Transport Pick-Up Drop-off Request and Confirmation

Business Message Standard (BMS)

Release 3.1

1-May-2013, Issue 1

Document Summary

Document Item	Current Value
Document Title	Transport Pick-Up Drop-off Request and Confirmation - Business Message Standard (BMS)
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Work Group Name	eCom SMG
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	GS1 Germany	12-195

Business Requirements Document (BRAD) Reference

BRAD Title:	BRAD Date:	BRAD Version
Transport Management		1.0

Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change
25-Oct-2011	BMS 3.0 issue 1.1.0	Coen Janssen	BMS Release 3.0 eBallot Approved	Status updated
27-Nov-2012	BMS 3.1 issue 1	Coen Janssen	BMS release 3.1, first draft.	See section Summary of Changes

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1. Business Domain View

1.1. Problem Statement / Business Need

This business message standard enables the request and confirmation for an appointment to collect goods at a pick-up location or to deliver goods at a drop-off location.

Initial information about the collection and delivery of goods may already have been exchanged in the transport instruction. However, the party where the goods are collected (consignor / pick-up location / shipper / ship-from location) or delivered (consignee / drop-off location / receiver / ship-to location) will not in all cases be aware of the transport instruction details or they might have changed.

In the pick-up / drop-off request the carrier can specify delays or other relevant status information that might impact the time of collection or the time of delivery. In the pick-up / drop-off confirmation besides the detailed time and location (dock door) additional handling instructions might be included.

This scenario is beneficial for the time slot management at the pick-up and drop-off location. Planning of time slots (time slot allocation) at the pick-up and drop-off locations (dock door) is often critical because of the limited capacity of these locations.

1.2. Objective

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

- Transport Pick-up Drop-off Request
- Transport Pick-up Drop-off Confirmation

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
Work Group Chair	Fred Kempkes	Unilever
Work Group Chair	Jaco Voorspuij	DHL

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Function	Name	Company / organisation
Work Group Member	Mia Lenman	GS1 Sweden
Work Group Member	Richard Chresta	GS1 Switzerland & UNCEFACT TGB3
Work Group Member	Jeff Melcher	Army & Air Force Exchange Service
Work Group Member	Yuliya Shevchenko	GS1 Global Office
Work Group Member	Roman Strand	GS1 Germany
Work Group Member	Henk van Maaren	CETIMA & UNCEFACT TBG3
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Work Group Member	Helena Lunden	ICA Sweden
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Work Group Member	Audun Vennesland	SINTEF & eFreight
Work Group Member	Mary Vayou	BMT Group Ltd & eFreight

1.5.2. Development Team Members

Function	Name	Organisation
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Standards Content Lead	Coen Janssen	GS1 Global Office
Technical Development Lead	Ewa Iwicka	GS1 Global Office
Peer Review	Eric Kauz	GS1 Global Office

2. Business Context

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

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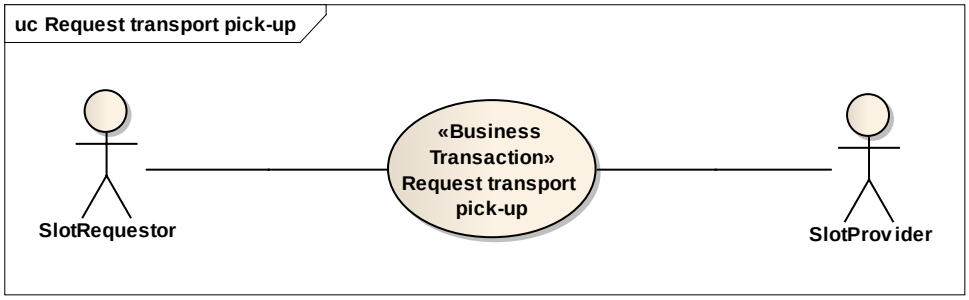
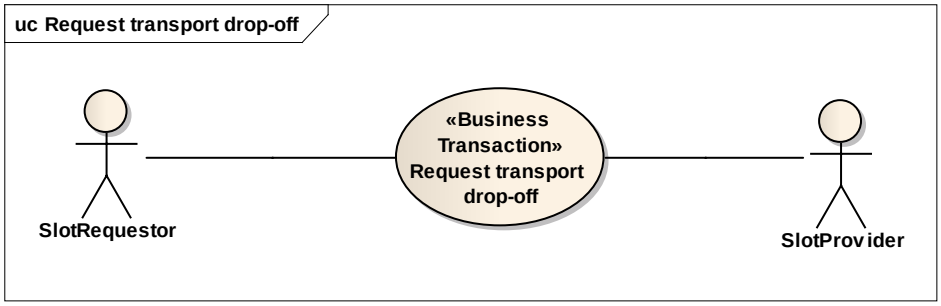
3. Business Transaction View

