



Transport Instruction and Response Business Message Standard (BMS)

Release 3.1

1-May-2013, Issue 1



Document Summary

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|----------------------|--|
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Business Requirements Document (BRAD) Reference

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|----------------------|------------|--------------|
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| 1-may-2013 | BMS 3.1 issue 1 | Coen Janssen | BMS Release 3.1 | See section Summary of Changes |

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1. Business Domain View

1.1. Problem Statement / Business Need

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.

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).

A Transport Instruction Response may be sent from Logistic Services Seller to Logistic Services Buyer, but exchanging this 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. Objective

This standard defines the transaction model and data model for the following business messages:

- Transport Instruction
- Transport Instruction Response

1.3. Audience

Not Applicable

1.4. References

| Reference Name |
|--|
| BRAD Transport Management (GS1, 2009) |
| Logistics Interoperability Model (GS1, 2007) |
| BMS eCom Common Library 3.1 (GS1, 2012) |
| BMS Shared Common Library 3.1 (GS1, 2012) |

1.5. Acknowledgements

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

1.5.1. Work Group

| Function | Name | Company / organisation |
|-----------------------|-------------------|-----------------------------------|
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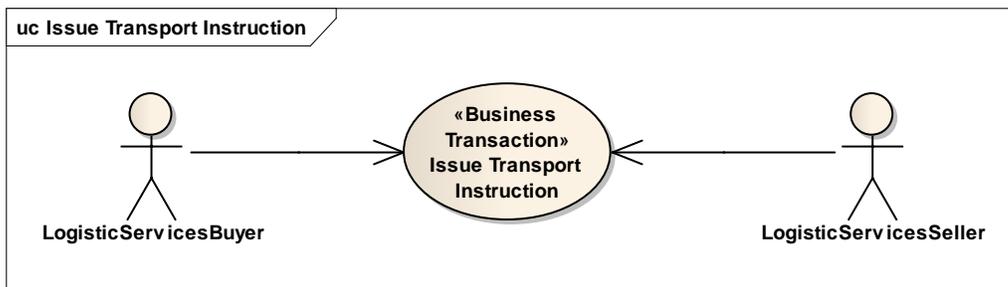
2. Business Context

| 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. 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 |

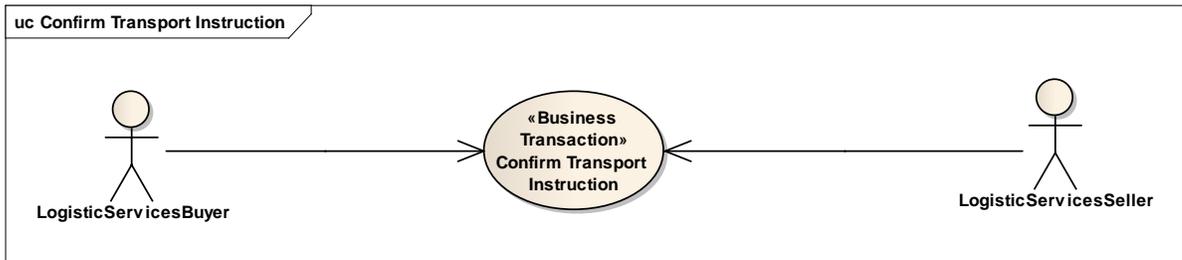
| Scenario | Begins when the Logistic Services Buyer determines transport services are needed. Continues with... <table border="1" style="margin: 10px auto; width: 80%;"> <thead> <tr> <th style="background-color: #4F81BD; color: white;">Step #</th> <th style="background-color: #4F81BD; color: white;">Actor</th> <th style="background-color: #4F81BD; color: white;">Activity Step</th> </tr> </thead> <tbody> <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> </tbody> </table> Ends when the LSS has processed the transport instruction in the transport management system. | 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 border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #003366; color: white;"> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>LSS</td> <td>Issues a transport instruction confirmation</td> </tr> <tr> <td style="text-align: center;">2</td> <td>LSB</td> <td>Receives the transport instruction confirmation</td> </tr> <tr> <td style="text-align: center;">3</td> <td></td> <td></td> </tr> </tbody> </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 | | | | | | | | | | | | |

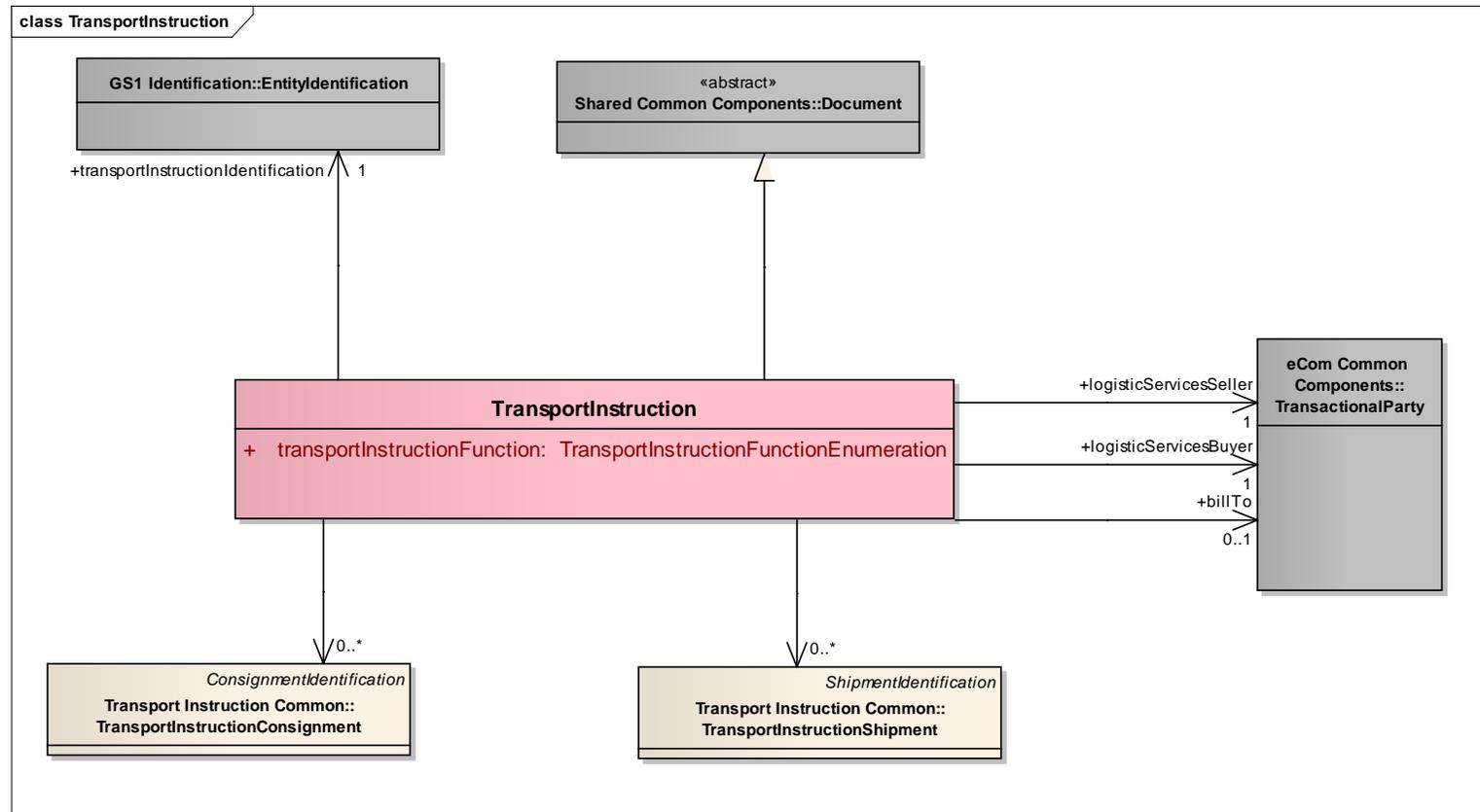
Activity Diagram(s)

