



# Transport Status Request and Notification

## Business Message Standard (BMS)

*Release 3.2*

*01-Dec-2014, Issue 1*





## Document Summary

Document Item	Current Value
Document Title	Business Message Standard (BMS) - Transport Status Request and Notification
BMS Release	3.2
Document Version	Issue 1, 01-Dec-2014
Work Group Name	eCom SMG
BMS Template Version	2.4

## Work Request Reference

Date of WR Submission to GSMP:	WR Submitter(s):	Refer to Work Request (WR) Number(s):
02-Jul-2012	GS1 Germany	12-000193
02-Jul-2012	GS1 Germany	12-000194
02-Jul-2012	GS1 Germany	12-000195
02-Jul-2012	GS1 Germany	12-000196
02-Jul-2012	GS1 Germany	12-000197
25-Jun-2014	GS1 Global Office	14-000110

## Business Requirements Document (BRAD) Reference

BRAD Title	BRAD Issue Date	BRAD Version
Transport Management		1.0

## Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change
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



## Disclaimer

WHILST EVERY EFFORT HAS BEEN MADE TO ENSURE THAT THE GUIDELINES TO USE THE GS1 STANDARDS CONTAINED IN THE DOCUMENT ARE CORRECT, GS1 AND ANY OTHER PARTY INVOLVED IN THE CREATION OF THE DOCUMENT HEREBY STATE THAT THE DOCUMENT IS PROVIDED WITHOUT WARRANTY, EITHER EXPRESSED OR IMPLIED, REGARDING ANY MATTER, INCLUDING BUT NOT LIMITED TO THE OF ACCURACY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND HEREBY DISCLAIM ANY AND ALL LIABILITY, DIRECT OR INDIRECT, FOR ANY DAMAGES OR LOSS RELATING TO OR RESULTING FROM THE USE OF THE DOCUMENT. THE DOCUMENT MAY BE MODIFIED, SUBJECT TO DEVELOPMENTS IN TECHNOLOGY, CHANGES TO THE STANDARDS, OR NEW LEGAL REQUIREMENTS. SEVERAL PRODUCTS AND COMPANY NAMES MENTIONED HEREIN MAY BE TRADEMARKS AND/OR REGISTERED TRADEMARKS OF THEIR RESPECTIVE COMPANIES. GS1 IS A REGISTERED TRADEMARK OF GS1 AISBL.



# Table of Contents

<b>1. Business Domain View</b>	<b>6</b>
1.1. Introduction	6
1.2. References	6
<b>2. Business Context</b>	<b>7</b>
<b>3. Business Transaction View</b>	<b>7</b>
3.1. Business Transaction – Request Transport Status	7
3.2. Report Transport Status	8
<b>4. Business Information View</b>	<b>11</b>
4.1. Transport Status Request (message)	11
4.1.1. Transport Status Request – Consignment	13
4.1.2. Transport Status Request – Shipment	15
4.1.3. Transport Status Request - Logistic Unit	16
4.1.4. Transport Status Request - Transport Equipment	17
4.1.5. Transport Status Request - Transport Means	18
4.2. Transport Status Notification (message)	20
4.2.1. Transport Status Notification – Consignment	23
4.2.2. Transport Status Notification – Shipment	26
4.2.3. Transport Status Notification - Logistic Unit	28
4.2.4. Transport Status Notification - Transport Equipment	30
4.2.5. Transport Status Notification - Transport Means	32
4.2.6. Transport Status Notification - Transport Movement	34
4.3. Code Lists	37
<b>5. Business Message Examples</b>	<b>38</b>
5.1. Example 1	38
5.2. Example 2	39
5.3. Example 3	40
<b>6. Implementation Considerations</b>	<b>43</b>
6.1. User Guide	43
6.2. Message Specific Considerations	43
<b>7. Summary of Changes</b>	<b>43</b>
7.1. BMS Release 3.0	43
7.2. BMS Release 3.1	43
7.3. BMS Release 3.2	44
<b>8. Appendices</b>	<b>45</b>
<b>9. Acknowledgements</b>	<b>45</b>



9.1.1.	Work Group .....	45
9.1.2.	Development Team Members .....	46

# 1. Business Domain View

## 1.1. Introduction

### Message Definition

#### Transport Status Request Message Definition

Message requesting information on the transport status and movements of a transport related object.

#### Transport Status Notification Message Definition

This scenario allows for the exchange of information regarding the status of transport execution progress at any point (in time or place) within the full transport chain.

### Principles

A status message may be sent:

- as the result of a request or requests for information (through the Transport Status Request message) regarding a consignment or consignments;
- on a scheduled basis at predetermined times;
- on the occurrence of a selected event or events;
- on the occurrence of an exceptional event as agreed by the partners involved.

The status message can relate to a status (or statuses) that has (or have) been reached in a transport chain. Additionally, the message may report an exceptional status and the reason for that exceptional status.

In general the exchange of Transport Status Request and Transport Status Notification messages is optional and to be agreed between the LSC and LSP. However, normally at least one Transport Status message is provided by the LSP to the LSC and/or any other agreed party to inform those parties on the final delivery of the goods.

Current technology of IT devices installed on transport means or transport equipment (usually known as vehicle or assets track devices) allows to measure and communicate a set of parameters, such as:

- Temperature
- Position (GPS latitude and longitude)
- Speed
- Engine on/off
- Door status: open/closed
- Refrigeration system on/off
- Etc.

The Transport Status Notification message supports the inclusion of this kind of information.

## 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)

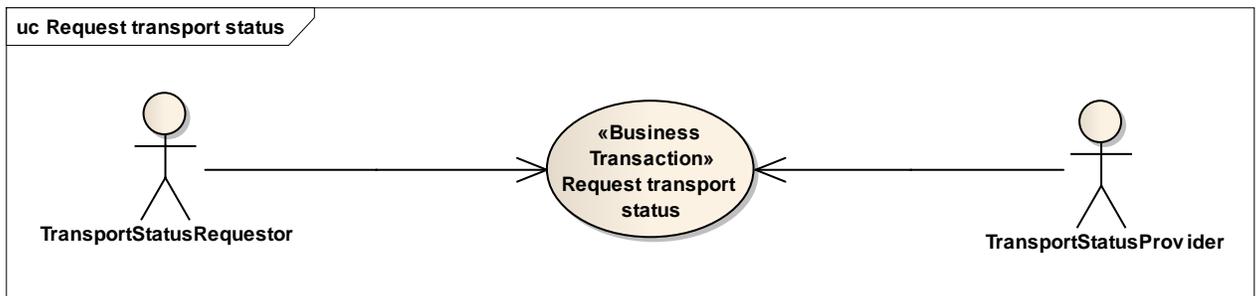
## 2. Business Context

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 – Request Transport Status

#### Use Case Diagram



#### Use Case Description

<b>Use Case ID</b>	UC-1
<b>Use Case Name</b>	Request transport status
<b>Use Case Description</b>	To request information regarding the status of transport execution progress.
<b>Actors (Goal)</b>	Transport Status Requestor Transport Status Provider
<b>Performance Goals</b>	Not applicable
<b>Preconditions</b>	Interoperation agreement is in place.
<b>Post conditions</b>	Transport status request has been received by the LSS

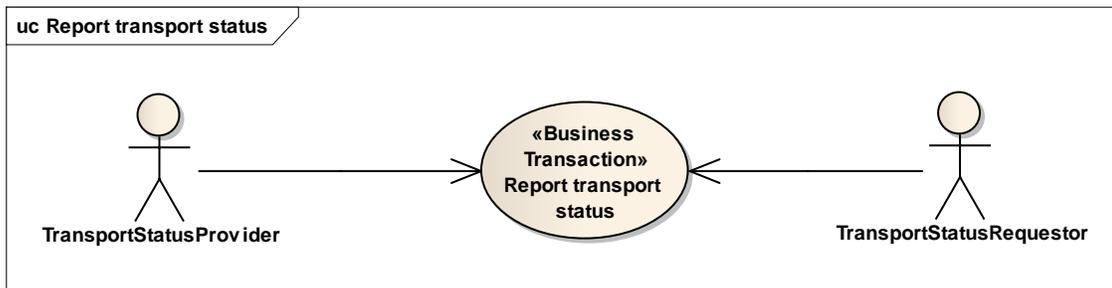
<b>Scenario</b>	Begins when the transport status requestor determines a transport status update is needed. Continues with... <table border="1" style="margin: 10px auto; width: 80%;"> <thead> <tr> <th style="background-color: #1a3d4d; color: white;">Step #</th> <th style="background-color: #1a3d4d; color: white;">Actor</th> <th style="background-color: #1a3d4d; color: white;">Activity Step</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Requestor</td> <td>Issues a transport status request</td> </tr> <tr> <td>2</td> <td>Provider</td> <td>Receives the transport status request</td> </tr> </tbody> </table> Ends when the LSS has processed the transport status request in the transport management system.	Step #	Actor	Activity Step	1	Requestor	Issues a transport status request	2	Provider	Receives the transport status request
Step #	Actor	Activity Step								
1	Requestor	Issues a transport status request								
2	Provider	Receives the transport status request								
<b>Alternative Scenario</b>	Not applicable									
<b>Related Requirements</b>	Not applicable									
<b>Related Rules</b>	Not applicable									

### Activity Diagram(s)

Not applicable

## 3.2. Report Transport Status

### Use Case Diagram



### Use Case Description

<b>Use Case ID</b>	UC-2
<b>Use Case Name</b>	Report transport status
<b>Use Case Description</b>	Transport Status: The main objective is to report the transport status between the transport status requestor and the transport status provider. Information on Delivery: The main objective is for the logistics services seller to inform the logistics services buyer on the final execution status of deliveries specified in a transport instruction.
<b>Actors (Goal)</b>	Transport Status Requestor Transport Status Provider
<b>Performance Goals</b>	Not applicable

