

Business Message Standard (BMS)

for

**Deliver/ Transportation Routing In-
struction**

BRG: Deliver

**BMS Release: 2.0.2
Document Version: 0.1.2**

Date: 31.03.2005

(dd.mm.cyy)



Change Request Reference

Refer to Change Request (CR) Number(s):	1-101
CR Submitter(s):	Springs Industries
Date of CR Submission to GSMP:	20011114

Business Requirements Document (BRAD) Reference

BRAD Title: Transportation Routing Instruction
BRAD Date: 20040524
BRAD Version: 0.0.9 P4CL: 2929

BRAD Title:
BRAD Date:
BRAD Version:

Document Summary

Document Title:	BMS for Deliver/Transportation Routing Instruction
Document Version	0.1.2
Owner:	Deliver BRG
Status:	(Check one box) <input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> Approved
BMS Template Version:	1.1
Targeted BMS Publication Version	2.0.2

Document Change History

Note: During development include revisions in history. Upon Approval, eliminate revisions and include only delta from previous version.

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
20050303	0.1.0	John Ryu	Initial Draft	Migration of BRD to standard BMS/BSD format	Model P4CL: 5883 BSD P4CL: 5924
20050331	0.1.1	Andrew Hearn	Update Context	Context Updated for initial publication	N/A
20070419	0.1.2	Giovanni Biffi	Editorial Updates	Minor Editorial Changes	N/A

Business Message Standard

Table of contents

Chapter	Page
1 Business Solution	1
1.1 Business Domain View.....	1
1.1.1 Problem Statement / Business Need.....	1
1.1.2 Objective.....	1
1.1.3 Audience.....	1
1.1.4 Artefacts	1
1.1.5 References	1
1.1.6 Acknowledgements	2
1.1.6.1 BRG Members.....	2
1.1.6.2 ITRG Members	3
1.1.6.3 Task/Project Group Participants (<i>where applicable</i>)	3
1.1.6.4 Design Team Members	4
1.2 Business Context	5
1.3 Additional Technical Requirements Analysis	5
1.3.1 Technical Requirements (optional).....	5
1.4 Business Transaction View	7
1.4.1 Business Transaction Use Case Diagram.....	7
1.4.2 Use Case Description.....	7
1.4.3 Business Transaction Activity Diagram(s).....	9
1.4.4 Business Transaction Sequence Diagram(s) (optional)	9
1.5 Information Model (including GDD Report)	10
1.5.1 Data Description:	10
1.5.2 GDD Report :	11
1.5.3 Class Diagrams	29
1.5.4 Code Lists.....	30
1.6 Business Document Example	31
1.6.1 Header Information CRIT	31
1.6.2 Ship From Parameter- CRIT.....	31
1.6.3 Ship To Parameter- CRIT.....	31
1.6.4 Shipping Parameter - CRIT	32
1.6.5 Amended Ship To Location - CRIT.....	32
1.6.6 Routing Information – CRIT.....	32

Business Message Standard

Table of contents

1.6.7	Ship From Origins.....	32
1.6.8	Assigned Ship To Locations	35
1.6.9	Overriding Freight Terms Through Routing Determination	37
1.6.10	Revised Ship to Section	39
1.6.11	A consolidator is the carrier and shipments are not combined by the supplier	39
1.6.12	An LTL carrier is used to ship to the consolidator and shipments are not combined by the supplier.....	42
1.6.13	A consolidator is the carrier, and shipments are combined by the vendor	44
1.6.14	An LTL carrier is used to ship to a consolidator, and shipments are combined by the vendor	47
1.6.15	Deconsolidation of DC level Shipments	49
1.6.16	Scenarios of New Carrier Routing Instruction Number Issuance	51
1.6.17	Scenarios of New Release Number Issuance	52
1.7	Implementation Considerations.....	53
1.8	Testing.....	54
1.8.1	Pass / Fail Criteria	54
1.8.2	Test Data	54
1.9	Appendices.....	54
1.10	Summary of Changes.....	54
2	XML Technical Solution ITRG Packet.....	55

Business Solution Design

1 Business Solution

1.1 Business Domain View

1.1.1 Problem Statement / Business Need

Foundational messages are needed to electronically pass transportation routing instructions similar to the paper based VICS Routing Guide standard. The messages consist of a buyer's carrier routing instructions and buyer's party cross reference (Store, Distribution Centre, Department) to the seller.

Current Situation

- Buyer provides predefined carrier routing instructions to the seller. This is used to determine ship to and carrier and or service level. Buyer also provides the party cross reference.
- Standards do not exist for deployment, change notification, or basic format of a transportation routing instruction, and this leads to manual process by seller.
- The current process does not enable sellers to ensure consistent compliance with buyer's requirements, which leads to unnecessary costs for all parties, misdirected shipments and needless delays in moving product to the buyer. Typically, transportation routing instructions are embedded within a buyer's vendor compliance manual, which is a primary source of information about the rules of engagement between buyer and seller.

1.1.2 Objective

The objective is to create a business message standard to develop transactional messages to communicate a buyer's carrier routing instructions in a static routing guide environment. Static routing guide is defined as a document or message that contains routing instructions which remain constant for a specific period of time.

The objective excludes, the framework for a central routing guide repository, party cross reference, and a standard change management process.

1.1.3 Audience

The audience of the standards would be any participant in the global supply chain management. This would include carriers, and their customers and partners

1.1.4 Artefacts

(List of the artefacts that are used as either an input to the process or an output from the process, also indicating the different states that the artefact takes during the process.)

Artefact name	State	Artefact / State description
VICS Routing Guide	Draft	Draft VICS Voluntary Guidelines for the Routing Guide January 2002

1.1.5 References

Reference Name	Description
None	

Business Solution Design

1.1.6 Acknowledgements

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

1.1.6.1 BRG Members

Function	Name	Company / Organisation
BRG Deliver Co-Chair	Sue Donarski	Schneider Logistics
BRG Deliver Co-Chair	Debra Noyes	Johnsonville Sausage, L.L.C.
BRG Member	Becky Dettling	3M Company
BRG Member	K. Wayne Gingerich	Werner Enterprises
BRG Member	Doug Harness	Fleming Companies, Inc. Vice Chair
BRG Member	Stephanie Hodge-Daniels	Levi Strauss & Co.
BRG Member	Kari Melhus	Target Corporation
BRG Member	Jeff Miller	Kraft Foods, Inc.
BRG Member	Mike Osiecki	Best Buy Company, Inc.
BRG Manager	Bruno Julien	Gencod EAN France

Business Solution Design

1.1.6.2 ITRG Members

Function	Name	Company / organisation
ITRG Chair		

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

Function	Name	Company / Organisation
Participant	Denny Adams	Target Corporation
Participant	Fred Anderson	Dillard Department Stores
Participant	Theron Barham	Federated Department Stores
Participant	Ann Biswas	Biswrites Comm.
Participant	Cullen Blalock	West Point Stevens Inc.
Participant	Chris Bolton	Levi Strauss & Co.
Participant	Lee Bowers	Springs Industries
Participant	Mark Calvert	Sara Lee Intimate Apparel
Participant	Jim Cloughly	Belk, Inc.
Participant	William Coxwell	Vanity Fair Intimates
Participant	George Custer	Sara Lee Hosiery
Participant	Tammy Fadden	Saks Inc.
Participant	Dianne Ferguson	Nordstrom
Participant	Bob Gantt	Pillowtex
Participant	Barbara Gardsbane	Haggar Clothing Co.
Participant	Whitney Gilliam	Springs Industries
Participant	Gregg Golub	Gerson & Gerson, Inc.
Participant	Sharon Payne Hardy	Russell Corp.
Participant	Becky Higdon	VF Intimates
Participant	Eddie Jimenez	Guess ? Inc.
Participant	Brad Kennedy	Sara Lee Intimate Apparel
Participant	Thomas Moore	Jones Apparel
Participant	Paul Paulsen	Levi Strauss & Co.
Participant	Bill Pritz	Logility
Participant	Andrew Reiter	Haggar Clothing Co.
Task Group Chair	Bob Robertson	Manhattan Associates
Participant	Eric Sexauer	Federated Department Stores
Participant	Nathan Snyder	Robinson Mfg. Co.
Participant	Joe Spreitzer	Target Stores
Participant	Pam Sweeney	Federated Department Stores
Participant	Dana Thompson	Guess ? Inc.
Participant	Camille Watkins	Saks Inc.

Business Solution Design

1.1.6.4 Design Team Members

Function	Name	Organisation
Modeller	John Ryu	GS1 HO
XML Technical Designer		
EANCOM Technical Designer		
Peer Reviewer		

Business Solution Design

1.2 Business Context

(Note: The business context of the business)

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

If no value use, the default of "All" except for Official Constraints where default is "None".