Not applicable

4. Business Information View

4.1. Transport Instruction (message)

Class Diagram

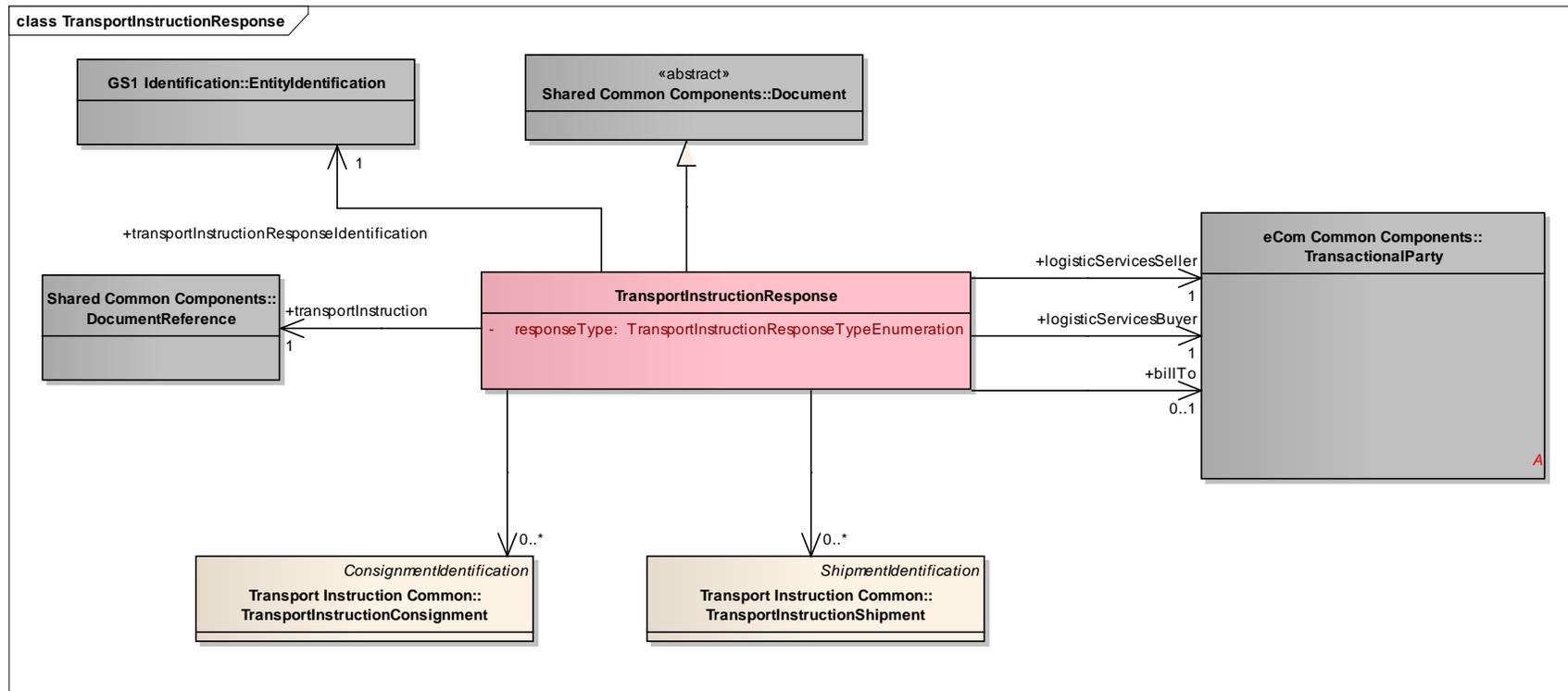


GDD Report

| content | attribute / role | datatype / secondary class | 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. | |
| Generalization | | Document | | Provides the generic document details for the transport instruction. | BRAD TransportInstruction-2, 4 |
| Association | logisticServicesSeller | TransactionalParty | [1..1] | A party that provides logistics services to another party. | BRAD TransportInstruction-6 |
| Association | billTo | TransactionalParty | [0..1] | Identifies the party who receives the invoice. Synonym: Invoicee. | BRAD TransportInstruction-7 |
| Association | | TransportInstructionShipment | [0..*] | Provides the information on a shipment contained in this transport instruction. | BRAD TransportInstruction-8, 9, 10, 11, 15 |
| Association | logisticServicesBuyer | TransactionalParty | [1..1] | A party that purchases logistics services from another party. | BRAD TransportInstruction-5 |
| Association | | TransportInstructionConsignment | [0..*] | Provides the information on a consignment contained in this transport instruction. | BRAD TransportInstruction-8, 12, 13 |
| Association | transportInstructionIdentification | EntityIdentification | [1..1] | The identification of the transport instruction document. | BRAD TransportInstruction-1 |
| Attribute | transportInstructionFunction | TransportInstructionFunctionEnumeration | [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