<b>Preconditions</b>	Either: The transport status provider did receive a transport status request; Or A pre-agreed event type or time interval determines when a transport status notification needs to be sent.  Furthermore: The requesting party is indeed entitled to the transport status information.												
<b>Post conditions</b>	Transport status notification has been received by the transport status requestor.												
<b>Scenario</b>	Begins when the transport status provider receives a request. Continues with... <table border="1" data-bbox="500 674 1430 852"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Provider</td> <td>Issues a transport status notification</td> </tr> <tr> <td>2</td> <td>Requestor</td> <td>Receives the transport status notification</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> Ends when the requestor has processed the transport status notification.	Step #	Actor	Activity Step	1	Provider	Issues a transport status notification	2	Requestor	Receives the transport status notification			
Step #	Actor	Activity Step											
1	Provider	Issues a transport status notification											
2	Requestor	Receives the transport status notification											
<b>Alternative Scenario</b>	Begins when the transport status provider determines it is time to send a transport status notification. Continues with... <table border="1" data-bbox="500 1035 1430 1213"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Provider</td> <td>Issues a transport status notification</td> </tr> <tr> <td>2</td> <td>Requestor</td> <td>Receives the transport status notification</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> Ends when the requestor has processed the transport status notification.	Step #	Actor	Activity Step	1	Provider	Issues a transport status notification	2	Requestor	Receives the transport status notification			
Step #	Actor	Activity Step											
1	Provider	Issues a transport status notification											
2	Requestor	Receives the transport status notification											
<b>Related Requirements</b>	Not applicable												
<b>Related Rules</b>	Not applicable												

### Activity Diagram(s)

Not applicable

Sequence Diagram(s)

Figure: Report Transport Status with prior request

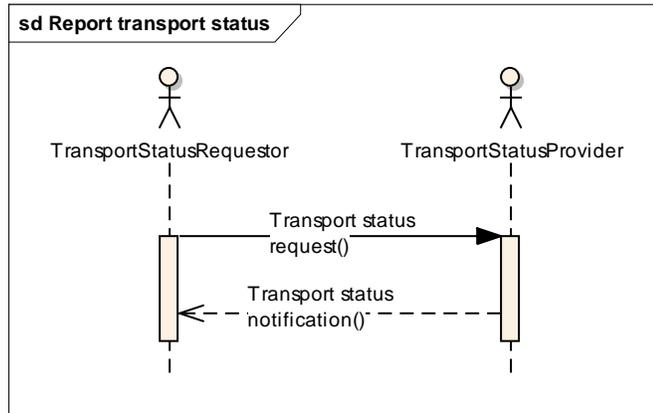
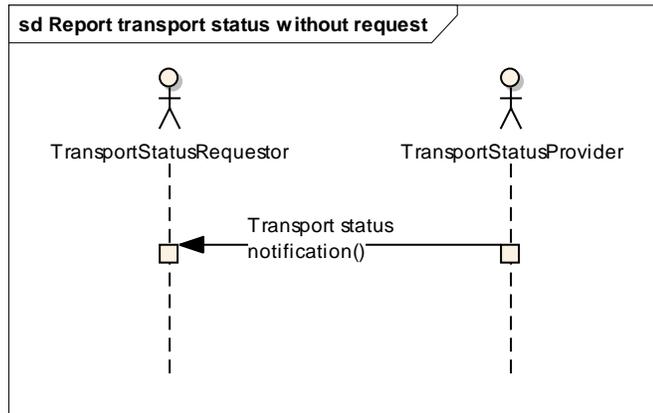


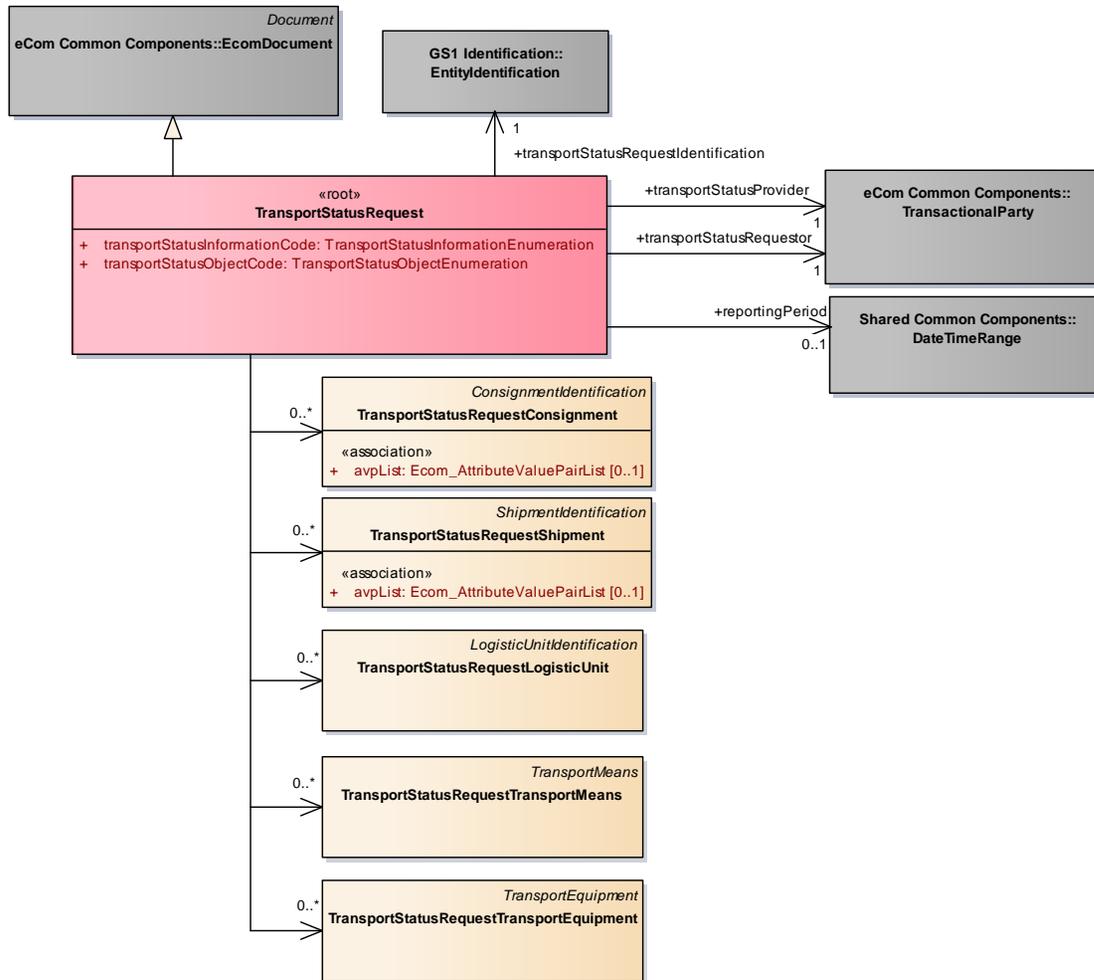
Figure: Report Transport Status without prior request



## 4. Business Information View

### 4.1. Transport Status Request (message)

#### Class Diagram



## GDD Report

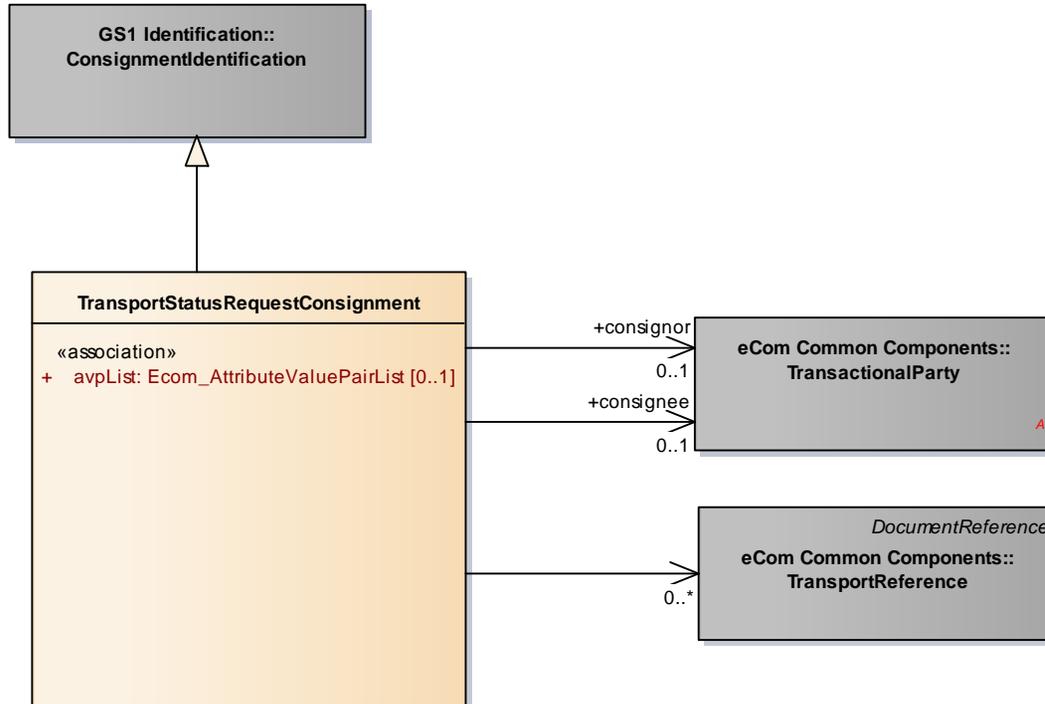
The content of the TransportStatusRequest class, its structure and component definitions can be accessed in the Global Data Dictionary: [http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusRequest](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusRequest)

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
TransportStatusRequest				Message requesting information on the transport status and movements of a transport related object.	
Association		TransportStatusRequestShipment	0..*	Information identifying the shipment for which transport status information is being requested.	
Association	transportStatusProvider	TransactionalParty	1..1	A party that provides transport status information to another party.	
Association		TransportStatusRequestTransportEquipment	0..*	Information identifying the piece of transport equipment for which transport status information is being requested.	
Association		TransportStatusRequestLogisticUnit	0..*	Information identifying the logistic unit for which transport status information is being requested.	
Association		TransportStatusRequestTransportMeans	0..*	Information identifying the transport means for which transport status information is being requested.	
Generalization		EcomDocument		Basic information about the content of the message including version number, creation date and time.	WR 14-000110
Association	reportingPeriod	DateTimeRange	0..1	The date time range for which transport status information is being requested.	BRAD new requirement
Association		TransportStatusRequestConsignment	0..*	Information identifying the consignment for which transport status information is being requested.	
Association	transportStatusRequestor	TransactionalParty	1..1	A party that requests transport status information from another party.	
Association	transportStatusRequestIdentification	EntityIdentification	1..1	The identification of the transport status request document.	

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
Attribute	transportStatusInformationCode	TransportStatusInformationEnumeration	1..1	Code specifying the type of transport status information that is being requested. Example: STATUS_ONLY.	
Attribute	transportStatusObjectCode	TransportStatusObjectEnumeration	1..1	Code specifying the type of object for which transport status information is being requested. Example: CONSIGNMENT.	