1.3 Additional Technical Requirements Analysis

1.3.1 Technical Requirements (optional)

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

Number	Statement	Rationale
1	If Party cross reference is used, it is required to align party cross reference information prior to submission of the carrier routing instruction. The requirements for the party cross reference document is being developed as a separate document under a separate BRD. Party Cross Reference is outside the scope of this particular BRD.	Implementation Consideration
2	<p>Range Type Fields</p> <p>Listed is the appropriate way to populate range type fields.</p> <p>ALL</p> <p>ALL Except (All Except ##)</p> <p>Comma Separator (##, ##)</p> <p>Dash Separator (## - ##) for ranges</p> <p>Combination (All except ##, ## - ##)</p> <p>An example on populating the State or Province field</p> <ul style="list-style-type: none"> • A single State or Province or a list of State or Province separated by a comma (CA, MX) • A range of State or Province separated by a dash (AZ-CA) • "All Except ##" if there is a limited list of State or Province (s) that apply to other instructions (All Except PA) • Combination of either comma, dash, and or all except (All Except ND, AZ-CA) 	<p>Implementation Consideration</p> <p>In a true electronic system to system communication, it is recommended to transmit explicit data (refrain from using ALL or ALL EXCEPT ##)</p>

Business Solution Design

Number	Statement	Rationale
	<ul style="list-style-type: none"><li data-bbox="456 302 867 359">• “All ” if the routing instruction applies to all State or Province (All)	
3	Global Location Number is an acceptable identification format for consolidator, distribution centre, store, and department.	Implementation Consideration

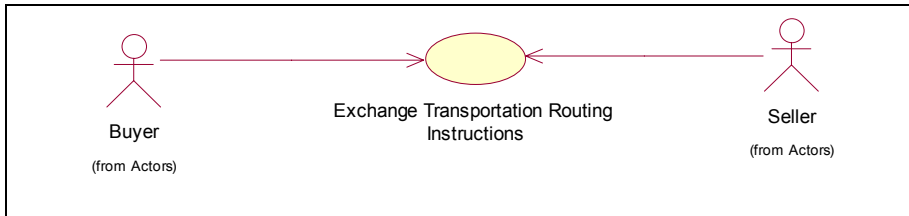
Business Solution Design

1.4 Business Transaction View

1.4.1 Business Transaction Use Case Diagram

Detailed Use Case for generic use of the message. Focuses on commands associated with business solution.

Note: Each Use Case shall be given a consecutive paragraph number (e.g., 2.4.1) and heading.)



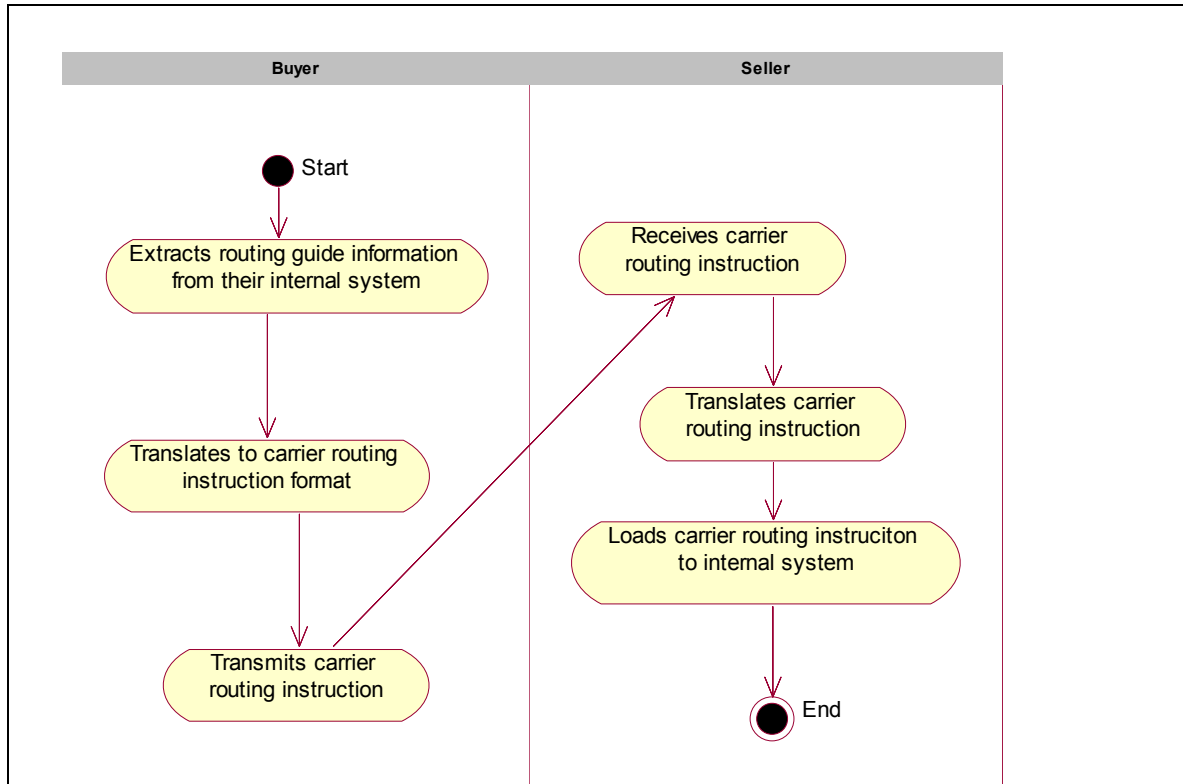
1.4.2 Use Case Description

Use Case ID	UC-1
Use Case Name	Exchange Transportation Routing Instructions
Use Case Description	
Actors (Goal)	Buyer: Owner and publisher of the transportation routing instructions. Seller: Complies with the transportation routing instructions.
Performance Goals	
Preconditions	The buyer: <ul style="list-style-type: none"> Needs to have carrier routing instructions and party cross-reference. Should have the ability to electronically transmit carrier routing instructions and party cross reference. Should maintain an archive of the carrier routing instructions and party cross reference. It is best practice for the new carrier routing instructions to entirely replace the previous carrier routing instructions. The seller: <ul style="list-style-type: none"> Should have the ability to receive and support electronic carrier routing instructions, and party cross reference. Should maintain an archive of the carrier routing instructions and party cross reference. It is best practice for the new carrier routing instructions to entirely replace the previous carrier routing instructions.
Post conditions	A successful implementation results in a seller receiving and the implementation of the buyer's transportation routing instructions. A failed condition results if the seller is not able to either receive and implement a buyer's transportation routing instructions.
Scenario	Begins when... Buyer: Extract the routing guide information from their internal system Continues with...

Business Solution Design

	Step #	Actor	Activity Step
	1	Buyer	Translates the routing guide information into the carrier routing instruction message format
	2	Buyer	Transmits the carrier routing instruction to seller
	3	Seller	Receives the carrier routing instruction
	4	Seller	Translates the carrier routing instruction to their internal system
Ends when... Seller: Loads the carrier routing instructions to their internal system.			
Alternative Scenario			
	Step #	Actor	Activity Step
			No alternative scenario
Related Requirements	None		
Related Rules	None		

1.4.3 Business Transaction Activity Diagram(s)



1.4.4 Business Transaction Sequence Diagram(s) (optional)

None

Business Solution Design

1.5 Information Model (including GDD Report)

1.5.1 Data Description:

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
AmendedShip-ToLocation				BRAD Title: Transportation Routing Instruction Version 0.0.9 Date: 20050524
CarrierContactInformation				BRAD Title: Transportation Routing Instruction Version 0.0.9 Date: 20050524
CarrierRoutingInstruction				BRAD Title: Transportation Routing Instruction Version 0.0.9 Date: 20050524
CarrierRoutingInstructionDateInformation				BRAD Title: Transportation Routing Instruction Version 0.0.9 Date: 20050524
InitialShipFrom-Location				BRAD Title: Transportation Routing Instruction Version 0.0.9 Date: 20050524
InitialShipToLocation				BRAD Title: Transportation Routing Instruction Version 0.0.9 Date: 20050524
RoutingInformation				BRAD Title: Transportation Routing Instruction Version 0.0.9 Date: 20050524
ShippingParameter				BRAD Title: Transportation Routing Instruction Version 0.0.9 Date: 20050524
Transportation-RoutingLineItemInformation				BRAD Title: Transportation Routing Instruction Version 0.0.9 Date: 20050524