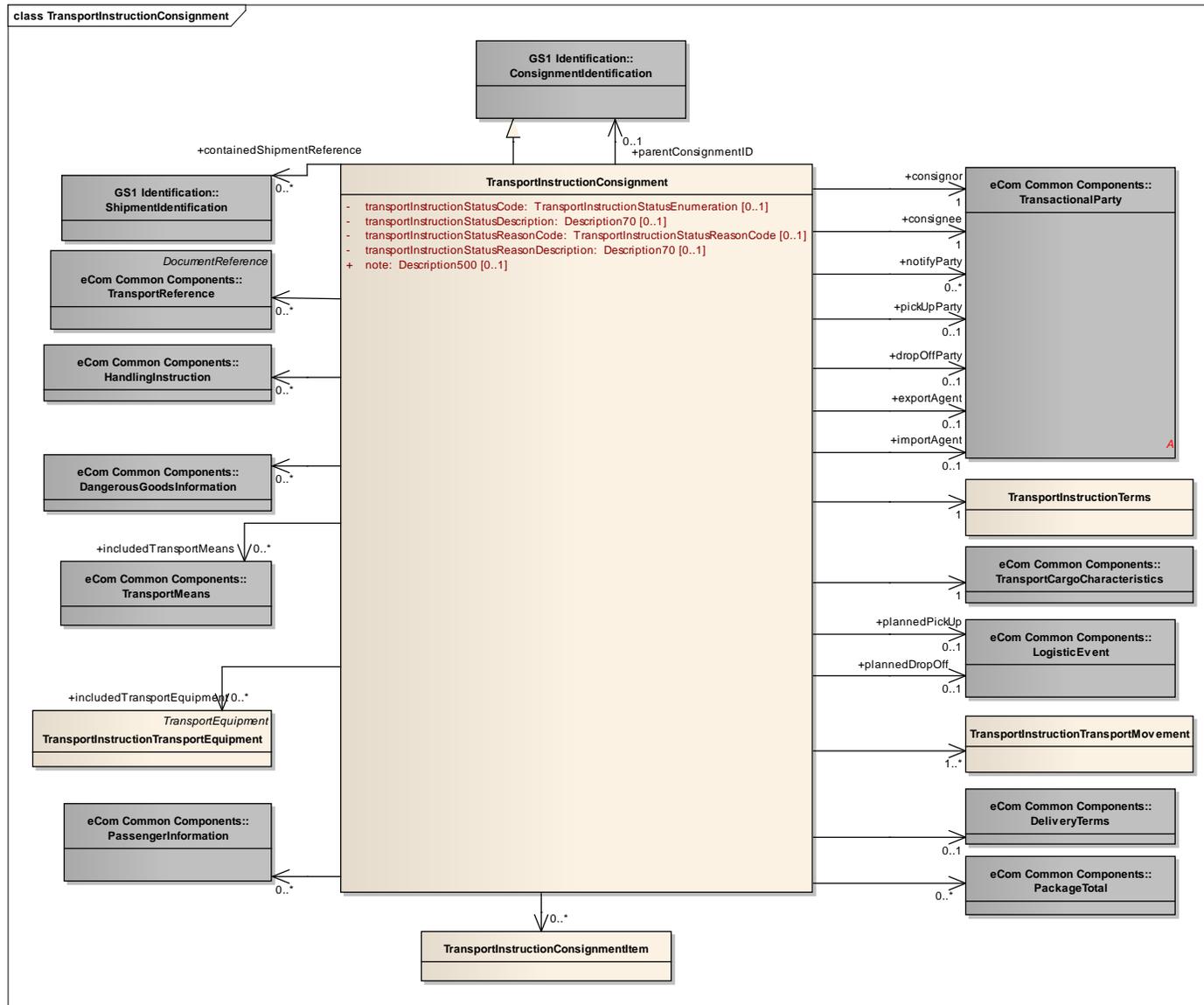
GDD Report

| content | attribute / role | datatype / secondary class | multiplcity | definition | requirements |
|------------------------------|----------------------|----------------------------|-------------|--|--|
| TransportInstructionResponse | | | | The main objective of the Transport Instruction Response is to confirm the requested transport services and where needed provide additional information. | |
| Association | transportInstruction | DocumentReference | [1..1] | The identification of the referenced transport instruction. | BRAD TransportInstructionConfirmation-7 |

| content | attribute / role | datatype / secondary class | multiplicity | definition | requirements |
|----------------|--|---|--------------|--|--|
| Association | transportInstructionResponseIdentification | EntityIdentification | [1..1] | The identification of the transport instruction response document. | BRAD TransportInstructionConfirmation-2 |
| Generalization | | Document | | Provides the generic document details for the transport instruction response. | BRAD TransportInstructionConfirmation-3, 18 |
| Association | logisticServicesSeller | TransactionalParty | [1..1] | A party that provides logistics services to another party. | BRAD TransportInstructionConfirmation-5 |
| Association | logisticServicesBuyer | TransactionalParty | [1..1] | A party that purchases logistics services from another party. | BRAD TransportInstructionConfirmation-4 |
| Association | billTo | TransactionalParty | [0..1] | Identifies the party who receives the invoice. Synonym: Invoicee. | BRAD TransportInstructionConfirmation-6 |
| Association | | TransportInstructionConsignment | [0..*] | Provides the information on a consignment contained in this transport instruction response. | BRAD TransportInstructionConfirmation-1, 10, 11, 12, 13, 19 |
| Association | | TransportInstructionShipment | [0..*] | Provides the information on a shipment contained in this transport instruction response. | BRAD TransportInstructionConfirmation-1, 15, 16 |
| 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

| Content | Attribute/Role | Datatype/Secondary Class | 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 | 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 |



