	Goals related to technical requirements  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	<b>Begins when</b> Shipment Status Inquiry Sender sends electronic Shipment Status Inquiry.  <b>Continues with...</b>  <div>Step # Actor Activity Step</div>

**Business Solution Design**

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

**1.4.2 Business Transaction Use Case Diagram : SPC Shipment status Response**



<b>Use Case ID</b>	UC-1
<b>Use Case Name</b>	Send Shipment Status
<b>Use Case Description</b>	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).
<b>Actors (Goal)</b>	Shipment Status Inquiry Receiver : Party that receives LTL, FTL, or SPC Shipment Status Message. This party is a generalization of Buyer, Supplier and 3PL.

## Business Solution Design

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

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

### **1.4.4 Business Transaction Use Case Diagram : SPC Shipment status Inquiry**

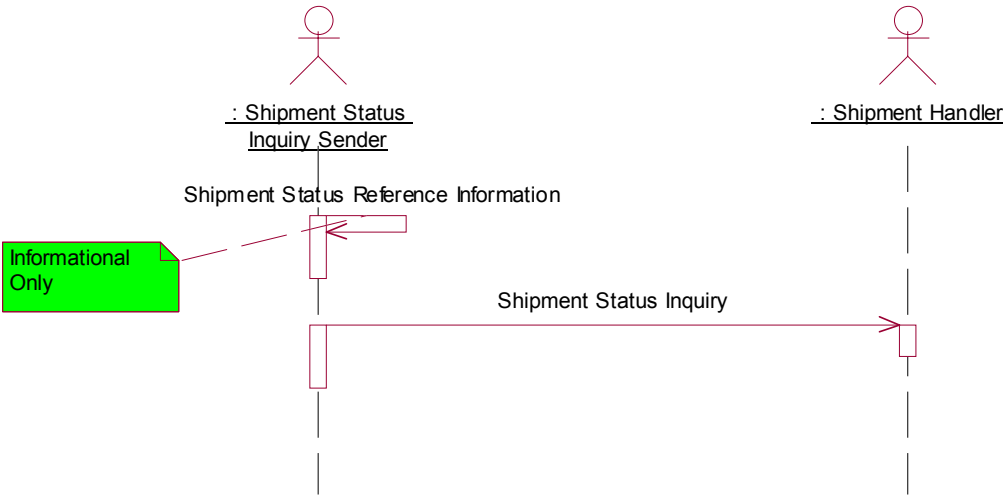
Not filled in the previous BRD

### **1.4.5 Business Transaction Use Case Diagram : SPC Shipment status Response**

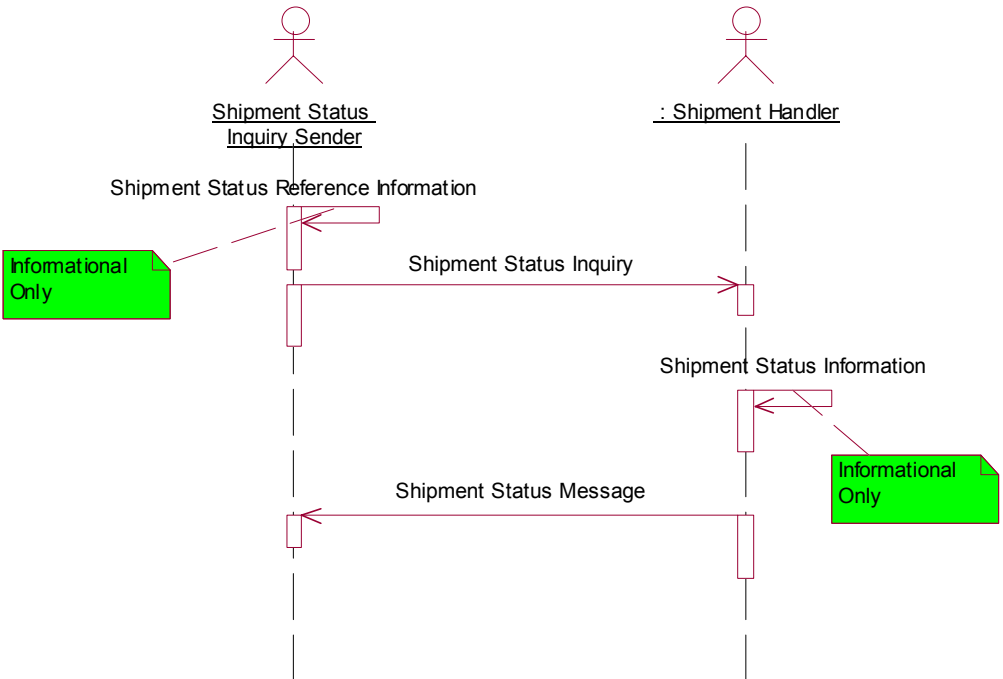
Not filled in the previous BRD

**1.4.6 Business Transaction Sequence Diagram(s) (optional)**

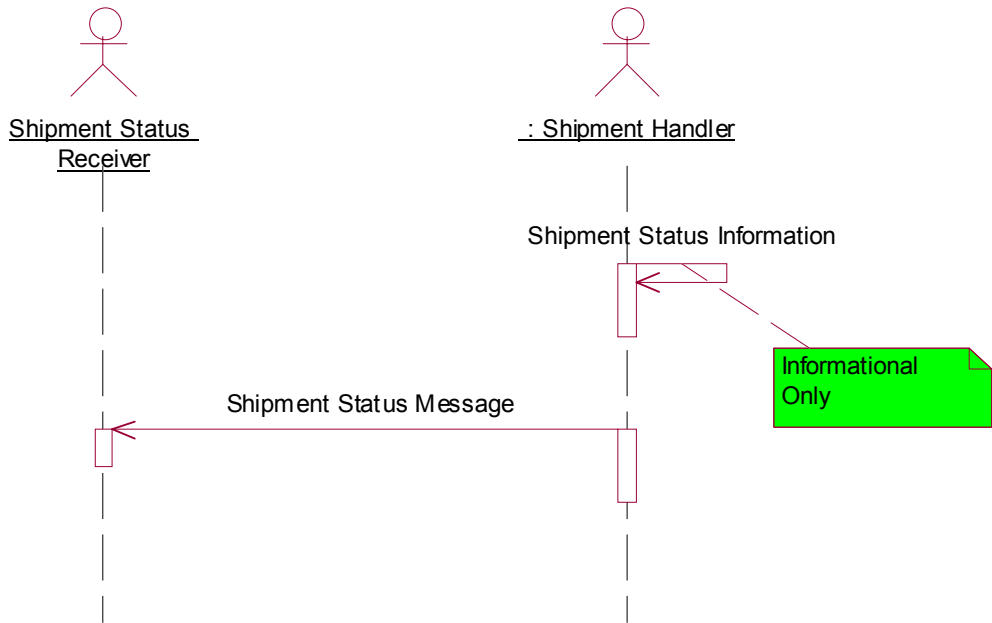
