



Transport Instruction and Response

Business Message Standard (BMS)

Release 3.2

01-Dec-2014, Issue 1



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BRAD Title	BRAD Issue Date	BRAD Version
Transport Management		1.0

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12-Jan-2012	BMS 3.0 – Issue 1	Mark Van Eeghem	BMS Release 3.0	See summary of changes
01-May-2013	BMS 3.1 – Issue 1	Coen Janssen	BMS Release 3.1	See summary of changes
01-Dec-2014	BMS 3.2 – Issue 1	Ewa Iwicka	BMS Release 3.2	See summary of changes

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Table of Contents

1. Business Domain View	4
1.1. Introduction.....	4
1.2. References	4
2. Business Context	4
3. Business Transaction View	5
3.1. Business Transaction – Issue Transport Instruction	5
3.2. Confirm Transport Instruction.....	6
4. Business Information View	7
4.1. Transport Instruction (message)	7
4.2. Transport Instruction Response (message).....	9
4.3. Transport Instruction Consignment.....	11
4.4. Transport Instruction Consignment Item.....	15
4.5. Transport Instruction Shipment.....	18
4.6. Transport Instruction Shipment Item	22
4.7. Transport Instruction Terms	24
4.8. Transport Instruction Transport Equipment	26
4.9. Transport Instruction Transport Movement.....	28
4.10. Code Lists	31
5. Business Message Examples	31
5.1. Example 1	31
5.2. Example 2	33
5.3. Example 3	35
6. Implementation Considerations	37
6.1. User Guide	37
6.2. Message Specific Considerations	38
7. Summary of Changes.....	38
7.1. BMS Release 3.0	38
7.2. BMS Release 3.1	38
7.3. BMS Release 3.2	39
8. Appendices	40
9. Acknowledgements	40
9.1.1. Work Group	40
9.1.2. Development Team Members	41

1. Business Domain View

1.1. Introduction

Message Definition

Transport Instruction Message Definition

The Transport Instruction allows communication and sharing the arrangements (through the agreed conditions) of the movement of the goods (including collection and delivery) between all parties involved and providing the information necessary to perform the handling of the goods.

Transport Instruction Response Message Definition

The Transport Instruction Response may be sent from Logistic Services Seller to Logistic Services Buyer in order to confirm the instruction and to provide further detail.

Principles

The Transport Instruction will be sent by the Logistic Services Buyer (supplier, retailer, 3rd party warehouse or freight forwarder) to a Logistic Services Seller (freight forwarder or carrier) upon order creation.

The Transport Instruction can include a request for either executing a **consignment** or executing a **shipment**. The trading partners need the ability to differentiate between less detailed transport instructions (shipments) and more detailed instructions (consignments).

Exchanging Transport Instruction Response message is optional. In many cases there exist standing agreements that the Logistic Services Seller will accept all Transport Instructions from the Logistic Services Buyer 'as sent'. In that case sending the Transport Instruction Response adds no value to the process and partners can agree NOT to exchange this message-type.

1.2. References

Reference Name
BRAD Transport Management (GS1, 2009)
Logistics Interoperability Model (GS1, 2007)
BMS eCom Common Library 3.2 (GS1, 2014)
BMS Shared Common Library 3.2 (GS1, 2014)

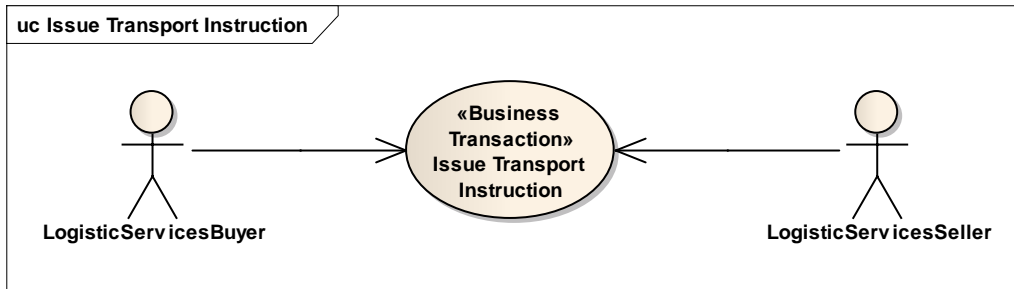
2. Business Context

Context Category	Value(s)
Industry	All
Geopolitical	All
Product	All
Process	Deliver / Transport Management
System Capabilities	GS1 System
Official Constraints	None

3. Business Transaction View

3.1. Business Transaction – Issue Transport Instruction

Use Case Diagram



Use Case Description

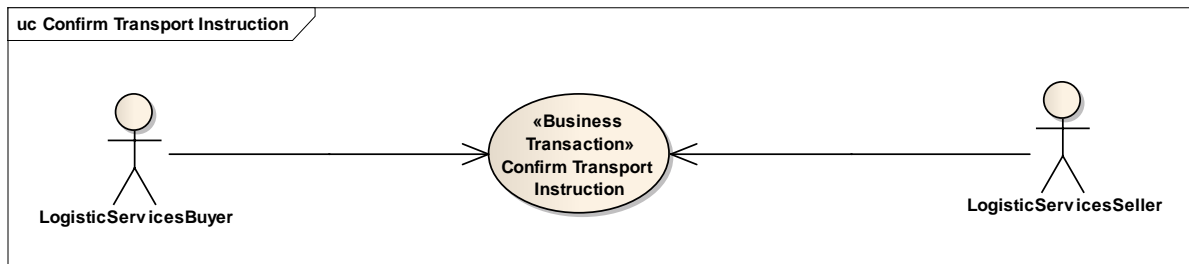
Use Case ID	UC-1									
Use Case Name	Issue Transport Instruction									
Use Case Description	The main objectives are to communicate/ share the arrangement of the transport of goods between all parties involved in the movement of the consignment(s) and or shipment(s) as well as providing the information necessary to perform that transport and delivery of the goods.									
Actors (Goal)	Logistic Services Buyer (LSB) Logistic Services Seller (LSS)									
Performance Goals	Not applicable									
Preconditions	Interoperation agreement is in place.									
Post conditions	Transport instructions have been received by the LSS									
Scenario	<div>Begins when the Logistic Services Buyer determines transport services are needed. Continues with...</div> <table><tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr><tr><td>1</td><td>LSB</td><td>Issues a transport instruction</td></tr><tr><td>2</td><td>LSS</td><td>Receives the transport instruction</td></tr></table> <div>Ends when the LSS has processed the transport instruction in the transport management system.</div>	Step #	Actor	Activity Step	1	LSB	Issues a transport instruction	2	LSS	Receives the transport instruction
Step #	Actor	Activity Step								
1	LSB	Issues a transport instruction								
2	LSS	Receives the transport instruction								
Alternative Scenario	Not applicable									
Related Requirements	Not applicable									
Related Rules	Not applicable									

Activity Diagram(s)

Not applicable

3.2. Confirm Transport Instruction

Use Case Diagram



Use Case Description

Use Case ID	UC-2												
Use Case Name	Confirm Transport Instruction												
Use Case Description	The main objectives are to give the confirmation or modification of the arrangement of the transport of goods between all parties.												
Actors (Goal)	Logistic Services Buyer Logistic Services Seller												
Performance Goals	Not applicable												
Preconditions	The Logistic Services Seller did receive a transport instruction. In the interoperation agreement it was agreed between the Logistic Services Buyer and Logistic Service Seller that												
Post conditions	Transport instruction response has been received by the LSB.												
Scenario	<p>Begins when the Logistic Service Seller has determined the appropriate response to the transport instruction.</p> <p>Continues with...</p> <table><tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr><tr><td>1</td><td>LSS</td><td>Issues a transport instruction confirmation</td></tr><tr><td>2</td><td>LSB</td><td>Receives the transport instruction confirmation</td></tr><tr><td>3</td><td></td><td></td></tr></table> <p>Ends when the LSB has processed the transport instruction confirmation in the transport management system.</p>	Step #	Actor	Activity Step	1	LSS	Issues a transport instruction confirmation	2	LSB	Receives the transport instruction confirmation	3		
Step #	Actor	Activity Step											
1	LSS	Issues a transport instruction confirmation											
2	LSB	Receives the transport instruction confirmation											
3													
Alternative Scenario	Not applicable												
Related Requirements	Not applicable												
Related Rules	Not applicable												