3.1. Request Transport Pick-up / Drop-off

Use Case Diagram





Use Case Description

Use Case ID	UC-1
Use Case Name	Request Transport Pick-up / Drop-off
Use Case Description	To request a slot (detailed time and location) for the collection or delivery of goods.
Actors (Goal)	Slot Requestor (logistic service provider) Slot Provider (customer, supplier, consolidation centre, …)
Performance Goals	Not applicable
Preconditions	The provider is aware that a shipment / consignment will need to be collected or delivered, based on previous information exchanges. The requestor is aware of the planned execution details for the transport, for example based on information exchanged in the transport instruction.
Post conditions	The slot provider has received the request.

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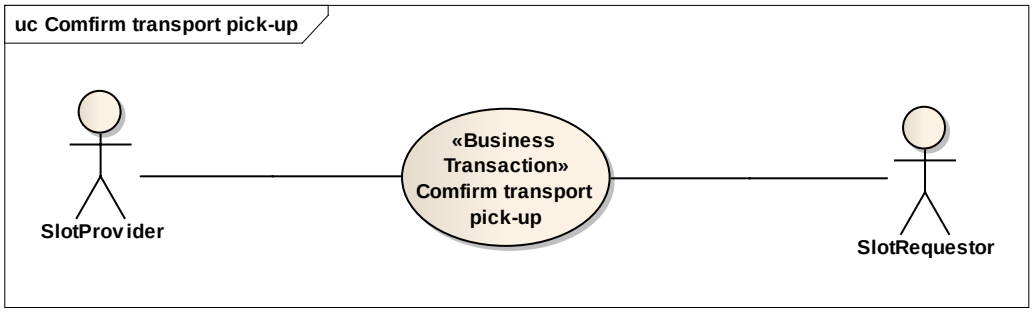
Scenario	Begins when the slot requestor determines a specific appointment is required. Continues with... Step # / Actor / Activity Step 1 / Requestor / Issues the transport pick-up drop-off request 2 / Provider / Receives the transport pick-up drop-off request Ends when
Alternative Scenario	Not applicable
Related Requirements	Not applicable
Related Rules	Not applicable

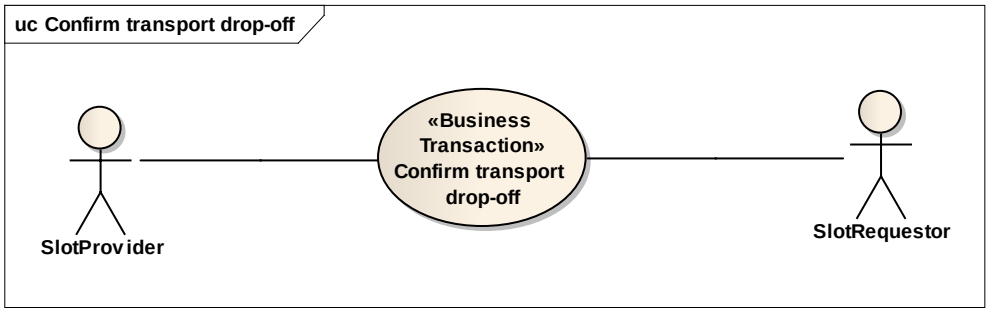
Activity Diagram(s)

Not applicable

3.2. Confirm Transport Pick-up / Drop-off

Use Case Diagram





Use Case Description

Use Case ID	UC-2
Use Case Name	Confirm Transport Pick-up / Drop-off
Use Case Description	To confirm the assignment of a slot (detailed time and location) for the collection or delivery of goods.

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<table>
<tr><th></th><th></th></tr>
<tr><td>Actors (Goal)</td><td>Slot Requestor (logistic service provider)
Slot Provider (customer, supplier, consolidation centre, …)</td></tr>
<tr><td>Performance Goals</td><td>Not applicable</td></tr>
<tr><td>Preconditions</td><td>The provider is aware that a shipment / consignment will need to be collected or delivered, based on previous information exchanges.
Optional: the provider may have received a Transport Pick-up Drop-off Request</td></tr>
<tr><td>Post conditions</td><td></td></tr>
<tr><td>Scenario</td><td>Begins when the provider receives the transport pic-up drop-off request
Continues with...
<table>
<tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr>
<tr><td>1</td><td>provider</td><td>Assigns a slot (time and location)</td></tr>
<tr><td>2</td><td>provider</td><td>Sends the confirmation</td></tr>
<tr><td>3</td><td>requestor</td><td>Receives the confirmation</td></tr>
</table>
Ends when</td></tr>
<tr><td>Alternative Scenario</td><td>Begins when the provider determines an update on the pick-up or drop-off slot is required.
Continues with...
<table>
<tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr>
<tr><td>1</td><td>provider</td><td>Assigns a slot (time and location)</td></tr>
<tr><td>2</td><td>provider</td><td>Sends the confirmation</td></tr>
<tr><td>3</td><td>requestor</td><td>Receives the confirmation</td></tr>
</table></td></tr>
<tr><td>Related Requirements</td><td>Not applicable</td></tr>
<tr><td>Related Rules</td><td>Not applicable</td></tr>
</table>