#### 4.1.1. Transport Status Request – Consignment

##### Class Diagram



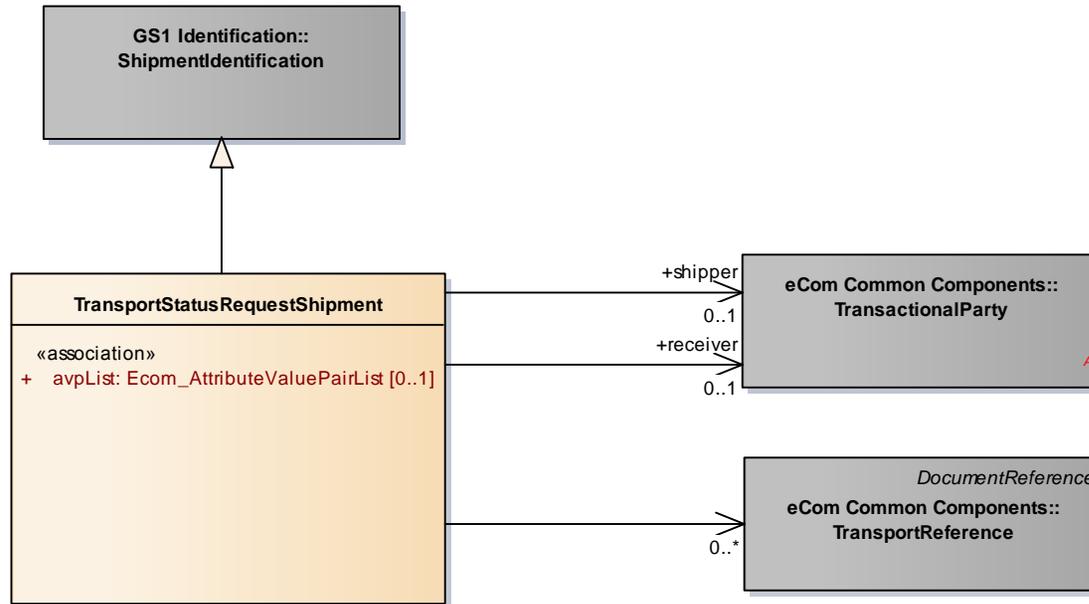
## GDD Report

The content of the TransportStatusRequestConsignment 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:TransportStatusRequestConsignment](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusRequestConsignment)

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
TransportStatusRequestConsignment				Information identifying the consignment for which transport status information is being requested.	
Association	consignor	TransactionalParty	0..1	The party despatching a consignment of goods.	BRAD TM CON1
Generalization		ConsignmentIdentification		The unique identifier for this consignment.	BRAD TM CON3
Association	consignee	TransactionalParty	0..1	The party receiving a consignment of goods.	BRAD TM CON1
Association		TransportReference	0..*	References to the commercial transaction or to transport or legal documents related to the consignment.	BRAD TM CON19
Attribute	avpList	Ecom_AttributeValuePairList	0..1	Temporary attributes introduced between minor versions.	WR 14-000110

## 4.1.2. Transport Status Request – Shipment

### Class Diagram



### GDD Report

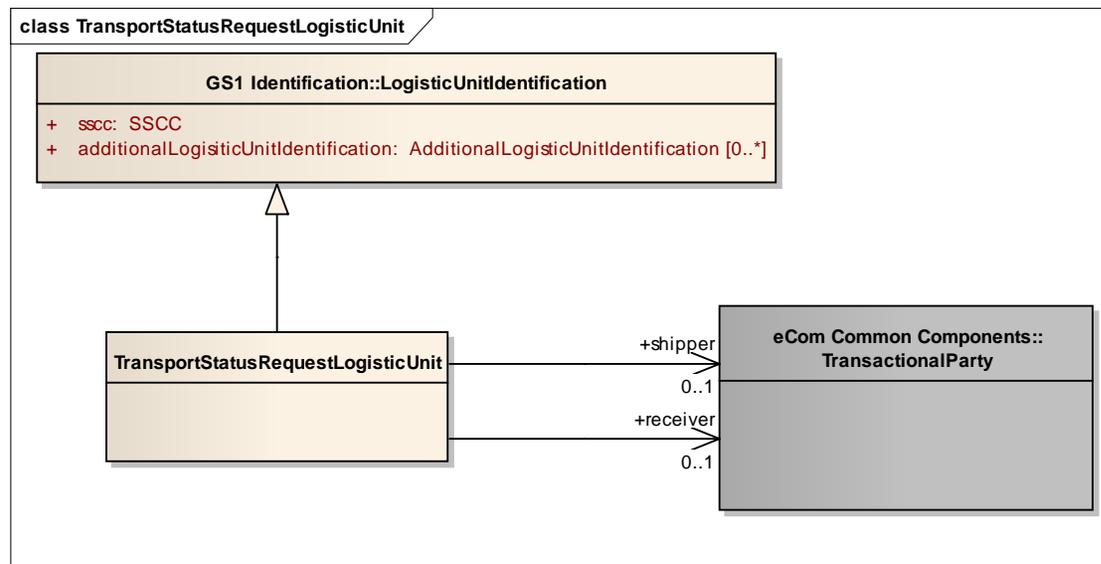
The content of the TransportStatusRequestShipment class, its structure and component definitions can be accessed in the Global Data Dictionary: [http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusRequestShipment](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusRequestShipment)

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
TransportStatusRequestShipment				Information identifying the shipment for which transport status information is being requested.	
Association	shipper	TransactionalParty	0..1	A party which engages in shipping this shipment of goods.	BRAD TM SHM1
Association	receiver	TransactionalParty	0..1	A party which engages in receiving this shipment of goods.	BRAD TM SHM1

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
Generalization		ShipmentIdentification		The unique identifier for this shipment.	BRAD TM SHM4
Association		TransportReference	0..*	References to the commercial transaction or to transport and legal documents related to the shipment.	BRAD TM SHM16
Attribute	avpList	Ecom_AttributeValuePairList	0..1	Temporary attributes introduced between minor versions.	WR 14-000110

### 4.1.3. Transport Status Request - Logistic Unit

#### Class Diagram



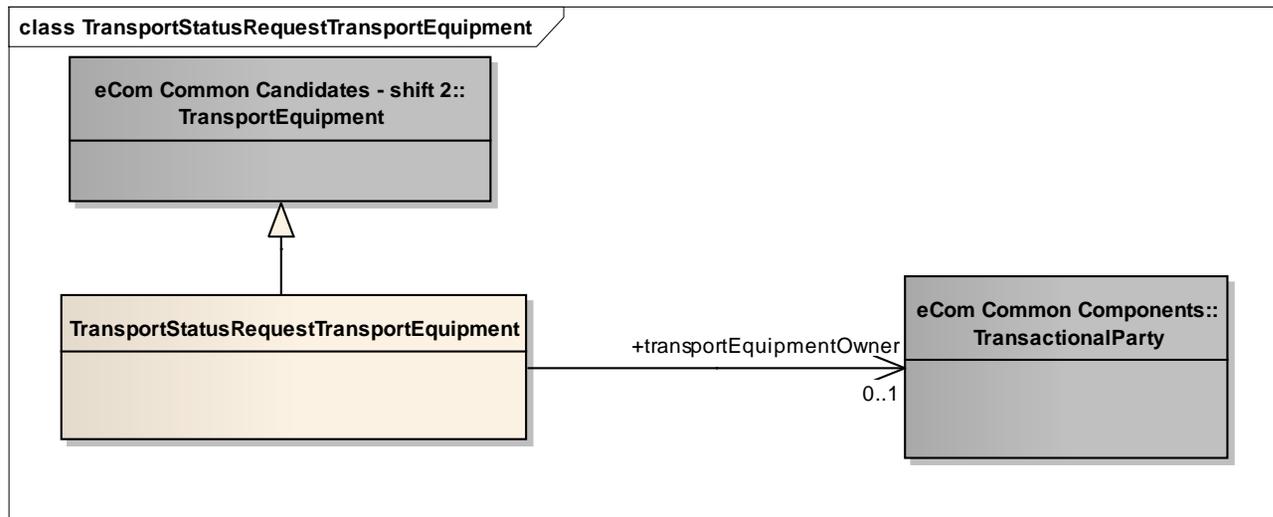
## GDD Report

The content of the TransportStatusRequestLogisticUnit 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:TransportStatusRequestLogisticUnit](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusRequestLogisticUnit)

Content	Multiplicity	Attribute / Role	Datatype /Secondary class	Definition	Requirements
TransportStatusRequestLogisticUnit				Information identifying the logistic unit for which transport status information is being requested.	
Generalization			LogisticUnitIdentification	The unique identifier for this logistic unit.	
Association	0..1	shipper	TransactionalParty	A party which engages in shipping this shipment of goods.	
Association	0..1	receiver	TransactionalParty	A party which engages in receiving this shipment of goods.	