**1.4.6.1 Business Transaction Use Case Diagram : SPC Shipment status Inquiry**



**1.4.7 Business Transaction Use Case Diagram : SPC Shipment status Response (Solicited Scenario)**



**1.4.8 Business Transaction Use Case Diagram : SPC Shipment status Response (Unsolicited Scenario)**





## Business Solution Design

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### 1.5 Information Model (including GDD Report)

#### 1.5.1 Data Description: SPC Shipment status Inquiry

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
ConsigneeInformation				BRD for Shipment Status Inquiry and Response V0.8.3, 12/08/2004
	addressLine1			BRD for Shipment Status Inquiry and Response V0.8.3
	addressLine2			BRD for Shipment Status Inquiry and Response V0.8.3
	addressLine3			BRD for Shipment Status Inquiry and Response V0.8.3
	attention			BRD for Shipment Status Inquiry and Response V0.8.3
	city			BRD for Shipment Status Inquiry and Response V0.8.3
	consigneeName			BRD for Shipment Status Inquiry and Response V0.8.3
	countryCode			BRD for Shipment Status Inquiry and Response V0.8.3
	entityIdentifierCode			BRD for Shipment Status Inquiry and Response V0.8.3
	postalCode			BRD for Shipment Status Inquiry and Response V0.8.3
	stateOrProvince			BRD for Shipment Status Inquiry and Response V0.8.3
DeliverReference				BRD for Shipment Status Inquiry and Response V0.8.3
	deliverReferenceIdentification			BRD for Shipment Status Inquiry and Response V0.8.3
	deliverReferenceType			BRD for Shipment Status Inquiry and Response