Activity Diagram(s)

Not applicable

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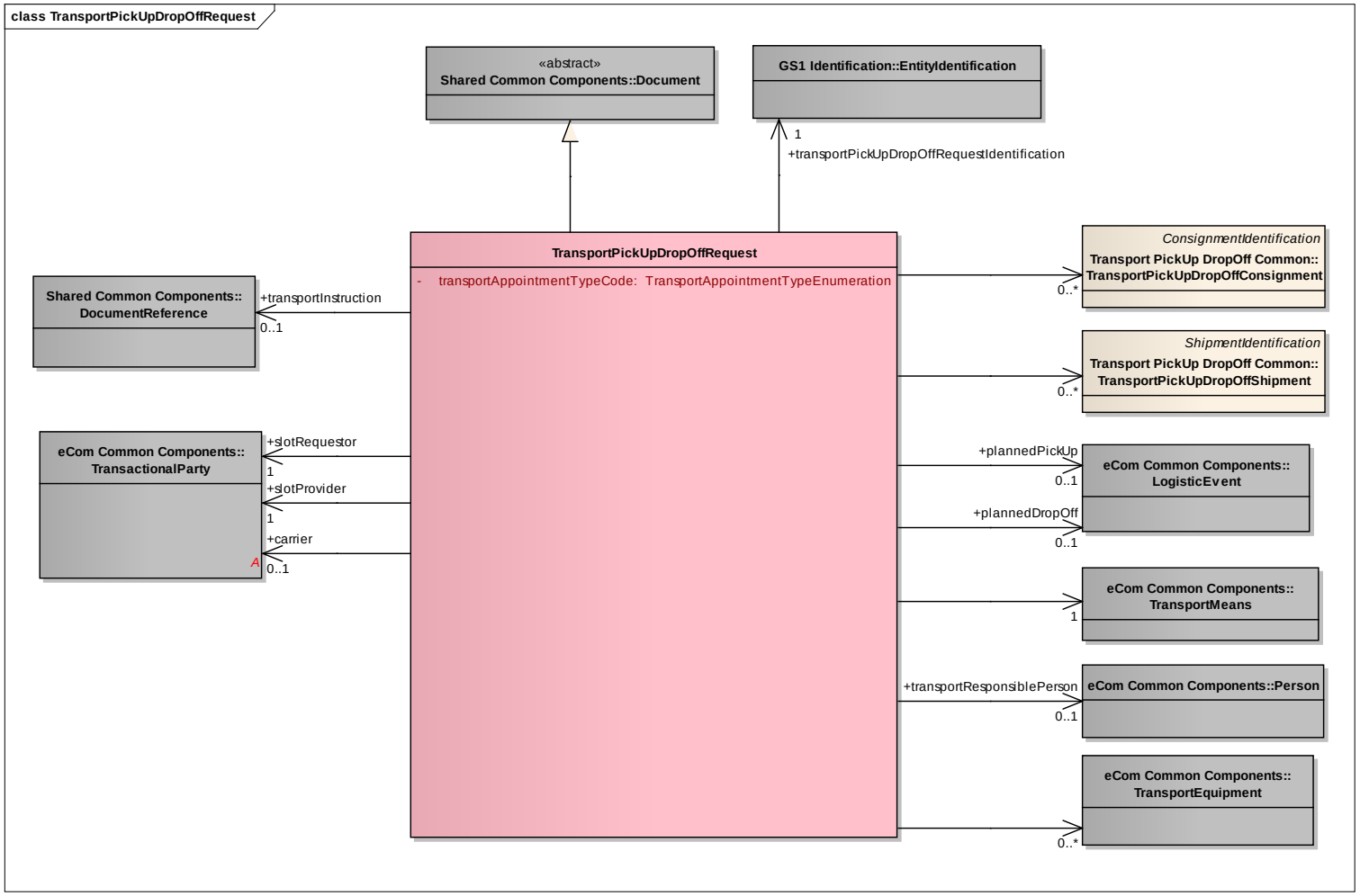
4. Business Information View