### 4.1.4. Transport Status Request - Transport Equipment

#### Class Diagram



## GDD Report

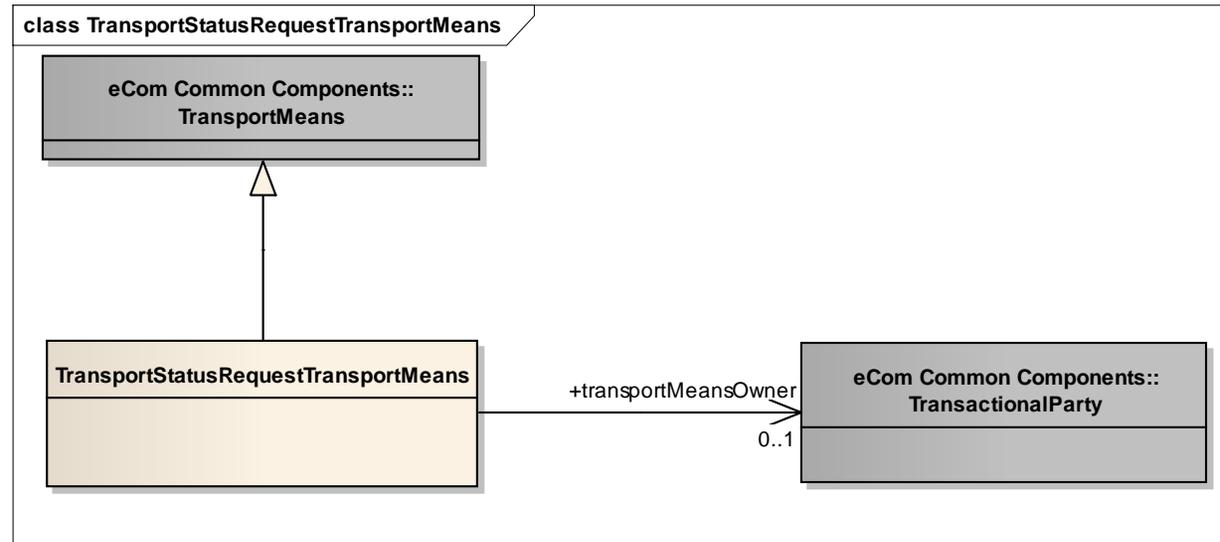
The content of the TransportStatusRequestTransportEquipment class, its structure and component definitions can be accessed in the Global Data Dictionary:

[http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusRequestTransportEquipment](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusRequestTransportEquipment)

Content	Multiplicity	Attribute / Role	Datatype /Secondary class	Definition	Requirements
TransportStatusRequestTransportEquipment				Information identifying the piece of transport equipment for which transport status information is being requested.	
Generalization			TransportEquipment	Details describing and identifying the piece of transport equipment.	BRAD TM TEQ1,7
Association	0..1	transportEquipmentOwner	TransactionalParty	The party who owns the piece of transport equipment.	BRAD TM - new requirement

### 4.1.5. Transport Status Request - Transport Means

#### Class Diagram



## GDD Report

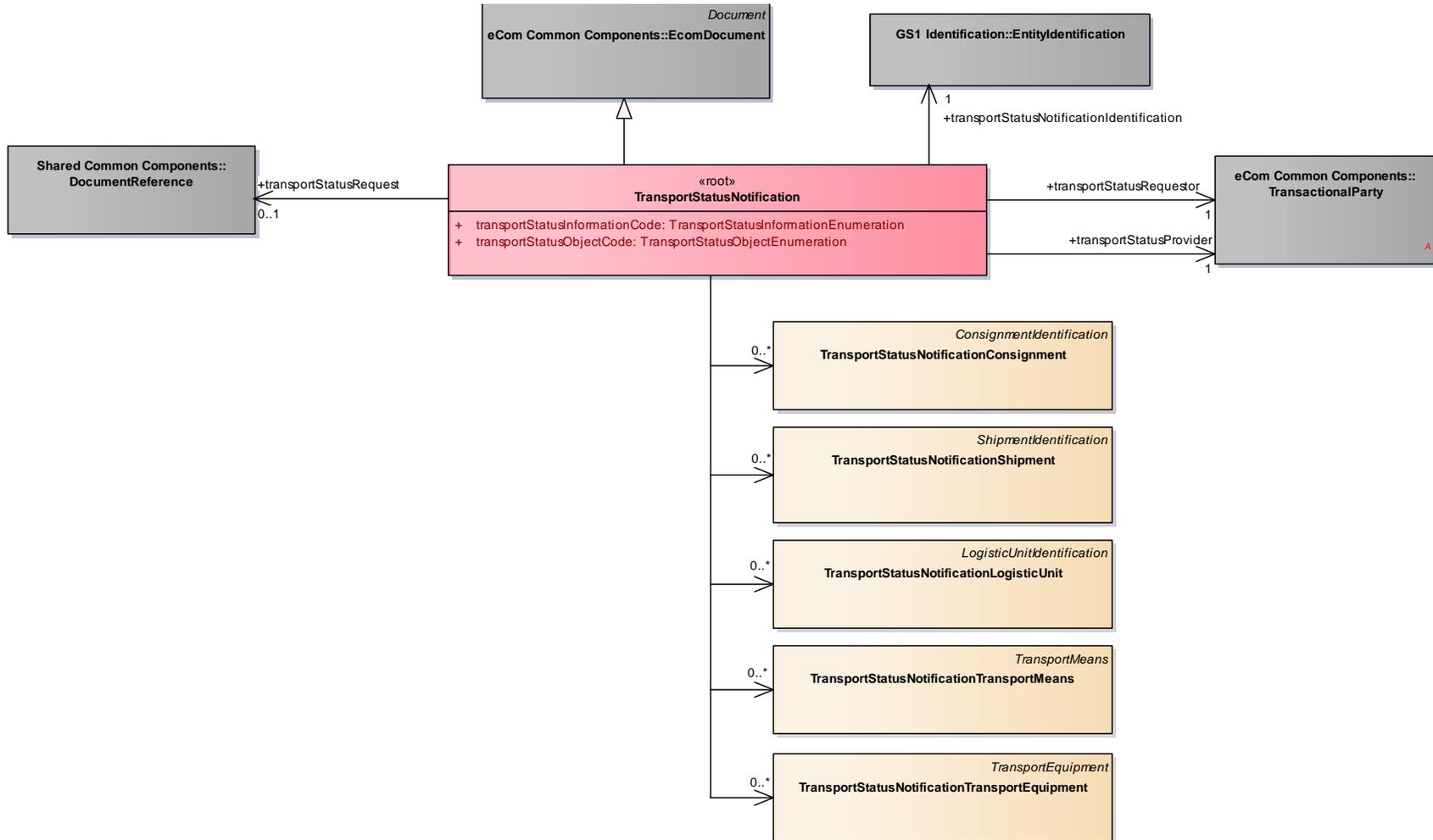
The content of the TransportStatusRequestTransportMeans class, its structure and component definitions can be accessed in the Global Data Dictionary:

[http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusRequestTransportMeans](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusRequestTransportMeans)

Content	Multiplicity	Attribute / Role	Datatype /Secondary class	Definition	Requirements
TransportStatusRequestTransportMeans				Information identifying the transport means for which transport status information is being requested.	
Generalization			TransportMeans	Details describing and identifying the transport means.	BRAD TM TME1,2,3
Association	0..1	transportMeansOwner	TransactionalParty	The party who owns the transport means	BRAD TM - new requirement

## 4.2. Transport Status Notification (message)

### Class Diagram



## GDD Report

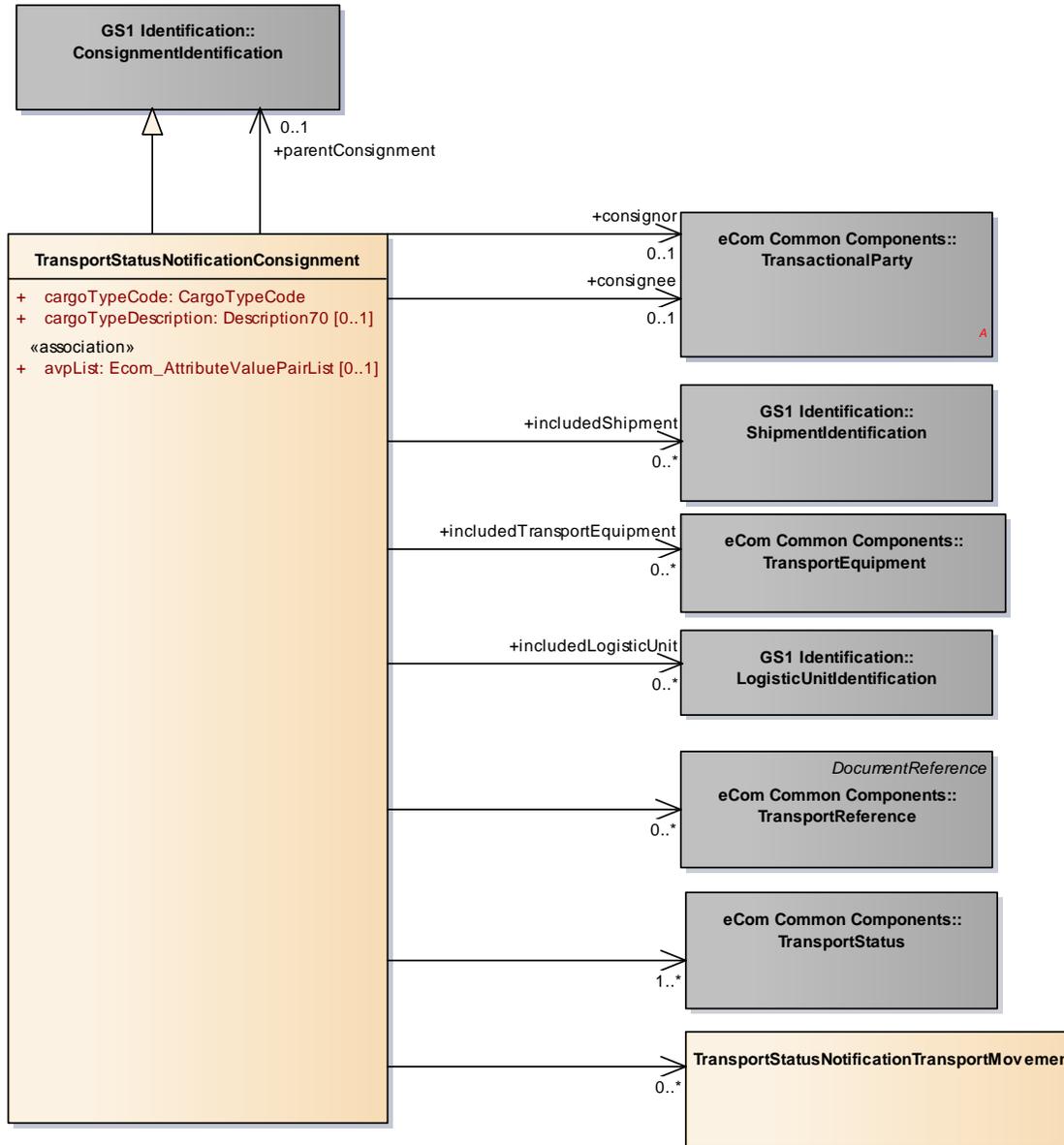
The content of the TransportStatusNotification class, its structure and component definitions can be accessed in the Global Data Dictionary: [http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusNotification](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusNotification)

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
TransportStatusNotification				Message providing information on the transport status and movements of a transport related object.	
Association		TransportStatusNotificationShipment	0..*	Information on the status and movements of a shipment.	
Association	transportStatusRequestor	TransactionalParty	1..1	A party that requests transport status information from another party.	
Association		TransportStatusNotificationLogisticUnit	0..*	Information on the status and movements of a logistic unit.	
Association		TransportStatusNotificationConsignment	0..*	Information on the status and movements of a consignment.	
Association	transportStatusNotificationIdentification	EntityIdentification	1..1	The identification of the transport status notification document.	
Association	transportStatusRequest	DocumentReference	0..1	Optional reference to the transport status request that triggered the sending of the transport status notification.	
Association		TransportStatusNotificationTransportEquipment	0..*	Information on the status, movements and event log of one or more pieces of transport equipment.	
Association		TransportStatusNotificationTransportMeans	0..*	Information on the status, movements and event log of one or more means of transport.	
Generalization		EcomDocument		Basic information about the content of the message including version number, creation date and time.	WR 14-000110
Association	transportStatusProvider	TransactionalParty	1..1	A party that provides transport status information to another party.	