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
				V0.8.3
ExceptionInformation				BRD for Shipment Status Inquiry and Response V0.8.3
	exceptionReasonCode			BRD for Shipment Status Inquiry and Response V0.8.3
	exceptionReasonDescription			BRD for Shipment Status Inquiry and Response V0.8.3
	exceptionStatusCode			BRD for Shipment Status Inquiry and Response V0.8.3
	exceptionStatusDescription			BRD for Shipment Status Inquiry and Response V0.8.3
	exceptionStatusType			BRD for Shipment Status Inquiry and Response V0.8.3
ShipmentPackageDetail				BRD for Shipment Status Inquiry and Response V0.8.3
	deliveryLocationDescription			BRD for Shipment Status Inquiry and Response V0.8.3
	deliveryNoticeReferenceNumber			BRD for Shipment Status Inquiry and Response V0.8.3
	hasDriverReleasedPackage			BRD for Shipment Status Inquiry and Response V0.8.3
	residentialIndicator			BRD for Shipment Status Inquiry and Response V0.8.3
	serviceLevelCode			BRD for Shipment Status Inquiry and Response V0.8.3
		packageReferenceNumber	DeliverReference	BRD for Shipment Status Inquiry and Response V0.8.3
		trackingNumber	DeliverReference	BRD for Shipment Status Inquiry and Response V0.8.3
		None	ExceptionInformation	BRD for Shipment Status Inquiry and Response V0.8.3

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
		None	ShipmentPack- ageStatus	BRD for Shipment Status Inquiry and Response V0.8.3
ShipmentPackageStatus				BRD for Shipment Status Inquiry and Response V0.8.3
	activityDescription			BRD for Shipment Status Inquiry and Response V0.8.3
	carrierSpecificShip- mentStatus			BRD for Shipment Status Inquiry and Response V0.8.3
	packageStatusActivity- Subtype			BRD for Shipment Status Inquiry and Response V0.8.3
	packageStatusActiv- ityType			BRD for Shipment Status Inquiry and Response V0.8.3
	packageStatusCode			BRD for Shipment Status Inquiry and Response V0.8.3
	shipmentStatus- DateTime			BRD for Shipment Status Inquiry and Response V0.8.3
	None			BRD for Shipment Status Inquiry and Response V0.8.3
		None	StopLocationIn- formation	BRD for Shipment Status Inquiry and Response V0.8.3
SignatureInformation				BRD for Shipment Status Inquiry and Response V0.8.3
	signatureBinaryData			BRD for Shipment Status Inquiry and Response V0.8.3
	signatureSpecifications			BRD for Shipment Status Inquiry and Response V0.8.3
	None			BRD for Shipment Status Inquiry and Response V0.8.3
SPCShipmentStatus				BRD for Shipment Status Inquiry and Response V0.8.3
	shipperName			BRD for Shipment Status Inquiry and Response

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
				V0.8.3
	transactionDate			BRD for Shipment Status Inquiry and Response V0.8.3
		shipmentAccountNumber	DeliverReference	BRD for Shipment Status Inquiry and Response V0.8.3
		sPCShipmentStatusIdentification	EntityIdentification	BRD for Shipment Status Inquiry and Response V0.8.3
		shipperIdentification	PartyIdentification	BRD for Shipment Status Inquiry and Response V0.8.3
		None	SPCShipment-StatusDetail	BRD for Shipment Status Inquiry and Response V0.8.3
SPCShipmentStatusDetail				BRD for Shipment Status Inquiry and Response V0.8.3
		None	ConsigneeInformation	BRD for Shipment Status Inquiry and Response V0.8.3
		referenceNumber	DeliverReference	BRD for Shipment Status Inquiry and Response V0.8.3
		None	ShipmentPackageDetail	BRD for Shipment Status Inquiry and Response V0.8.3
		None	SignatureInformation	BRD for Shipment Status Inquiry and Response V0.8.3

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### 1.5.2 Data Description: SPC Shipment status Response

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
SPCShipmentDateCriteria				BRD for Shipment Status Inquiry and Response V0.8.3
	shipmentDate			BRD for Shipment Status Inquiry and Response V0.8.3
		shipmentDateRange	TimePeriodDue	BRD for Shipment Status Inquiry and Response V0.8.3
SPCShipmentStatusInquiry				BRD for Shipment Status Inquiry and Response V0.8.3
	shipmentAccount-Number			BRD for Shipment Status Inquiry and Response V0.8.3
		referenceNumber	DeliverReference	BRD for Shipment Status Inquiry and Response V0.8.3
		SPCShipmentStatusInquiryIdentification	EntityIdentification	BRD for Shipment Status Inquiry and Response V0.8.3
		shipperIdentifier	PartyIdentification	BRD for Shipment Status Inquiry and Response V0.8.3
		None	SPCShipmentDateCriteria	BRD for Shipment Status Inquiry and Response V0.8.3