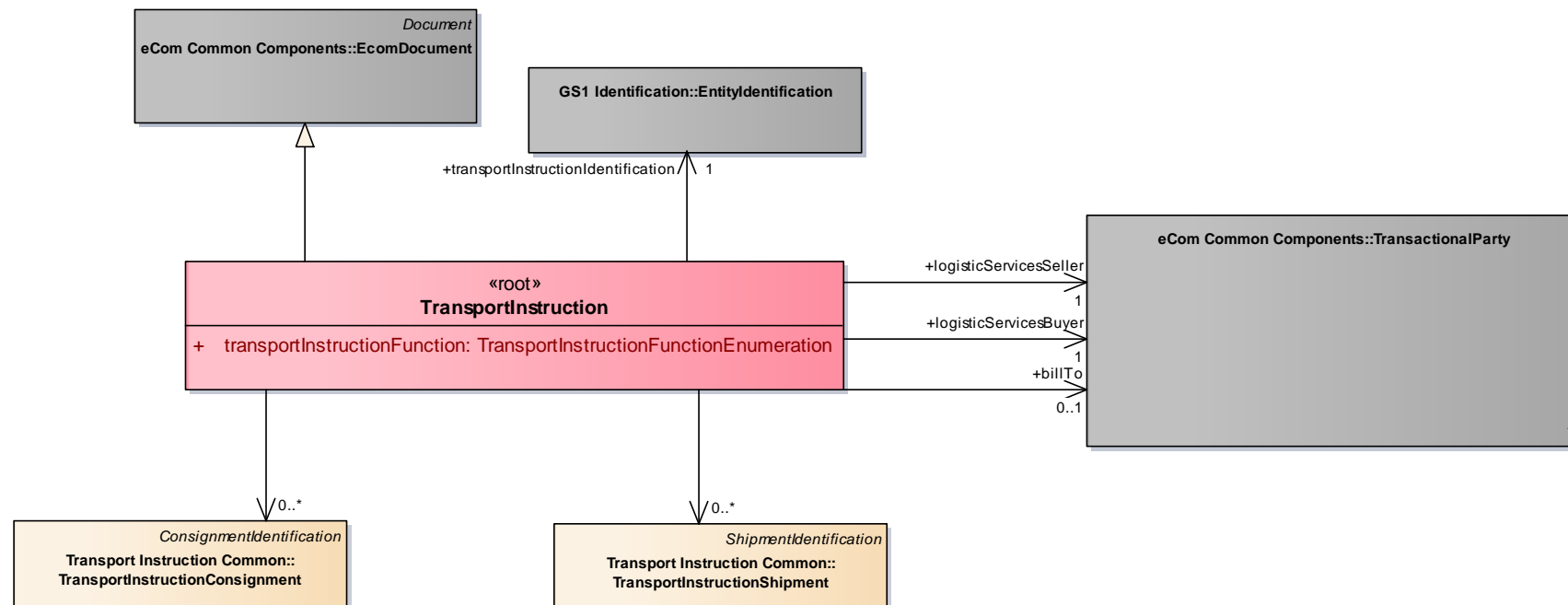
Activity Diagram(s)

Not applicable

4. Business Information View

4.1. Transport Instruction (message)

Class Diagram



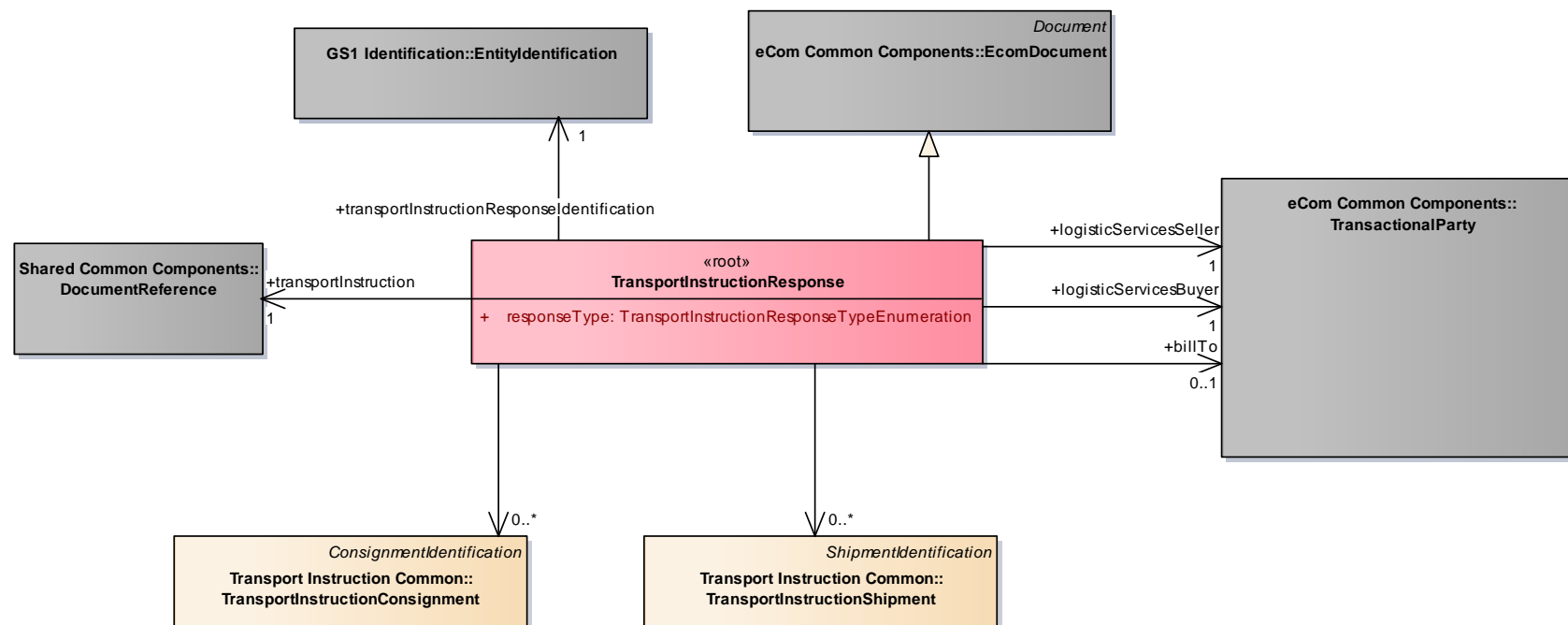
GDD Report

The content of the TransportInstruction class, its structure and component definitions can be accessed in the Global Data Dictionary: http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportInstruction

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
TransportInstruction				The main objectives of the Transport Instruction are to communicate and share the arrangements (through the agreed conditions) of the movement of the goods (including collection and delivery) between all parties involved and providing the information necessary to perform the handling of the goods.	
Association	logisticServices Buyer	TransactionalParty	1..1	A party that purchases logistics services from another party.	BRAD TransportInstruction-5
Association		TransportInstructionC onsignment	0..*	Provides the information on a consignment contained in this transport instruction.	BRAD TransportInstruction-8, 12, 13
Association		TransportInstructionS hipment	0..*	Provides the information on a shipment contained in this transport instruction.	BRAD TransportInstruction-8, 9, 10, 11, 15
Generalization		EcomDocument		Basic information about the content of the message including version number, creation date and time.	WR 14-000110
Association	billTo	TransactionalParty	0..1	Identifies the party who receives the invoice. Synonym: Invoicee.	BRAD TransportInstruction-7
Association	logisticServices Seller	TransactionalParty	1..1	A party that provides logistics services to another party.	BRAD TransportInstruction-6
Association	transportInstruc tionIdentificatio n	EntityIdentification	1..1	The identification of the transport instruction document.	BRAD TransportInstruction-1
Attribute	transportInstruc tionFunction	TransportInstructionF unctionEnumeration	1..1	The transport instruction function identifies whether the transport instruction is consignment-based or shipment-based.	BRAD TransportInstruction-3

4.2. Transport Instruction Response (message)

Class Diagram



GDD Report

The content of the **TransportInstructionResponse** class, its structure and component definitions can be accessed in the Global Data Dictionary:

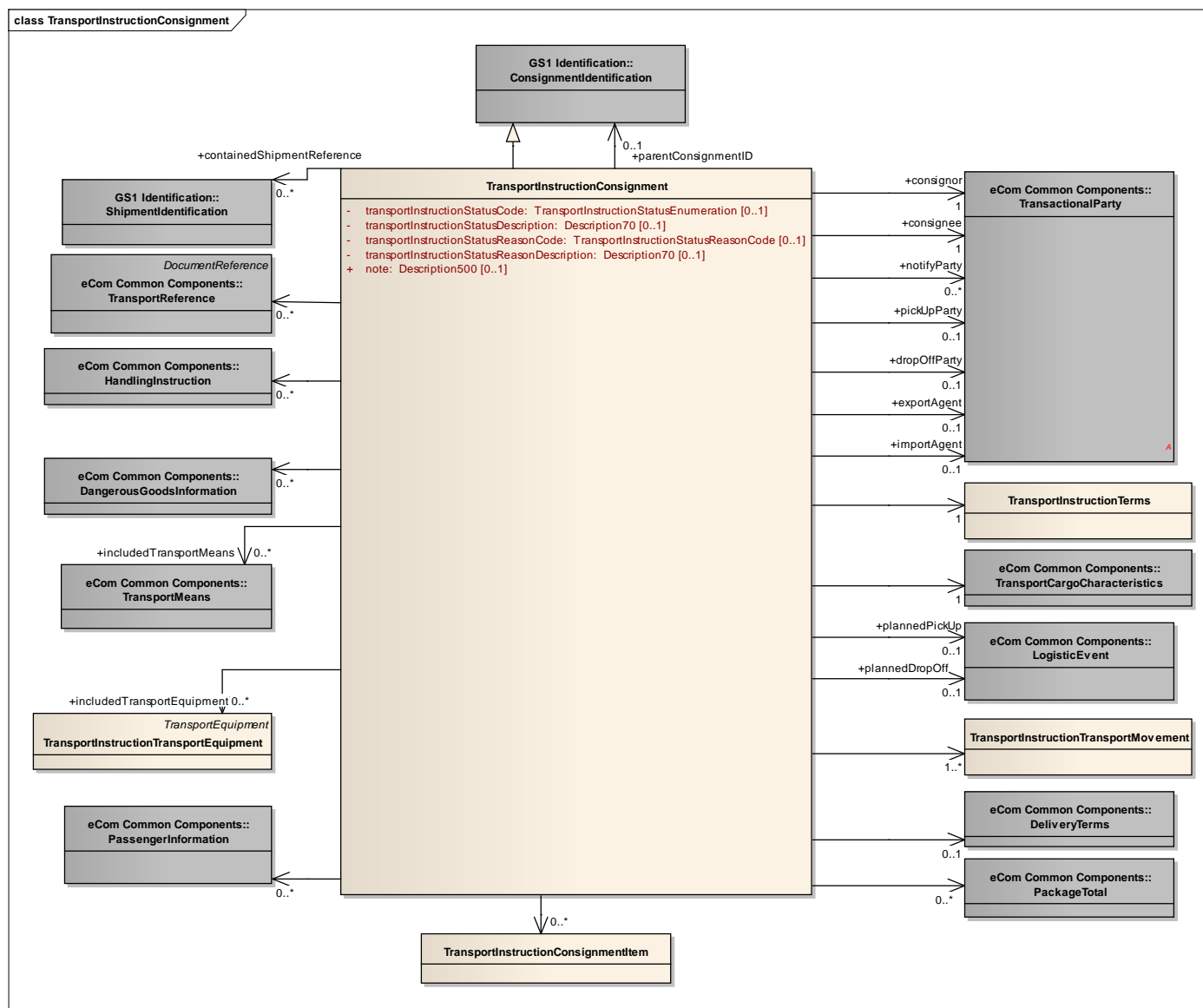
http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportInstructionResponse

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
TransportInstructionResponse				The main objective of the Transport Instruction Response is to confirm the requested transport services and where needed provide additional information.	

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Generalization		EcomDocument		Basic information about the content of the message including version number, creation date and time.	WR 14-000110
Association	logisticServices Seller	TransactionalParty	1..1	A party that provides logistics services to another party.	BRAD TransportInstructionConfirmation-5
Association	transportInstruction	DocumentReference	1..1	The identification of the referenced transport instruction.	BRAD TransportInstructionConfirmation-7
Association		TransportInstructionShipment	0..*	Provides the information on a shipment contained in this transport instruction response.	BRAD TransportInstructionConfirmation-1, 15, 16
Association	logisticServices Buyer	TransactionalParty	1..1	A party that purchases logistics services from another party.	BRAD TransportInstructionConfirmation-4
Association	transportInstructionResponseIdentification	EntityIdentification	1..1	The identification of the transport instruction response document.	BRAD TransportInstructionConfirmation-2
Association		TransportInstructionConsignment	0..*	Provides the information on a consignment contained in this transport instruction response.	BRAD TransportInstructionConfirmation-1, 10, 11, 12, 13, 19
Association	billTo	TransactionalParty	0..1	Identifies the party who receives the invoice. Synonym: Invoicee.	BRAD TransportInstructionConfirmation-6
Attribute	responseType	TransportInstructionResponseTypeEnumeration	1..1	Code specifying the acceptance or non-acceptance of the services requested in the Transport Instruction.	

4.3. Transport Instruction Consignment

Class Diagram



GDD Report

The content of the TransportInstructionConsignment class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportInstructionConsignment

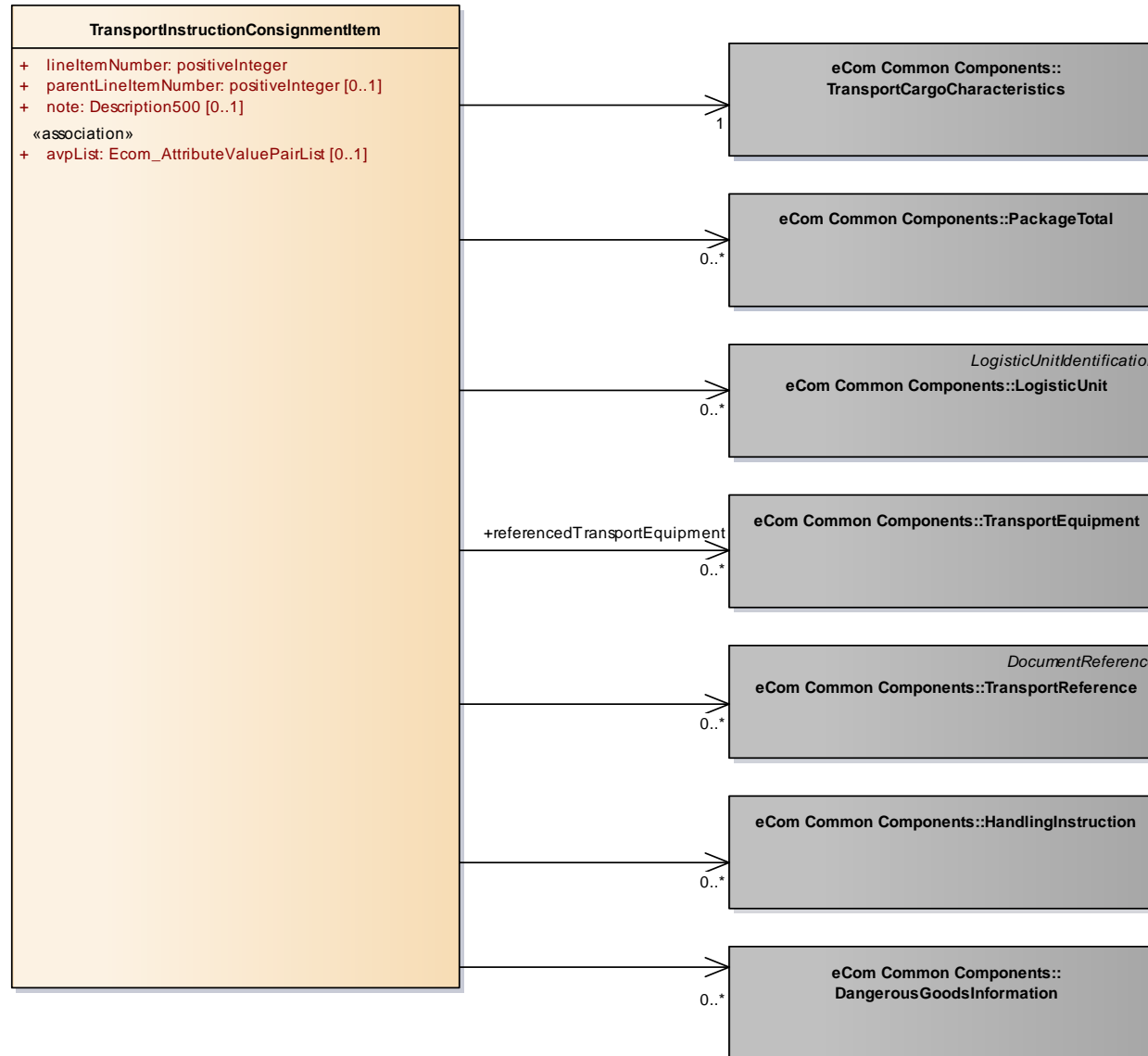
Content	Attribute / Role	Datatype / SecondaryClass	Multiplicity	Definition	Requirements
TransportInstructionConsignment				A consignment is a logical grouping of goods (one or more physical entities) that is intended to be transported as a whole from a consignor to a consignee by a carrier or freight forwarder via one or more modes of transport, subject to one single transport contract.	
Association	plannedDropOff	LogisticEvent	0..1	Details on the planned delivery of the consignment.	BRAD CON6, CON7 (LogisticLocation)
Association		TransportInstructionTransportMovement	1..*	The transport movement details for this consignment.	
Association	plannedPickUp	LogisticEvent	0..1	Details on the planned collection of the consignment.	BRAD CON6, CON7 (LogisticLocation)
Association		DeliveryTerms	0..1	The applicable legal, customs, financial and insurance terms that have been agreed for the delivery of the consignment.	BRAD CON10
Association		HandlingInstruction	0..*	Instruction on the way to treat the goods during transport and storage.	BRAD CON9
Association		PackageTotal	0..*	Aggregate information per type of package contained in the consignment.	BRAD CON18
Association	includedTransportEquipment	TransportInstructionTransportEquipment	0..*	Details on the transport equipment contained in the consignment.	
Association	consignee	TransactionalParty	1..1	The party receiving a consignment of goods.	BRAD CON1
Association		TransportReference	0..*	References to the commercial transaction or to transport or legal documents related to the consignment.	BRAD CON19
Association	parentConsignmentID	ConsignmentIdentification	0..1	Reference to another consignment that contains this consignment (and several other consignments).	BRAD CON22
Association		TransportCargoCharacteristics	1..1	Aggregate information on the goods that are contained in this consignment.	BRAD CON28

