



Business Message Standard (BMS)

Transport Status Request and Notification

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1. Business Domain View

1.1. Problem Statement / Business Need

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.

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.

This message can relate to a status (or status's) 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. Objective

To supply the detail design of the (specific) business transaction needed to meet the requirements of the referenced BRAD(s).

1.3. Audience

Not Applicable

1.4. References

Reference Name	Description
BRAD Transport Management (GS1, 2009)	
Logistics Interoperability Model (GS1, 2007)	

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. BRG 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
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		

1.5.2. Design Team Members

Function	Name	Organisation
Modeler	Coen Janssen, Mark van Eeghem	GS1
XML Technical Designer	Dipan Anarkat	GS1
EANCOM Technical Designer	Not applicable	
Peer Reviewer	Eric Kauz	GS1
Process Manager	Jean-Luc Champion	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

3. Additional Technical Requirements Analysis

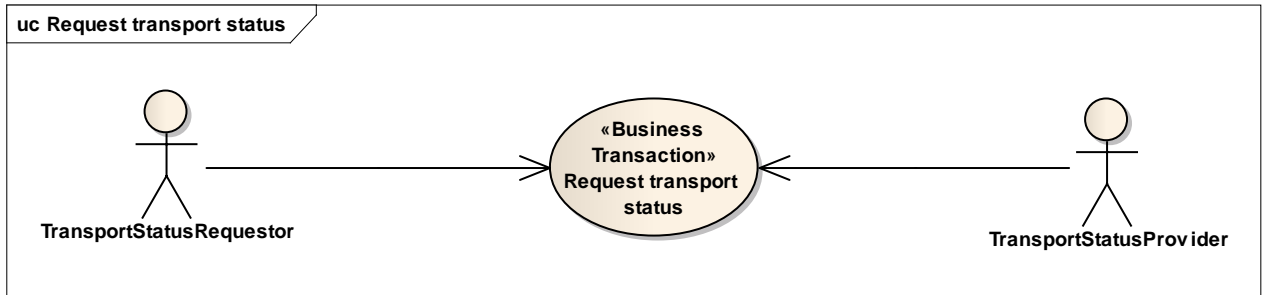
Not applicable

3.1. Technical Requirements (optional)

Number	Statement	Rationale
	Not applicable	

4. Business Transaction View

4.1. Use Case Diagram – Request Transport Status



4.2. Use Case Description – Request Transport Status

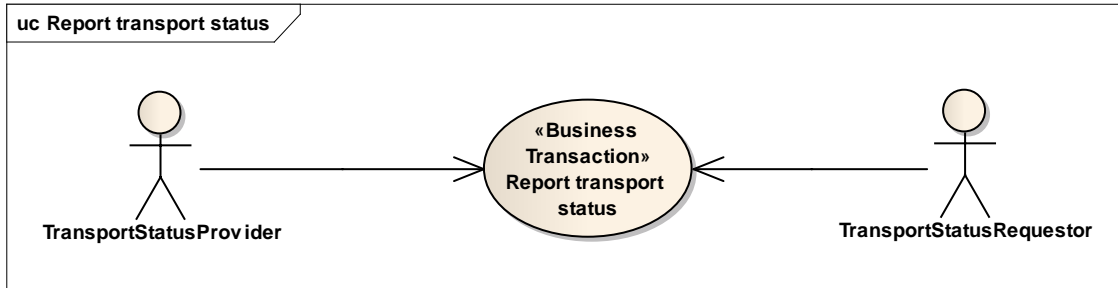
Use Case ID	UC-1												
Use Case Name	Request transport status												
Use Case Description	To request information regarding the status of transport execution progress.												
Actors (Goal)	Transport Status Requestor Transport Status Provider												
Performance Goals	Not applicable												
Preconditions	Interoperation agreement is in place.												
Post conditions	Transport status request has been received by the LSS												
Scenario	<p>Begins when the transport status requestor determines a transport status update is needed.</p> <p>Continues with...</p> <table><tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr><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></table> <p>Ends when the LSS has processed the transport status request in the transport management system.</p>	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											
Alternative Scenario	<table><tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr><tr><td>1</td><td></td><td></td></tr><tr><td>2</td><td></td><td></td></tr><tr><td>3</td><td></td><td></td></tr></table>	Step #	Actor	Activity Step	1			2			3		
Step #	Actor	Activity Step											
1													
2													
3													

Related Requirements	Not applicable
Related Rules	Not applicable

4.3. Activity Diagram(s) – Request Transport Status

Not applicable

4.4. Use Case Diagram – Report Transport Status



4.5. Use Case Description – Report Transport Status

Use Case ID	UC-2
Use Case Name	Report transport status
Use Case Description	<p>Transport Status: The main objective is to report the transport status between the transport status requestor and the transport status provider.</p> <p>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.</p>
Actors (Goal)	<p>Transport Status Requestor</p> <p>Transport Status Provider</p>
Performance Goals	Not applicable
Preconditions	<p>Either:</p> <ul style="list-style-type: none"> ■ The transport status provider did receive a transport status request; <p>Or</p> <ul style="list-style-type: none"> ■ A pre-agreed event type or time interval determines when a transport status notification needs to be sent. <p>Furthermore:</p> <ul style="list-style-type: none"> ■ The requesting party is indeed entitled to the transport status information.
Post conditions	Transport status notification has been received by the transport status requestor.

Scenario	<p>Begins when the transport status provider receives a request.</p> <p>Continues with...</p> <table><tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr><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></table> <p>Ends when the requestor has processed the transport status notification.</p>	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											
Alternative Scenario	<p>Begins when the transport status provider determines it is time to send a transport status notification.</p> <p>Continues with...</p> <table><tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr><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></table> <p>Ends when the requestor has processed the transport status notification.</p>	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											
Related Requirements	Not applicable												
Related Rules	Not applicable												