1.5.2 GDD Report :

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

Transportation Routing Instruction

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
AmendedShipToLocation				Amended Ship To_ Transport Location. Details	The updated location where the buyer has selected the merchandise to be delivered, which is different than the original assigned location, because of pre-determined shipment characteristic guidelines issued by the buyer. Exactly one of the three may be populated (Consolidator, Distribution Centre, Store).	
		consolidator	PartyIdentification	Amended Ship To_ Transport Location. Consolidator_ Association. Party Identification	This field describes the logistics process that provides for a consolidation point where goods from multiple shipping points are combined for a single volume shipment.	0..1
		distributionCentre	PartyIdentification	Amended Ship To_ Transport Location. Distribution Centre_ Association.	This field includes the location identifier assigned by the customer to the specific distribution centre where the merchandise is to be shipped.	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Party Identification		
		store	PartyIdentification	Amended Ship To_ Transport Location. Store Association. Party Identification	This field includes the location identifier assigned by the buyer to the specific store where the merchandise is to be shipped.	0..1
Carrier-ContactInformation				Carrier_Contact. Details	There may be multiple carrier contact names. Each name may have multiple contact numbers such as phone, facsimile, email, and website.	
		carrier-Contact	Contact	Carrier_Contact. Association. Contact	The contact number provides two fields. The first value is the actual number or data, and the second value is the contact number type, which qualifies the number. Phone number, fax number, email address, and/or Website are the qualifier types.	1..1
		carrierIdentification	PartyIdentification	Carrier_Contact. Association. Party Identification	The official company name of the carrier or instructions on how to obtain the routing instructions (e.g., "XYZ Trucking"). If this field is left blank, second pass routing must be used to determine the appropriate routing for the ship-	1..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
					ment. The four-letter alpha code that uniquely identifies a carrier. Carrier SCAC codes are assigned and maintained by the National Motor Freight Transportation Association (NMFTA). To obtain a SCAC code or a list of all carrier SCACs, contact the NMFTA at (703) 838-1868. This field must be populated when the carrier field contains the name of a carrier.	
Carrier-RoutingInstruction				Carrier Routing Instruction. Details	This is the collection of the carrier routing instruction details	
	carrierRoutingInstructionName			Carrier Routing Instruction. Carrier Routing Instruction_Name. Text	The name of the carrier routing instruction assigned by the buyer.	1..1
	carrierRoutingInstructionNumberAndReleaseNumber			Carrier Routing Instruction. Carrier Routing Instruction_Number And Release Number. Text	The Carrier Routing Instruction Number is a unique identifier assigned by the buyer for each carrier routing instruction defined as a combination of parent company/ division/ merchandise type/ department/ freight terms. Release Number is each iteration of	1..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
					change to publication.	
	comments			Carrier Routing Instruction. Comments. Text	Section used to provide additional information or requirements regarding certain shipping guidelines (e.g., expedited shipments, late shipments, appointment indicator)	0..1
	division			Carrier Routing Instruction. Division. Text	The unique operating company or division to which the carrier routing instruction applies. Reference Technical Requirements Number 2 Range Type Fields on proper ways to populate this field.	0..1
	freightTermsType			Carrier Routing Instruction. Freight Terms Type. Code	Freight terms identify the party responsible for receiving the freight invoice and paying it. Freight terms can be Collect, Consignee Billing, Prepaid by Con-signor, or Third Party Pay.	1..1
	merchandiseType			Carrier Routing Instruction. Merchandise Type. Text	The unique description assigned by the buyer of the merchandise type to which the carrier routing instruction applies. A merchandise type is a like grouping of retail goods or family of business. Reference Technical Requirements Number 2 Range	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
					Type Fields on proper ways to populate this field.	
	parentCompanyName			Carrier Routing Instruction. Parent Company Name. Text	The name of the entity that created the carrier routing instruction	1..1
	partyCrossReferenceNumber			Carrier Routing Instruction. Party Cross Reference Number. Text	The Party Cross Reference Number is a unique identifier for each party cross reference document assigned by the buyer. This is a link between the two documents CRIT and the party cross reference	0..1
	supersedesCarrierRoutingInstructionNumberAndReleaseNumber			Carrier Routing Instruction. Supersedes Carrier Routing Instruction Number And Release Number. Text	Identification of the Carrier Routing Instruction Number(s and /Release(s) Number being replaced by the new Carrier Routing Instruction Number and Release Number.	1..1
		None	CarrierRoutingInstructionDateInformation	Carrier Routing Instruction. Association. Carrier Routing Instruction Date Group	Not Available	1..1
		None	Document	Carrier Routing	Not Available	1..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Instruction. Inheritance. Electronic_Document		
		carrier-RoutingInstructionIdentification	EntityIdentification	Carrier Routing Instruction. Association. Entity Identification	Unique Identification for the carrier routing instruction message.	1..1
		None	TransportationRoutingLineItemInformation	Carrier Routing Instruction. Association. Transportation Routing Line Item Information	Not Available	0..*
Carrier-RoutingInstruction-DateInformation				Carrier Routing Instruction_ Date Group. Details	Not Available	
	effectiveDate			Carrier Routing Instruction_ Date Group. Effective Date. Date Time	The date the carrier routing instruction goes into effect. The date format is CCYYMMDD.	1..1
	expirationDate			Carrier Routing	The expiration date may be pro-	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Instruction_ Date Group. Expiration date. Date Time	vided as a pre-notification to suppliers of the expected effective date of a new routing guide. If no expiration date is provided, instructions have no expiration. The date format is CCYYMMDD	
	publishDate			Carrier Routing Instruction_ Date Group. Publish Date. Date Time	The date the carrier routing instruction / release was published. The publish date shall be at least 15 days prior to the effective date. Both dates are mandatory. The date format is CCYYMMDD.	1..1
Initial-Ship-FromLocation				Initial Ship From_ Transport Location. Details	The original location in which the merchandise is to be shipped from. At least one of the seven fields must be populated. (City, Country ISO Code, County, GLN, Postal Code, SPLC, State or Province)	
	city			Initial Ship From_ Transport Location. City. Text	This field includes a city where the initial ship from location takes place.	0..1
	countryISOCode			Initial Ship From_ Transport Location. Country. ISO3166_1_	This field includes the two-character alpha ISO 3166 country code (CA = Canada, MX = Mexico, PR = Puerto Rico, and US = United States). This field is	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Code	required if the routing guide applies to the Ship From locations in multiple countries. Reference Technical Requirements Number 2 Range Type Fields on proper ways to populate this field.	
	county			Initial Ship From_ Transport Location. Code. Code	This field includes a county where the initial ship from location takes place.	0..1
	gLN			Initial Ship From_ Transport Location. GLN_ Code. Code	Global Location Number-- The globally unique EAN.UCC System identification number for physical, functional, or legal entities. The Global Location Number uses the EAN/UCC-13 Data Structure.	0..1
	postalCode			Initial Ship From_ Transport Location. Postal Code. Text	This field includes the individual three- or five-digit postal code, individual six-character postal code, range(s) of three- or five-digit codes, or any combination of the above. Postal code ranges cannot span more than one state. Reference Technical Requirements Number 2 Range Type Fields on proper ways to populate this field.	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
	sPLC			Initial Ship From_ Transport Location. SPLC_ Code. Code	This field is designed to provide each point originating freight and each point receiving freight in North America with a unique code number so constructed as to identify the point with its geographic location, using two digits to identify State, County and City and three digits to identify Sub-Code.	0..1
	stateOrProvince			Initial Ship From_ Transport Location. State Or Province. Text	This field includes a single two-character state or province code. An example is the United States state code, Canadian province code, or Mexican Estado code, listed by country and alphabetically within country. Reference Technical Requirements Number 2 Range Type Fields on proper ways to populate this field.	0..1
Initial-Ship-ToLocation				Initial Ship To_ Transport Location. Details	The Location where the buyer has selected the merchandise to be delivered. At least one of the eight fields must be populated (City, Consolidator, County, Distribution Centre, Postal Code, SPLC, State or Province, Store) and Department is optional.	
	city			Initial Ship To_	This field includes a city where	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Transport Location. City. Text	the initial ship to location takes place.	
	county			Initial Ship To_ Transport Location. County_ Code. Code	This field includes a county where the initial ship to location takes place	0..1
	postalCode			Initial Ship To_ Transport Location. Postal Code. Text	This field includes the individual three- or five-digit postal code, individual six-character postal code, range(s) of three- or five-digit codes, or any combination of the above. Postal code cannot span more than one state. Reference Technical Requirements Number 2 Range Type Fields on proper ways to populate this field.	0..1
	sPLC			Initial Ship To_ Transport Location. SPLC_ Code. Code	This field is designed to provide each point originating freight and each point receiving freight in North America with a unique code number so constructed as to identify the point with its geographic location, using two digits to identify State, County and City and three digits to identify Sub-Code.	0..1
	stateOrProvince			Initial Ship To_	This field includes a single two-	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Transport Location. State Or Province. Text	character state or province code. An example is the United States Postal Service state code, Canadian province code, or Mexican Estado code, listed by country and alphabetically within country. Reference Technical Requirements Number 2 Range Type Fields on proper ways to populate this field.	
		consolidator	PartyIdentification	Initial Ship To_ Transport Location. Consolidator_ Association. Party Identification	This field describes the logistics process that provides for a consolidation point where goods from multiple shipping points are combined for a single volume shipment. Reference Technical Requirements Number 2 Range Type Fields on proper ways to populate this field.	0..1
		department	PartyIdentification	Initial Ship To_ Transport Location. Department_ Association. Party Identification	This field includes the department number assigned by the buyer that defines a merchandise category. This field should be used only if the buyer is creating separate routing instructions at the department level. Reference Technical Requirements Number 2 Range Type Fields on proper ways to populate this field.	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
		distributionCentre	PartyIdentification	Initial Ship To_Transport Location. Distribution Centre_Association. Party Identification	This field includes a location assigned by the buyer to the specific distribution centre where the merchandise is to be shipped. Reference Technical Requirements Number 2 Range Type Fields on proper ways to populate this field.	0..1
		store	PartyIdentification	Initial Ship To_Transport Location. Store_Association. Party Identification	This field includes the location identifier assigned by the buyer to the specific store where the merchandise is to be shipped. Reference Technical Requirements Number 2 Range Type Fields on proper ways to populate this field.	0..1
RoutingInformation				Routing Instruction. Details	Communication for a specific carrier and/or method of shipment for a given shipment. Routing information can specify a carrier, a level of service on a specific carrier or mode of shipment, as well as the means to determine the carrier.	
	freight-TermsOverrideType			Routing Instruction. Freight Terms_Override Type. Code	Freight terms used only to override the freight terms previously specified in the routing guide. Freight terms can be Collect, Consignee Billing, Prepaid by	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
					Consignor, or Third Party Pay.	
	serviceLevelType			Routing Instruction. Service Level Type. Code	The service level as defined by the carrier. Service level can be Ground, Next Day Air, Next Day PM, Next Morning, Second Day Air, Second Morning, or Three Day Service.	0..1
	useDynamicRouting			Routing Instruction. Use_Dynamic Routing. Indicator	'Y' Indicates that routing instructions will be received outside of the static routing guide. If Yes, then Contact information is mandatory. "N" indicates that carrier routing instructions will be received in the static routing guide. Static Routing Guide: A document or message that contains routing instructions, which remain constant for a specific period of time. Dynamic Routing Guide: The process where by the routing requirements are determined on per-shipment basis. The shipping information can be communicated by EDI or other electronic means and the routing information is normally provided electronically.	1..1
		None	CarrierContactInformation	Routing Instruction. Association.	The contact number provides two fields. The first value is the actual	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				tion. Carrier_Contact	number or data, and the second value is the contact number type, which qualifies the number. Phone number, fax number, email address, and/or Website are the qualifier types.	
		specialInstruction-Contact	Contact	Routing Instruction. Special Instruction Contact_Association. Contact	The contact number provides two fields. The first value is the actual number or data, and the second value is the contact number type, which qualifies the number. Phone number, fax number, email address, and/or Website are the qualifier types.	0..1
Shipping-Parameter				Shipping Parameter. Details	Decision points based on certain requirements predetermined by the retailer about the method of shipment and sometimes the service levels.	
	shipmentType			Shipping Parameter. Shipment Type. Code	The unique shipment characteristics that result in different equipment requirements (Garment On Hangers, Reefer, Blanket Wrap). The possible shipment type codes are blanket wrap, garment on hangers, or reefer.	0..1
		cubeRange	MeasurementRange	Shipping Parameter. Cube	The minimum and maximum total shipment cube and Unit of	0..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Range_Association. Measurement Range	Measure for a routing instruction.	
		handlingUnitRange	MeasurementRange	Shipping Parameter. Handling Unit Range_Association. Measurement Range	The type of handling unit and the minimum and maximum number of handling units for a routing instruction and Unit of Measure.	0..1
		linearLengthRange	MeasurementRange	Shipping Parameter. Linear Length Range_Association. Measurement Range	The minimum and maximum linear length and Unit of Measure of a trailer occupied by the shipment for a routing instruction.	0..1
		weightRange	MeasurementRange	Shipping Parameter. Weight Range_Association. Measurement Range	The minimum and maximum total shipment weight and Unit of Measure for a routing instruction.	0..1
TransportationRoutingLineItemInformation				Transportation Routing Line Item Information. Details	Not Available	
	didLineItemInformationChange			Transportation Routing Line	"Y" Indicates that information on the line item has changed from a	1..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Item Information. Change Indicator. Indicator	previous version of the CRIT. "N" indicates that the information on the line item has not changed from a previous version of the CRIT.	
		None	AmendedShip-ToLocation	Transportation Routing Line Item Information. Association. Amended Ship To_ Transport Location	This section is used only to convey changes to the Ship To location based on parameters specified in the Initial Ship From/Ship To Location section and/or the Shipping Parameters section. When a revised Ship To location is provided and the carrier identification field is left blank, second pass routing must be performed, with the revised Ship To location used as the new Ship To. Second pass routing identifies the carrier for the combined shipment. The Amended Ship To Location consists of three fields. Exactly one of these three fields may be used per routing table entry.	0..1
		None	InitialShip-FromLocation	Transportation Routing Line Item Information. Association. Initial Ship	The original location in which the merchandise is to be shipped from. At least one of the seven fields must be populated. (City, Country ISO Code, County, GLN,	1..1