## Business Solution Design

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### 1.5.3 GDD Report :

#### SPC Shipment Status Response

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
SPCShipmentDateCriteria				Small Package Carrier_ Shipment Status Date Criterion. Details		
	shipmentDate			Small Package Carrier_ Shipment Status Date Criterion. Shipment Date. Date Time	Date freight is picked up by carrier.	1..1
		shipmentDateRange	TimePeriodDue	Small Package Carrier_ Shipment Status Date Criterion. Shipment_ Date Range. Time Period	Start and End Date defining a range within which the freight was picked up by the carrier	1..1
SPCShipmentStatusInquiry				Small Package Carrier_	This class is the root class in the model.	

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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Shipment Status Inquiry. Details	It contains status inquiry message level information including details on the party sending the status.	
	shipmentAccount-Number			Small Package Carrier_ Shipment Status Inquiry. Shipment_ Account Number. Text		0..1
		referenceNumber	DeliverReference	Small Package Carrier_ Shipment Status Inquiry. Reference Number. Deliver_ Entity Reference	None	1..*
		sPCShipmentStatusInquiryIdentification	EntityIdentification	Small Package Carrier_ Shipment Status Inquiry. Shipment Status Inquiry Identification. Entity	None	1..1

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Identification		
		shipperIdentifier	PartyIdentification	Small Package Carrier Shipment Status Inquiry. Shipper Identification. Party Identification	A unique identifier for the shipper. Standard Carrier Alpha Code (SCAC) should be used in North America.	1..*
		None	SPCShipmentDateCriteria	Small Package Carrier Shipment Status Inquiry. Association. Small Package Carrier Shipment Status Date Criterion	A unique identifier for the shipper. Standard Carrier Alpha Code (SCAC) should be used in North America.	0..1



## Business Solution Design

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### SPC Shipment Status Inquiry

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
ConsigneeInformation				Consignee_ Transport Location. Details	This Class contains address and party information about the Party identified as the final recipient of freight/goods. A consignee can also be a party requesting the shipment of the freight/goods.	
	addressLine1			Consignee_ Transport Location. Line1_ Address. Text	Mailing address 1 of consignee.	0..1
	addressLine2			Consignee_ Transport Location. Line2_ Address. Text	Mailing address 2 of consignee.	0..1
	addressLine3			Consignee_ Transport Location. Line3_ Address. Text	Mailing address 3 of consignee.	0..1
	attention			Consignee_ Transport Location. Attention_ Name. Text	Intended recipient of freight/goods.	0..1
	city			Consignee_	City name.	0..1

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Transport Location. City. Text		
	consigneeName			Consignee_ Transport Location. Consignee_ Name. Text	Free form text for Name.	0..1
	countryCode			Consignee_ Transport Location. Country. ISO3166_1_ Code	ISO Country Code associated with consignee address.	0..1
	entityIdentifierCode			Consignee_ Transport Location. Entity Identifier. Entity Identifier_ Code		0..1
	postalCode			Consignee_ Transport Location. Postal Code. Text	Code defining postal zone code.	0..1
	stateOrProvince			Consignee_ Transport Location. State Or Province.	Free form text for State/Province.	0..1

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Text		
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
ExceptionInformation				Shipment_ Exception Status. Details	Optional Class providing Status Information specific to a shipment exception. An exception is an event outside of the normal scheduled delivery of a package. For example: accidents, missed-pickups, cancellations, etc.	
	exceptionReasonCode			Shipment_ Exception Status. Exception_ Reason Code. Shipment	Provides further detail as to why a package is in a specific exception status. ANSI Code List 1651 is recommended.	0..1

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Status Reason_ Code		
	exceptionReasonDescription			Shipment_ Exception Status. Exception_ Reason Description. Text	Free-form Text	0..1
	exceptionStatusCode			Shipment_ Exception Status. Exception_ Status Code. Shipment Status_ Code		1..1
	exceptionStatusDescription			Shipment_ Exception Status. Exception_ Status Description. Text	Free-form text allowing for further description of the Exception Status. Can be used with the Exception Status of Mutually Defined to handle Exception Status which are not currently included on the Exception Status Enumerated List.	0..1
	exceptionStatusType			Shipment_ Exception Status. Exception_ Status Type. Exception Status Type_	Exception Reason with StatusException Reason OnlyException Reason with Resolution	0..1