4.6. Activity Diagram(s) – Report Transport Status

Not applicable

4.7. Sequence Diagram(s) – Report Transport Status

Figure: Report Transport Status with prior request

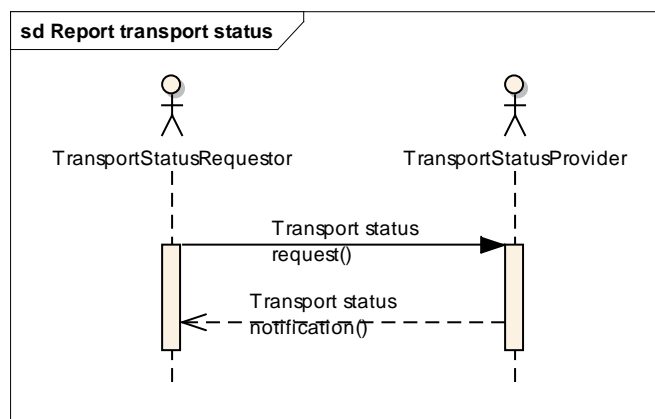
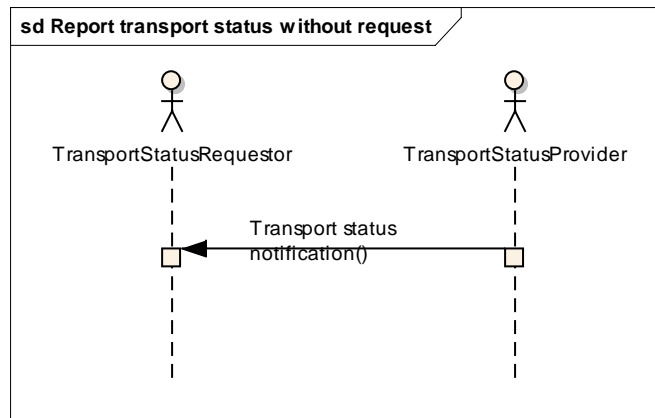


Figure: Report Transport Status without prior request

5. Information Model (Including GDD Report)

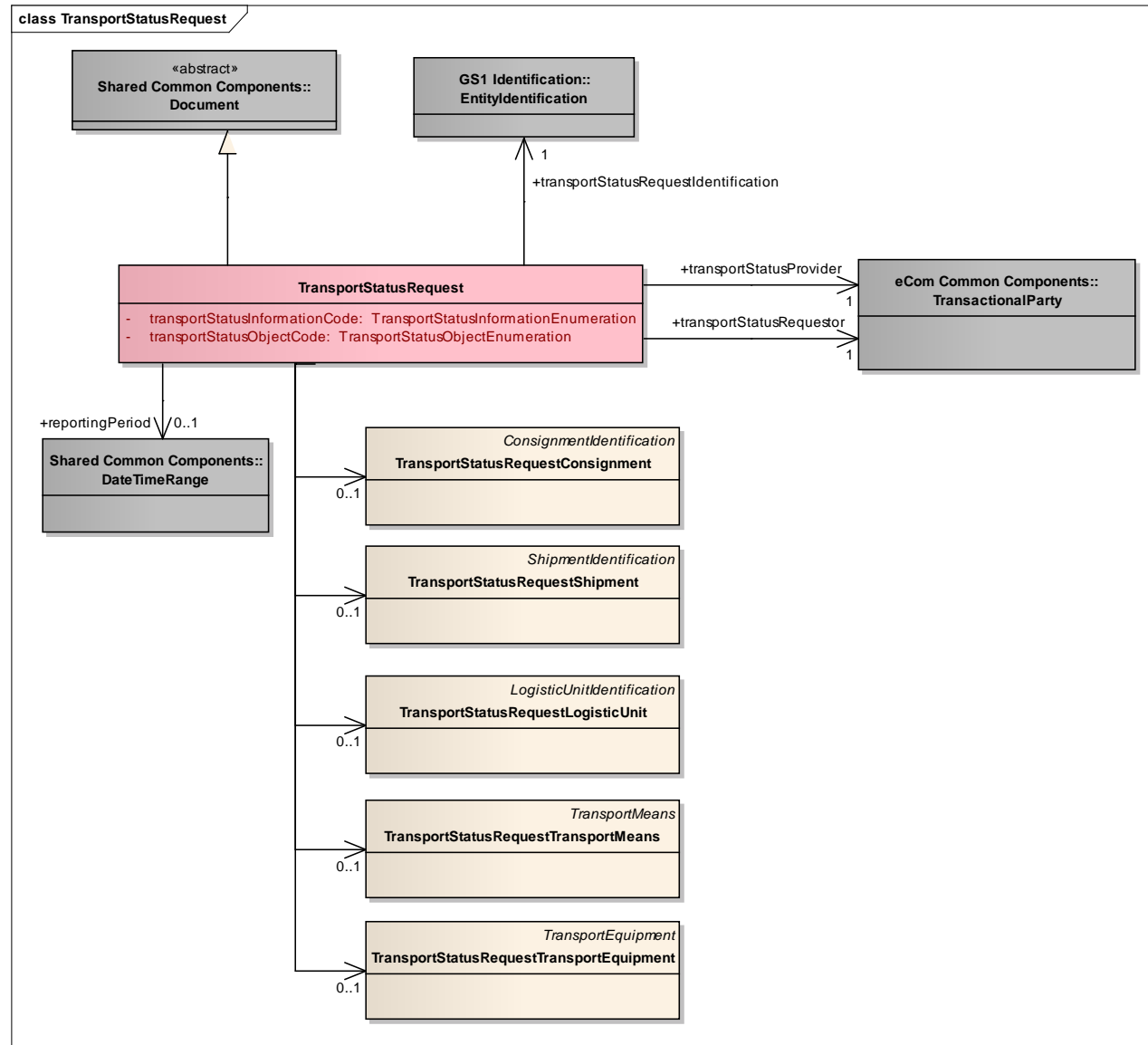
5.1. Transport Status Request (message)

5.1.1. GDD Report - Transport Status Request

content	multi plicit y	attribute / role	datatype /secondary class	definition	requirement s
TransportStatusRequest				Message requesting information on the transport status and movements of a transport related object.	
Generalization			Document	Provides the generic document details for the transport status request.	
Association	1 ..1	transportStatusProvider	TransactionalParty	A party that provides transport status information to another party.	
Association	1 ..1	transportStatusRequestor	TransactionalParty	A party that requests transport status information from another party.	
Association	1 ..1	transportStatusRequestIdentification	EntityIdentification	The identification of the transport status request document.	
Association	0..1		TransportStatusRequestConsignment	Information identifying the consignment for which transport status information is being requested.	

content	multi plicity	attribute / role	datatype /secondary class	definition	requirements
Association	0..1		TransportStatusRequestShipment	Information identifying the shipment for which transport status information is being requested.	
Association	0..1		TransportStatusRequestLogisticUnit	Information identifying the logistic unit for which transport status information is being requested.	
Association	0..1		TransportStatusRequestTransportMeans	Information identifying the transport means for which transport status information is being requested.	
Association	0..1		TransportStatusRequestTransportEquipment	Information identifying the piece of transport equipment for which transport status information is being requested.	
Association	0..1	reportingPeriod	DateTimeRange	The date time range for which transport status information is being requested.	BRAD new requirement
Attribute	1..1	transportStatusInformationCode	TransportStatusInformationEnumeration	Code specifying the type of transport status information that is being requested. Example: STATUS_ONLY.	
Attribute	1..1	transportStatusObjectCode	TransportStatusObjectEnumeration	Code specifying the type of object for which transport status information is being requested. Example: CONSIGNMENT.	