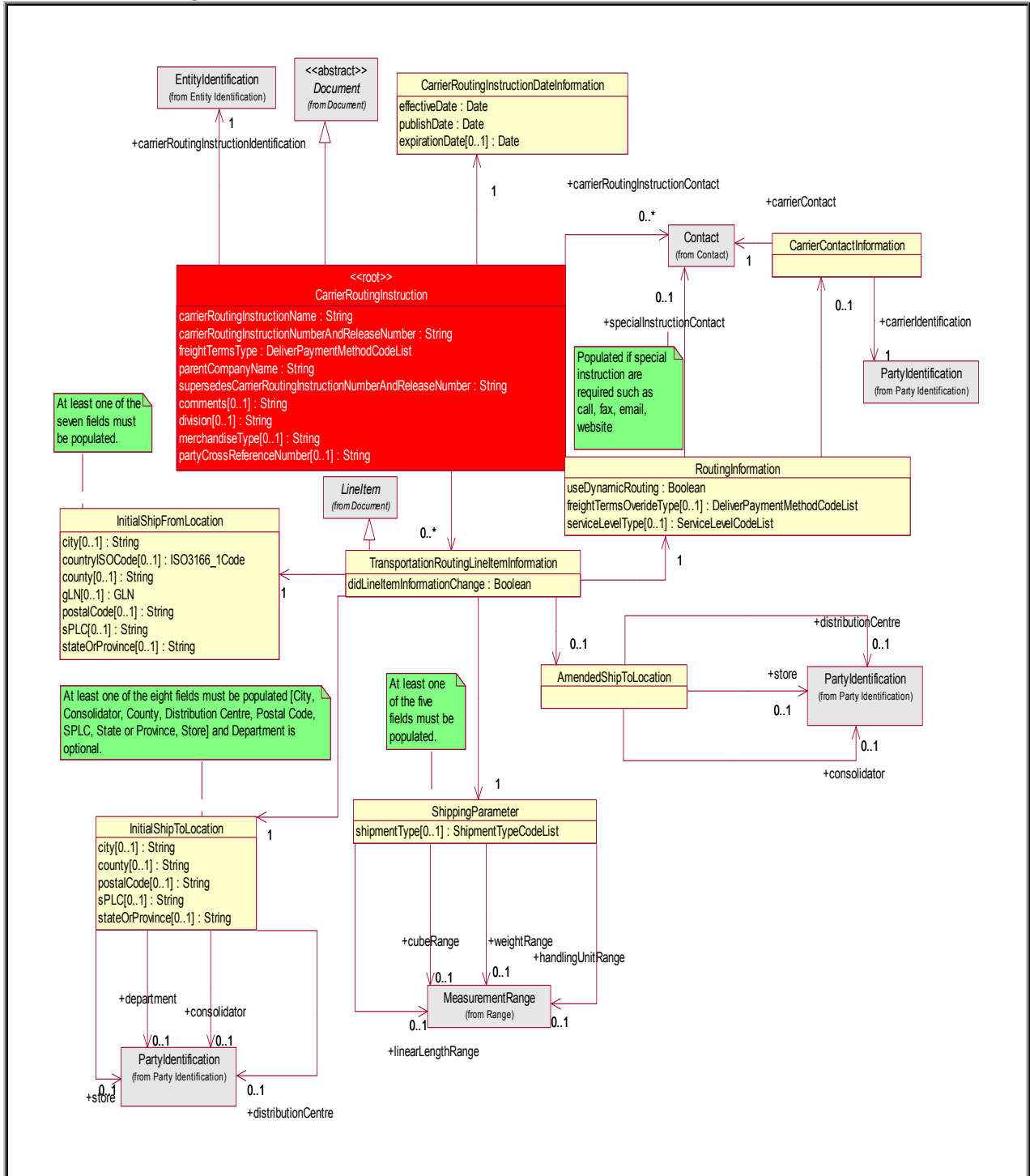
Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				From_Transport Location	Postal Code, SPLC, State or Province)	
		None	InitialShip-ToLocation	Transportation Routing Line Item Information. Association. Initial Ship To_Transport Location	The Location where the buyer has selected the merchandise to be delivered. At least one of the eight fields must be populated (City, Consolidator, County, Distribution Centre, Postal Code, SPLC, State or Province, Store) and Department is optional.	1..1
		None	LineItem	Transportation Routing Line Item Information. Inheritance. Line Item	Not Available	1..1
		None	RoutingInformation	Transportation Routing Line Item Information. Association. Routing Instruction	Communication for a specific carrier and/or method of shipment for a given shipment. Routing information can specify a carrier, a level of service on a specific carrier or mode of shipment, as well as the means to determine the carrier	1..1
		None	Shipping-Parameter	Transportation Routing Line Item Information. Association. Shipping	The Shipping Parameters fields provide the minimum and maximum weights and minimum and maximum cubes associated with a specific shipping method.	1..1

Business Solution Design

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

1.5.3 Class Diagrams



Business Solution Design

1.5.4 Code Lists

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

Code List Name	Code List Description
Shipment Type Code List	Not Available
Code Name	Code Description
BLANKET_WRAP	Not Available
GARMENT_ON_HANGER	Not Available
REEFER	Not Available

Business Solution Design

1.6 Business Document Example

Section 1.6.1 through 1.6.6 illustrates the different section of the Carrier Routing Instruction Template (CRIT)

1.6.1 Header Information CRIT

Header Information- Carrier Routing Instruction Template 1 of 6

- CARRIER ROUTING INSTRUCTION NAME (M)
- CARRIER ROUTING INSTRUCTION NUMBER AND RELEASE NUMBER (M)
- FREIGHT TERMS TYPE (M)
- PARENT COMPANY NAME (M)
- SUPERSEDES CARRIER ROUTING INSTRUCTION NUMBER AND RELEASE NUMBER (M)
- EFFECTIVE DATE (M)
- PUBLISH DATE (M)
- COMMENTS (O)
- CONTACT (O)
- DIVISION (O)
- EXPIRATION DATE (O)
- MERCHANDISE TYPE (O)
- PARTY CROSS REFERENCE NUMBER (O)

1.6.2 Ship From Parameter- CRIT

Ship From Parameter - Carrier Routing Instruction Template 2 of 6

Line Item Number (M)	Did Line Item Information Change Indicator (M)	INITIAL SHIP FROM / SHIP TO LOCATION						
		SHIP FROM (At least one of the seven fields must be populated as the Ship From Parameter.)						
		Country ISO Code (O Choice)	State Or Province (O Choice)	County (O Choice)	City (O Choice)	Postal Code (O Choice)	GLN (O Choice)	SPLC (O Choice)