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Code		
ShipmentPackageDetail				Small Package Carrier_ Shipment Package. Details	This class contains shipment status information at the package level. An SPC Shipment can contain multiple packages.	
	deliveryLocationDescription			Small Package Carrier_ Shipment Package. Delivery Location_ Description. Text	Free-form text detail physical location of delivery.	0..1
	deliveryNoticeReferenceNumber			Small Package Carrier_ Shipment Package. Delivery Note_ Reference Number. Text		0..1
	hasDriverReleasedPackage			Small Package Carrier_ Shipment Package. Delivery_ Status. Indicator	This is the Driver Release Indicator. It is Boolean field determining whether driver has released custody of the package.	1..1
	residentialIndicator			Small Package Carrier_	Enumerated list specifying residential or business delivery. The	0..1

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Shipment Package. Residential_Indicator. Code	residential code currently has two values: Residential delivery and commercial delivery.	
	serviceLevelCode			Small Package Carrier_ Shipment Package. Service Level Code. Service Level_ Code	Enumerated List Identifying the service type associated with the package. For example Delivery Confirmation, Expedited Service, Next Day Air.	0..1
		packageReferenceNumber	DeliverReference	Small Package Carrier_ Shipment Package. Package_ Reference Number. Deliver_ Entity Reference	Number used to reference a specific package.	0..*
		trackingNumber	DeliverReference	Small Package Carrier_ Shipment Package. Tracking Number. Deliver_ Entity Reference	A number issued by the shipper used to track the shipment of a package	1..1

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
		None	ExceptionInformation	Small Package Carrier_Shipment Package. Association. Shipment_Exception Status	A number issued by the shipper used to track the shipment of a package	0..*
		None	ShipmentPackageStatus	Small Package Carrier_Shipment Package. Association. Package Level_Shipment Status Line	A number issued by the shipper used to track the shipment of a package	1..*
ShipmentPackageStatus				Package Level_Shipment Status Line. Details	Optional class containing a shipment package status and associated modifiers for shipment status (location, date and time). There can be one to many statuses associated with a single package.	
	activityDescription			Package Level_Shipment Status Line. Activity Description. Text	Denotes reason for scan	0..1
	carrierSpecificShip-			Package	A reference to the Description	0..*

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
	mentStatus			Level_ Shipment Status Line. Carrier Specific Shipment_ Status Description. Text	Class enabling multiple carrier specific shipment statuses to be included in a status message.	
	packageStatusActivity-Subtype			Package Level_ Shipment Status Line. Activity Sub Type. Scan Activity_ Code	Indicates the reason why a scan has taken place	0..1
	packageStatusActivityType			Package Level_ Shipment Status Line. Activity Type. Package Status Activity Type_ Code	Not Available	1..1
	packageStatusCode			Package Level_ Shipment Status Line. Package_ Status Code. Shipment Status_ Code	Not Available	0..1



## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
	shipmentStatus-DateTime			Package Level_ Shipment Status Line. Shipment_ Status Date. Date Time	Date and time related to status or appointment. Time is optional and is included in Shipment Status Date Time.	0..1
	None			Package Level_ Shipment Status Line. Package_ Status Code. Code		0..1
		None	StopLocationInformation	Package Level_ Shipment Status Line. Scan Location_ Association. Stop_ Transport Location	None	0..1
SignatureInformation				Signature. Details	This optional class contains both the clarified and binary data signature associated with the receiver of a package.	
	signatureBinaryData			Signature. Binary Signature. Binary Object	Actual captured signature of party receiving the package.	0..1
	signatureSpecifications			Signature. Specifications	The protocol used to capture the Signature Binary Data asso-	0..1

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				tions. Text	ciated with the receiver of a package.	
	None			Signature. Signature. Text	Text version of the signature associated with the receiver of a package.	0..1
SPCShipmentStatus				Small Package Carrier_ Shipment Status. Details		
	shipperName			Small Package Carrier_ Shipment Status. Shipper_ Name. Text	Name of Shipping Company.	0..1
	transactionDate			Small Package Carrier_ Shipment Status. Transaction_ Date Time. Date Time	Date that status message is created.	1..1
		shipmentAccountNumber	DeliverReference	Small Package Carrier_ Shipment Status. Shipper Account_ Reference Number. Deliver_	The account number of the party shipping the freight.	0..1