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
Attribute	transportStatusInformationCode	TransportStatusInformationEnumeration	1..1	Code specifying the type of transport status information that is being reported. Example: STATUS_ONLY.	
Attribute	transportStatusObjectCode	TransportStatusObjectEnumeration	1..1	Code specifying the type of object for which transport status information is being reported. Example: CONSIGNMENT.	

## 4.2.1. Transport Status Notification – Consignment

### Class Diagram



## GDD Report

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

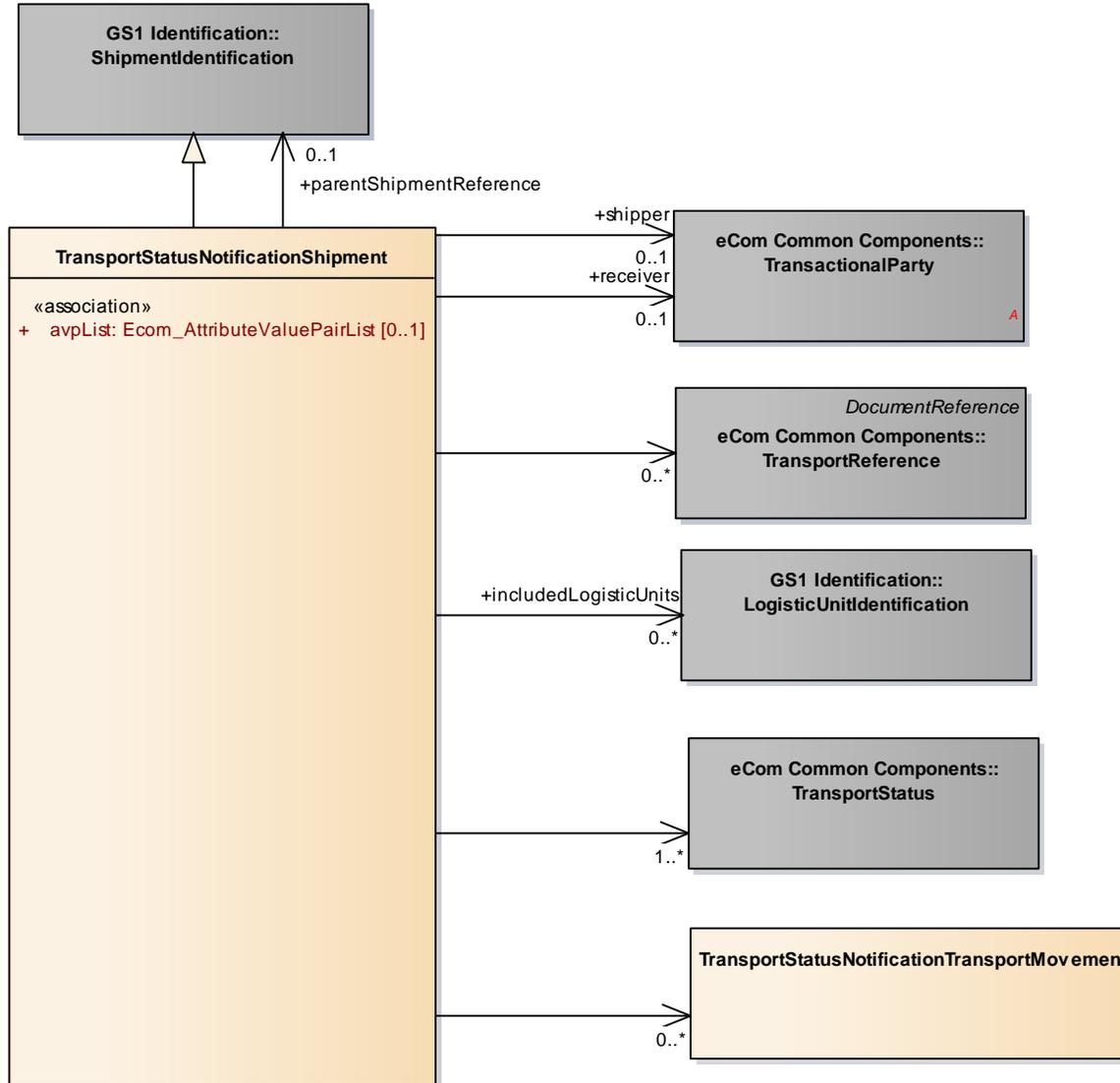
[http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusNotificationConsignment](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusNotificationConsignment)

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
TransportStatusNotificationConsignment				Information on the status and movements of a consignment.	
Association		TransportReference	0..*	References to the commercial transaction or to transport or legal documents related to the consignment.	BRAD TM CON19
Association	parentConsignment	ConsignmentIdentification	0..1	Reference to a consignment that contains this consignment (and several other consignments)	BRAD TM CON22
Association		TransportStatusNotificationTransportMovement	0..*	The transport movement details for this consignment.	
Association	includedShipment	ShipmentIdentification	0..*	Reference to the shipment(s) contained in this consignment.	BRAD TM CON28
Association	consignee	TransactionalParty	0..1	The party receiving a consignment of goods.	BRAD TM CON1
Association	consignor	TransactionalParty	0..1	The party despatching a consignment of goods.	BRAD TM CON1
Association		TransportStatus	1..*	The transport status details for this consignment.	
Association	includedLogisticUnit	LogisticUnitIdentification	0..*	Identification of the logistic units contained in the consignment.	
Association	includedTransportEquipment	TransportEquipment	0..*	Details on the transport equipment contained in the consignment.	
Generalization		ConsignmentIdentification		The unique identifier for this consignment.	BRAD TM CON2

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
Attribute	cargoTypeCode	CargoTypeCode	1..1	Code specifying the classification of a type of cargo for example hazardous cargo.	BRAD CON8, CIT4, SHI4
Attribute	cargoTypeDescription	Description70	0..1	Free text specifying the classification of a type of cargo.	BRAD CON8, CIT4, SHI5
Attribute	avpList	Ecom_AttributeValuePairList	0..1	Temporary attributes introduced between minor versions.	WR 14-000110

## 4.2.2. Transport Status Notification – Shipment

### Class Diagram



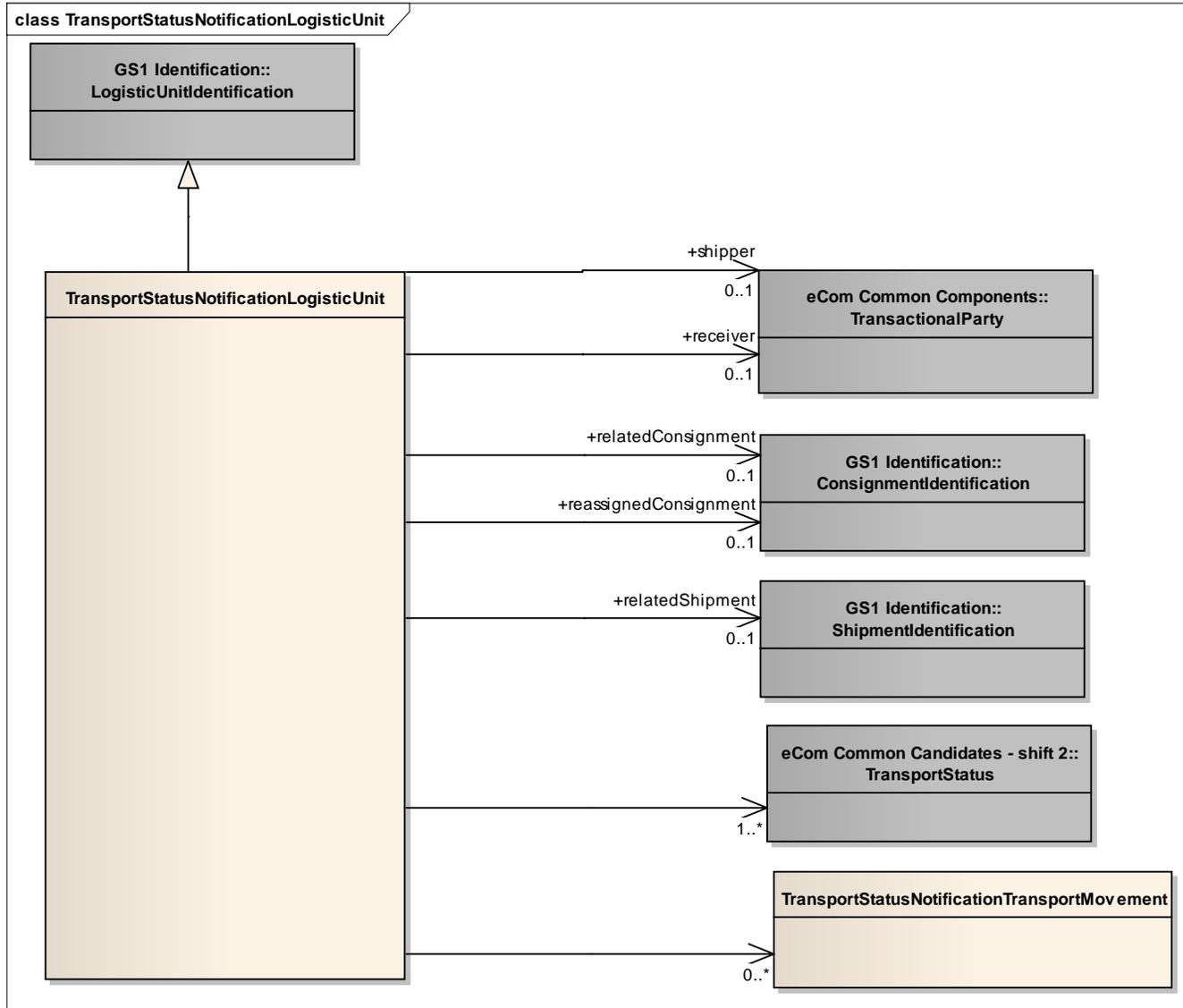
## GDD Report

The content of the TransportStatusNotificationShipment 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:TransportStatusNotificationShipment](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusNotificationShipment)