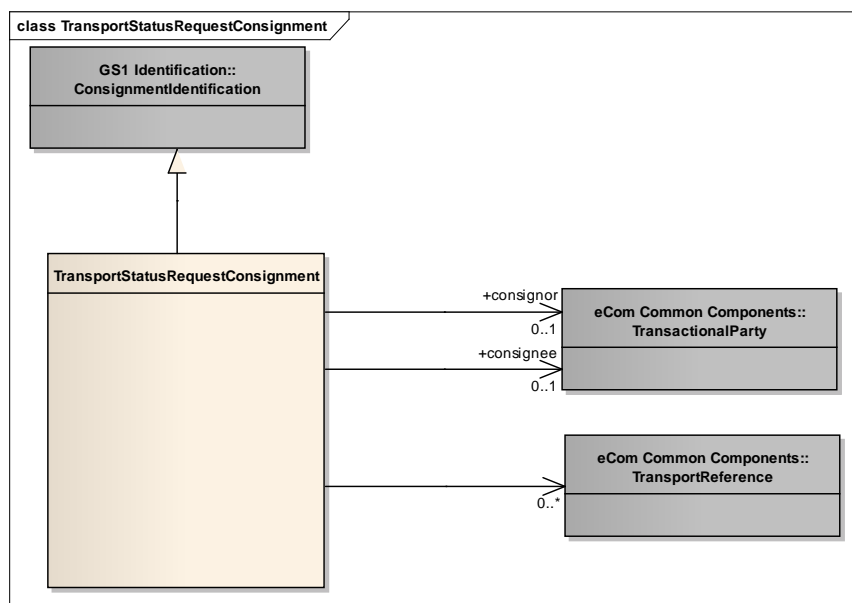
5.1.2. Class Diagram - Transport Status Request



5.1.3. GDD Report - Transport Status Request - Consignment

content	multiplicity	attribute / role	datatype /secondary class	definition	requirements
TransportStatusRequestConsignment				Information identifying the consignment for which transport status information is being requested.	
Association	0..*		TransportReference	References to the commercial transaction or to transport or legal documents related to the consignment.	BRAD TM CON19
Association	0..1	consignee	TransactionalParty	The party receiving a consignment of goods.	BRAD TM CON1
Generalization			ConsignmentIdentification	The unique identifier for this consignment.	BRAD TM CON3
Association	0..1	consignor	TransactionalParty	The party despatching a consignment of goods.	BRAD TM CON1

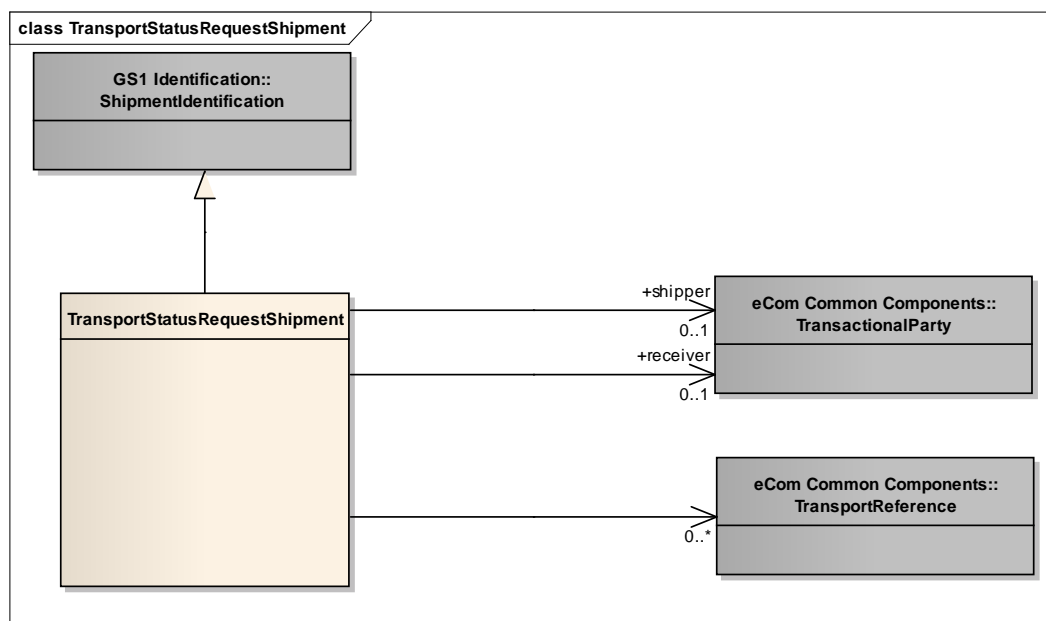
5.1.4. Class Diagram - Transport Status Request - Consignment



5.1.5. GDD Report - Transport Status Request - Shipment

content	multiplicity	attribute / role	datatype /secondary class	definition	requirements
TransportStatusRequestShipment				Information identifying the shipment for which transport status information is being requested	
Association	0..1	shipper	TransactionalParty	A party which engages in shipping this shipment of goods.	BRAD TM SHM1
Association	0..1	receiver	TransactionalParty	A party which engages in receiving this shipment of goods.	BRAD TM SHM1
Association	0..*		TransportReference	References to the commercial transaction or to transport and legal documents related to the shipment.	BRAD TM SHM16
Generalization			ShipmentIdentification	The unique identifier for this shipment.	BRAD TM SHM4

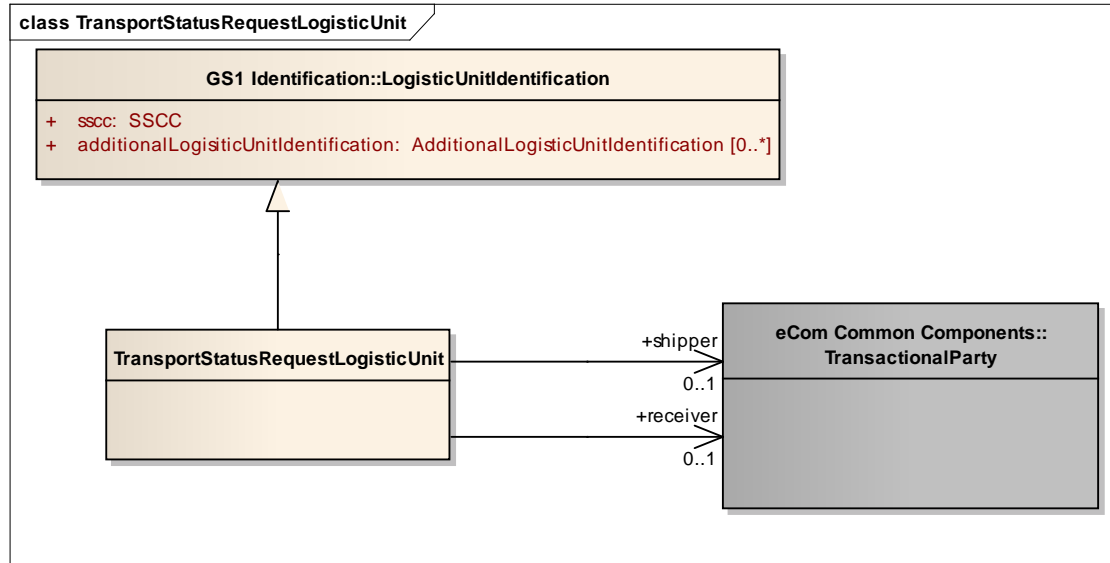
5.1.6. Class Diagram - Transport Status Request - Shipment



5.1.7. GDD Report - Transport Status Request - Logistic Unit

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.	