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Entity Reference		
		SPCShipmentStatusIdentification	EntityIdentification	Small Package Carrier Shipment Status. Shipment Status Identification. Entity Identification	The account number of the party shipping the freight.	1..1
		shipperIdentification	PartyIdentification	Small Package Carrier Shipment Status. Shipper Identification. Party Identification	Number assigned to uniquely identify the shipper.	0..1
		None	SPCShipment-StatusDetail	Small Package Carrier Shipment Status. Association. Small Package Carrier Shipment Status Line	Number assigned to uniquely identify the shipper.	1..*
SPCShipmentStatusDetail				Small Package Carrier Shipment Status Line.	This class contains shipment status information at the shipment level. An SPC Shipment Status Message can contain	

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Details	multiple shipments.	
		None	ConsigneeInformation	Small Package Carrier_ Shipment Status Line. Association. Consignee_ Transport Location	None	0..*
		referenceNumber	DeliverReference	Small Package Carrier_ Shipment Status Line. Reference Number. Deliver_ Entity Reference	None	0..*
		None	ShipmentPackageDetail	Small Package Carrier_ Shipment Status Line. Association. Small Package Carrier_ Shipment Package	None	0..*
		None	SignatureInformation	Small Package Carrier_ Shipment Status Line.	None	0..1