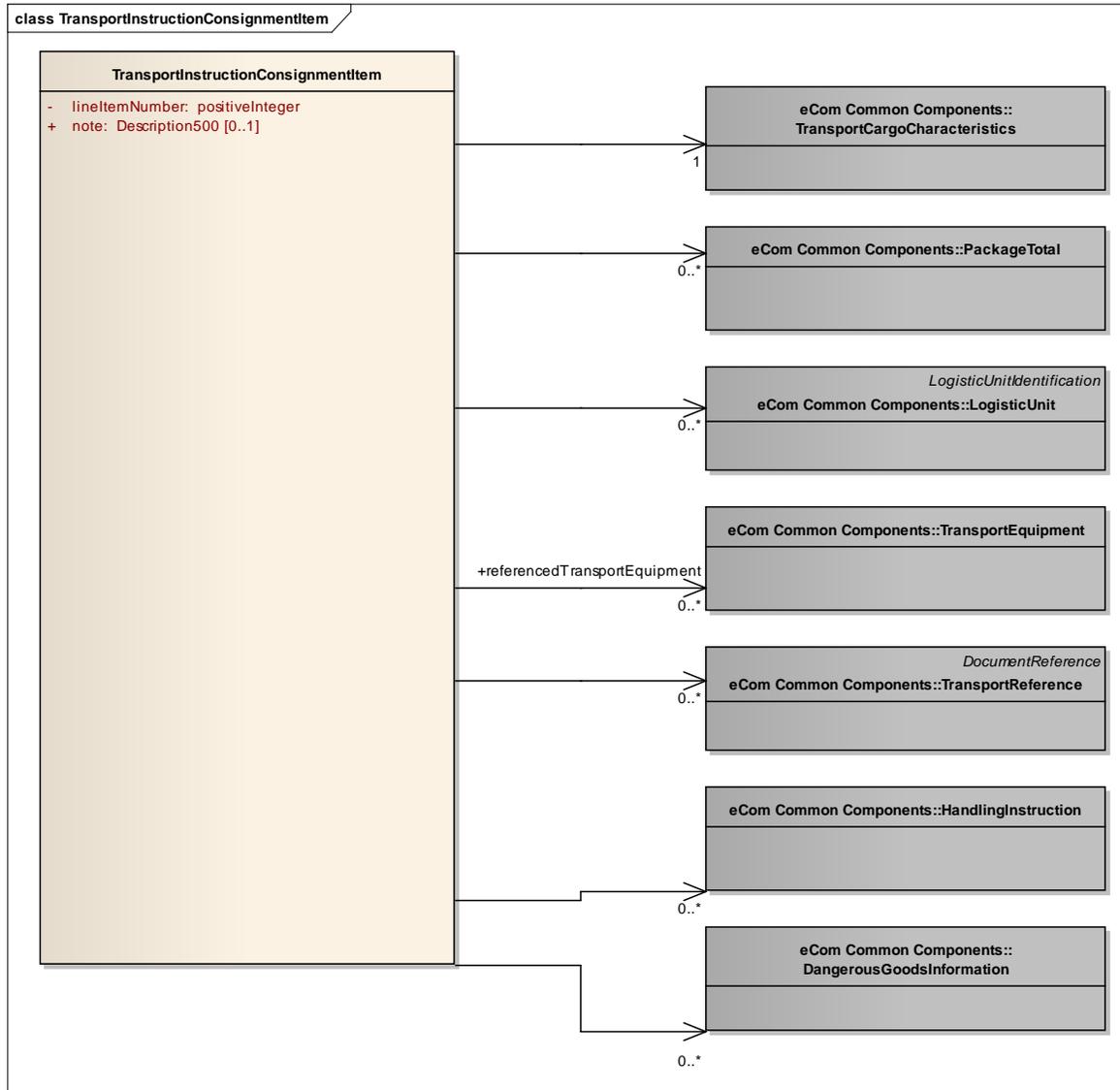
| | | | | | |
|----------------|----------------------------|-------------------------------------|------|---|---|
| Association | | TransportCargoCharacteristics | 1 | Aggregate information on the goods that are contained in this consignment. | BRAD CON28 |
| Association | containedShipmentReference | 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 | 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 | The agreed transport service conditions for this consignment. | |
| Attribute | transportInstructionStatusCode | TransportInstructionStatus Enumeration | 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 | TransportInstructionStatus ReasonCode | 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