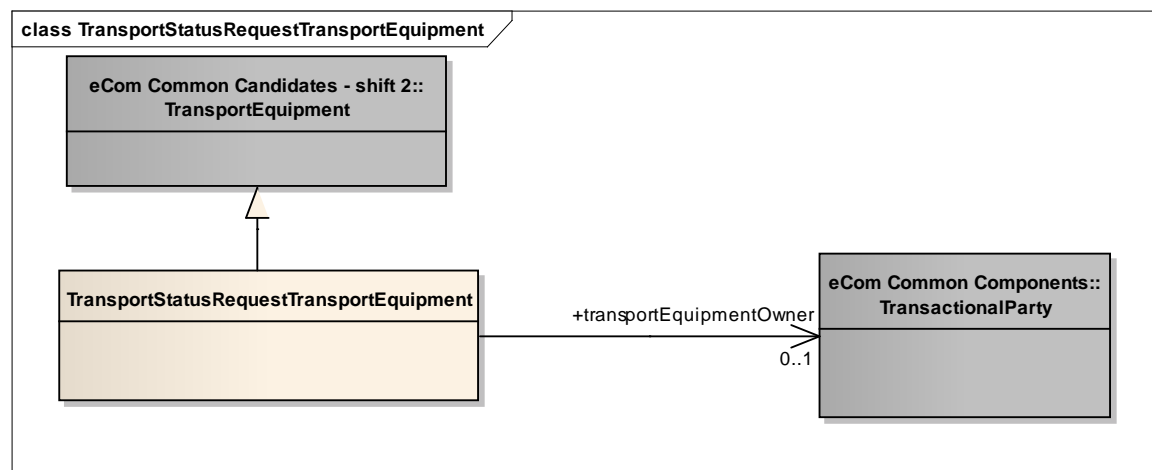
5.1.8. Class Diagram - Transport Status Request - Logistic Unit



5.1.9. GDD Report - Transport Status Request - Transport Equipment

content	multipl icity	attribute / role	datatype /secondary class	definition	requirement s
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

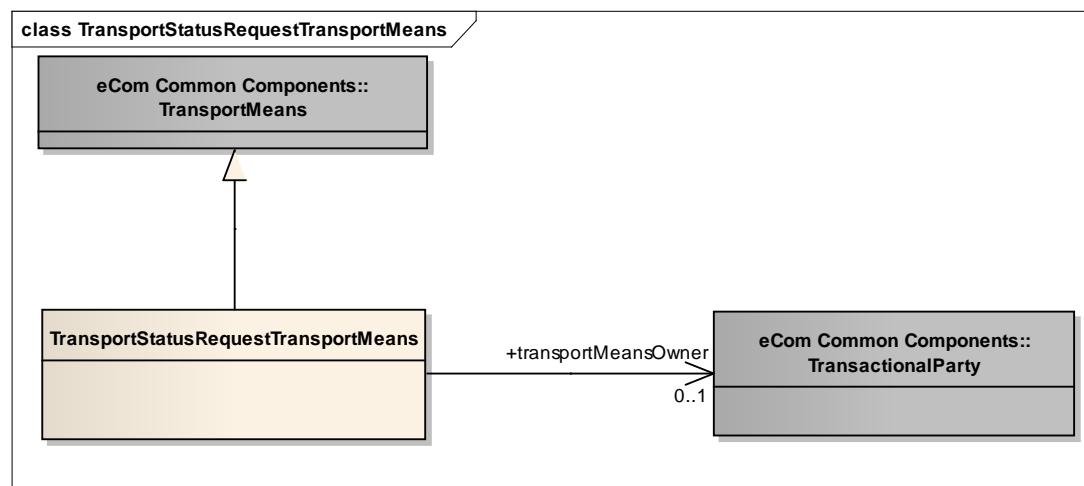
5.1.10. Class Diagram - Transport Status Request - Transport Equipment



5.1.11. GDD Report - Transport Status Request - Transport Means

content	multipl icity	attribute / role	datatype /secondary class	definition	requirements
TransportStatusRequestTransp ortMeans				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