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
TransportStatusNotificationShipment				Information on the status and movements of a shipment.	
Association	receiver	TransactionalParty	0..1	A party which engages in receiving this shipment of goods.	BRAD TM SHM1
Association		TransportStatusNotificationTransportMovement	0..*	The transport movement details for this shipment.	BRAD TM SHM3
Association		TransportReference	0..*	References to the commercial transaction or to transport or legal documents related to the shipment.	BRAD TM SHM16
Association		TransportStatus	1..*	The transport status details for this shipment.	
Association	shipper	TransactionalParty	0..1	A party which engages in shipping this shipment of goods.	BRAD TM SHM1
Association	parentShipmentReference	ShipmentIdentification	0..1	The unique identifier of a shipment in which this shipment is included.	
Association	includedLogisticUnits	LogisticUnitIdentifications	0..*	Identification of the logistic units contained in the shipment.	
Generalization		ShipmentIdentification		The unique identifier for this shipment.	BRAD TM SHM4
Attribute	avpList	Ecom_AttributeValuePairList	0..1	Temporary attributes introduced between minor versions.	WR 14-000110

### 4.2.3. Transport Status Notification - Logistic Unit

#### Class Diagram



## GDD Report

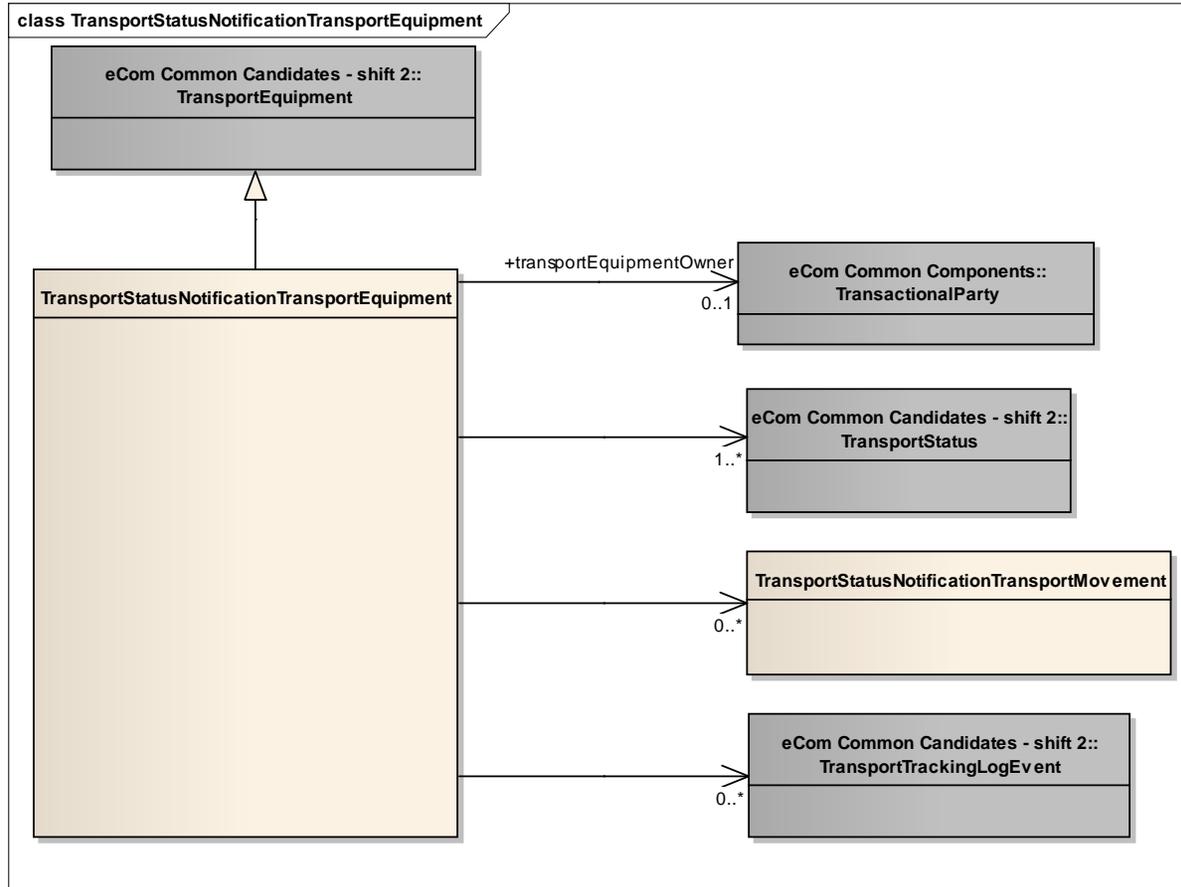
The content of the TransportStatusNotificationLogisticUnit class, its structure and component definitions can be accessed in the Global Data Dictionary:

[http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusNotificationLogisticUnit](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusNotificationLogisticUnit)

Content	Datatype /Secondary class	Attribute / Role	Multiplicity	Definition	Requirements
TransportStatusNotificationLogisticUnit				Information on the status and movements of a logistic unit.	
Association	ShipmentIdentification	relatedShipment	0..1	Identification of the shipment in which the logistic unit is contained.	
Association	ConsignmentsIdentification	reassignedConsignments	0..1	Identification of the consignment to which the logistic unit has been reassigned.	
Association	TransactionalParty	shipper	0..1	A party which engages in shipping this logistic unit.	
Association	TransactionalParty	receiver	0..1	A party which engages in receiving this logistic unit.	
Association	TransportStatus		1..*	The transport status details for this logistic unit.	
Association	TransportStatusNotificationTransportMovement		0..*	The transport movement details for this logistic unit.	
Generalization	LogisticUnitIdentification			The unique identifier for this logistic unit.	
Association	ConsignmentsIdentification	relatedConsignments	0..1	Identification of the consignment in which the logistic unit is contained.	

## 4.2.4. Transport Status Notification - Transport Equipment

### Class Diagram



## GDD Report

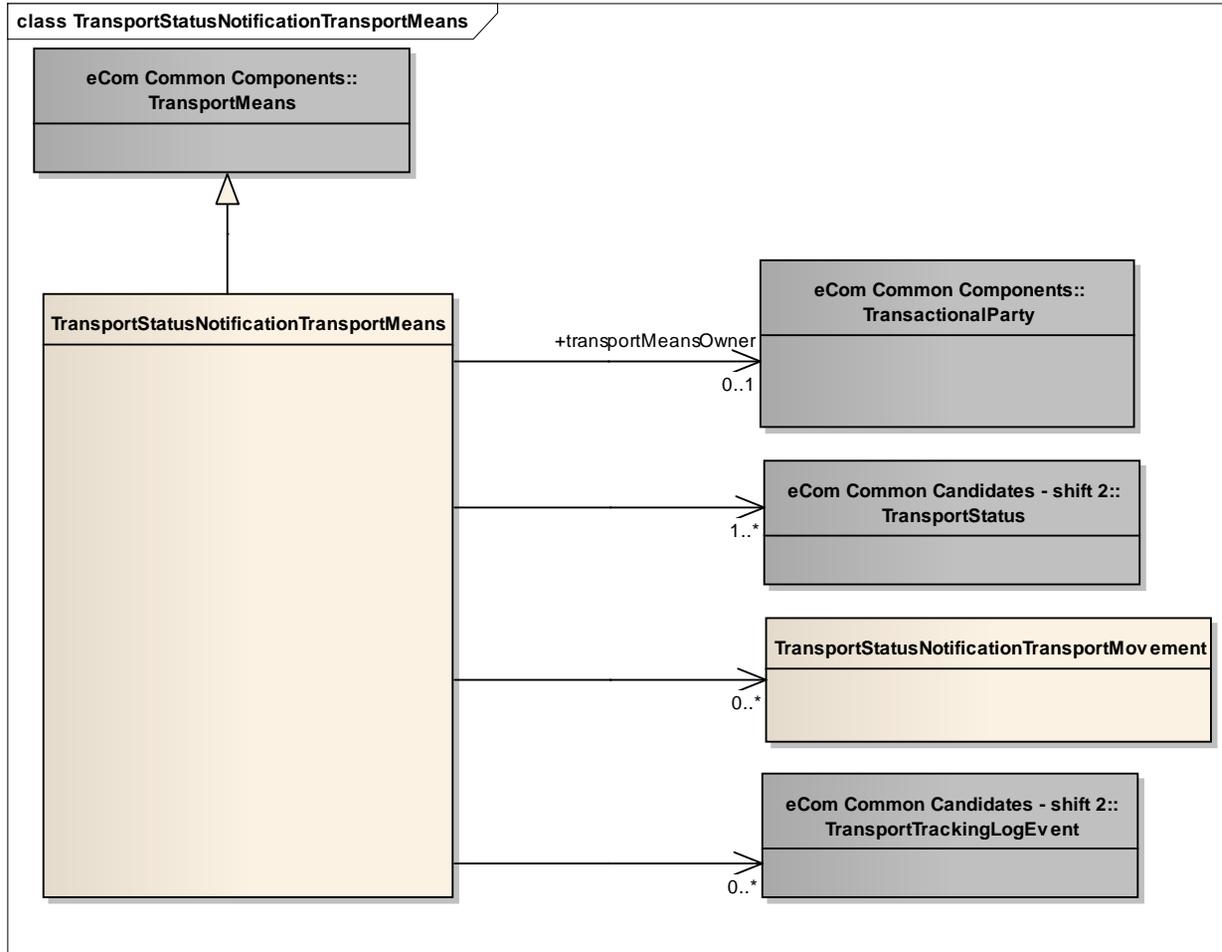
The content of the TransportStatusNotificationTransportEquipment class, its structure and component definitions can be accessed in the Global Data Dictionary:

[http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusNotificationTransportEquipment](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusNotificationTransportEquipment)

Content	Datatype /Secondary class	Attribute / Role	Multiplicity	Definition	Requirements
TransportStatusNotificationTransportEquipment				Information on the status, movements and event log of a piece of transport equipment.	
Generalization	TransportEquipment			Details describing and identifying the piece of transport equipment.	BRAD TM TEQ1,7
Association	TransactionalParty	transportEquipment Owner	0..1	The party who owns the piece of transport equipment.	BRAD TM - new requirement
Association	TransportStatus		1..*	The transport status details for this piece of transport equipment.	
Association	TransportStatusNotificationTransportMovement		0..*	The transport movement details for this piece of transport equipment.	
Association	TransportTrackingLogEvent		0..*	The transport tracking details for this piece of transport equipment.	