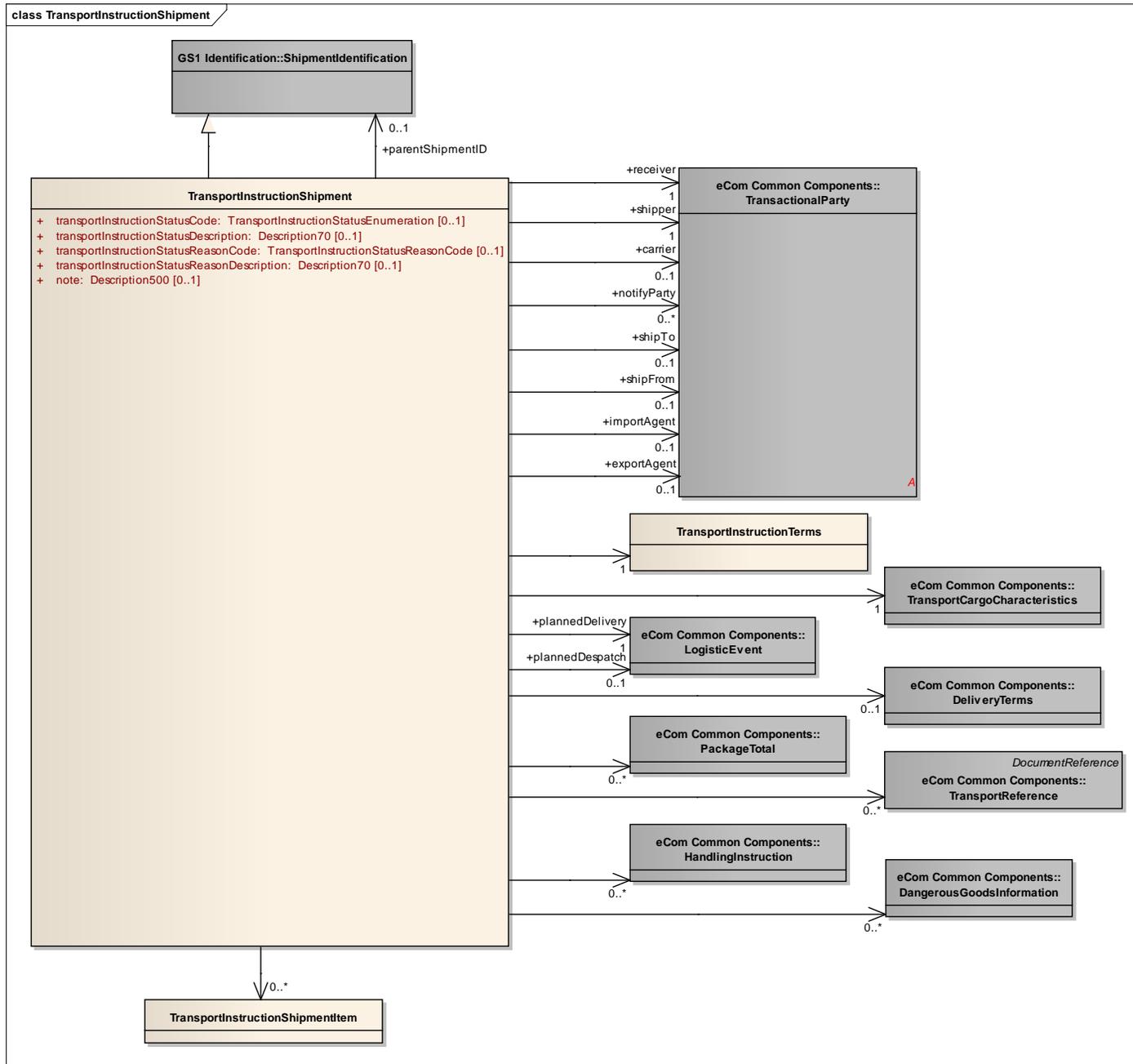
GDD Report

| Content | Attribute / Role | Datatype /Secondary class | Multi plicity | Definition | Requireme nts |
|---|-------------------------------|--------------------------------|---------------|--|------------------|
| TransportInstructionConsignme ntItem | | | | 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 | | LogisticUnit | 0..* | Information on the logistic unit(s) included in the consignment item. | |
| Association | | TransportReference | 0..* | References to the commercial transaction or to transport or legal documents related to the consignment item. | BRAD CIT9 |
| Association | | HandlingInstruction | 0..* | Handling instructions for the consignment item. | BRAD CIT6, CIT8 |
| Association | | DangerousGoodsInfor mation | 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 | | PackageTotal | 0..* | Aggregate information per type of package included in the consignment item. | BRAD CIT11 |
| Association | referencedTransp ortEquipment | TransportEquipment | 0..* | Identification of the transport equipment that contains the consignment item. | |
| Association | | TransportCargoCharact eristics | 1 | Aggregate information on the goods that are included in this consignment item. | |
| Attribute | lineItemNumber | positiveInteger | 1..1 | The sequence number for this consignment item. | BRAD CIT3 |
| 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 |



4.5. Transport Instruction Shipment

Class Diagram



GDD Report

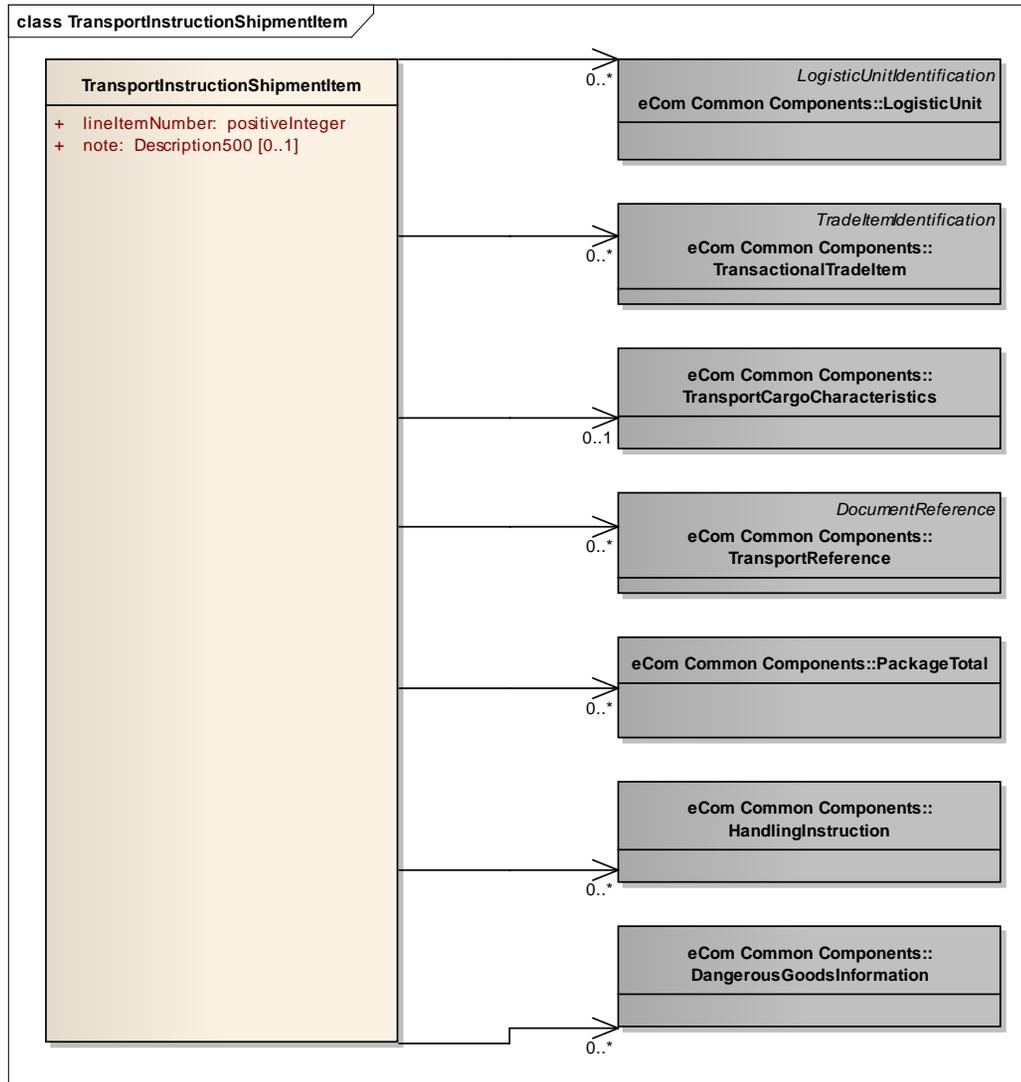
| Content | Attribute / Role | Datatype /Secondary class | Multiplicity | Definition | Requirements |
|------------------------------|------------------|----------------------------------|--------------|---|--|
| TransportInstructionShipment | | | | A <u>shipment</u> is an identifiable collection of 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 | 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 | A party which engages in shipping this shipment of goods; | BRAD SHM1 |
| 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 |



| Content | Attribute / Role | Datatype /Secondary class | Multiplicity | Definition | Requirements |
|-------------|---|---------------------------------------|--------------|--|--|
| Association | plannedDelivery | LogisticEvent | 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 | Aggregate information on the goods that are contained in this shipment. | |
| Association | | TransportInstructionTerms | 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 |
| 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