5.1.12. Class Diagram - Transport Status Request - Transport Means



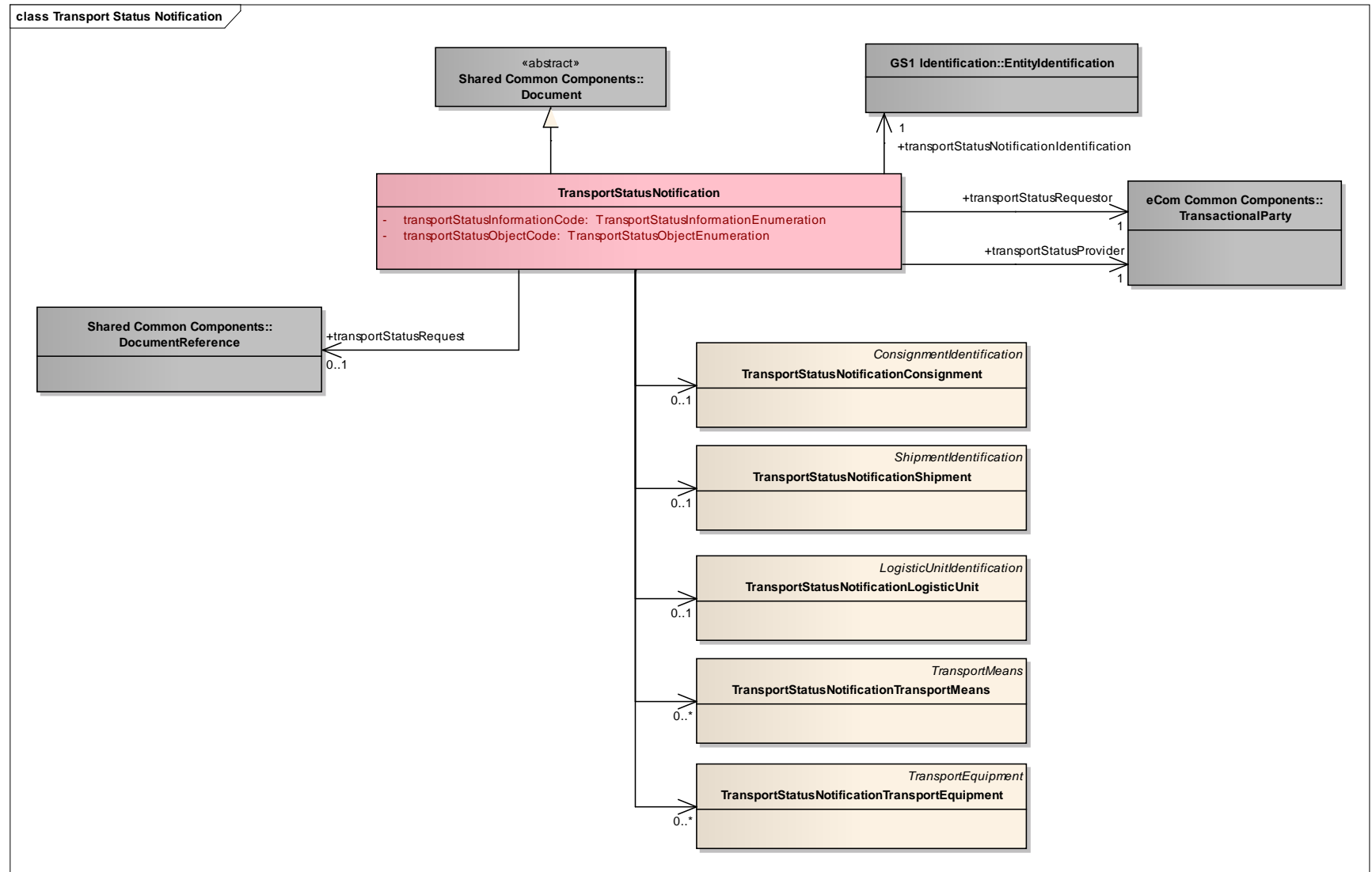
5.2. Transport Status Notification (message)

5.2.1. GDD Report - Transport Status Notification

content	multiplicity	attribute / role	datatype /secondary class	Definition	requirements
TransportStatusNotification				Message providing information on the transport status and movements of a transport related object.	
Generalization			Document	Provides the generic document details for the transport status notification.	
Association	1..1	transportStatusRequestor	TransactionalParty	A party that requests transport status information from another party.	
Association	1..1	transportStatusProvider	TransactionalParty	A party that provides transport status information to another party.	
Association	0..1	transportStatusRequest	DocumentReference	Optional reference to the transport status request that triggered the sending of the transport status notification.	
Association	0..1		TransportStatusNotificationConsignment	Information on the status and movements of a consignment.	
Association	0..1		TransportStatusNotificationShipment	Information on the status and movements of a shipment.	
Association	0..1		TransportStatusNotificationLogisticUnit	Information on the status and movements of a logistic unit.	
Association	0..*		TransportStatusNotificationTransportMeans	Information on the status, movements and event log of a transport means.	
Association	0..*		TransportStatusNotificationTransportEquipment	Information on the status, movements and event log of a piece of transport equipment.	
Association	1..1	transportStatusNotificationIdentification	EntityIdentification	The identification of the transport status notification document.	

content	multiplicity	attribute / role	datatype /secondary class	Definition	requirements
Attribute	1..1	transportStatusInformationCode	TransportStatusInformationEnumeration	Code specifying the type of transport status information that is being requested. Example: STATUS_ONLY.	
Attribute	1..1	transportStatusObjectCode	TransportStatusObjectEnumeration	Code specifying the type of object for which transport status information is being requested. Example: CONSIGNMENT.	