## 4.2.5. Transport Status Notification - Transport Means

### Class Diagram



## GDD Report

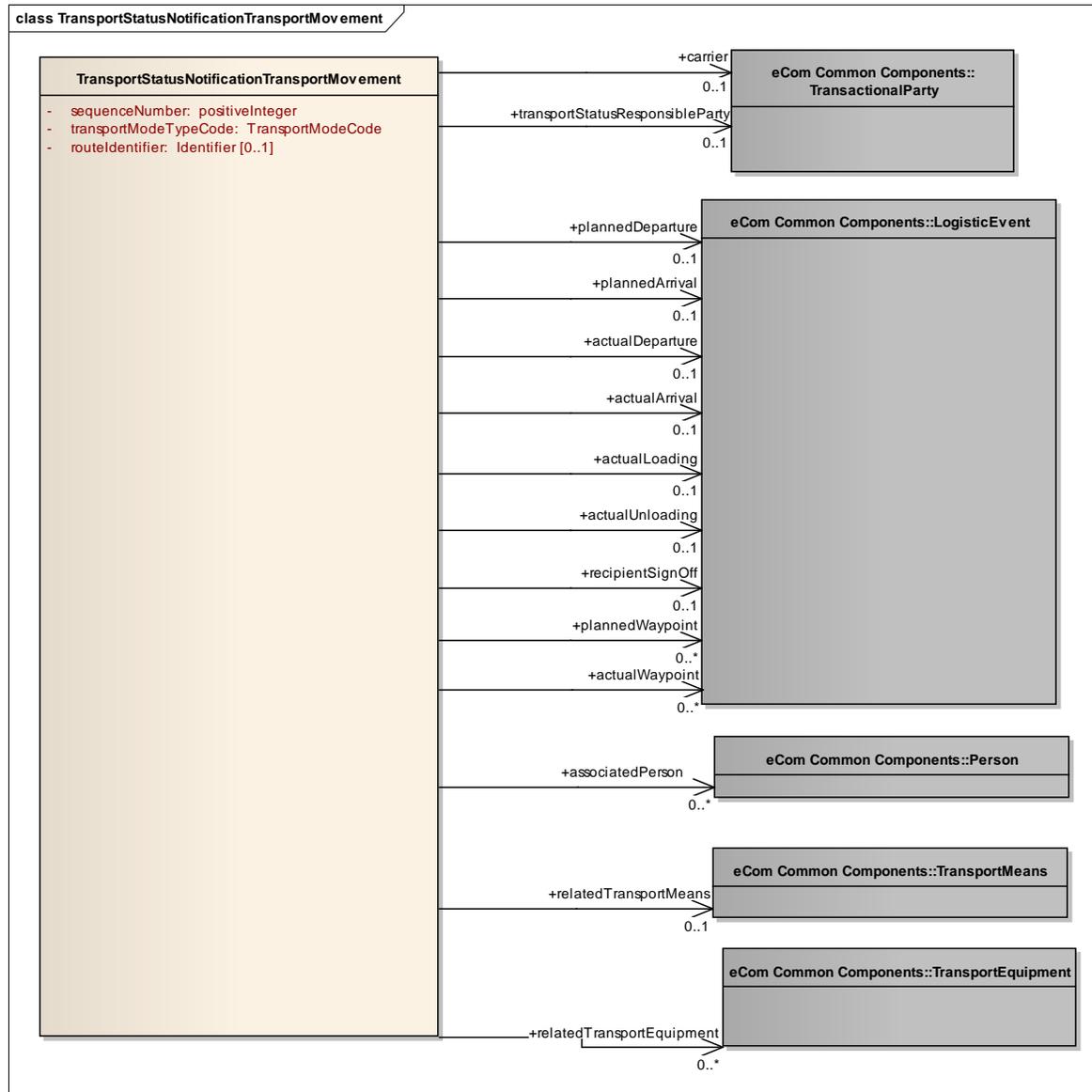
The content of the TransportStatusNotificationTransportMeans class, its structure and component definitions can be accessed in the Global Data Dictionary:

[http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusNotificationTransportMeans](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusNotificationTransportMeans)

Content	Datatype /Secondary class	Attribute / Role	Multiplicity	Definition	Requirements
TransportStatusNotificationTransportMeans				Information on the status, movements and event log of a transport means.	
Generalization	TransportMeans			Details describing and identifying the transport means.	BRAD TM TME1,2,3
Association	TransactionalParty	transportMeansOwner	0..1	The party who owns the transport means	BRAD TM - new requirement
Association	TransportStatus		1..*	The transport status details for this transport means.	
Association	TransportStatusNotificationTransportMovement		0..*	The transport movement details for this transport means.	
Association	TransportTrackingLogEvent		0..*	The transport tracking details for this transport means.	

## 4.2.6. Transport Status Notification - Transport Movement

### Class Diagram



## GDD Report

The content of the TransportStatusNotificationTransportMovement 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:TransportStatusNotificationTransportMovement](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportStatusNotificationTransportMovement)

Content	Datatype /Secondary class	Attribute / Role	Multiplicity	Definition	Requirements
TransportStatusNotificationTransportMovement					
Association	TransportMeans	relatedTransportMeans	0..1	The type of vehicle, aircraft, vessel or other device used for the transport of goods in this transport movement.	BRAD TM TMV19
Association	TransportEquipment	relatedTransportEquipment	0..*	The type of trailer, container, ULD or other device used for the transport of goods in this transport movement.	BRAD TM TMV19
Association	TransactionalParty	carrier	0..1	A party that physically transports goods from one place to another.	BRAD TM TMV5
Association	Person	associatedPerson	0..*	A person associated with the execution of this transport movement, for example the driver.	BRAD TM TMV9
Association	TransactionalParty	transportStatusResponsibleParty	0..1	Party in charge of collecting and forwarding the information about the transport movement.	BRAD TM TMV17
Association	LogisticEvent	recipientSignOff	0..1	Details on the sign-off of the receipt at the arrival location, such as the responsible person.	BRAD TM - new requirement
Association	LogisticEvent	actualArrival	0..1	The actual time of arrival on the designated arrival location.	BRAD TM TMV11
Association	LogisticEvent	actualDeparture	0..1	The actual time of departure from the designated departure location.	BRAD TM TMV10
Association	LogisticEvent	actualLoading	0..1	The actual time and location of loading.	BRAD TM TMV14
Association	LogisticEvent	actualUnloading	0..1	The actual time and location of unloading.	BRAD TM TMV15
Association	LogisticEvent	plannedDeparture	0..1	The expected time of departure from the designated departure location.	BRAD TM TMV12

Content	Datatype /Secondary class	Attribute / Role	Multiplicity	Definition	Requirements
Association	LogisticEvent	plannedWaypoint	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	LogisticEvent	actualWaypoint	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	LogisticEvent	plannedArrival	0..1	The expected time of arrival on the designated arrival location.	BRAD TM TMV13
Attribute	positiveInteger	sequenceNumber	1..1	Unique number identifying the sequence of this transport movement with respect to the other specified movements.	
Attribute	TransportModeCode	transportModeTypeCode	1..1	Code specifying the transportation mode used for this transport movement.	BRAD TMV2
Attribute	Identifier	routeIdentifier	[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.

### 4.3. Code Lists

Class	Codelist	GDD Link
TransportStatusRequest, TransportStatusNotification	TransportStatusInformationEnumeration	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportStatusInformationEnumeration">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportStatusInformationEnumeration</a>
TransportStatusRequest, TransportStatusNotification	TransportStatusObjectEnumeration	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportStatusObjectEnumeration">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportStatusObjectEnumeration</a>
TransportStatusNotification Consignment	CargoTypeCode	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:CargoTypeCode">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:CargoTypeCode</a>
TransportStatusNotification TransportMovement	TransportModeCode	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportModeCode">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TransportModeCode</a>



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

## 5. Business Message Examples

### 5.1. Example 1

This is an example of the Transport Status Request message used in Consignment Status and Movement process.

#### Party Information

GS1 Global Location Number	Party Type
7365566156190	Transport Status Requestor
4048623000003	Transport Status Provider
7365566156190	Consignor
7300011234566	Consignee

#### Message Example 1

Attribute	Value
<b>TransportStatusRequest</b>	
creationDateTime	2011-01-12T12:00:00
documentStatusCode	ORIGINAL
transportStatusObjectCode	CONSIGNMENT
transportStatusInformationCode	STATUS_AND_MOVEMENT
<b>EntityIdentification (+transportStatusRequestIdentification)</b>	
uniqueCreatorIdentification	TRSR00001
<b>TransactionalParty (+transportStatusProvider)</b>	
gln	4048623000003
<b>TransactionalParty (+transportStatusRequestor)</b>	
gln	7365566156190
<b>TransportStatusRequestConsignment</b>	
ginc	7365566156191234567
<b>TransactionalParty (+consignor)</b>	
gln	7365566156190
<b>TransactionalParty (+consignee)</b>	
gln	7300011234566

## 5.2. Example 2

This is an example of the Transport Status Notification message used in Consignment Status and Movement process.

### Message Example 2

Attribute	Value
<b>TransportStatusNotification</b>	
creationDateTime	2011-01-12T12:10:00
documentStatus	ORIGINAL
transportStatusInformationCode	STATUS_AND_MOVEMENT
transportStatusObjectCode	CONSIGNMENT
<b>EntityIdentification (+transportStatusNotificationIdentification)</b>	
uniqueCreatorIdentification	TRSN00001
<b>TransactionalParty (+transportStatusRequestor)</b>	
gln	7365566156190
<b>TransactionalParty (+transportStatusProvider)</b>	
gln	4048623000003
<b>DocumentReference (+transportStatusRequest)</b>	
uniqueCreatorIdentification	TRSR00001
<b>TransportStatusNotificationConsignment</b>	
Ginc	7365566156191234567
cargoType	21
<b>TransactionalParty (+consignor)</b>	
gln	7365566156190
<b>TransactionalParty (+consignee)</b>	
gln	7300011234566
<b>TransportStatus</b>	
transportStatusConditionCode	29
<b>TransportStatusNotificationTransportMovement</b>	
sequenceNumber	1
transportModeTypeCode	30
<b>LogisticEvent (+actualDeparture)</b>	
<b>DateOptionalTime (+logisticEventDateTime)</b>	
date	2011-01-14
time	11:08:00
<b>LogisticLocation</b>	
<b>Address</b>	
city	Stockholm
<b>LogisticEvent (+actualArrival)</b>	

Attribute	Value
<b>DateOptionalTime (+logisticEventDateTime)</b>	
date	2011-01-14
time	18:08:00
<b>LogisticLocation</b>	
<b>Address</b>	
city	Lund

### 5.3. Example 3

This is an example of the Transport Status Notification message used in Shipment - Information on Delivery (IoD) process.