1.6.3 Ship To Parameter- CRIT

Ship To Parameter - Carrier Routing Instruction Template 3 of 6

INITIAL SHIP FROM / SHIP TO LOCATION								
SHIP TO (At least one of the eight fields must be populated as the Ship TO Parameter and Department is Optional.)								
Consolidator (O Choice)	Distribution Centre (O Choice)	Store (O Choice)	State Or Province (O Choice)	County (O Choice)	City (O Choice)	Postal Code (O Choice)	SPLC (O Choice)	Department (O)

Business Solution Design

1.6.4 Shipping Parameter - CRIT

Shipping Parameter - Carrier Routing Instruction Template 4 of 6

SHIPPING PARAMETERS (At least one of the five fields must be populated as the Shipping Parameter)												
Cube Range (O)			Handling Unit Range (O)			Linear Length Range (O)			Weight Range (O)			Shipment Type (O)
UoM	MIN	MAX	UoM	MIN	MAX	UoM	MIN	MAX	UoM	MIN	MAX	

1.6.5 Amended Ship To Location - CRIT

Amended Ship To Location - Carrier Routing Instruction Template 5 of 6

Amended Ship to Location		
(Exactly one of the three fields must be populated as the Amended Ship To Parameter)		
Consolidator (O)	Distribution Centre (O)	Store (O)

1.6.6 Routing Information – CRIT

Routing Information - Carrier Routing Instruction Template 6 of 6

Routing Information					
Use Dynamic Routing Indicator (M)	Carrier Party Identification (C)	Special Instruction (C)	Service Level (C)	Contact (C)	Freight Terms Override (O)

1.6.7 Ship From Origins

This appendix shows Ship From origins including various states, postal code, and commercial zones. In this scenario, the retailer provides the store distribution on the purchase order, and there is one distribution centre for all

Business Solution Design

stores. The carrier routing instruction specifies carton counts and weight min/max to determine how and where to ship the merchandise. Within Shipping Parameters, when the carton count or weight does not apply to a carrier routing instruction detailed record, it is left blank. All carton counts and weight breaks are based on total shipments for all of the store locations on the same day. The CRIT provides the following columns to convey this information:

- The Ship From field provides the shipping origin state and postal code.
- The Shipping Parameters fields provide the minimum and maximum cartons and minimum and maximum weights associated with a specific shipping method.
- The Amended Ship To Location fields provide the identifier of the DC to which the shipment should be shipped to if the weight and carton parameters are met. This field is left blank if the store number on the purchase order will be the Ship To location.
- The Routing Instruction fields provide the carrier, SCAC code, service level, and contact number.

Business Solution Design

Ship From origins including various states, zip codes, commercial zones

Fields that apply are shown.

CARRIER ROUTING INSTRUCTION NAME (M) Manual
 CARRIER ROUTING INSTRUCTION NUMBER AND RELEASE NUMBER (M) 1234.0001
 FREIGHT TERMS TYPE (M) COLLECT
 PARENT COMPANY NAME (M) Retailer A
 SUPERSEDES CARRIER ROUTING INSTRUCTION NUMBER AND RELEASE NUMBER (M) Initial Release
 EFFECTIVE DATE (M) 20010222
 PUBLISH DATE (M) 20010122
 CONTACT (O) Retailer A Transportation Services
 DIVISION (O) Division X
 EXPIRATION DATE (O) 20010531
 MERCHANDISE TYPE (O) All Except Furniture
 PARTY CROSS REFERENCE NUMBER (O) 5.0

Line Item Number (M)	Did Line Item Information Change Indicator (M)	Initial Ship From/ Ship To Location			Shipping Parameters						Amended Ship To Location	ROUTING INFORMATION					
		Ship From		Ship To	Handling Unit Range(O)			Weight Range (O)				Distribtuion Centre (O)	Use Dynamic Routing Indicator (M)	Carrier Party Identification (C)	Special Instruction (C)	Service Level (C)	Contact (C)
		State Or Province (O)	Postal Code (O)	Store (O)	UoM	MIN	MAX	UoM	MIN	MAX							
1	Y	AL	201-250	Buyer Assigned Identifier For a Party 1001-1999	CTN	1	15	LBS	1	170	GLN 7370000000000	N	FEDG		GROUND	1-800-762-3725	
2	Y	AL	201-250	Buyer Assigned Identifier For a Party 1001-1999	CTN	1	9999	LBS	171	1000	GLN 7370000000000	N	SERJ		GROUND	1-800-227-3503	
3	Y	AL	201-250	Buyer Assigned Identifier For a Party 1001-1999	CTN	1	9999	LBS	1001	9999999		Y		FAX		1-704-357-3607	
4	Y	CA	900-931	Buyer Assigned Identifier For a Party 1001-1999	CTN	1	5	LBS	1	60	GLN 7370000000000	N	FEDG		GROUND	1-800-762-3725	
5	Y	CA	900-931	Buyer Assigned Identifier For a Party 1001-1999	CTN	1	9999	LBS	61	1000	ALL	N	GADC		GROUND	1-562-345-2200	
6	Y	CA	900-931	Buyer Assigned Identifier For a Party 1001-1999	CTN	1	9999	LBS	1001	9999999		Y		FAX		1-704-357-3607	
7	Y	CA	932-939	Buyer Assigned Identifier For a Party 1001-1999	CTN	1	15	LBS	1	170	GLN 7370000000000	N	FEDG		GROUND	1-800-762-3725	
8	Y	CA	932-939	Buyer Assigned Identifier For a Party 1001-1999	CTN	1	9999	LBS	171	1000	GLN 7370000000000	N	WWAT		GROUND	1-800-456-4545	
9	Y	CA	932-939	Buyer Assigned Identifier For a Party 1001-1999	CTN	1	9999	LBS	1001	9999999		Y		FAX		1-704-357-3607	
10	Y	CA	940-952	Buyer Assigned Identifier For a Party 1001-1999	CTN	1	5	LBS	1	60	GLN 7370000000000	N	FEDG		GROUND	1-800-762-3725	

1.6.8 Assigned Ship To Locations

The assigned Ship To locations are determined through the use of a Party cross-reference document. In this scenario, the retailer provides the store distribution on the purchase order; however, there are multiple distribution centres servicing specific stores. A Party cross-reference document must be utilized to determine the appropriate DC that is related to the store(s) on the shipment. Once the proper DC number has been obtained, the carrier routing instruction will be referenced with the DC as the initial Ship To. The carrier routing instruction specifies weight min/max and cube min/max to determine how and where to ship the merchandise. Within Shipping Parameters, when the weight or cube does not apply to a carrier routing instruction detailed record, it is left blank. All weight breaks and cubes are based on total shipments for all of the DC locations on the same day. The CRIT provides the following columns to convey this information:

- The Ship From field provides the shipping origin state and postal code. See Party Cross Reference document used in conjunction with this example.
- The Shipping Parameters fields provide the minimum and maximum weights and minimum and maximum cubes associated with a specific shipping method.
- The Routing Instruction fields provide the carrier party identification, service level, and contact number.

Business Solution Design

Assigned ship to locations determined through the use of a Party cross-reference document

Fields that apply are shown.

CARRIER ROUTING INSTRUCTION NAME (M) Retailer B Routing Instruction Manual
 CARRIER ROUTING INSTRUCTION NUMBER AND
 RELEASE NUMBER (M) 1234.0001
 FREIGHT TERMS TYPE (M) COLLECT
 PARENT COMPANY NAME (M) Retailer B

SUPERSEDES CARRIER ROUTING INSTRUCTION
 NUMBER AND RELEASE NUMBER (M) Initial Release
 EFFECTIVE DATE (M) 20010901
 PUBLISH DATE (M) 20010815
 Comments (O) Refer to Party Cross Reference Document for Ship to Information
 CONTACT (O) Traffic Department 889-889-9999
 DIVISION (O) All
 EXPIRATION DATE (O) 20011231
 MERCHANDISE TYPE (O) Furniture Except Parts, Hardware, Pillows, ETC..
 PARTY CROSS REFERENCE NUMBER (O) 5

Line Item Number (M)	Did Line Item Information Change Indicator (M)	Initial Ship From / Ship To Location				Shipping Parameters						Amended Ship To Location	ROUTING INFORMATION					
		Ship From		Ship To		Cube Range(O)			Weight Range (O)				Consolidator (O)	Use Dynamic Routing Indicator (M)	Carrier Party Identification (C)	Special Instruction (C)	Service Level (C)	Contact (C)
		State Or Province (O)	Postal Code (O)	Consolidator (O)	Distribution Centre (O)	UoM	MIN	MAX	UoM	MIN	MAX							
		GLN 1001000000000-1010000000000				Cubic Metre	1	99999	LBS	1	99999							
1	Y	AR	720-723		GLN 1001000000000-1010000000000	Cubic Metre	1	99999	LBS	1	99999		Y		CALL		Gina Jones at Express (800-284-4320x2201)	
2	Y	CA	900-999		GLN 1001000000000-1010000000000	Cubic Metre	1	9999	LBS	1	150		N	UPSG		GROUND		
3	Y	CA	900-918		GLN 1001000000000-1010000000000	Cubic Metre	1	1000	LBS	151	5000		N	CTE			800-540-0244	
4	Y	CA	922		GLN 1001000000000-1010000000000	Cubic Metre	1	1000	LBS	151	5000		N	CTE			800-540-0244	
5	Y	CA	926-929		GLN 1001000000000-1010000000000	Cubic Metre	1	1000	LBS	151	5000		N	CTE			800-540-0244	
6	Y	CA	919-921		GLN 1001000000000-1010000000000	Cubic Metre	1	1000	LBS	151	5000		N	CTE			800-540-0244	
7	Y	CA	923-925		GLN 1001000000000-1010000000000	Cubic Metre	1	1000	LBS	151	5000		N	CTE			800-540-0244	
8	Y	CA	930-931		GLN 1001000000000-1010000000000	Cubic Metre	1	1000	LBS	151	5000		N	CTE			800-540-0244	
9	Y	CA	940-969		GLN 1001000000000-1010000000000	Cubic Metre	1	1000	LBS	151	5000		N	CTE			800-540-0244	
10	Y	CA	932-939		GLN 1001000000000-1010000000000	Cubic Metre	1	1000	LBS	151	5000		N	ABF				
11	Y	CA	900-999		GLN 1001000000000-1010000000000	Cubic Metre	1001	99999	LBS	151	5000		Y		CALL		626-855-4154	
12	Y	CA	900-999		GLN 1001000000000-1010000000000	Cubic Metre	1	99999	LBS	5001	99999		Y		CALL		626-855-4154	
13	Y	NJ	060-110		GLN 1001000000000-1010000000000	Cubic Metre	1	9999	LBS	1	150		N	UPSG		GROUND		
14	Y	NJ	070-089		GLN 1001000000000-1010000000000	Cubic Metre	1	1000	LBS	151	5000	Buyer Assigned Identifier for a party METCON	N					
15	Y	NJ	090-099		GLN 1001000000000-1010000000000	Cubic Metre	1	1000	LBS	151	5000	Buyer Assigned Identifier for a party NEW DEAL	N					
16	Y	NJ	060-110	Buyer Assigned Identifier for a party METCON	GLN 1001000000000-1010000000000	Cubic Metre	1	1000	LBS	1	5000		N	METC			201-434-1606	