5.2.2. Class Diagram - Transport Status Notification

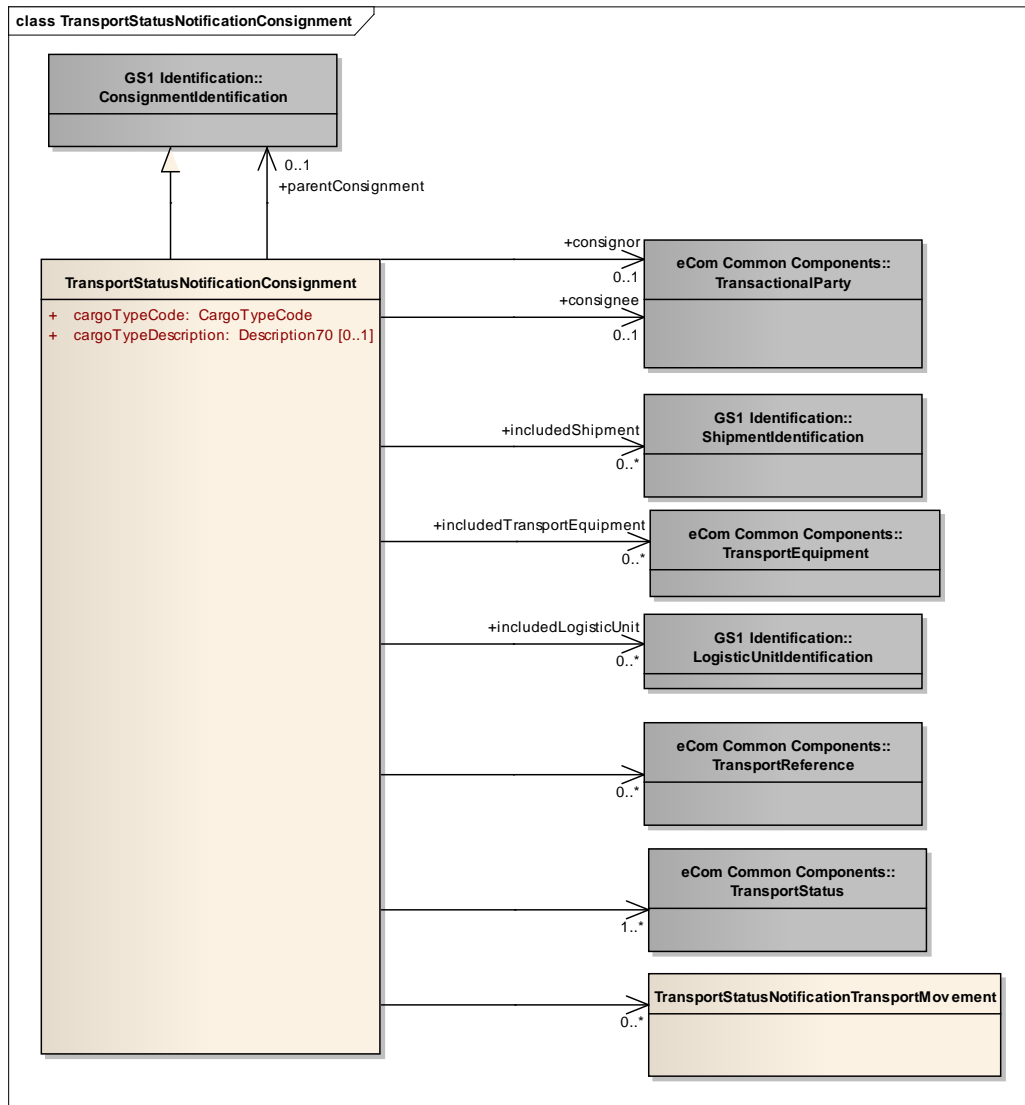


5.2.3. GDD Report - Transport Status Notification - Consignment

content	multiplicity	attribute / role	datatype /secondary class	definition	requirements
TransportStatusNotificationConsignment				Information on the status and movements of a consignment.	
Association	0..*	includedLogisticUnit	LogisticUnitIdentification	Identification of the logistic units contained in the consignment.	
Association	0..1	consignor	TransactionalParty	The party despatching a consignment of goods.	BRAD TM CON1
Association	0..1	consignee	TransactionalParty	The party receiving a consignment of goods.	BRAD TM CON1
Association	0..1	parentConsignment	ConsignmentIdentification	Reference to a consignment that contains this consignment (and several other consignments).	BRAD TM CON22
Association	0..*	includedShipment	ShipmentIdentification	Reference to the shipment(s) contained in this consignment.	BRAD TM CON28
Association	0..*		TransportReference	References to the commercial transaction or to transport or legal documents related to the consignment.	BRAD TM CON19
Association	0..*	includedTransportEquipment	TransportEquipment	Details on the transport equipment contained in the consignment.	
Association	1..*		TransportStatus	The transport status details for this consignment.	
Association	0..*		TransportStatusNotificationTransportMovement	The transport movement details for this consignment.	

content	multiplicity	attribute / role	datatype /secondary class	definition	requirements
Generalization			ConsignmentIdentification	The unique identifier for this consignment.	BRAD TM CON2
Attribute	1..1	cargoTypeCode	CargoTypeCode	Code specifying the classification of a type of cargo for example hazardous cargo.	BRAD CON8, CIT4, SHI4
Attribute	[0..1]	cargoTypeDescription	Description70	Free text specifying the classification of a type of cargo.	BRAD CON8, CIT4, SHI5

5.2.4. Class Diagram - Transport Status Notification – Consignment

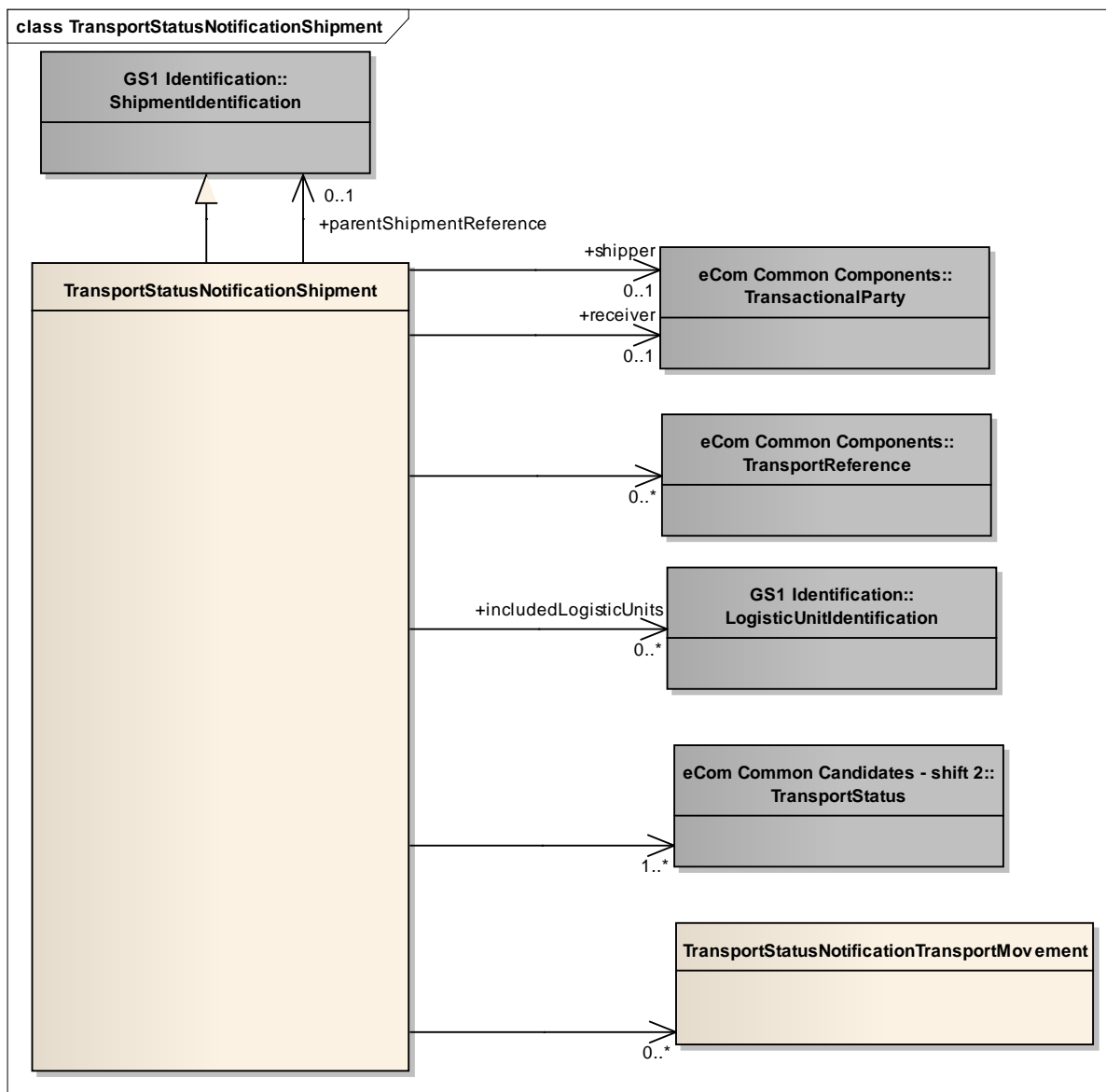


5.2.5. GDD Report - Transport Status Notification – Shipment

content	multiplicity	attribute / role	datatype /secondary class	definition	requirements
TransportStatusNotificationShipment				Information on the status and movements of a shipment.	
Association	0..*		TransportReference	The transport movement details for this shipment.	BRAD TM SHM16
Association	0..*	includedLogisticUnits	LogisticUnitIdentification	Identification of the logistic units contained in the shipment.	
Association	0..1	shipper	TransactionalParty	A party which engages in shipping this shipment of goods.	BRAD TM SHM1
Association	0..1	receiver	TransactionalParty	A party which engages in receiving this shipment of goods.	BRAD TM SHM1
Association	0..1	parentShipmentReference	ShipmentIdentification	The unique identifier for this shipment.	