#### Message Example 2

Attribute	Value
<b>TransportStatusNotification</b>	
creationDateTime	2011-01-15T14:10:00
documentStatusCode	ORIGINAL
transportStatusInformationCode	INFORMATION_ON_DELIVERY
transportStatusObjectCode	SHIPMENT
<b>EntityIdentification (+transportStatusNotificationIdentification)</b>	
uniqueCreatorIdentification	TRSN00001
<b>TransactionalParty (+transportStatusRequestor)</b>	
gln	7365566156190
<b>TransactionalParty (+transportStatusProvider)</b>	
gln	4048623000003
<b>TransportStatusNotificationShipment</b>	
gsin	37365560000834055
<b>LogisticUnitIdentification (+includedLogisticUnits)</b>	
sscc	373655600812834054
<b>LogisticUnitIdentification (+includedLogisticUnits)</b>	
sscc	373655600812834061
<b>LogisticUnitIdentification (+includedLogisticUnits)</b>	
sscc	373655600812834078
<b>TransportStatus</b>	
transportStatusConditionCode	21
<b>TransportStatusNotificationTransportMovement</b>	
sequenceNumber	1
transportModeTypeCode	30
<b>TransactionalParty (+carrier)</b>	



Attribute	Value
<b>Address</b>	
name	DSV
<b>LogisticEvent (+actualDeparture)</b>	
<b>DateOptionalTime (+logisticEventDateTime)</b>	
date	2009-01-13
time	09:00:00
<b>LogisticLocation</b>	
<b>Address</b>	
city	Eindhoven
<b>LogisticEvent (+actualArrival)</b>	
<b>DateOptionalTime (+logisticEventDateTime)</b>	
date	2009-01-13
time	18:00:00
<b>LogisticLocation</b>	
<b>Address</b>	
city	Rotterdam
<b>TransportMeans (+relatedTransportMeans)</b>	
transportMeansType	31
transportMeansID	TF-69-XX
<b>TransportEquipment (+relatedTransportEquipment)</b>	
transportEquipmentTypeCode	14
<b>ReturnableAssetIdentification (+individualReturnableAssetTypeIdentification)</b>	
grai	00000000000000
additionalReturnableAssetIdentification	TRL-ABC-912; OWNER_ASIGNED
<b>TransportStatusNotificationTransportMovement</b>	
sequenceNumber	2
transportModeTypeCode	10
<b>TransactionalParty (+carrier)</b>	
<b>Address</b>	
name	P&O
<b>LogisticEvent (+actualDeparture)</b>	
<b>DateOptionalTime (+logisticEventDateTime)</b>	
date	2009-01-14
time	14:00:00
<b>LogisticLocation</b>	
unLocationCode	NL RTM



Attribute	Value
<b>LogisticEvent (+actualArrival)</b>	
<b>DateOptionalTime (+logisticEventDateTime)</b>	
date	2009-02-23
Time	18:00:00
<b>LogisticLocation</b>	
unLocationCode	ZA CPT
<b>TransportMeans (+relatedTransportMeans)</b>	
transportMeansType	13
transportMeansName	SS Kopenhagen
<b>TransportEquipment (+relatedTransportEquipment)</b>	
transportEquipmentTypeCode	20
<b>ReturnableAssetIdentification(+individualReturnableAssetTypeIdentification)</b>	
grai	00000000000000
additionalReturnableAssetIdentification	BCN001213; OWNER_ASSIGNED
<b>TransportStatusNotificationTransportMovement</b>	
sequenceNumber	3
transportModeTypeCode	30
<b>TransactionalParty (+carrier)</b>	
<b>Address</b>	
name	Boer Trucking
<b>LogisticEvent (+actualDeparture)</b>	
<b>DateOptionalTime (+logisticEventDateTime)</b>	
date	2009-02-25
time	09:00:00
<b>LogisticLocation</b>	
<b>Address</b>	
city	Cape Town
<b>LogisticEvent (+actualArrival)</b>	
<b>DateOptionalTime (+logisticEventDateTime)</b>	
date	2009-02-28
time	18:00:00
<b>LogisticLocation</b>	
<b>Address</b>	
city	Johannesburg
<b>TransportMeans (+relatedTransportMeans)</b>	
transportMeansType	31

Attribute	Value
transportMeansID	123-XYZ-76

## 6. Implementation Considerations

### 6.1. User Guide

The Functional User Guide contains more information about the structure and content of the Transport Status Request and Notification message: [http://www.gs1.org/docs/ecom/xml/3/3.2/eCom-Trade\\_messages.html#TransportStatusRequestandNotification](http://www.gs1.org/docs/ecom/xml/3/3.2/eCom-Trade_messages.html#TransportStatusRequestandNotification)

### 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	BSD Version	Associated CR Number
<ul style="list-style-type: none"> <li>■ TransportStatusRequest: changed cardinality of associations to Consignment, Shipment, Log Unit, Transport Means and Transport Equipment from 0..1 to 0..*</li> <li>■ TransportStatusNotification: changed cardinality of associations to Consignment, Shipment, Log Unit from 0..1 to 0..*</li> </ul>	Draft 1	WR 12-193 WR 12-194 WR 12-195 WR 12-196 WR 12-197

### 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 data-bbox="289 369 1295 596"> <p><b>class TransportStatusRequest - maintenance view</b></p> <pre> classDiagram     class TransportStatusRequest {         +transportStatusInformationCode :TransportStatusInformationEnumeration         +transportStatusObjectCode :TransportStatusObjectEnumeration     }     class maintenance     TransportStatusRequest ..&gt; maintenance                     </pre> <p>Change: (Complete) 3.1 changed cardinality of associations to Consignment, Shipment, Log Unit, Transport Means and Transport Equipment from 0..1 to 0..*                      Change: (Verified) 3.2 changed generalisation from Document to eComDocument class to include AVP (WR 14-110)</p> </div> <div data-bbox="289 617 1060 926"> <p><b>class TransportStatusRequestConsignment - maintenance view</b></p> <pre> classDiagram     class TransportStatusRequestConsignment {         +«association» avpList :Ecom_AttributeValuePairList [0..1]     }     class maintenance     TransportStatusRequestConsignment ..&gt; maintenance                     </pre> <p>Change: (Verified) 3.2 added +avpList (WR 14-110)</p> </div> <div data-bbox="289 947 1052 1262"> <p><b>class TransportStatusRequestShipment - maintenance view</b></p> <pre> classDiagram     class TransportStatusRequestShipment {         +«association» avpList :Ecom_AttributeValuePairList [0..1]     }     class maintenance     TransportStatusRequestShipment ..&gt; maintenance                     </pre> <p>Change: (Verified) 3.2 added +avpList (WR 14-110)</p> </div> <div data-bbox="289 1283 1263 1570"> <p><b>class Transport Status Notification - maintenance view</b></p> <pre> classDiagram     class TransportStatusNotification {         +transportStatusInformationCode :TransportStatusInformationEnumeration         +transportStatusObjectCode :TransportStatusObjectEnumeration     }     class maintenance     TransportStatusNotification ..&gt; maintenance                     </pre> <p>Change: (Complete) 3.1 changed cardinality of associations to Consignment, Shipment, Log Unit from 0..1 to 0..*                      Change: (Verified) 3.2 changed generalisation from Document to eComDocument class to include AVP (WR 14-110)</p> </div>	<p>14-000110</p>

Change	Associated WR
<div style="border: 1px solid black; padding: 5px;"> <p><b>class TransportStatusNotificationConsignment - maintenance ...</b></p> <div style="border: 1px solid black; padding: 5px; margin: 5px;"> <p style="text-align: center;"><b>TransportStatusNotificationConsignment</b></p> <p>+ cargoTypeCode :CargoTypeCode                      + cargoTypeDescription :Description70 [0..1]                      + «association» avpList :Ecom_AttributeValuePairList [0..1]</p> <p style="text-align: center;"><i>maintenance</i></p> <p>Change: (Verified) 3.2 added +avpList (WR 14-110)</p> </div> </div>	
<div style="border: 1px solid black; padding: 5px;"> <p><b>class TransportStatusNotificationShipment - maintenance view</b></p> <div style="border: 1px solid black; padding: 5px; margin: 5px;"> <p style="text-align: center;"><b>TransportStatusNotificationShipment</b></p> <p>+ «association» avpList :Ecom_AttributeValuePairList [0..1]</p> <p style="text-align: center;"><i>maintenance</i></p> <p>Change: (Verified) 3.2 added +avpList (WR 14-110)</p> </div> </div>	

## 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

Function	Name	Company / organisation
BRG Work Group Chair	Fred Kempkes	Unilever
BRG Work Group Chair	Jaco Voorspuij	DHL
BRG Work Group Member	Mia Lenman	GS1 Sweden
BRG Work Group Member	Richard Chresta	GS1 Switzerland & UNCEFACT TGB3
BRG Work Group Member	Jeff Melcher	Army & Air Force Exchange Service
BRG Work Group Member	Yuliya Shevchenko	GS1 Global Office
BRG Work Group Member	Roman Strand	GS1 Germany

Function	Name	Company / organisation
BRG Work Group Member	Henk van Maaren	CETIMA & UNCEFACT TBG3
BRG Work Group Member	Pere Rosell	GS1 Spain
BRG Work Group Member	Mats Rosen	DSV Sweden
BRG Work Group Member	Helena Lunden	ICA Sweden
BRG Work Group Member	Gerald Borgolte	Atos Origin
BRG Work Group Member	Audun Vennesland	SINTEF & eFreight
BRG Work Group Member	Mary Vayou	BMT Group Ltd & eFreight
BRG Work Group Member		
BRG Work Group Member		

### 9.1.2. Development Team Members

Function	Name	Organisation
GSMP Process Lead	Jean-Luc Champion	GS1 Global Office
Standards Content Lead	Coen Janssen, Ewa Iwicka	GS1 Global Office
Technical Development Lead	Ewa Iwicka	GS1 Global Office
Peer Review	Eric Kauz	GS1 Global Office