Association	containedShipmentReference	ShipmentIdentification	0..*	Reference to the shipment(s) contained in this consignment. #	
Association		TransportInstructionConsignmentItem	0..*	A line item included in this consignment of goods.#	
Association	notifyParty	TransactionalParty	0..*	The party which needs to be informed regarding the consignment information to fulfill the end to end transportation process.	BRAD CON2
Association	consignor	TransactionalParty	1..1	The party despatching a consignment of goods.	BRAD CON1
Association		TransportInstructionConsignment	0..*	Provides the information on a consignment contained in this transport instruction.	BRAD TransportInstruction-8, 12, 13
Association	includedTransportMeans	TransportMeans	0..*	Details on the transport means contained in the consignment, such as trucks being transported on a ferry.	
Association		DangerousGoodsInformation	0..*	Hazardous instructions for this consignment, such as where or how specified packages or containers are to be handled because of restriction from dangerous goods.	BRAD CON30
Generalization		ConsignmentIdentification		The unique identifier for this consignment.	BRAD CON3
Association		PassengerInformation	0..*		
Association	exportAgent	TransactionalParty	0..1	The party acting as an agent for, or on behalf of, the consignor with respect to the customs export procedures for this consignment.	BRAD TM: additional requirement during design phase.
Association		TransportInstructionConsignment	0..*	Provides the information on a consignment contained in this transport instruction response.	BRAD TransportInstructionConfirmation-1, 10, 11, 12, 13, 19
Association	dropOffParty	TransactionalParty	0..1	Identification of the physical location to where goods will be or have been shipped.	BRAD CON1
Association	pickUpParty	TransactionalParty	0..1	Identification of the physical location from where goods will be picked up for delivery.	BRAD CON1

Association	importAgent	TransactionalParty	0..1	The party acting as an agent for, or on behalf of, the consignee with respect to the customs import procedures for this consignment. #	BRAD TM: additional requirement during design phase.
Association		TransportInstructionTerms	1..1	The agreed transport service conditions for this consignment.	
Attribute	transportInstructionStatusCode	TransportInstructionStatusEnumeration	0..1	Code specifying the instruction status of this consignment.	BRAD TransportInstructionConfirmation-8
Attribute	transportInstructionStatusDescription	Description70	0..1	Textual description of the instruction status of this consignment. #	BRAD TransportInstructionConfirmation-8
Attribute	transportInstructionStatusReasonCode	TransportInstructionStatusReasonCode	0..1	Code specifying the instruction status reason for this consignment.	BRAD TransportInstructionConfirmation-8
Attribute	transportInstructionStatusReasonDescription	Description70	0..1	Textual description of the instruction status reason for this consignment.	BRAD TransportInstructionConfirmation-8
Attribute	note	Description500	0..1	Free text used to convey information that is not processed by applications. Only meant to present the information to a user as on a screen, in a browser, etc.	BRAD RQ 09.236.F

4.4. Transport Instruction Consignment Item

Class Diagram



GDD Report

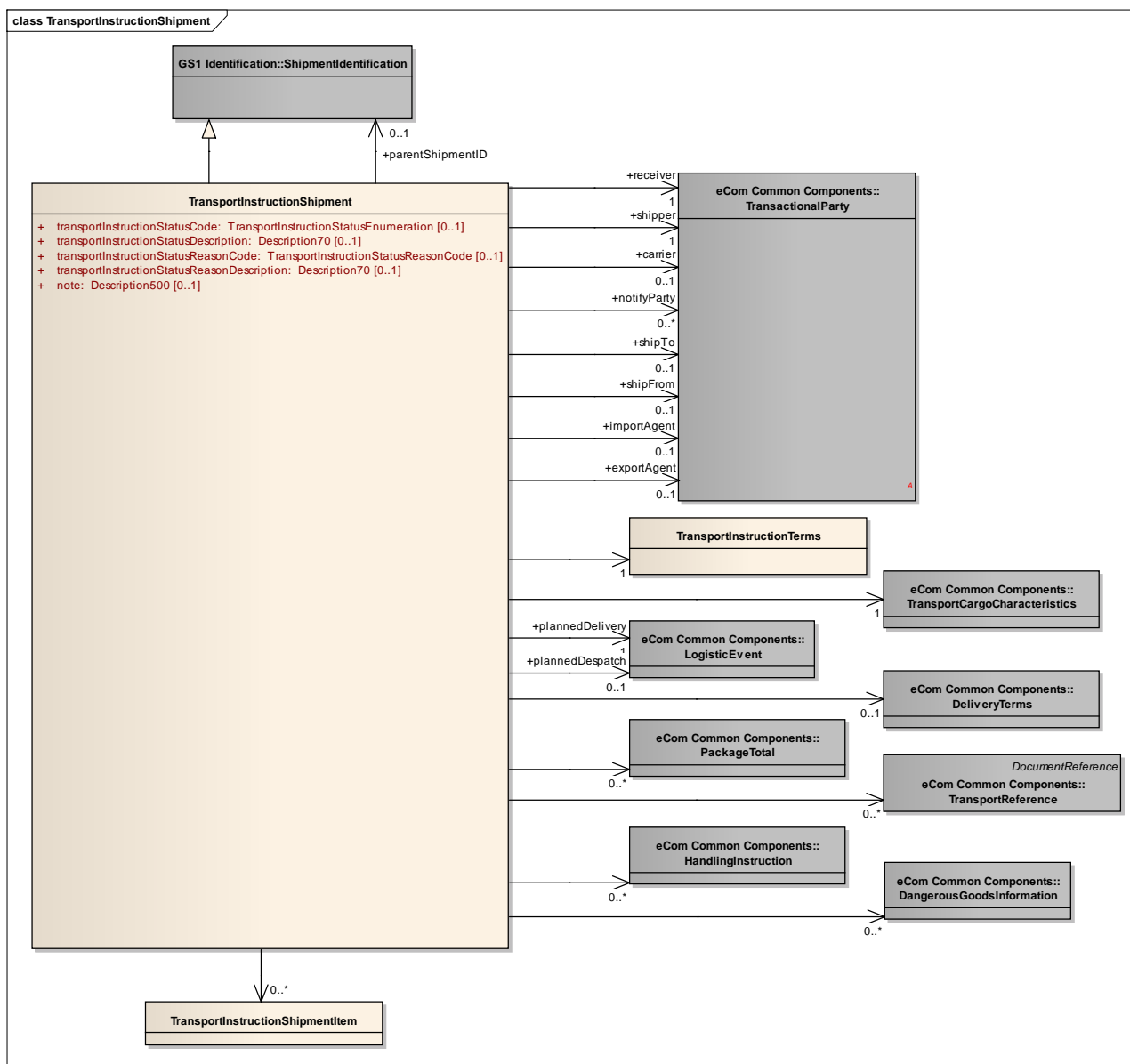
The content of the TransportInstructionConsignmentItem class, its structure and component definitions can be accessed in the Global Data Dictionary: http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportInstructionConsignmentItem

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
TransportInstructionConsignmentItem				A <u>consignment item</u> is a (collection of) Load Units that can be identified (uniquely) within the consignment and may be treated/handled in the same way during transportation (and associated administrative processes).	
Association		PackageTotal	0..*	Aggregate information per type of package included in the consignment item.	BRAD CIT11
Association	referencedTransportEquipment	TransportEquipment	0..*	Identification of the transport equipment that contains the consignment item.	
Association		TransportCargoCharacteristics	1..1	Aggregate information on the goods that are included in this consignment item.	
Association		TransportReference	0..*	References to the commercial transaction or to transport or legal documents related to the consignment item.	BRAD CIT9
Association		LogisticUnit	0..*	Information on the logistic unit(s) included in the consignment item.	
Association		DangerousGoodsInformation	0..*	Hazardous instructions for this consignment item, such as where or how specified packages or containers are to be handled because of restriction from dangerous goods.	BRAD CIT7
Association		HandlingInstruction	0..*	Handling instructions for the consignment item.	BRAD CIT6, CIT8
Attribute	lineItemNumber	positiveInteger	1..1	The sequence number for this consignment item.	BRAD CIT3
Attribute	parentLineItemNumber	positiveInteger	0..1	The number of line item containing information about the parent of the current item. It allows establishing hierarchical link between the two items.	WR 14-000021 WR 14-000044
Attribute	note	Description500	0..1	Free text used to convey information that is not processed by applications. Only meant to present the information to a user as on a screen, in a browser, etc.	BRAD RQ 09.236.F

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Attribute	avpList	Ecom_AttributeValue PairList	0..1	Temporary attributes introduced between minor versions.	WR 14-000110

4.5. Transport Instruction Shipment

Class Diagram



GDD Report

The content of the TransportInstructionShipment class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportInstructionShipment

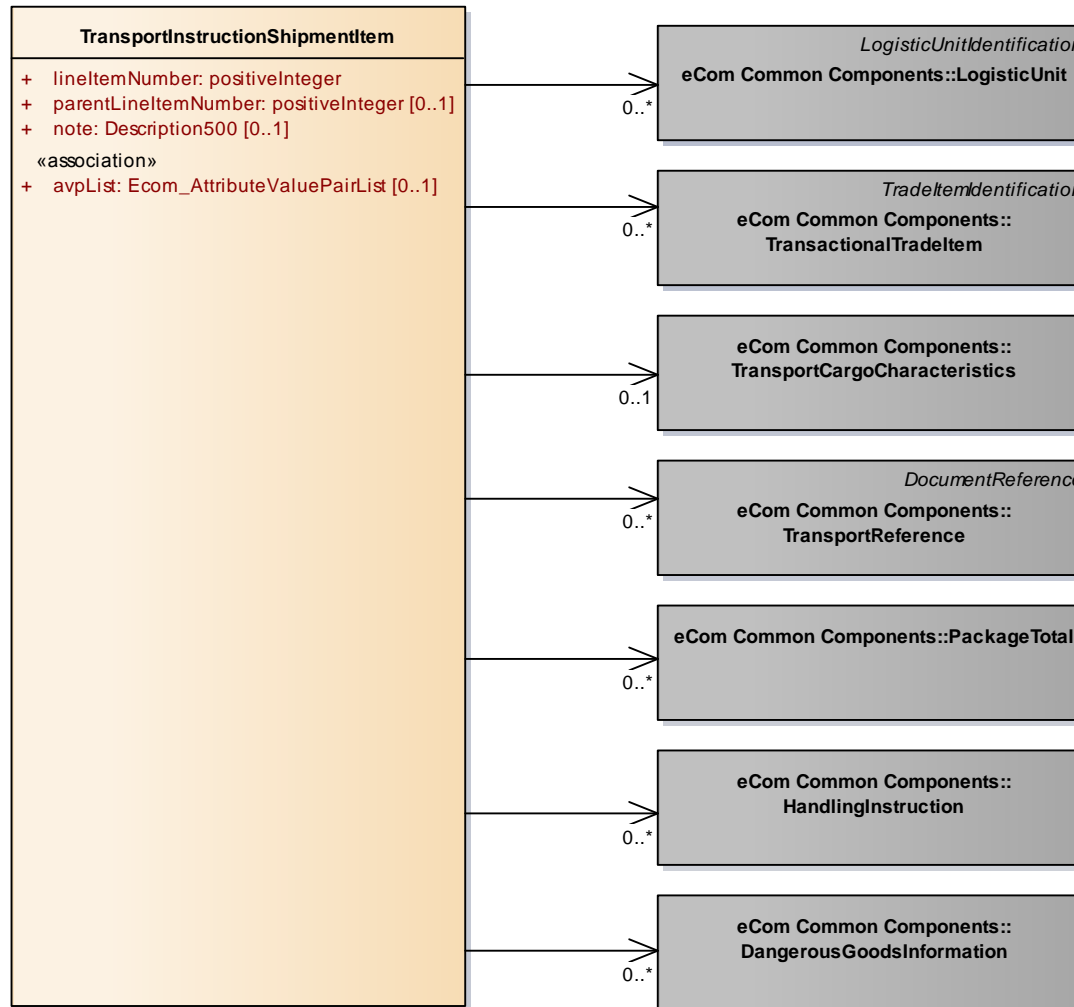
Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
TransportInstructionShipment				A <u>shipment</u> is an identifiable collection of one or more Trade Items available to be transported together from the shipper (Original Consignor/Shipper), to the receiver (Final/Ultimate Consignee). Typically the shipment is the entity communicated between trading partners in the Despatch and Receiving Advice.	
Association	receiver	TransactionalParty	1..1	A party which engages in receiving this shipment of goods.	BRAD SHM1
Association		TransportInstructionShipmentItem	0..*	A line item included in this shipment of goods. #	
Association		HandlingInstruction	0..*	Instruction on the way to treat the goods during transport and storage. #	BRAD SHM7
Association	notifyParty	TransactionalParty	0..*	The party which needs to be informed regarding the shipment to fulfill the end to end transportation process. #	BRAD SHM20
Association	plannedDespatch	LogisticEvent	0..1	Details on the planned despatch of the shipment.	BRAD SHM10, SHM11 (LogisticLocation)
Generalization		ShipmentIdentification		The unique identifier for this shipment.	BRAD SHM4
Association		DeliveryTerms	0..1	The applicable legal, customs, financial and insurance terms that have been agreed for the delivery of the shipment.	BRAD SHM27
Association	parentShipmentID	ShipmentIdentification	0..1	Reference to a shipment that contains this shipment (and several other shipments). #	BRAD SHM17
Association	shipFrom	TransactionalParty	0..1	The physical location from where goods will be or have been shipped.	BRAD SHM1
Association		TransportInstructionShipment	0..*	Provides the information on a shipment contained in this transport instruction.	BRAD TransportInstruction-8, 9, 10, 11, 15
Association	shipper	TransactionalParty	1..1	A party which engages in shipping this shipment of goods;	BRAD SHM1

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Association	importAgent	TransactionalParty	0..1	The party acting as an agent for, or on behalf of, the consignee with respect to the customs import procedures for this shipment. #	BRAD TM: additional requirement during design phase.
Association		DangerousGoodsInformation	0..*	Hazardous instructions for this shipment, such as where or how specified packages or containers are to be handled because of restriction from dangerous goods.	BRAD SHM8
Association	carrier	TransactionalParty	0..1	A party that physically transports goods from one place to another.	BRAD SHM3
Association	plannedDelivery	LogisticEvent	1..1	Details on the planned delivery of the shipment.	BRAD SHM10, SHM11 (LogisticLocation)
Association		TransportReference	0..*	References to the commercial transaction or to transport and legal documents related to the shipment.	BRAD SHM16
Association		PackageTotal	0..*	Aggregate information per type of package contained in the shipment.	BRAD SHM19
Association		TransportInstructionShipment	0..*	Provides the information on a shipment contained in this transport instruction response.	BRAD TransportInstructionConfirmation-1, 15, 16
Association	exportAgent	TransactionalParty	0..1	The party acting as an agent for, or on behalf of, the consignor with respect to the customs export procedures for this shipment. #	BRAD TM: additional requirement during design phase.
Association	shipTo	TransactionalParty	0..1	The physical location to where goods will be or have been shipped.	BRAD SHM1
Association		TransportCargoCharacteristics	1..1	Aggregate information on the goods that are contained in this shipment.	
Association		TransportInstructionTerms	1..1	The agreed transport service conditions for this shipment.	
Attribute	transportInstructionStatusCode	TransportInstructionStatusEnumeration	0..1	Code specifying the instruction status of this shipment. #	BRAD TransportInstructionConfirmation-9
Attribute	transportInstructionStatusDescription	Description70	0..1	Textual description of the instruction status of this shipment. #	BRAD TransportInstructionConfirmation-9

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Attribute	transportInstructionStatusReasonCode	TransportInstructionStatusReasonCode	0..1	Code specifying the instruction status reason for this shipment.	BRAD TransportInstructionConfirmation-9
Attribute	transportInstructionStatusReasonDescription	Description70	0..1	Textual description of the instruction status reason for this shipment. #	BRAD TransportInstructionConfirmation-9
Attribute	note	Description500	0..1	Free text used to convey information that is not processed by applications. Only meant to present the information to a user as on a screen, in a browser, etc.	BRAD RQ 09.236.F

4.6. Transport Instruction Shipment Item

Class Diagram



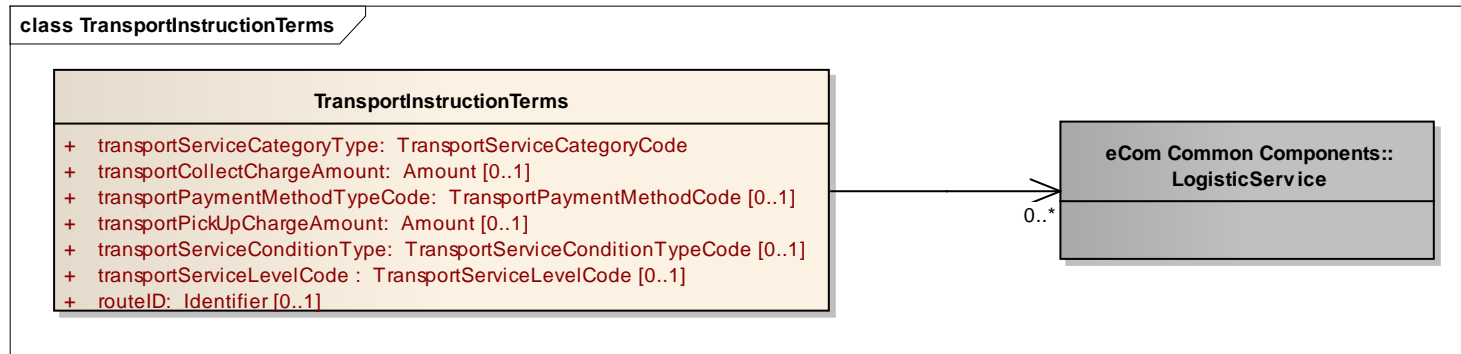
GDD Report

The content of the TransportInstructionShipmentItem class, its structure and component definitions can be accessed in the Global Data Dictionary: http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportInstructionShipmentItem

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
TransportInstructionShipmentItem				A <u>shipment item</u> is a (collection of) Trade Items and/or Logistic Units that can each be identified (uniquely) within a shipment.	
Association		HandlingInstruction	0..*	Handling instructions for the consignment item.	BRAD SHI6, SHI19
Association		TransportCargoCharacteristics	0..1	Aggregate information on the goods that are included in this shipment item.	
Association		PackageTotal	0..*	Aggregate information per type of package included in the shipment item.	BRAD SHI9, SHI13
Association		TransactionalTradeItem	0..*	Information on the trade item(s) included in the shipment item.	BRAD SHI1, SHI3, SHI5, SHI16, SHI17
Association		TransportReference	0..*	References to the commercial transaction or to transport or legal documents related to the shipment item.	BRAD SHI8
Association		LogisticUnit	0..*	Information on the logistic unit(s) included in the shipment item.	BRAD SHI1, SHI18
Association		DangerousGoodsInformation	0..*	Hazardous instructions for this shipment item, such as where or how specified packages or containers are to be handled because of restriction from dangerous goods.	BRAD SHI7
Attribute	lineItemNumber	positiveInteger	1..1	The sequence number for this shipment item.	BRAD SHI2
Attribute	parentLineItemNumber	positiveInteger	0..1	The number of line item containing information about the parent of the current item. It allows establishing hierarchical link between the two items.	WR 14-000021 WR 14-000044
Attribute	note	Description500	0..1	Free text used to convey information that is not processed by applications. Only meant to present the information to a user as on a screen, in a browser, etc.	BRAD RQ 09.236.F
Attribute	avpList	Ecom_AttributeValuePairList	0..1	Temporary attributes introduced between minor versions.	WR 14-000110

4.7. Transport Instruction Terms

Class Diagram



GDD Report

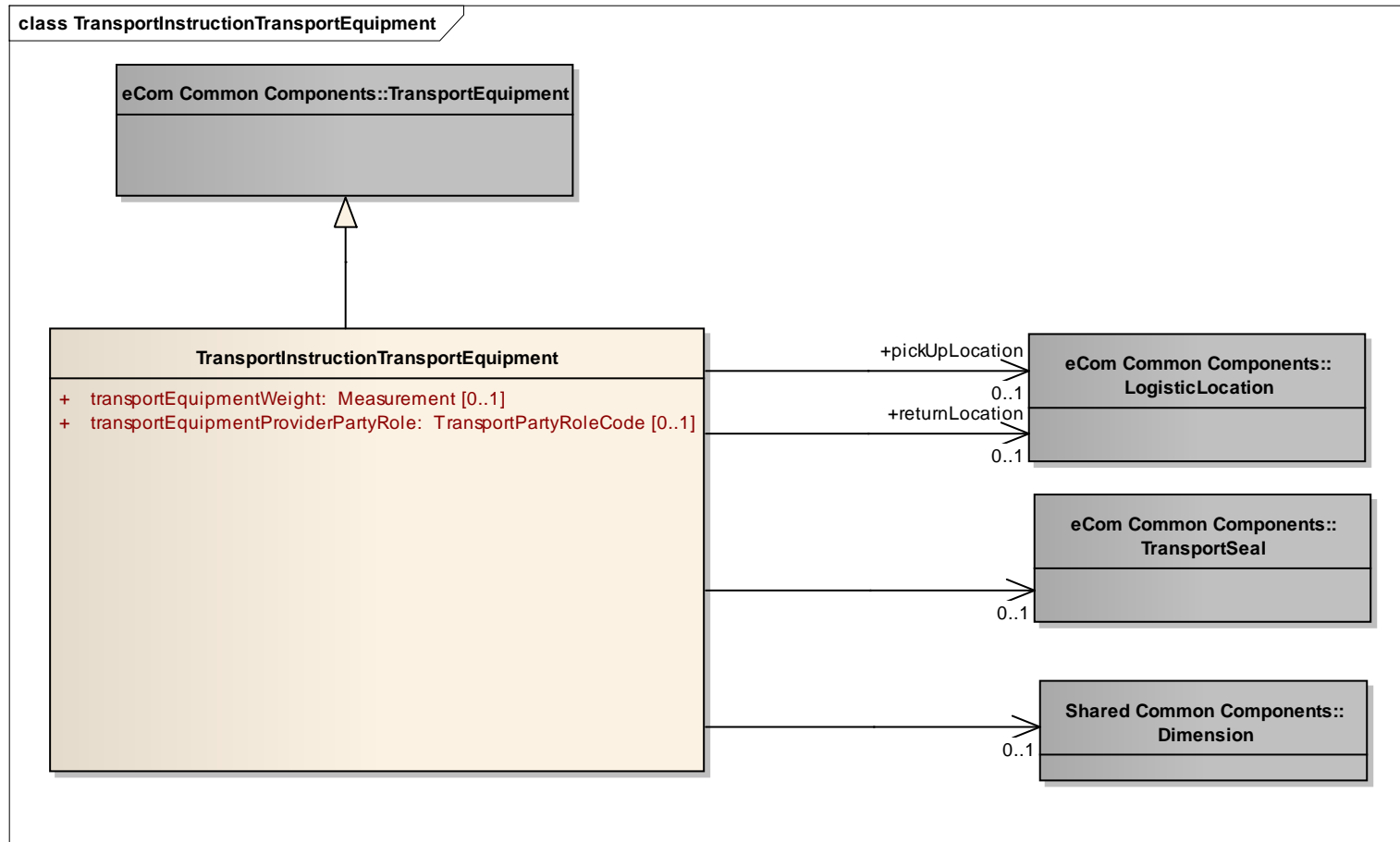
The content of the **TransportInstructionTerms** class, its structure and component definitions can be accessed in the Global Data Dictionary: http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportInstructionTerms

Content	Datatype / Secondaryclasses	Attribute / Role	Multiplicity	Definition	Requirements
TransportInstructionTerms				Information on the commercial conditions under which the requested transport services will be performed. #	
Association	LogisticService		[0..*]	Details on the additional services agreed as part of the transport instruction terms. #	
Attribute	TransportServiceCategoryCode	transportServiceCategoryType	[1..1]	Code specifying the type of transport service that will be provided. For example: Courier service. #	BRAD CON29, SHM26, SHM3
Attribute	Amount	transportCollectChargeAmount	[0..1]	The total monetary value of all freight and other service charges which are to be collected from the consignee at or after delivery of the goods. #	BRAD CON20
Attribute	TransportPaymentMethodCode	transportPaymentMethodTypeCode	[0..1]	Code specifying the method of payment for the transport and service charges. #	BRAD CON11, SHM5
Attribute	Amount	transportPickUpChargeAmount	[0..1]	The total monetary value of all freight and other service charges which are to be collected from the consignor at or after pick-up of the goods. #	BRAD CON20

Content	Datatype / Secondaryclasses	Attribute / Role	Multiplicity	Definition	Requirements
Attribute	TransportServiceConditionTypeCode	transportServiceConditionType	[0..1]	Code specifying the type of contractual conditions applicable to these transport terms.#	BRAD CON29, SHM26
Attribute	TransportServiceLevelCode	transportServiceLevelCode	[0..1]	Code specifying the service level requested for the transport service. For example: Express service. #	BRAD CON29, SHM26
Attribute	Identifier	routeID	[0..1]	Unique identifier of the standard route that will be used for this shipment.	WR 12-000202