4.1. Transport Pick-up Drop-off Request (message)

Class Diagram



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GDD Report

content	attribute / role	datatype / secondary class	multiplicity	definition	requirements
TransportPickUpDropOffRequest				This business message standard enables the request for an appointment to collect goods at a pick-up location or to deliver goods at a drop-off location.	
Association		TransportEquipment	0..*	Details on the transport equipment used for the transport.	BRAD Transport Management – new requirement
Association	carrier	TransactionalParty	0..1	The party that will collect, transport and deliver the goods.	BRAD TM - TransportPUDORequest-4
Association	slotRequestor	TransactionalParty	1	The party that requests a pick-up or drop-off slot from another party.	BRAD TM - new requirement
Association	slotProvider	TransactionalParty	1	The party that provides a pick-up or drop-off slot to another party.	BRAD TM - new requirement
Association	transportInstruction	DocumentReference	0..1	Reference to the transport instruction document related to this request.	BRAD TM - TransportPUDORequest-3
Association	plannedPickUp	LogisticEvent	0..1	Details on the planned collection of the consignment.	
Generalization		Document		Provides the generic document details for this business document.	BRAD TM - TransportPUDORequest-2
Association	transportPickUpDropOffRequestIdentification	EntityIdentification	1	The identification of the Transport Pick-up Drop-off Request document.	BRAD TM - TransportPUDORequest-1
Association		TransportMeans	1	Details on the transport means used for the transport.	BRAD TM - TransportPUDORequest-6
Association		TransportPickUpDropOffShipment	0..*	Details on the shipment that will be collected or delivered.	
Association	plannedDropOff	LogisticEvent	0..1	Details on the planned delivery of the consignment.	
Association	transportResponsiblePerson	Person	0..1	The person responsible for the execution of this pick-up or drop-off, for example the driver.	BRAD TM - TransportPUDORequest-4

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content	attribute / role	datatype / secondary class	multiplicity	definition	requirements
Association		TransportPickUpDropoffConsignment	0..*	Details on the consignment that will be collected or delivered.	
Attribute	transportAppointmentTypeCode	TransportAppointmentTypeEnumeration		Code specifying whether the request relates to a pick-up or drop-off.	

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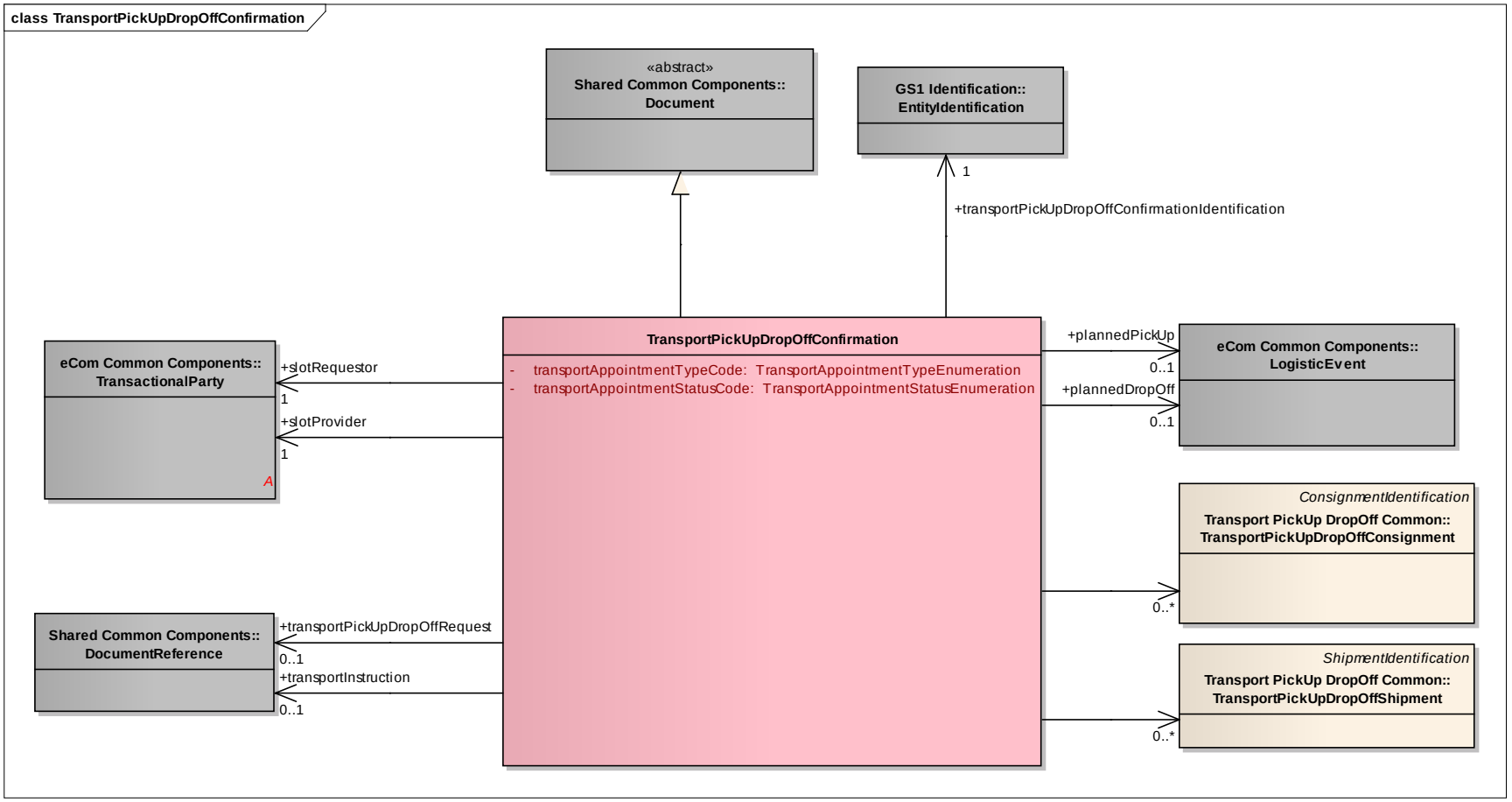
4.2. Transport Pick-up Drop-off Confirmation (message)