1.6.9 Overriding Freight Terms Through Routing Determination

In this scenario, the retailer determines that the freight terms are collect. However, in certain situations, such as specific Ship From locations and depending on Shipping Parameters, freight terms may change from collect to prepaid. The carrier routing instruction specifies weight min/max and cube min/max to determine how and where to ship the merchandise. Within Shipping Parameters, when the weight or cube does not apply to a carrier routing instruction detailed record, it is left blank. All weight breaks and cubes are based on total shipments for all of the DC locations on the same day. The CRIT provides the following columns to convey this information:

- The Ship From field provides the shipping origin state and postal code.
- The Shipping Parameters fields provide the minimum and maximum weights and minimum and maximum cube associated with a specific shipping method.
- See [Section 4.10—4.14](#) for use of The Revised Ship To Location fields.
- The Routing Instruction fields provide the carrier party identification, service level, contact number, and freight terms override indicator.

Business Solution Design

Overriding of freight terms through routing determination

Columns that apply are shown

Carrier Routing Instruction Name (M) Retailer B Routing Instruction Name

Carrier Routing Instruction Number and Release Number (M) 1234.0003

Freight Terms Type (M) COLLECT

Parent Company Name (M) Retailer B

Supersedes Carrier Routing Instruction Number and Release Number (M) 1234.0002

Effective Date (M) 20010901

Publish Date (M) 20010815

Comment (O) Refer to the Party Cross Reference document for ship to information.

Contact (O) TRAFFIC DEPT. 889-999-9999

Division (O) ALL

Expiration Date (O) 20011231

Merchandise Type (O) FURNITURE (EXCEPT PARTS, HARDWARE, PILLOWS, ETC.)

Party Cross Reference Number (O) 5

Line Item Number (M)	Did Line Item Information Change Indicator (M)	INITIAL SHIP FROM/SHIP TO LOCATION				Shipping Parameters						Amended Ship To Location (O)	ROUTING INFORMATION						
		SHIP FROM		SHIP TO		Cube Range (O)			Weight Range (O)				Consolidator (O)	Use Dynamic Routing Indicator (M)	Carrier Party Identification (C)	Special Instruction (C)	Service Level (C)	CONTACT (C)	FREIGHT TERM OVERRIDE (O)
		State Or Province (O)	Postal Code (O)	Consolidator (O)	Store (O)	UoM	MIN	MAX	UoM	MIN	MAX								
1	Y	AR	ALL		ALL	LF	1	99999	LBS	1	99999		Y		CALL		John Jones at Express (800-284-4320 EXT.2201)		
2	Y	CA	ALL		ALL	LF	151	5000	LBS	1	150		Y	UPSG		GROUND			
3	Y	CA	900-918, 922, 926-929		ALL	LF	1	1000	LBS	151	5000		Y	CTE			800-540-0244	PREPAID BY CONSIGNOR	
6	N	CA	919-921, 923-925, 930, 931, 940-969		ALL	LF	1	1000	LBS	151	5000		Y	CTE			800-540-0244		
11	N	CA	932-939		ALL	LF	1	1000	LBS	151	5000		Y	ABF			800-098-1234		
12	N	CA	ALL		ALL	LF	1001	99999	LBS	151	5000		Y		CALL		626-855-4154		
13	N	CA	ALL		ALL	LF	1	99999	LBS	5001	99999		Y		CALL		626-855-4154		
14	N	NJ	ALL		ALL				LBS	1	150		Y	UPSG		GROUND			
15	N	NJ	070-089		ALL	LF	1	1000	LBS	151	5000	Buyer Assigned Identifier For A Party METCON	Y						
16	N	NJ	090-099		ALL	LF	1	1000	LBS	151	5000	Buyer Assigned Identifier For A Party NEW DEAL	Y						
17	Y	NJ	ALL	Buyer Assigned Identifier For A Party METCON		LF	1	1000	LBS	1	5000		Y	METC			201-434-1606	PREPAID BY CONSIGNOR	
18	Y	NJ	ALL	Buyer Assigned Identifier For A Party NEW DEAL		LF	1	1000	LBS	1	5000		Y	NEWD			201-985-0300		
19	N	NJ	ALL		ALL	LF	1001	99999	LBS	151	99999		Y		CALL		626-855-4154		
20	N	NJ	ALL		ALL	LF	1	99999	LBS	5000	99999		Y		CALL		626-855-4154		

1.6.10 Revised Ship to Section

This appendix provides examples for using the Revised Ship To section as it relates to freight consolidation.

- The Ship From field provides the shipping origin state and postal code.
- The Shipping Parameters fields provide the minimum and maximum weights and minimum and maximum cubes associated with a specific shipping method.
- The Revised Ship To Location fields are used for determining if shipping locations change.
- The Routing Instruction fields provide the carrier party identification, service level, contact number, and freight terms override indicator.

1.6.11 A consolidator is the carrier and shipments are not combined by the supplier

In this scenario, the shipments are destined for the retailer's DCs, but the consolidator will act as the carrier for the shipments. There will be no consolidation of shipments by the supplier. The consolidator will pick up the shipment from the supplier and take it to the consolidation facility. There, the shipment will be combined with other freight before being transported to the retailer's DCs.

- CRIT: Revised Ship To: none; Routing Information: Consolidator is the carrier
- BOL/Master BOL: Individual BOLs are created for each DC; no Master BOL
- BOL Address: DC address will appear on each BOL

Business Solution Design

Consolidator is carrier and shipments not combined by the vendor

Fields that apply are shown.

CARRIER ROUTING INSTRUCTION NAME (M) Retailer B Routing Instruction Manual
 CARRIER ROUTING INSTRUCTION NUMBER AND RELEASE NUMBER (M) 1.0003
 FREIGHT TERMS TYPE (M) Collect
 PARENT COMPANY NAME (M) Retailer B Parent Company Name
 SUPERSEDES CARRIER ROUTING INSTRUCTION NUMBER AND RELEASE NUMBER (M) 1.0002
 EFFECTIVE DATE (M) 20010901
 PUBLISH DATE (M) 20010815
 Comments (O) Refer to Party Cross Reference Document for ship to information
 CONTACT (O) Traffic Department 889-999-9999
 DIVISION (O) All
 EXPIRATION DATE (O) 20011231
 MERCHANDISE TYPE (O) Furniture (Except Parts, Hardware, Pillows, Etc.)
 PARTY CROSS REFERENCE NUMBER (O) 5.0

Line Item Number (M)	Did Line Item Information Change Indicator (M)	Initial Ship From/ Ship To Location			Shipping Parameters			ROUTING INFORMATION				
		Ship From		Ship To	UoM	MIN	MAX	Use Dynamic Routing Indicator (M)	Carrier Party Identification (C)	Special Instruction (C)	Service Level (C)	Contact (C)
		State Or Province (O)	Postal Code (O)	Distribution Centre (O)								
		Weight Range (O)										
1	N	CT	ALL	ALL	LBS	1	150	N	UPSG		GROUND	
2	N	CT	100-119	ALL	LBS	151	13999	N	CON1			888-123-1234
3	N	CT	120-129	ALL	LBS	151	13999	N	CAR1			999-432-2343
4	N	CT	ALL	ALL	LBS	14000	99999	Y		CALL		Retailer Traffic 123-456-7890
5	Y	NJ	ALL	ALL	LBS	1	150	N	UPSG		GROUND	
6	Y	NJ	070-089	ALL	LBS	151	13999	N	CON2			888-123-1234
7	Y	NJ	090-099	ALL	LBS	151	13999	N	CAR2			999-432-2343
8	Y	NJ	ALL	ALL	LBS	14000	99999	Y		CALL		Retailer Traffic 123-456-7890

1.6.12 An LTL carrier is used to ship to the consolidator and shipments are not combined by the supplier

In this scenario, shipments are destined for the DCs, but will be shipped to the consolidator (CON1) via an LTL carrier. There will be no consolidation of shipments by the supplier. The LTL carrier will pick up shipments from the supplier and drop off the freight at CON1. There, the shipments will be combined with other shipments before being taken to the DCs.