4.8. Transport Instruction Transport Equipment

Class Diagram



GDD Report

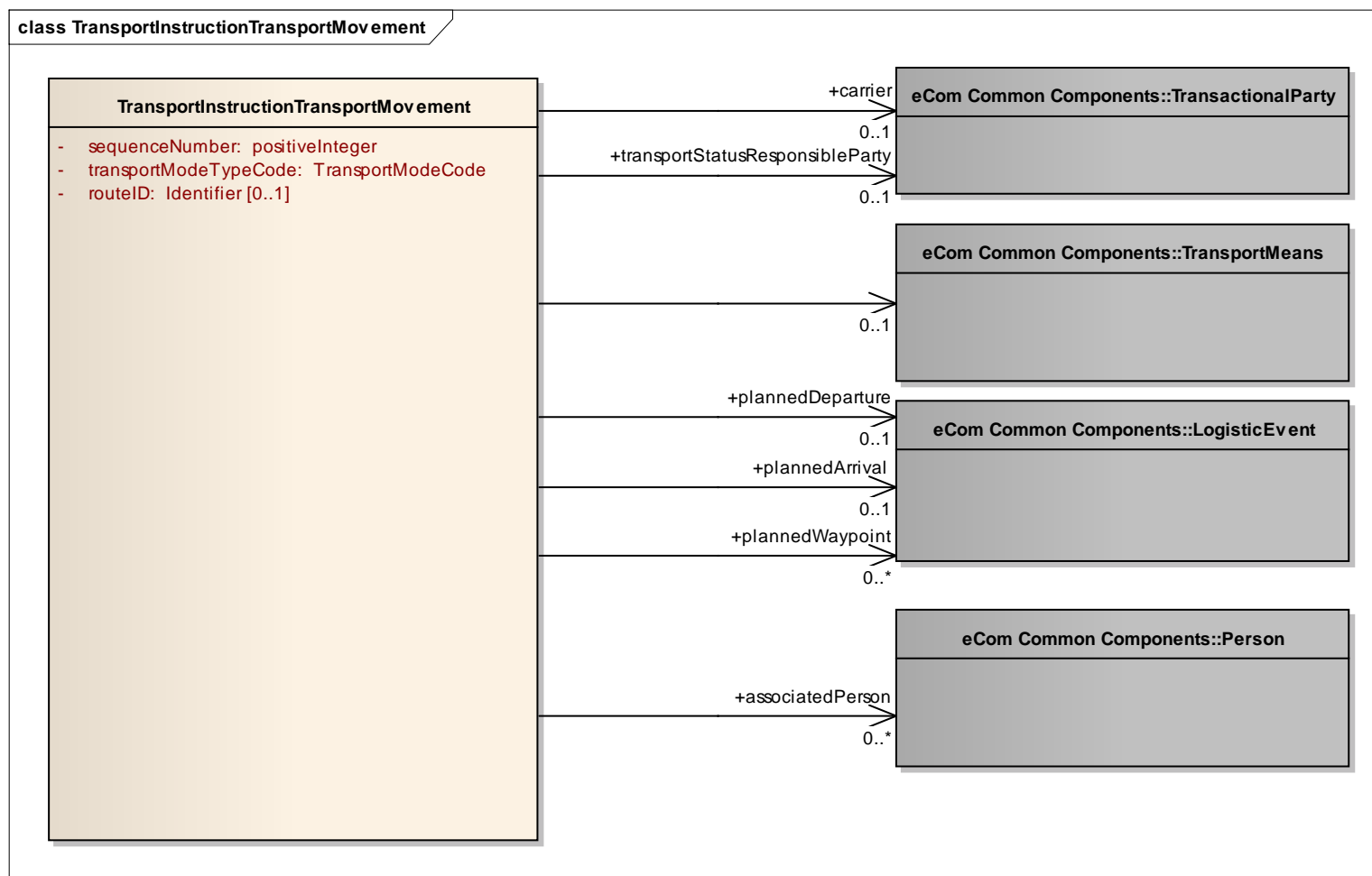
The content of the TransportInstructionTransportEquipment class, its structure and component definitions can be accessed in the Global Data Dictionary:

http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportInstructionTransportEquipment

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
TransportInstructionTransportEquipment				<u>Transport equipment</u> is a piece of equipment used to hold, protect or secure cargo for logistics purposes. Transport Equipment is to be moved using Transport Means.	
Association		TransportSeal	0..1	Details on the seal affixed to this piece of transport equipment.	
Association	returnLocation	LogisticLocation	0..1	The physical location to where the equipment will be returned.	BRAD TEQ6
Association	pickUpLocation	LogisticLocation	0..1	The physical location from where the equipment will be collected.	BRAD TEQ5
Association		Dimension	0..1	The linear dimensions of this type of transport equipment.	
Generalization		TransportEquipment		Provides the generic identification details for the transport equipment.	
Attribute	transportEquipmentWeight	Measurement	0..1	A measure of the mass of this type of transport equipment.	
Attribute	transportEquipmentProviderPartyRole	TransportPartyRoleCode	0..1	The code specifying the role of the party responsible for supplying this piece of logistics transport equipment.	BRAD TEQ3

4.9. Transport Instruction Transport Movement

Class Diagram



GDD Report

The content of the TransportInstructionTransportMovement class, its structure and component definitions can be accessed in the Global Data Dictionary:

http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportInstructionTransportMovement

Content	Attribute/Role	Datatype/Secondary class	Multiplicity	Definition	Requirements
TransportInstructionTransportMovement				The <u>transport movement</u> information specifies details of the movement of goods such as mode and means of transport, locations, departure, and arrival date(s) and time(s).	
Association	associatedPerson	Person	[0..*]	The name and/or identification of an individual associated with this transport movement.	BRAD TMV9
Association	plannedWaypoint	LogisticEvent	[0..*]	An administrative procedure taking place at a specific location that may have an effect on the lead time of a transport movement, such as dangerous goods handling, customs clearance, ...	
Association		TransportMeans	[0..1]	The type of vehicle, aircraft, vessel or other device used for the transport of goods in this transport movement	TMV19, TME1, TME2, TME3
Association	plannedArrival	LogisticEvent	[0..1]	The date, time, date time, or other date time value that the given party expects the means of transport for this transport movement to arrive at the designated arrival location.	BRAD TMV7, 13
Association	plannedDeparture	LogisticEvent	[0..1]	The date, time, date time, or other date time value that the given party expects the means of transport for this transport movement to depart from the designated departure location.	BRAD TMV6, TMV12
Association	carrier	TransactionalParty	[0..1]	A party that physically transports goods from one place to another.	BRAD TMV5
Association	transportStatusResponsibleParty	TransactionalParty	[0..1]	Party in charge of collecting and forwarding the information about the transport movement. #	BRAD TMV17, TMV18
Attribute	sequenceNumber	positiveInteger	[1..1]	Unique number identifying the sequence of this transport movement with respect to the other specified movements.#	

Content	Attribute/Role	Datatype/Secondary class	Multiplicity	Definition	Requirements
Attribute	transportModeTypeCode	TransportModeCode	[1..1]	Code specifying the transportation mode used for this transport movement. #	BRAD TMV2
Attribute	routeID	Identifier	[0..1]	Unique identifier of the standard route that will be used for this transport movement.#	BRAD TMV8



Note: Reference Shared Common Library Business Message (BMS) Release 3.2.0 and eCom Domain Common Library Business Message (BMS) Release 3.2.0 for all common information.

4.10. Code Lists

Class	Codelist	GDD Link
TransportInstruction	TransportInstructionFunctionEnumeration	http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportInstructionFunctionEnumeration
TransportInstructionResponse	TransportInstructionResponseTypeEnumeration	http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportInstructionResponseTypeEnumeration
TransportInstructionConsignment, TransportInstructionShipment	TransportInstructionStatusEnumeration	http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportInstructionStatusEnumeration
TransportInstructionConsignment, TransportInstructionShipment	TransportInstructionStatusReasonCode	http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportInstructionStatusReasonCode
TransportInstructionTerms	TransportServiceCategoryCode	http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportServiceCategoryCode
TransportInstructionTerms	TransportPaymentMethodCode	http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportPaymentMethodCode
TransportInstructionTerms	TransportServiceConditionTypeCode	http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportServiceConditionTypeCode
TransportInstructionTerms	TransportServiceLevelCode	http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportServiceLevelCode
TransportInstructionTransportEquipment	TransportPartyRoleCode	http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportPartyRoleCode
TransportInstructionTransportMovement	TransportModeCode	http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportModeCode



Note: Refer to the Global Data Dictionary (GDD) for the code values.

5. Business Message Examples

5.1. Example 1

Transport Instruction – Domestic, 1 consignment, 1 truck, with logistic units

Party Information

GS1 Global Location Number	Party Type
7365566156190	Logistic Service Buyer
4048623000003	Logistic Service Seller
7365566156190	Consignor
7300011234566	Consignee

Message Example 1

Attribute	Value
TransportInstruction	
creationDateTime	2011-01-12T12:00:00
documentStatusCode	ORIGINAL
transportInstructionFunction	CONSIGNMENT
EntityIdentification (+transportInstructionIdentification)	
uniqueCreatorIdentification	TRINS00001
TransactionalParty (+logisticServicesSeller)	
gln	4048623000003
TransactionalParty (+logisticServicesBuyer)	
gln	7365566156190
TransportInstructionConsignment	
ConsignmentIdentification	
ginc	7365566156191234567
TransactionalParty (+consignor)	
gln	7365566156190
TransactionalParty (+consignee)	
gln	7300011234566
TransportInstructionTerms	
transportServiceCategoryType	30
TransportCargoCharacteristics	
cargoTypeCode	21
cargoTypeDescription	General cargo (EN)
totalGrossVolume	3.5 (CBM)
totalGrossWeight	1500 (KGM)
totalPackageQuantity	5
TransportInstructionTransportMovement	
sequenceNumber	1
transportModeTypeCode	30
LogisticEvent (+plannedDeparture)	
DateOptionalTime (+logisticEventDateTime)	
date	2011-01-14
LogisticLocation	
Address	
city	Stockholm
LogisticEvent (+plannedArrival)	

Attribute	Value
LogisticLocation	
Address	
city	Lund
PackageTotal	
packageTypeCode	201
totalPackageQuantity	3
PackageTotal	
packageTypeCode	211
totalPackageQuantity	2
TransportInstructionConsignmentItem	
lineItemNumber	1
TransportCargoCharacteristics	
cargoTypeCode	21
cargoTypeDescription	Furniture (EN)
LogisticUnit (*)	
sscc	373655661561900018
packageTypeCode	201
LogisticUnit (*)	
sscc	373655661561900025
packageTypeCode	201
LogisticUnit (*)	
sscc	373655661561900032
packageTypeCode	201
LogisticUnit (*)	
sscc	373655661561900049
packageTypeCode	211
LogisticUnit (*)	
sscc	373655661561900056
packageTypeCode	211