Class Diagram



GDD Report

content	attribute / role	datatype / secondary class	multiplicity	definition	requirements
TransportPickUpDropOffConfirmation				This business message standard enables the confirmation of an appointment to collect goods at a pick-up location or to deliver goods at a drop-off location.	

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content	attribute / role	datatype / secondary class	multiplicity	definition	requirements
Association	slotProvider	TransactionalParty	1	The party that requests a pick-up or drop-off slot from another party.	BRAD TM - TransportPUDOConfirmation- new
Association	slotRequestor	TransactionalParty	1	The party that provides a pick-up or drop-off slot to another party.	BRAD TM - TransportPUDOConfirmation- new
Association	transportInstruction	DocumentReference	0..1	Reference to the Transport Instruction document related to this confirmation.	BRAD TM - TransportPUDOConfirmation-4
Association	transportPickUpDropOffRequest	DocumentReference	0..1	Reference to the Transport Pick-up Drop-off Request document related to this request.	BRAD TM - TransportPUDOConfirmation-3
Association	plannedDropOff	LogisticEvent	0..1	Details on the planned delivery of the consignment.	BRAD TM - TransportPUDOConfirmation-6
Generalization		Document		Provides the generic document details for this business document.	BRAD TM - TransportPUDOConfirmation-2
Association	transportPickUpDropOffConfirmationIdentification	EntityIdentification	1	The identification of the Transport Pick-up Drop-off Request document.	BRAD TM - TransportPUDOConfirmation-1
Association		TransportPickUpDropOffConsignment	0..*	Details on the consignment that will be collected or delivered.	BRAD TM - TransportPUDOConfirmation-7
Association		TransportPickUpDropOffShipment	0..*	Details on the shipment that will be collected or delivered.	BRAD TM - TransportPUDOConfirmation-7
Association	plannedPickUp	LogisticEvent	0..1	Details on the planned collection of the consignment.	BRAD TM - TransportPUDOConfirmation-6
Attribute	transportAppointmentTypeCode	TransportAppointmentTypeEnumeration	1..1	Code specifying whether the request relates to a pick-up or drop-off.	
Attribute	transportappointmentStatusCode	TransportAppointmentStatusEnumeration	1..1	Code specifying the status of the confirmed appointment, for example UPDATED.	BRAD TM - TransportPUDOConfirmation-5