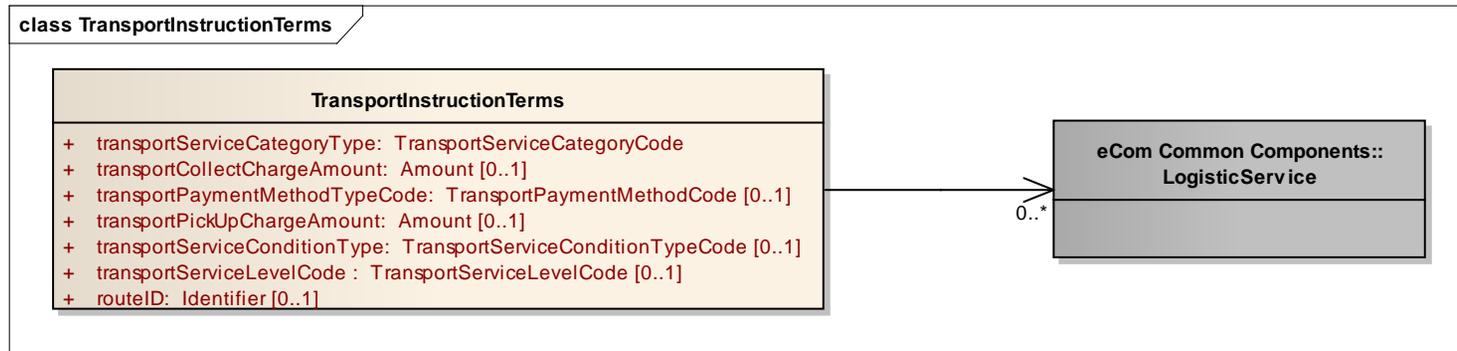


GDD Report

| content | attribute / role | datatype / secondary class | 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 | | PackageTotal | [0..*] | Aggregate information per type of package included in the shipment item. | BRAD SHI9, SHI13 |
| 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 | | TransactionalTradeItem | [0..*] | Information on the trade item(s) included in the shipment item. | BRAD SHI1, SHI3, SHI5, SHI16, SHI17 |
| Association | | HandlingInstruction | [0..*] | Handling instructions for the consignment item. | BRAD SHI6, SHI19 |
| 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 |
| Association | | TransportCargoCharacteristics | [0..1] | Aggregate information on the goods that are included in this shipment item. | |
| Attribute | lineItemNumber | positiveInteger | [1..1] | The sequence number for this shipment item. | BRAD SHI2 |
| 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. | |