content	multiplicity	attribute / role	datatype /secondary class	definition	requirements
Association	1..*		TransportStatus	The transport status details for this shipment.	
Association	0..*		TransportStatusNotificationTransportMovement	The transport movement details for this shipment.	BRAD TM SHM3
Generalization			ShipmentIdentification	The unique identifier for this shipment.	BRAD TM SHM4

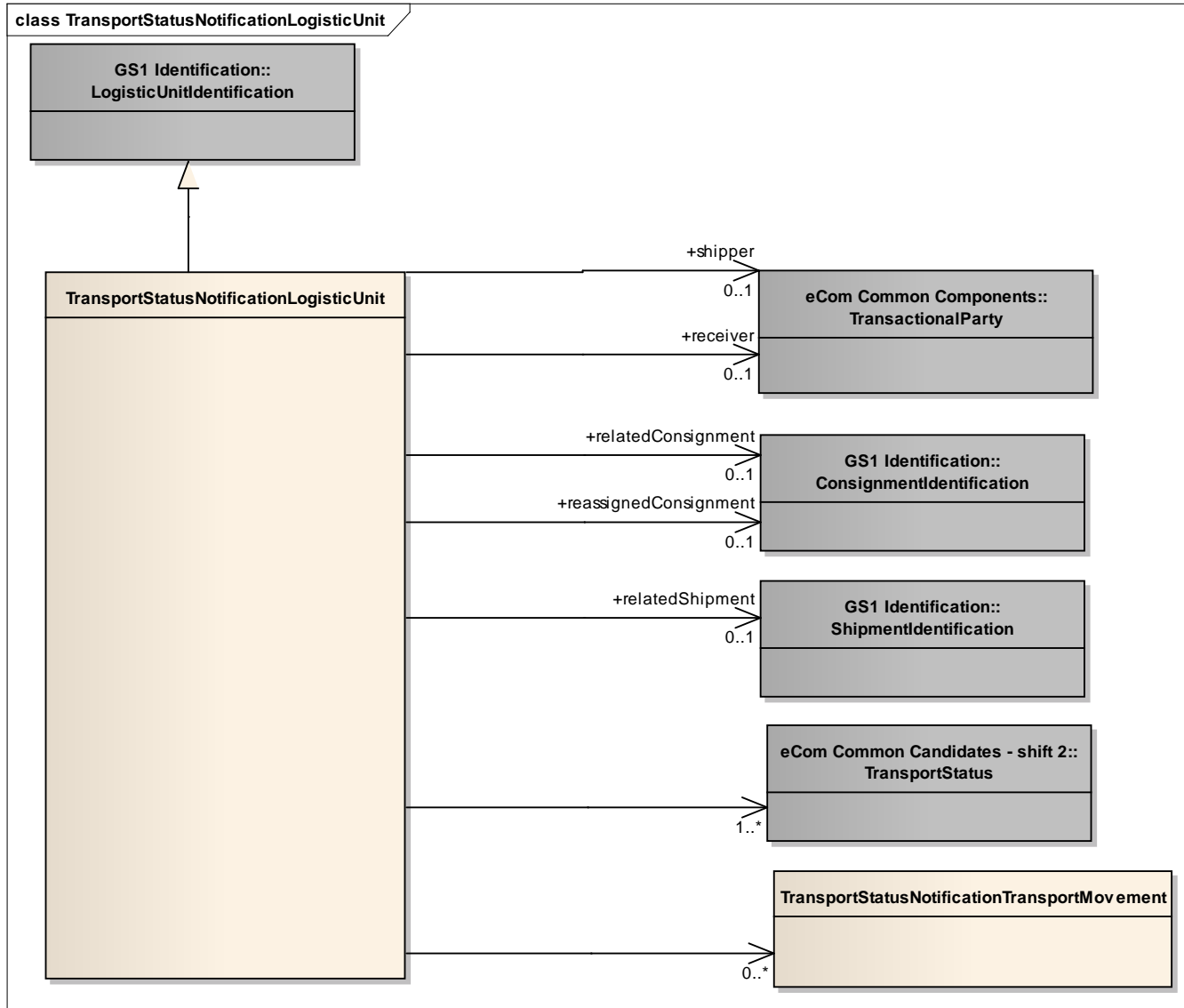
5.2.6. Class Diagram - Transport Status Notification – Shipment



5.2.7. GDD Report - Transport Status Notification - Logistic Unit

content	multiplicity	attribute / role	datatype /secondary class	definition	requirements
TransportStatusNotificationLogisticUnit				Information on the status and movements of a logistic unit.	
Association	0..1	relatedShipment	ShipmentIdentification	Identification of the shipment in which the logistic unit is contained.	
Association	0..1	reassignedConsignment	ConsignmentIdentification	Identification of the consignment to which the logistic unit has been reassigned.	
Association	0..1	shipper	TransactionalParty	A party which engages in shipping this logistic unit.	
Association	0..1	receiver	TransactionalParty	A party which engages in receiving this logistic unit.	
Association	1..*		TransportStatus	The transport status details for this logistic unit.	
Association	0..*		TransportStatusNotificationTransportMovement	The transport movement details for this logistic unit.	
Generalization			LogisticUnitIdentification	The unique identifier for this logistic unit.	
Association	0..1	relatedConsignment	ConsignmentIdentification	Identification of the consignment in which the logistic unit is contained.	