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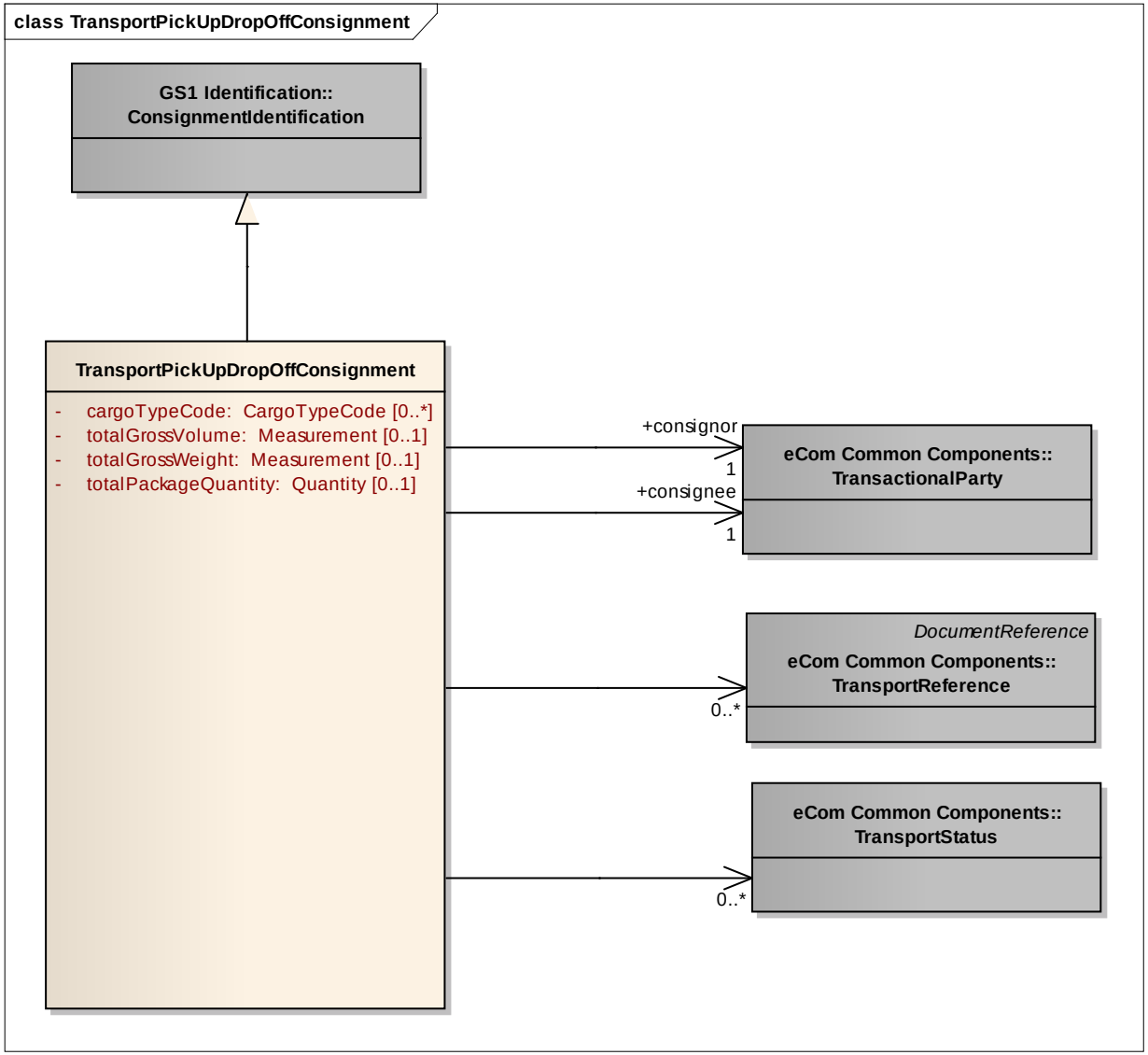
4.3. Transport Pick-Up Drop-off Consignment

Class Diagram



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GDD Report

content	attribute / role	datatype / secondary class	multiplicity	definition	requirements
TransportPickUpDropOffConsignment				Details on the consignment that will be collected or delivered.	BRAD TM - TransportPUDORequest-6
Association	consignee	TransactionalParty	1	The party receiving a consignment of goods.	
Generalization		ConsignmentIdentification		The unique identifier for this consignment.	
Association		TransportStatus	0..*	Details on the transport status of the consignment.	
Association		TransportReference	0..*	References to the commercial transaction or to transport or legal documents related to the consignment.	
Association	consignor	TransactionalParty	1	The party despatching a consignment of goods.	
Attribute	cargoTypeCode	CargoTypeCode	0..*	Code specifying the classification of a type of cargo for example hazardous cargo.	
Attribute	totalGrossVolume	Measurement	0..1	A measure of the volume, normally calculated by multiplying the maximum length, width, and height of the packaged goods.	
Attribute	totalGrossWeight	Measurement	0..1	A measure of the mass of the goods including the weight of transport packaging, and potentially the weight of any transport equipment.	
Attribute	totalPackageQuantity	Quantity	0..1	Total number of logistic units (e.g. pallets) in this transport cargo.	