- CRIT: Revised Ship To: CON1 is the Consolidator; Routing Information: The LTL carrier is the carrier
- BOL/Master BOL: Individual BOLs are created for each DC; no Master BOL
- BOL Address: CON1 address will appear on each BOL;

Business Solution Design

Consolidator is carrier and shipments not combined by the vendor

Fields that apply are shown.

CARRIER ROUTING INSTRUCTION NAME (M) Retailer B Routing Instruction Manual
 CARRIER ROUTING INSTRUCTION
 NUMBER AND RELEASE NUMBER (M) 1.0003
 FREIGHT TERMS TYPE (M) Collect
 PARENT COMPANY NAME (M) Retailer B Parent Company Name
 SUPERSEDES CARRIER ROUTING INSTRUCTION
 NUMBER AND RELEASE NUMBER (M) 1.0002
 EFFECTIVE DATE (M) 20010901
 PUBLISH DATE (M) 20010815
 Comments (O) Refer to Party Cross Reference Documet for ship to information
 CONTACT (O) Traffic Department 889-999-9999
 DIVISION (O) All
 EXPIRATION DATE (O) 20011231
 MERCHANDISE TYPE (O) Furniture (Except Parts, Hardware, Pillows, Etc.)
 PARTY CROSS REFERENCE NUMBER (O) 5

Line Item Number (M)	Did Line Item Information Change Indicator (M)	Initial Ship From/ Ship To Location			Shipping Parameters			Amended Ship To Location (O)	ROUTING INFORMATION				
		Ship From		Ship To	Consolidator (O)	Use Dynamic Routing Indicator (M)	Carrier Party Identification (C)		Special Instruction (C)	Service Level (C)	Contact (C)		
		State Or Province (O)	Postal Code (O)									Distribution Centre (O)	Weight Range (O)
				UoM									MIN
1	Y	CT	ALL	ALL	LBS	1	150		N	UPSG		GROUND	
2	Y	CT	100-119	ALL	LBS	151	13999	SCAC CON1	N	CAR1			888-123-1234
3	Y	CT	120-129	ALL	LBS	151	13999	SCAC CON1	N	CAR2			999-432-2343
4	Y	CT	ALL	ALL	LBS	14000	99999		Y		CALL		Retailer Traffic 123-456-7890
5	N	NJ	ALL	ALL	LBS	1	150		N	UPSG		GROUND	
6	N	NJ	070-089	ALL	LBS	151	13999	SCAC CON1	N	CAR3			888-987-6543
7	N	NJ	090-099	ALL	LBS	151	13999	SCAC CON1	N	CAR4			999-123-9876
8	N	NJ	ALL	ALL	LBS	14000	99999		Y		CALL		Retailer Traffic 123-456-7890

1.6.13 A consolidator is the carrier, and shipments are combined by the vendor

In this scenario, the shipments are destined for multiple retailers' DCs, and a consolidator will act as the carrier for the shipments. There will be consolidation of freight by the supplier. The consolidator will pick up the shipment from the supplier and take it to the consolidation facility. There, the shipment will be combined with other freight before being transported to retailers' DCs.

Shipments across multiple DCs are consolidated as part of second pass routing. Second pass routing is used if the revised Ship To is populated, and the carrier is left blank.

- CRIT: Revised Ship To: CON1 is the Consolidator; Routing Information: left blank; second pass routing is used to determine the carrier
- BOL/Master BOL: Individual BOLs are created for each DC; Master BOL for CON1
- BOL/ Master BOL Address: DC address will appear on each BOL; CON1 address will appear on Master BOL

Business Solution Design

Consolidator is carrier and freight is combined by the vendor

Fields that apply are shown.

CARRIER ROUTING INSTRUCTION NAME (M) Retailer B Routing Instruction Manual
 CARRIER ROUTING INSTRUCTION 1.0003
 NUMBER AND RELEASE NUMBER (M) Collect
 FREIGHT TERMS TYPE (M) Retailer B Parent Company Name
 PARENT COMPANY NAME (M) Retailer B Parent Company Name
 SUPERSEDES CARRIER ROUTING INSTRUCTION
 NUMBER AND RELEASE NUMBER (M) 1.0002
 EFFECTIVE DATE (M) 20010901
 PUBLISH DATE (M) 20010815
 Comments (O) Refer to Party Cross Reference Document for ship to information
 CONTACT (O) Traffic Department 889-999-9999
 DIVISION (O) All
 EXPIRATION DATE (O) 20011231
 MERCHANDISE TYPE (O) Furniture (Except Parts, Hardware, Pillows, Etc.)
 PARTY CROSS REFERENCE NUMBER (O) 5

Line Item Number (M)	Did Line Item Information Change Indicator (M)	Initial Ship From/ Ship To Location				Shipping Parameters						Amended Ship To Location (O)	ROUTING INFORMATION						
		Ship From		Ship To		Cube Range (O)			Weight Range (O)				Consolidator (O)	Use Dynamic Routing Indicator (M)	Carrier Party Identification (C)	Special Instruction (C)	Service Level (C)	Contact (C)	Freight Terms Override (O)
		State Or Province (O)	Postal Code (O)	Consolidator (o)	Distribution Centre (O)	UoM	MIN	MAX	UoM	MIN	MAX								
1	N	NJ	000-999		ALL				LBS	1	150		N	UPSG		GROUND			
2	N	NJ	000-999		ALL	CUBIC METRE	1	1000	LBS	151	5000	Buyer Assigned Identifier For A Party METCON	N						
3	N	NJ	000-999		ALL	CUBIC METRE	1001	99999	LBS	151	5000		N		CALL		Retailer Traffic 123-456-7890		
4	N	NJ	000-999		ALL	CUBIC METRE	1	99999	LBS	5001	99999		N		CALL		Retailer Traffic 123-456-7890		
5	Y	NJ	000-999	Buyer Assigned Identifier For A Party METCON		CUBIC METRE	1	1000	LBS	1	5000		N	METC			201-434-1606	PREPAID BY CONSIGNOR	
6	N	NJ	000-999	Buyer Assigned Identifier For A Party METCON		CUBIC METRE	1001	99999	LBS	151	5000		N		CALL		Consolidator Traffic1		
7	N	NJ	999	Buyer Assigned Identifier For A Party METCON		CUBIC METRE	1	99999	LBS	5001	99999		N		CALL		Consolidator Traffic1		

1.6.14 An LTL carrier is used to ship to a consolidator, and shipments are combined by the vendor

In this scenario, shipments are destined for the DCs, but will be shipped to the consolidator (CON1) via an LTL carrier. There will be consolidation of shipments by the supplier. The LTL carrier will pick up shipments from the supplier and drop off the freight at CON1. There, the shipments will be combined with other shipments before being taken to the DCs.

- CRIT: Revised Ship To: CON1 is the Consolidator; Routing Information: left blank; second pass routing is used to determine the carrier
- BOL/Master BOL: Individual BOLs are created for each DC; Master BOL for CON1
- BOL/ Master Address: DC address will appear on each BOL; CON1 address will appear on Master BOL

Business Solution Design

LTL carrier used to ship to consolidator and shipments are combined by the vendor

Fields that apply are shown.

CARRIER ROUTING INSTRUCTION NAME (M)	Retailer B Routing Instruction Manual
CARRIER ROUTING INSTRUCTION NUMBER AND RELEASE NUMBER (M)	1.0003
FREIGHT TERMS TYPE (M)	Collect
PARENT COMPANY NAME (M)	Retailer B Parent Company Name
SUPERSEDES CARRIER ROUTING INSTRUCTION NUMBER AND RELEASE NUMBER (M)	1.0002
EFFECTIVE DATE (M)	20010901
PUBLISH DATE (M)	20010815
Comments (O)	Refer to Party Cross Reference Documet for ship to information
CONTACT (O)	Traffic Department 889-999-9999
DIVISION (O)	All
EXPIRATION DATE (O)	20011231
MERCHANDISE TYPE (O)	Furniture (Except Parts, Hardware, Pillows, Etc.)
PARTY CROSS REFERENCE NUMBER (O)	5

Line Item Number (M)	Did Line Item Information Change Indicator (M)	Initial Ship From/ Ship To Location				Shipping Parameters						Amended Ship To Location (O)	ROUTING INFORMATION					
		Ship From		Ship To		Cube Range (O)			Weight Range (O)				Consolidator (O)	Use Dynamic Routing Indicator (M)	Carrier Party Identification (C)	Special Instruction (C)	Service Level (C)	Contact (C)
		State Or Province (O)	Postal Code (O)	Consolidator (o)	Distribution Centre (O)	UoM	MIN	MAX	UoM	MIN	MAX							
1	N	NJ	ALL		ALL				LBS	1	150		N	UPSG			GROUND	
2	N	NJ	ALL		ALL	CUBIC METRE	1	1000	LBS	151	5000	SCAC CON1	N					
3	N	NJ	ALL		ALL	CUBIC METRE	1001	99999	LBS	151	5000		Y			CALL		Retailer Traffic 123-456-7890
4	N	NJ	ALL		ALL	CUBIC METRE	1	99999	LBS	5001	99999		Y			CALL		Retailer Traffic 123-456-7890
5	N	NJ	ALL	SCAC CON1		CUBIC METRE	1	1000	LBS	1	5000		N	LTL1				987-654-3210
6	N	NJ	ALL	SCAC CON1		CUBIC METRE	1001	99999	LBS	151	5000		Y			CALL		Consolidator Traffic1
7	N	NJ	ALL	SCAC CON1		CUBIC METRE	1	99999	LBS	5001	99999		Y			CALL		Consolidator Traffic1

1.6.15 Deconsolidation of DC level Shipments

In this scenario, shipments are destined for the DCs, but the weight does not meet the minimum criteria required for shipping direct to the DC. As a result, the Revised Ship To section is used to indicate that the shipment will go directly to the store. There will be deconsolidation of shipments by the supplier.