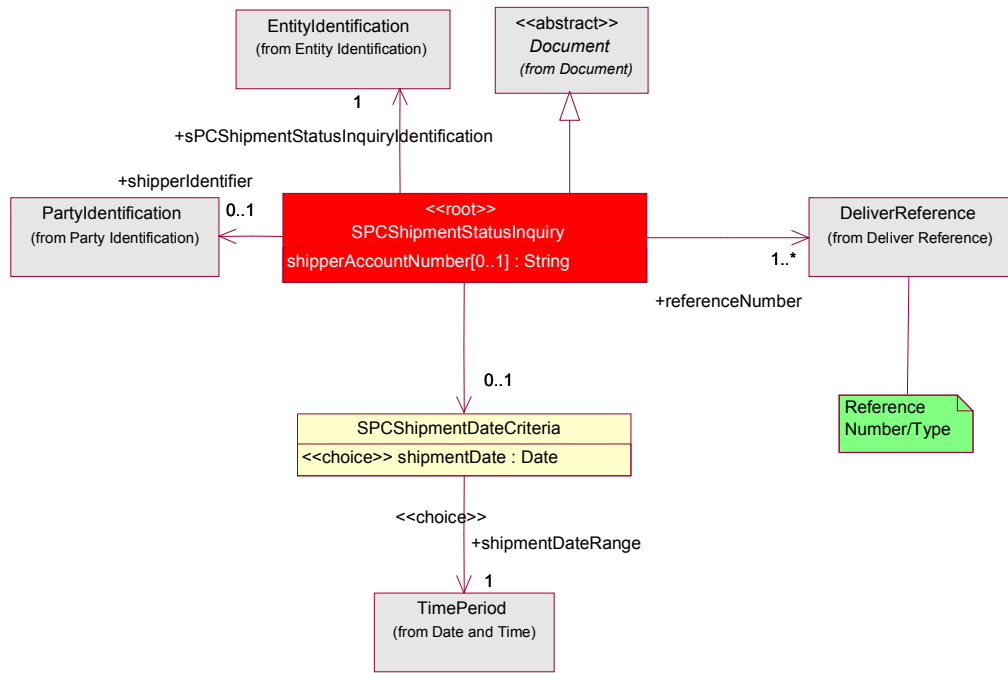
## Business Solution Design

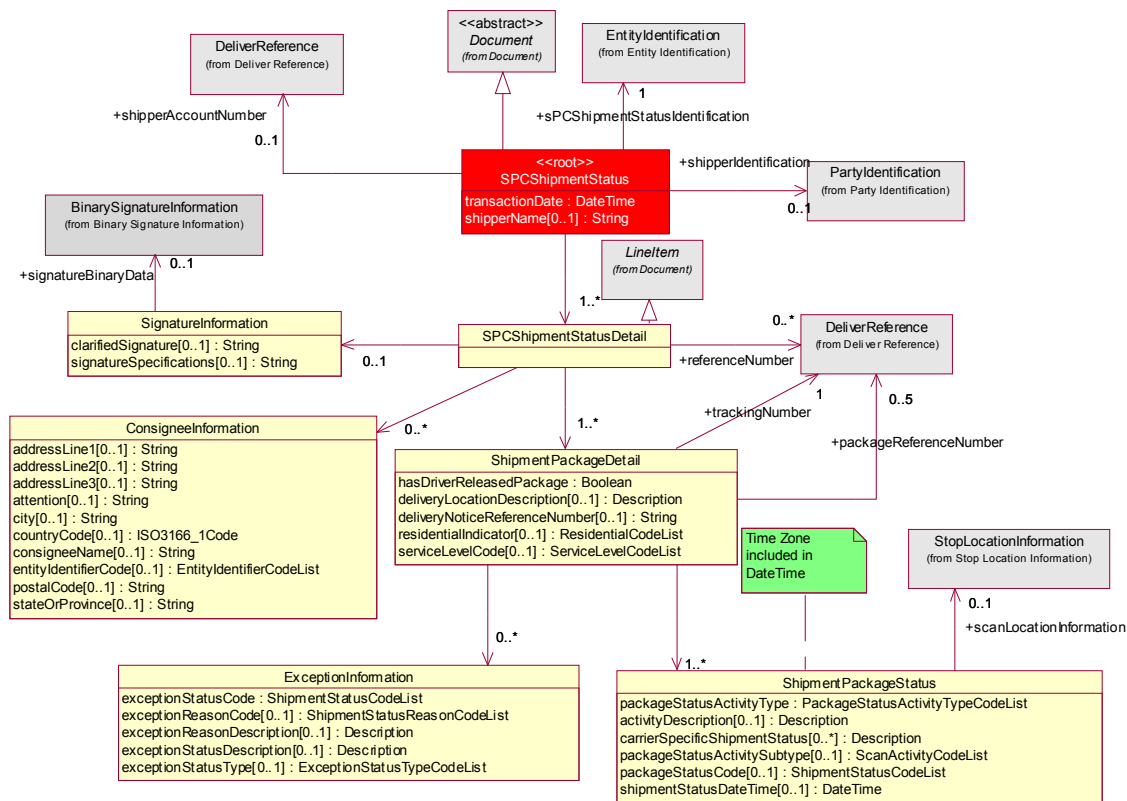
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Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Association. Signature		

1.5.4 Class Diagrams

1.5.4.1 Class Diagram for SPC Shipment Status Inquiry









### 1.5.5 Code Lists

#### 1.6.20.2 Code Lists : SPC Shipment Status

Code List Name	Code List Description
EntityIdentifierCodeList	
Code Name	Code Description
ACTUAL_CONSIGNEE	N/A
INTENDED_CONSIGNEE	N/A
UPDATED_CONSIGNEE	N/A

Code List Name	Code List Description
ServicelevelCodeList	
Code Name	Code Description
AUTHORIZED_RETURN_SERVICE	N/A
CONSIGNEE_BILLING_SERVICE	N/A
DELIVERY_CONFIRMATION	N/A
EXPEDITED_SERVICE	N/A
EXPEDITED_SERVICE_WORLDWIDE	N/A
EXPRESS_SERVICE	N/A
EXPRESS_SERVICE_PLUS	N/A
GROUND	N/A
GROUND_CX_EXPRESS_SERVICE	N/A
MULTIWEIGHT	N/A
MUTUALLY_DEFINED	N/A
NEXT_DAY_AIR	N/A
NEXT_DAY_PM	N/A
NEXT_MORNING	N/A
PRIMARY_SERVICE_AREA_NEXT_DAY_BY_10:30_AM	N/A
PRIMARY_SERVICE_AREA_NEXT_DAY_BY_5:00_PM	N/A

Code List Name	Code List Description
ResidentialIndicatorList	
Code Name	Code Description
BUSINESS_DELIVERY	N/A
RESIDENTIAL_DELIVERY	N/A

Code List Name	Code List Description
PackageStatusActivityTypeList	
Code Name	Code Description
DELIVERY	N/A
EXCEPTION	N/A
INTERMEDIATE	N/A
PICKUP	N/A

## Business Solution Design

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Code List Name	Code List Description
ExceptionStatusTypeCodeList	
Code Name	Code Description
EXCEPTION_REASON_ONLY	N/A
EXCEPTION_REASON_WITH_RESOLUTION	N/A
EXCEPTION_REASON_WITH_STATUS	N/A