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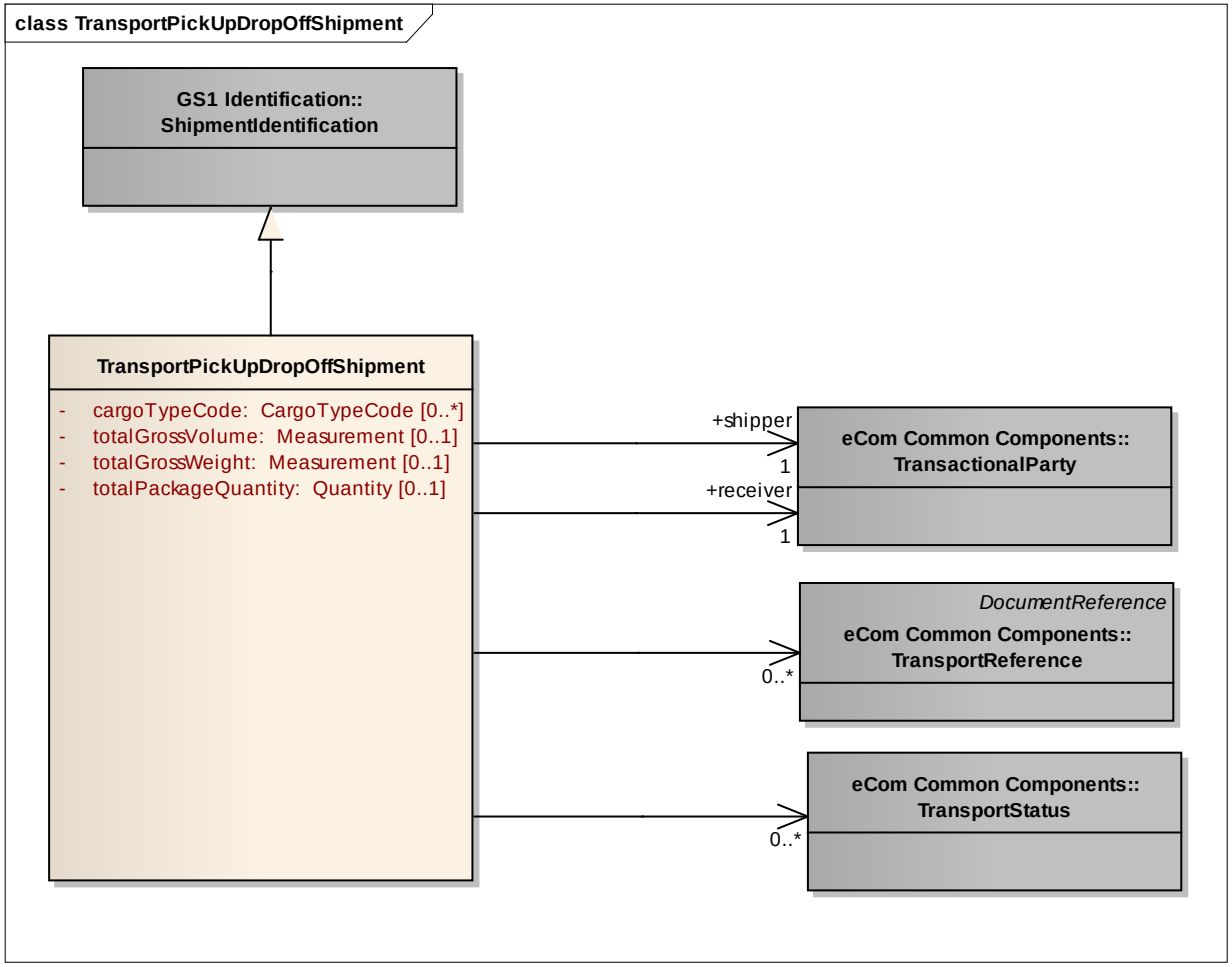
4.4. Transport Pick-up Drop-off Shipment