4.7. Transport Instruction Terms

Class Diagram



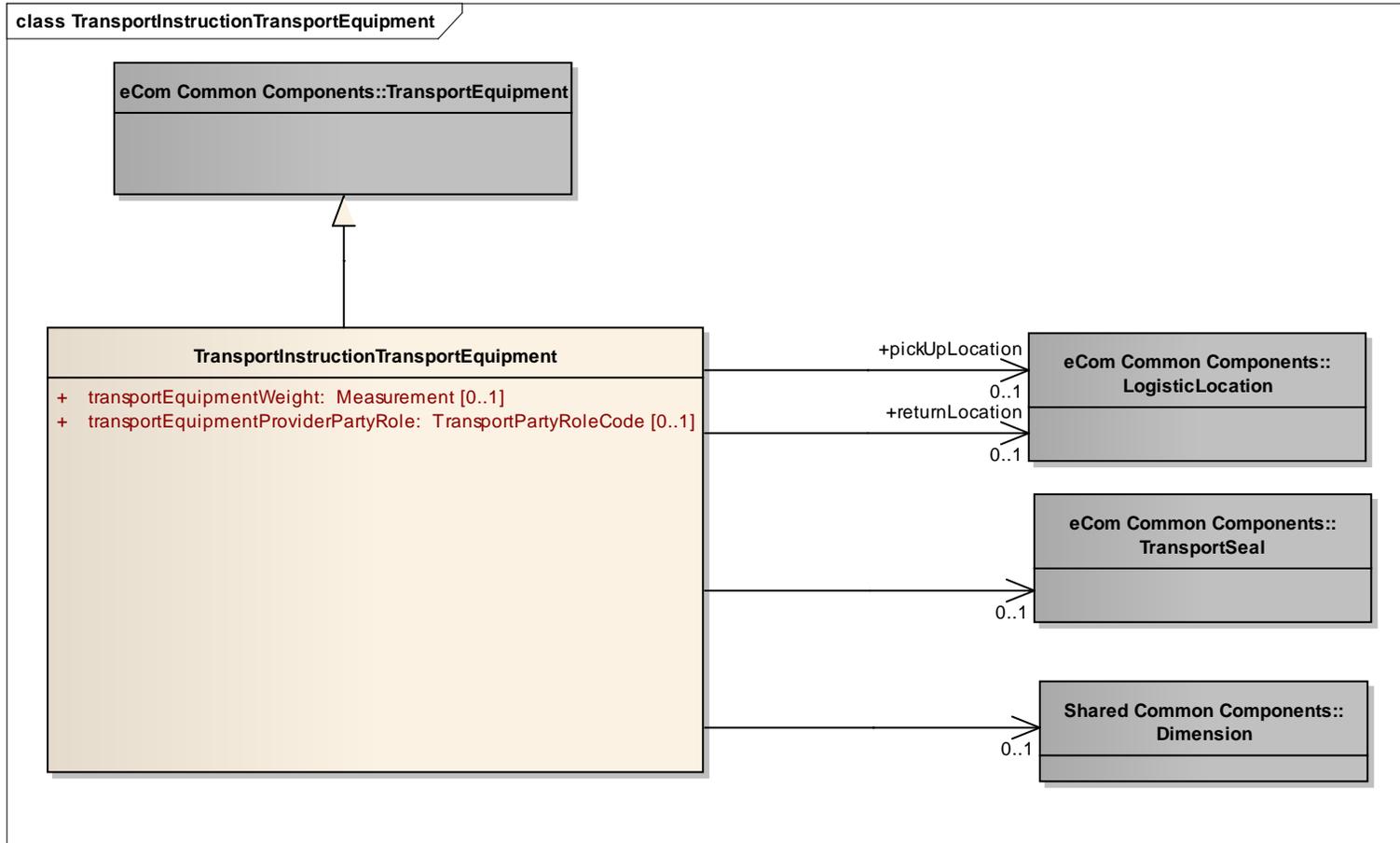
GDD Report

| content | multiplicity | attribute / role | datatype /secondary class | definition | requirements |
|---------------------------|--------------|--------------------------------|------------------------------|--|-------------------------|
| TransportInstructionTerms | | | | Information on the commercial conditions under which the requested transport services will be performed.# | |
| Association | [0..*] | | LogisticService | Details on the additional services agreed as part of the transport instruction terms.# | |
| Attribute | [1..1] | transportServiceCategoryType | TransportServiceCategoryCode | Code specifying the type of transport service that will be provided. For example: Courier service. # | BRAD CON29, SHM26, SHM3 |
| Attribute | [0..1] | transportCollectChargeAmount | Amount | 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 | [0..1] | transportPaymentMethodTypeCode | TransportPaymentMethodCode | Code specifying the method of payment for the transport and service charges. # | BRAD CON11, SHM5 |

| content | multiplicity | attribute / role | datatype /secondary class | definition | requirements |
|-----------|--------------|-------------------------------|-----------------------------------|--|-------------------|
| Attribute | [0..1] | transportPickUpChargeAmount | Amount | 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 |
| Attribute | [0..1] | transportServiceConditionType | TransportServiceConditionTypeCode | Code specifying the type of contractual conditions applicable to these transport terms.# | BRAD CON29, SHM26 |
| Attribute | [0..1] | transportServiceLevelCode | TransportServiceLevelCode | Code specifying the service level requested for the transport service. For example: Express service. # | BRAD CON29, SHM26 |
| Attribute | [0..1] | routeID | Identifier | Unique identifier of the standard route that will be used for this shipment. | WR 12-202 |

4.8. Transport Instruction Transport Equipment

Class Diagram

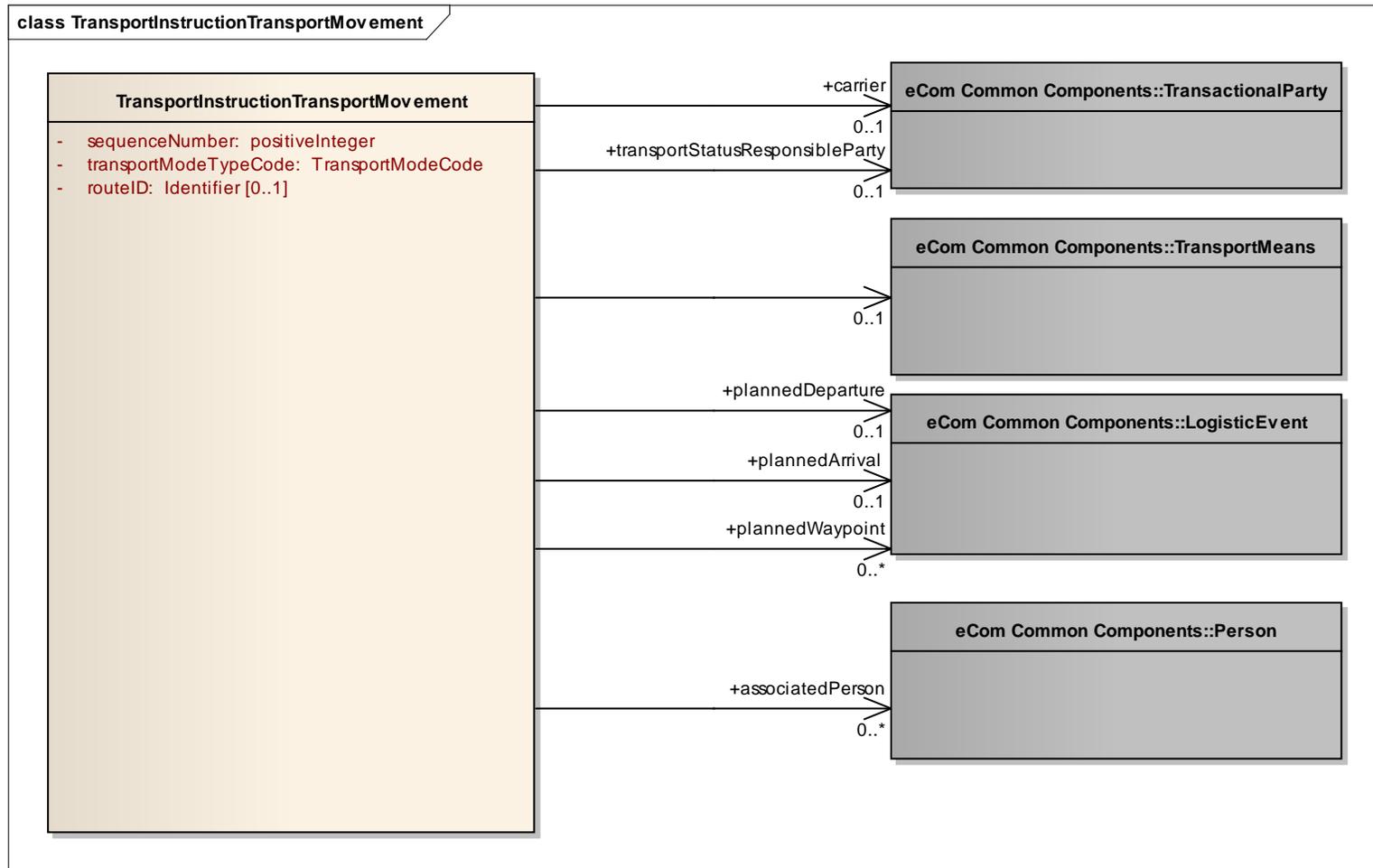


GDD Report

| Content | Attribute / Role | Datatype /Secondary class | 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