5.2. Example 2

Transport Instruction Response– Domestic, 1 consignment, 1 truck, with logistic units

Message Example 2

Attribute	Value
TransportInstructionResponse	
creationDateTime	2011-01-13T12:00:00

Attribute	Value
documentStatusCode	ORIGINAL
responseType	FULLY_ACCEPTED_WITH_AMENDMENTS
EntityIdentification (+transportInstructionResponseIdentification)	
uniqueCreatorIdentification	TRINR00001
TransactionalParty (+logisticServicesSeller)	
gln	4048623000003
TransactionalParty (+logisticServicesBuyer)	
gln	7365566156190
DocumentReference (+transportInstruction)	
uniqueCreatorIdentification	TRINS00001
TransportInstructionConsignment	
ginc	7365566156191234567
TransactionalParty (+consignor)	
gln	7365566156190
TransactionalParty (+consignee)	
gln	7300011234566
TransportInstructionTerms	
transportServiceCategoryType	30
TransportCargoCharacteristics	
cargoTypeCode	21
cargoTypeDescription	General cargo (EN)
totalGrossVolume	3.5 (CBM)
totalGrossWeight	1500 (KGM)
totalPackageQuantity	5
TransportInstructionTransportMovement	
sequenceNumber	1
transportModeTypeCode	30
TransactionalParty (+carrier)	
gln	4048623000003
LogisticEvent (+plannedDeparture)	
LogisticLocation	
Address	
city	Stockholm
DateOptionalTime (+logisticEventDateTime)	
date	2011-01-14
time	08:00:00

Attribute	Value
LogisticEvent (+plannedArrival)	
LogisticLocation	
Address	
city	Lund
DateOptionalTime (+logisticEventDateTime)	
date	2011-01-14
time	17:00:00
PackageTotal	
packageTypeCode	201
totalPackageQuantity	3
PackageTotal	
packageTypeCode	211
totalPackageQuantity	2
TransportInstructionConsignmentItem	
lineItemNumber	1
TransportCargoCharacteristics	
cargoTypeCode	21
cargoTypeDescription	Furniture (EN)
LogisticUnit (*)	
sscc	373655661561900018
packageTypeCode	201
LogisticUnit (*)	
sscc	373655661561900025
packageTypeCode	201
LogisticUnit (*)	
sscc	373655661561900032
packageTypeCode	201
LogisticUnit (*)	
sscc	373655661561900049
packageTypeCode	211
LogisticUnit (*)	
sscc	373655661561900056
packageTypeCode	211

5.3. Example 3

Transport Instruction – Domestic, 1 shipment, 1 truck, with logistic units

Message Example 2

Attribute	Value
TransportInstruction	
creationDateTime	2011-01-12T12:00:00
documentStatus	ORIGINAL
transportInstructionFunction	SHIPMENT
EntityIdentification (+transportInstructionIdentification)	
uniqueCreatorIdentification	TRINS00002
TransactionalParty (+logisticServicesSeller)	
gln	4048623000003
TransactionalParty (+logisticServicesBuyer)	
gln	7365566156190
TransportInstructionShipment	
gsin	73655661561900123
TransactionalParty (+receiver)	
gln	7300011234566
TransactionalParty (+shipper)	
gln	7365566156190
TransactionalParty (+shipTo)	
Address	
city	Lund
postalCode	22478
streetAddressOne	Glimmervägen 125
TransportInstructionTerms	
transportServiceCategoryType	30
TransportCargoCharacteristics	
cargoTypeCode	21
cargoTypeDescription	General cargo (EN)
totalGrossVolume	3.5 (CBM)
totalGrossWeight	1500 (KGM)
totalPackageQuantity	5
LogisticEvent (+plannedDelivery)	
DateOptionalTime (+logisticEventDateTime)	
date	2011-01-18
PackageTotal (*)	
packageTypeCode	201
totalPackageQuantity	3

Attribute	Value
PackageTotal (*)	
packageTypeCode	211
totalPackageQuantity	2
TransportInstructionShipment Item (*)	
lineItemNumber	1
LogisticUnit (*)	
sscc	373655661561900018
packageTypeCode	201
LogisticUnit (*)	
sscc	373655661561900025
packageTypeCode	201
LogisticUnit (*)	
sscc	373655661561900032
packageTypeCode	201
TransactionalTradeItem	
gtin	03736556615609
tradeItemQuantity	3
TransportInstructionShipment Item (*)	
lineItemNumber	2
LogisticUnit (*)	
sscc	373655661561900049
packageTypeCode	211
tradeItemQuantity	10
LogisticUnit (*)	
sscc	373655661561900056
packageTypeCode	211
tradeItemQuantity	10
TransactionalTradeItem	
gtin	03736556615616
tradeItemQuantity	20

6. Implementation Considerations

6.1. User Guide

The Functional User Guide contains more information about the structure and content of the Transport Instruction and Response message: http://www.gs1.org/docs/ecom/xml/3/3.2/eCom-Trade_messages.html#TransportInstructionandResponse

6.2. Message Specific Considerations

Not applicable

7. Summary of Changes

Any change in the GS1 standards is done based on the Work Request (WR) submitted by the GS1 User Companies or Member Organisations. All Work Requests are documented in the Work Request system available on the GS1 website: <http://wr.gs1.org>. The system is accessible to registered users. New visitors need to register first, to be able to access it. WRs can be searched by the number referenced in tables below, see: Search Work Requests. The number starts with the two last digits of the year when it was submitted, followed by the consecutive number within that year.



Note: WRs submitted earlier than February 2012 should be searched in Old Change Requests.

7.1. BMS Release 3.0

First publication.

7.2. BMS Release 3.1

Change	Version	Associated CR Number
<div><div>class TransportInstructionTerms - maintenance view</div><div><div><div>TransportInstructionTerms</div><div><div>+ transportServiceCategoryType: TransportServiceCategoryCode</div><div>+ transportCollectChargeAmount: Amount [0..1]</div><div>+ transportPaymentMethodTypeCode: TransportPaymentMethodCode [0..1]</div><div>+ transportPickUpChargeAmount: Amount [0..1]</div><div>+ transportServiceConditionType: TransportServiceConditionTypeCode [0..1]</div><div>+ transportServiceLevelCode : TransportServiceLevelCode [0..1]</div><div>+ routeID: Identifier [0..1]</div></div><div><div>maintenance</div><div>Change: (Verified) added routeID (WR 12-202)</div></div></div></div></div>	Draft 1	WR 12-202

7.3. BMS Release 3.2

Change	Associated WR
<p>Added Attribute Value Pair at the root, line item and sub line item levels</p> <div><div>class TransportInstruction - maintenance view</div><div><div>«root» TransportInstruction</div><div>+ transportInstructionFunction :TransportInstructionFunctionEnumeration</div><div><i>maintenance</i> Change: (Verified) 3.2 changed generalisation from Document to eComDocument class to include AVP (WR 14-110)</div></div></div> <div><div>class TransportInstructionResponse - maintenance view</div><div><div>«root» TransportInstructionResponse</div><div>+ responseType :TransportInstructionResponseTypeEnumeration</div><div><i>maintenance</i> Change: (Verified) 3.2 changed generalisation from Document to eComDocument class to include AVP (WR 14-110)</div></div></div>	14-000110

Change	Associated WR
<ul style="list-style-type: none"> Added a reference to parent line number to all Lineltem classes, to support hierarchical items. (WRs 14-021 & 14-044) Added Attribute Value Pair at the root, line item and sub line item levels (WR 14-110) <div> class TransportInstructionConsignmentItem - maintenance view <div> TransportInstructionConsignmentItem <ul style="list-style-type: none"> + lineItemNumber :positiveInteger + parentLineItemNumber :positiveInteger [0..1] + note :Description500 [0..1] + «association» avpList :Ecom_AttributeValuePairList [0..1] <div> <i>maintenance</i> <p>Change: (Verified) 3.2 added +avpList (WR 14-110)</p> <p>Change: (Verified) 3.2 added +parentLineItemNumber (WR 14-021 & 14-044)</p> </div> </div> </div> <div> class TransportInstructionShipmentItem - maintenance view <div> TransportInstructionShipmentItem <ul style="list-style-type: none"> + lineItemNumber :positiveInteger + parentLineItemNumber :positiveInteger [0..1] + note :Description500 [0..1] + «association» avpList :Ecom_AttributeValuePairList [0..1] <div> <i>maintenance</i> <p>Change: (Verified) 3.2 added +avpList (WR 14-110)</p> <p>Change: (Verified) 3.2 added +parentLineItemNumber (WR 14-021 & 14-044)</p> </div> </div> </div>	14-000021 14-000044 14-000110

8. Appendices

Not Applicable

9. Acknowledgements

The following is a list of individuals (and their companies) who participated in the creation, review and approval of this BMS.

9.1.1. Work Group

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