- CRIT: Revised Ship To: Store is the new ship to location; Routing Information: LTL Carrier1 is assigned
- BOL/Master BOL: Individual BOLs are created for each store; no Master BOL required
- BOL Address: Store address will appear on each BOL

Business Solution Design

Deconsolidation of DC level shipments

Fields that apply are shown.

CARRIER ROUTING INSTRUCTION NAME (M)	Retailer B Routing Instruction Manual
CARRIER ROUTING INSTRUCTION NUMBER AND RELEASE NUMBER (M)	1.0003
FREIGHT TERMS TYPE (M)	Collect
PARENT COMPANY NAME (M)	Retailer B Parent Company Name
SUPERSEDES CARRIER ROUTING INSTRUCTION NUMBER AND RELEASE NUMBER (M)	1.0002
EFFECTIVE DATE (M)	20010901
PUBLISH DATE (M)	20010815
CONTACT (O)	Traffic Department 889-999-9999
DIVISION (O)	All
EXPIRATION DATE (O)	20011231
MERCHANDISE TYPE (O)	Furniture (Except Parts, Hardware, Pillows, Etc.)

Line Item Number (M)	Did Line Item Information Change Indicator (M)	Initial Ship From/ Ship To Location				Shipping Parameters						Amended Ship To Location (O)		ROUTING INFORMATION				
		Ship From		Ship To		Cube Range (O)			Weight Range (O)			Consolidator (O)	Store (O)	Use Dynamic Routing Indicator (M)	Carrier Party Identification (C)	Special Instruction (C)	Service Level (C)	Contact (C)
		State Or Province (O)	Postal Code (O)	Consolidator (O)	Distribution Centre (O)	UoM	MIN	MAX	UoM	MIN	MAX							
1	N	NJ	ALL		ALL				LBS	1	500		ALL	N	LTL1			987-654-3210
2	N	NJ	070-089		ALL	CUBIC METRE	1	1000	LBS	501	5000	SCAC CON1		N				
3	Y	NJ	090-099		ALL	CUBIC METRE	1	1000	LBS	501	5000	SCAC CON1		N				
4	Y	NJ	ALL		ALL	CUBIC METRE	1001	99999	LBS	501	5000			Y		CALL		Retailer Traffic Dept
5	Y	NJ	ALL		ALL	CUBIC METRE	1	99999	LBS	5001	99999			Y		CALL		Retailer Traffic Dept
6	Y	NJ	ALL	SCAC CON1		CUBIC METRE	1	1000	LBS	1	5000			N	LTL1			987-654-3210
7	Y	NJ	ALL	SCAC CON2		CUBIC METRE	1	1000	LBS	1	5000			N	LTL2			123-456-7890
8	Y	NJ	ALL	SCAC CON1		CUBIC METRE	1001	99999	LBS	501	5000			Y		CALL		Consolidator 1 Traffic Dept
9	Y	NJ	ALL	SCAC CON1		CUBIC METRE	1	99999	LBS	5001	99999			Y		CALL		Consolidator 1 Traffic Dept
10	Y	NJ	ALL	SCAC CON2		CUBIC METRE	1001	99999	LBS	501	5000			Y		CALL		Consolidator 2 Traffic Dept
11	N	NJ	ALL	SCAC CON2		CUBIC METRE	1	99999	LBS	5001	99999			Y		CALL		Consolidator 2 Traffic Dept

1.6.16 Scenarios of New Carrier Routing Instruction Number Issuance

The following scenarios provide examples of when a new routing guide version must be issued.

1. The carrier routing instruction of two divisions are merged into one.

•Before (Division A and Division B have two separate carrier routing instruction):

- Division A

1. Carrier Routing Instruction Name: Retailer A
2. Division: Division A
3. Merchandise Type: All
4. Freight Terms: Collect
5. Carrier Routing Instruction Number and Release Number = 1.0001
6. Supersedes Carrier Routing Instruction Number and Release Number = 1.0000

- Division B

1. Carrier Routing Instruction Name: Retailer A
2. Division: Division B
3. Merchandise Type: All
4. Freight Terms: Collect
5. Carrier Routing Instruction Number and Release Number = 2.0005
6. Supersedes Carrier Routing Instruction Number and Release Number = 2.0004

•After (Division A and Division B are combined under one carrier routing instruction):

1. Carrier Routing Instruction Name: Retailer A
2. Division: Division A & B
3. Merchandise Type: All
4. Freight Terms: Collect
5. Carrier Routing Instruction Number and Release Number = 3.0000
6. Supersedes Carrier Routing Instruction Number and Release Number = 1.0001, 2.0005

2. Retailer A is purchased by Retailer B; Retailer A becomes a division of Retailer B.

•Before (Retailer A and Retailer B are two separate companies):

- Retailer A carrier routing instruction

1. Carrier Routing Instruction Name: Retailer A
2. Division: All
3. Merchandise Type: All
4. Freight Terms: Collect
5. Carrier Routing Instruction Number and Release Number = 1.0001
6. Supersedes Carrier Routing Instruction Number and Release Number = 1.0000

•After (Retailer A is now a division under Retailer B, and Retailer B already has two other divisions):

1. Carrier Routing Instruction Name: Retailer B
2. Division: (Formerly Retailer A)
3. Merchandise Type: All
4. Freight Terms: Collect
5. Carrier Routing Instruction Number and Release Number = 3.00 (note: carrier routing instruction number 1 and 2 are already assigned to the pre-existing divisions of Retailer B)
6. Supersedes Carrier Routing Instruction Number and Release Number = Initial Release

3. A carrier routing instruction is needed for a merchandise type (e.g., furniture).

•Before (All of Retailer A's merchandise types are classified under the same carrier routing instruction):

- Retailer A carrier routing instruction (All merchandise types)
 1. Carrier Routing Instruction Name: Retailer A
 2. Division: All
 3. Merchandise Type: All
 4. Freight Terms: Collect
 5. Carrier Routing Instruction Number and Release Number = 1.0003
 6. Supersedes Carrier Routing Instruction Number and Release Number = 1.0002

- After (Retailer A's furniture merchandise is routed using a different carrier routing instruction from the other merchandise types):
 - Retailer A routing guide (Furniture)
 1. Carrier Routing Instruction Name: Retailer A
 2. Division: All
 3. Merchandise Type: Furniture
 4. Freight Terms: Collect
 5. Carrier Routing Instruction Number and Release Number = 2.0000
 6. Supersedes Carrier Routing Instruction Number and Release Number = 1.0003

 - Retailer A routing guide (All merchandise except furniture)
 1. Carrier Routing Instruction Name: Retailer A
 2. Division: All
 3. Merchandise Type: All except furniture
 4. Freight Terms: Collect
 5. Carrier Routing Instruction Number and Release Number = 3.0000
 6. Supersedes Carrier Routing Instruction Number and Release Number = 1.0003

1.6.17 Scenarios of New Release Number Issuance

The following scenario provides an example of when a new release number must be issued.

1. Retailer A has changed its carrier assignment for shipments originating in Georgia.
 - Before (Shipping points in GA use Trucking Co. X to transport shipments to Retailer A):
 1. Carrier Routing Instruction Name: Retailer A
 2. Division: All
 3. Merchandise Type: All
 4. Freight Terms: Collect
 5. Carrier Routing Instruction Number and Release Number = 1.0000
 6. Supersedes Carrier Routing Instruction Number and Release Number = Initial Release

 - After (Retailer A changes the carrier assignment to Trucking Co. Y for shipping points in GA):
 1. Carrier Routing Instruction Name: Retailer A
 2. Division: All
 3. Merchandise Type: All
 4. Freight Terms: Collect
 5. Carrier Routing Instruction Number and Release Number = 1.0001
 6. Supersedes Carrier Routing Instruction Number and Release Number = 1.0000

1.7 Implementation Considerations

Rules of Use

The following rules should be followed when creating and using a carrier routing instruction template. (CRIT)

- A retailer may have one or more routing instructions depending on the business. Unique routing instructions may be required for different merchandise types (e.g., general, jewellery, lumber), freight terms (collect, prepaid), or different divisions. If routing instructions are consistent for all merchandise types/freight terms/divisions, a single routing guide should be used. However if routing instructions differ across merchandise types/freight terms/divisions, multiple routing guides are required.
- All mandatory columns and any optional columns in the CRIT that apply to the retailer's routing instructions must be populated. For readability, non-populated columns should be omitted from the CRIT.
- The CRIT is read from left to right and from top to bottom.
- List CRIT entries in alphabetical/numerical order based on the Ship From applicable fields Country ISO Code, Global Location Number, State or Province, and Postal Code.
- Within each Ship From location identified on the CRIT, routing instructions should be listed in order from most specific to least specific.
- Any additional cross-reference tables needed are defined outside the CRIT (e.g., party cross reference relationships).
- If a field is left blank, it does not apply to the routing instructions.

Business Solution Design

1.8 Testing

None

1.8.1 Pass / Fail Criteria

Unit testing criteria for business solution.

Number	Test Criteria	Related Requirement	Design Element	Pass Criteria	Fail Criteria
1	None				

1.8.2 Test Data

Attribute	Value
<i>None</i>	<i>None</i>

1.9 Appendices

1.10 Summary of Changes

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

Change	BMS Version	Associated CR Number
<ul style="list-style-type: none">Business Requirements Document conversion to Business Solution Design Document	V 2.0.1	CR 01-101

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 example 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