## Business Solution Design

Code List Name	Code List Description
ShipmentStatusCodeList	N/A
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
PICKUP_APPOINTMENT_DATE_AND_OR_TIME	N/A
PICKUP_APPOINTMENT_SECURED_ON_DATE_AND_OR_TIME	N/A

## Business Solution Design

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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_RECONSIGNEED	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

## Business Solution Design

Code List Name	Code List Description
ShipmentStatusReasonCodeList	N/A
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
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

## Business Solution Design

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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
RECONSIGNED	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
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

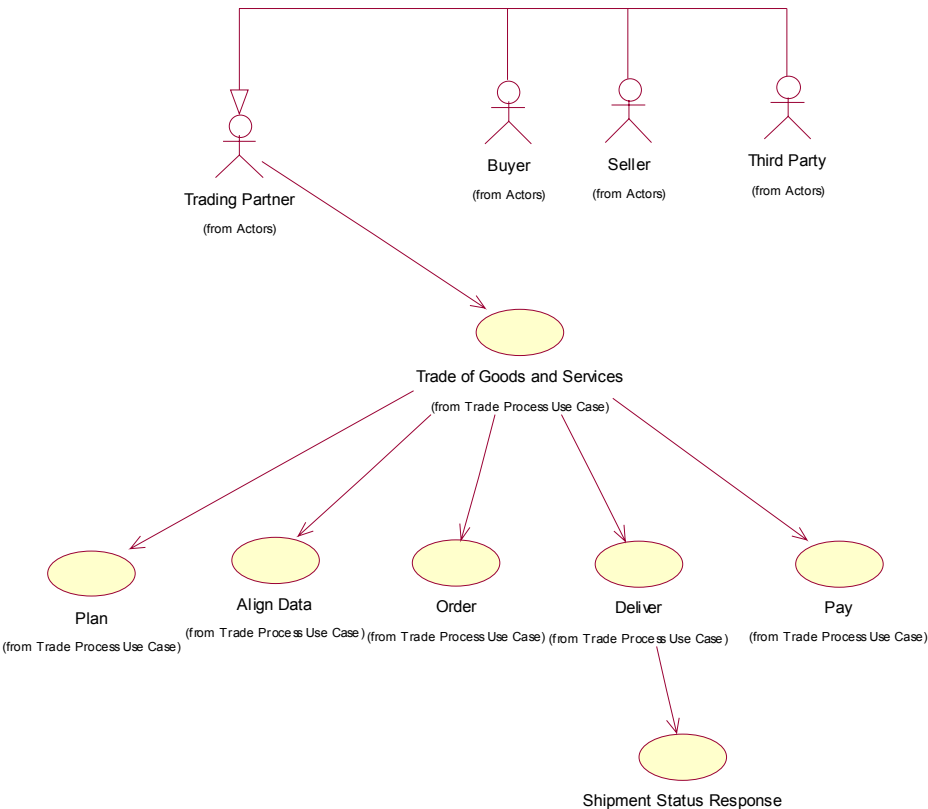
Code List Name	Code List Description
ScanActivityCodeList	N/A
Code Name	Code Description
AGENT_SCAN	N/A
AIR_TRANSIT_SCAN	N/A
ARRIVAL	N/A
CANCEL_UNLOAD	N/A
CANCELLED_ARRIVAL	N/A
CANCELLED_DEPARTURE	N/A
DELETED_EXCEPTION	N/A
DELIVERY_INTERNATIONAL	N/A
DELIVERY_LEFT_AT_CUSTOMERS_LOCATION	N/A
DELIVERY_PACKAGE_DRIVER_RELEASED	N/A
DELIVERY_PACKAGE_RELEASE_NUMBER	N/A
DELIVERY_PACKAGE_REPORTED_PICKED_UP	N/A
DELIVERY_SIGNATURE_OBTAINED	N/A
DELIVERY_SIGNED_DELIVERY_NOTICE	N/A
DEPARTURE_SCAN	N/A
DESTINATION_SCAN	N/A
DRIVER_LOAD	N/A
EXCEPTION	N/A
EXPORT_SCAN	N/A
HUB_SCAN	N/A
IMPORT_SCAN	N/A
LOCATION_SCAN_OR_ORIGIN_SCAN	N/A
PICKUP_SCAN	N/A
UNLOAD_SCAN	N/A
UPDATED_ARRIVAL	N/A
UPDATED_DEPARTURE	N/A
UPDATED_EXCEPTION	N/A
WAREHOUSE_SCAN	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

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### 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

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### 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