Class Diagram



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GDD Report

content	attribute / role	datatype / secondary class	multiplicity	definition	requirements
TransportPickUpDropOffShipment				Details on the shipment that will be collected or delivered.	BRAD TM - TransportPUDO Request-6
Generalization		ShipmentIdentification		The unique identifier for this shipment.	
Association		TransportStatus	0..*	Details on the transport status of the shipment.	
Association		TransportReference	0..*	References to the commercial transaction or to transport or legal documents related to the shipment.	
Association	receiver	TransactionalParty	1	A party which engages in receiving this shipment of goods.	
Association	shipper	TransactionalParty	1	A party which engages in shipping this shipment of goods.	
Attribute	cargoTypeCode	CargoTypeCode	0..*	Code specifying the classification of a type of cargo for example hazardous cargo.	
Attribute	totalGrossVolume	Measurement	0..1	A measure of the volume, normally calculated by multiplying the maximum length, width, and height of the packaged goods.	
Attribute	totalGrossWeight	Measurement	0..1	A measure of the mass of the goods including the weight of transport packaging, and potentially the weight of any transport equipment.	
Attribute	totalPackageQuantity	Quantity	0..1	Total number of logistic units (e.g. pallets) in this transport cargo.	

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4.5. Enumerations (message specific)

4.5.1. TransportAppointmentTypeEnumeration

Code	Code Description
PICK_UP	The appointment is for the pick-up of goods.
DROP_OFF	The appointment is for the drop-off of goods.

4.5.2. TransportAppointmentStatusEnumeration

Code	Code Description
CONFIRMED	Confirmation of the pick-up / drop-off slot requested in the Transport Pick-up Drop-off Request.
UPDATED	Update of the pick-up / drop-off slot requested in the Transport Pick-up Drop-off Request.
ALLOCATED	Allocation of a pick-up / drop-off slot without prior request.

4.6. 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
TransportPickUpDropOffShipment TransportPickUpDropOffConsignment	CargoTypeCode	eCom Domain Common Library Business Message (BMS) Release 3.0.0

5. Business Message Examples

5.1. Pick-Up Request for a Consignment

TransportPickUpDropOffRequest	
creationDateTime	**2011-01-12T12:00:00**
documentStatusCode	**ORIGINAL**
transportAppointmentTypeCode	**PICK_UP**
EntityIdentification (+transportPickUpDropOffRequestIdentification)	
uniqueCreatorIdentification	**PUDOR00001**
TransportPickUpDropOffConsignment	
ginc	**7365566156191234567**
TransactionalParty (+consignor)	
gln	**7365566156190**

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TransactionalParty (+consignee)	
gln	**7300011234566**
LogisticEvent (+plannedPickUp)	
DateOptionalTime (+logisticEventDateTime)	
date	**2009-01-13**
time	**09:00:00**
TransportMeans	
transportMeansType	**31**
transportMeansID	**TF-69-XX**
TransportEquipment	
transportEquipmentTypeCode	**14**
ReturnableAssetIdentification(+individualReturnableAssetIdentification)	
grai	**00000000000000**
additionalReturnableAssetIdentification; additionalReturnableAssetIdentificationTypeCode	**TRL-ABC-912;** **OWNER_ASIGNED**
TransactionalParty (+slotRequestor)	
gln	**4048623000003**
TransactionalParty (+slotProvider)	
gln	**7365566156190**

5.2. Pick-Up Confirmation for a Consignment

TransportPickUpDropOffConfirmation	
creationDateTime	**2011-01-12T12:00:00**
documentStatusCode	**ORIGINAL**
transportAppointmentTypeCode	**PICK_UP**
transportAppointmentStatusCode	**CONFIRMED**
EntityIdentification (+transportPickUpDropOffConfirmationIdentification)	
uniqueCreatorIdentification	**PUDOC00001**
LogisticEvent (+plannedPickUp)	
DateOptionalTime (+logisticEventDateTime)	
date	**2009-01-13**
time	**09:00:00**
LogisticLocation	
gln	**7365566156190**
subLocationIdentification	**Dockdoor-23**
TransportPickUpDropOffConsignment	

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ginc	**7365566156191234567**
TransactionalParty (+consignor)	
gln	**7365566156190**
TransactionalParty (+consignee)	
gln	**7300011234566**
TransactionalParty (+slotRequestor)	
gln	**4048623000003**
TransactionalParty (+slotProvider)	
gln	**7365566156190**
DocumentReference (+transportPickUpDropOffRequest)	
uniqueCreatorIdentification	**PUDOR00001**

6. Implementation Considerations

Not Applicable

7. Appendices

Not Applicable

8. Summary of Changes

8.1. BMS Release 3.0

First publication

8.2. BMS Release 3.1

Change	BSD Version	Associated CR Number
▪ TransportPickUpDropOffRequest: changed cardinality of association to Consignment from 0..1 to 0..* ▪ TransportPickUpDropOffConfirmation: changed cardinality of association to Consignment from 0..1 to 0..*	Draft 1	WR 12-195

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