| content | multiplicity | attribute / role | datatype / secondary class | 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 | [0..*] | associatedPerson | Person | The name and/or identification of an individual associated with this transport movement. | BRAD TMV9 |
| Association | [0..*] | plannedWaypoint | LogisticEvent | 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 | [0..1] | | TransportMeans | The type of vehicle, aircraft, vessel or other device used for the transport of goods in this transport movement | TMV19, TME1, TME2, TME3 |
| Association | [0..1] | plannedArrival | LogisticEvent | 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 | [0..1] | plannedDeparture | LogisticEvent | 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 | [0..1] | carrier | TransactionalParty | A party that physically transports goods from one place to another. | BRAD TMV5 |
| Association | [0..1] | transportStatusResponsibleParty | TransactionalParty | Party in charge of collecting and forwarding the information about the transport movement. # | BRAD TMV17, TMV18 |
| Attribute | [1..1] | sequenceNumber | positiveInteger | Unique number identifying the sequence of this transport movement with respect to the other specified movements.# | |

| content | multiplicity | attribute / role | datatype / secondary class | definition | requirements |
|-----------|--------------|-----------------------|----------------------------|---|--------------|
| Attribute | [1..1] | transportModeTypeCode | TransportModeCode | Code specifying the transportation mode used for this transport movement. # | BRAD TMV2 |
| Attribute | [0..1] | routeID | Identifier | Unique identifier of the standard route that will be used for this transport movement. # | BRAD TMV8 |

4.10. Enumerations (message specific)

4.10.1. TransportInstructionFunctionEnumeration

| Code | Code Description |
|-------------|---|
| SHIPMENT | The transport instruction contains information on one or more shipments to be transported. |
| CONSIGNMENT | The transport instruction contains information on one or more consignments to be transported, and optionally also on shipments contained. |

4.10.2. TransportInstructionResponseTypeEnumeration

| Code | Code Description |
|--------------------------------|--|
| FULLY_ACCEPTED | Fully accepted without amendments (only header information needs to be sent) |
| FULLY_REJECTED | Fully rejected (only header information needs to be sent) |
| FULLY_ACCEPTED_WITH_AMENDMENTS | Fully accepted with amendments / completed details (header and detail information needs to be sent). |
| PARTIALLY_ACCEPTED | Partially accepted, partially rejected (header and detail information needs to be sent) |

4.10.3. TransportInstructionStatusEnumeration

| Code | Code Description |
|-----------|--|
| CONFIRMED | The Logistic Services Seller confirms the instructed shipment / consignment without changes. |
| MODIFIED | The Logistic Services Seller modifies the instructed shipment / consignment. |
| CANCELLED | The Logistic Services Buyer cancels the instructed shipment / consignment |
| REJECTED | The Logistic Services Seller rejects the instructed shipment / consignment |

4.11. Codelists

 **Note:** Reference Shared Common Library Business Message (BMS) Release 3.0.0 and eCom Domain Common Library Business Message (BMS) Release 3.0.0 for all Code Lists

| Class | Codelist | Referenced in |
|---|--------------------------------------|---|
| TransportInstructionConsignment TransportInstructionShipment | TransportInstructionStatusReasonCode | eCom Domain Common Library Business Message (BMS) Release 3.0.0 |
| TransportInstructionTerms | TransportServiceCategoryCode | eCom Domain Common Library Business Message (BMS) Release 3.0.0 |
| TransportInstructionTerms | TransportPaymentMethodCode | eCom Domain Common Library Business Message (BMS) Release 3.0.0 |
| TransportInstructionTerms | TransportServiceConditionTypeCode | eCom Domain Common Library Business Message (BMS) Release 3.0.0 |

| Class | Codelist | Referenced in |
|--|---------------------------|---|
| TransportInstructionTerms | TransportServiceLevelCode | eCom Domain Common Library Business Message (BMS) Release 3.0.0 |
| TransportInstructionTransportEquipment | TransportPartyRoleCode | eCom Domain Common Library Business Message (BMS) Release 3.0.0 |
| TransportInstructionTransportMovement | TransportModeCode | eCom Domain Common Library Business Message (BMS) Release 3.0.0 |

5. Business Message Examples

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

| | |
|---|---------------------|
| 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) | |
| 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. Transport Instruction Response– Domestic, 1 consignment, 1 truck, with logistic units

| | |
|---|--------------------------------|
| TransportInstructionResponse | |
| creationDateTime | 2011-01-13T12:00:00 |
| 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 |
| 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. Transport Instruction – Domestic, 1 shipment, 1 truck, with logistic units

| | |
|---|---------------------|
| 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 |
| PackageTotal (*) | |
| packageTypeCode | 211 |
| totalPackageQuantity | 2 |
| TransportInstructionShipmentItem (*) | |
| lineItemNumber | 1 |
| LogisticUnit (*) | |
| sscc | 373655661561900018 |
| packageTypeCode | 201 |
| LogisticUnit (*) | |
| sscc | 373655661561900025 |
| packageTypeCode | 201 |
| LogisticUnit (*) | |
| sscc | 373655661561900032 |
| packageTypeCode | 201 |
| TransactionalTradeltem | |
| gtin | 03736556615609 |
| tradeltemQuantity | 3 |
| TransportInstructionShipmentItem (*) | |
| lineItemNumber | 2 |
| LogisticUnit (*) | |
| sscc | 373655661561900049 |
| packageTypeCode | 211 |
| tradeltemQuantity | 10 |
| LogisticUnit (*) | |
| sscc | 373655661561900056 |
| packageTypeCode | 211 |
| tradeltemQuantity | 10 |
| TransactionalTradeltem | |
| gtin | 03736556615616 |
| tradeltemQuantity | 20 |

6. Implementation Considerations

(Insert Content Here)

7. Appendices

Not Applicable

8. Summary of Changes

8.1. BMS Release 3.0

First publication.

8.2. BMS Release 3.1

| Change | Version | Associated CR Number |
|--|---------|----------------------|
| <div style="border: 1px solid black; padding: 5px;"> <p>class TransportInstructionTerms - maintenance view</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p style="text-align: center;">TransportInstructionTerms</p> <ul style="list-style-type: none"> + transportServiceCategoryType: TransportServiceCategoryCode + transportCollectChargeAmount: Amount [0..1] + transportPaymentMethodTypeCode: TransportPaymentMethodCode [0..1] + transportPickUpChargeAmount: Amount [0..1] + transportServiceConditionType: TransportServiceConditionTypeCode [0..1] + transportServiceLevelCode : TransportServiceLevelCode [0..1] + routeID: Identifier [0..1] </div> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p style="text-align: center;">maintenance</p> <p>Change: (Verified) added routeID (WR 12-202)</p> </div> </div> | Draft 1 | WR 12-202 |