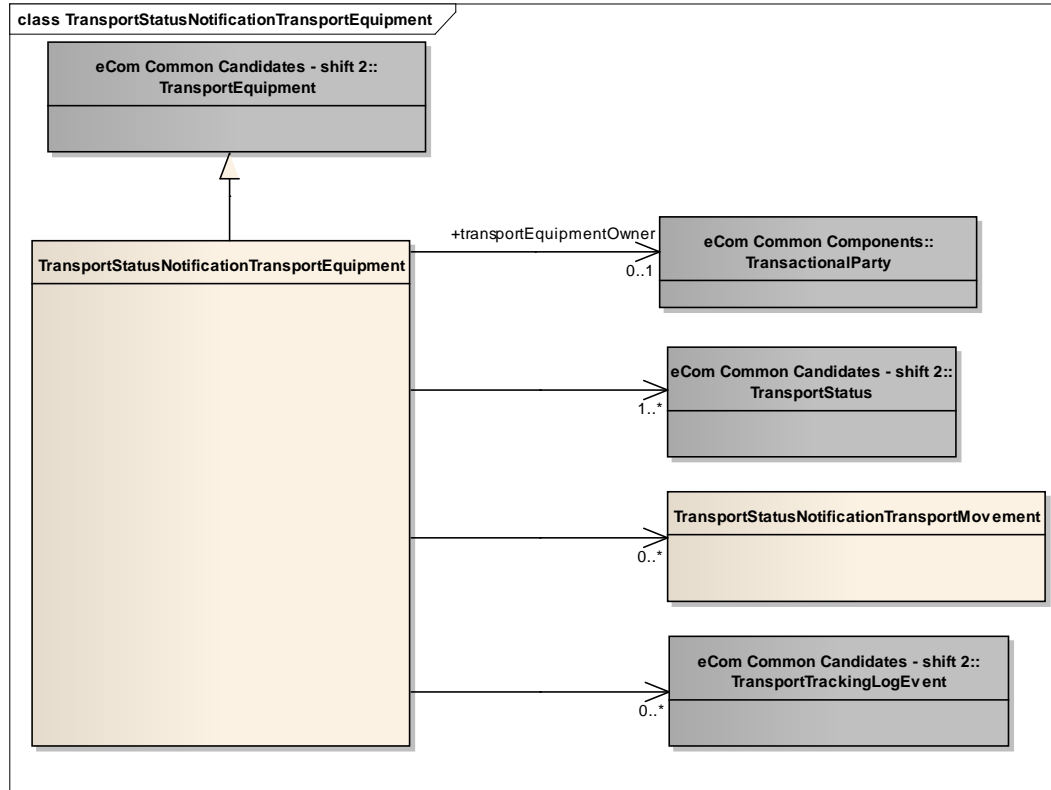
5.2.8. Class Diagram - Transport Status Notification - Logistic Unit



5.2.9. GDD Report - Transport Status Notification - Transport Equipment

content	multi plicity	attribute / role	datatype /secondary class	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	0..1	transportEquipmentOwner	TransactionalParty	The party who owns the piece of transport equipment.	BRAD TM - new requirement
Association	1..*		TransportStatus	The transport status details for this piece of transport equipment.	
Association	0..*		TransportStatusNotificationTransportMovement	The transport movement details for this piece of transport equipment.	
Association	0..*		TransportTrackingLogEvent	The transport tracking details for this piece of transport equipment.	

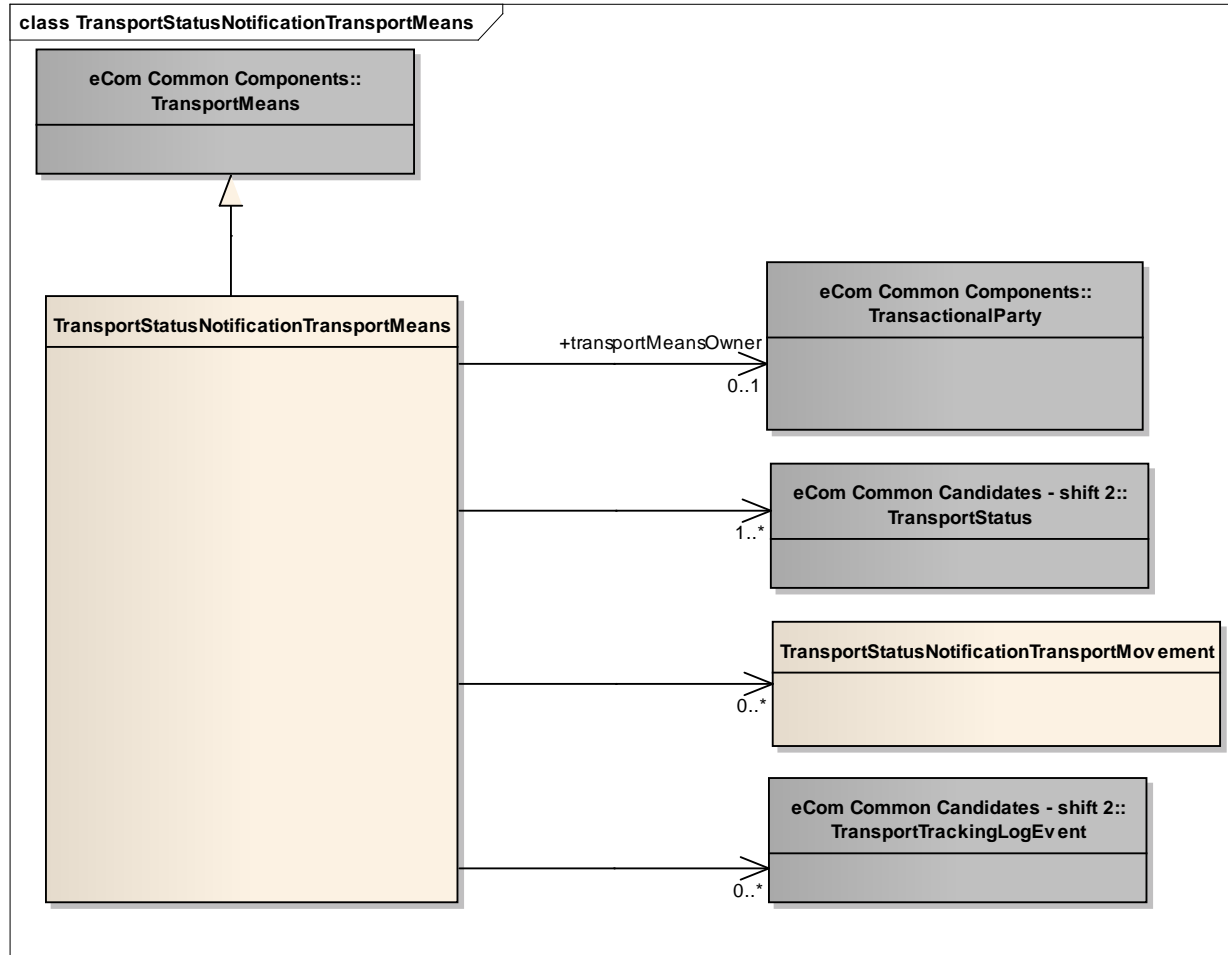
5.2.10. Class Diagram - Transport Status Notification - Transport Equipment



5.2.11. GDD Report - Transport Status Notification - Transport Means

content	multipl icity	attribute / role	datatype /secondary class	definition	requiremen ts
TransportStatusNotification TransportMeans				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	0..1	transportMeansO wner	TransactionalParty	The party who owns the transport means	BRAD TM - new requirement
Association	1..*		TransportStatus	The transport status details for this transport means.	
Association	0..*		TransportStatusNotification TransportMovement	The transport movement details for this transport means.	
Association	0..*		TransportTrackingLogEven t	The transport tracking details for this transport means.	

5.2.12. Class Diagram - Transport Status Notification - Transport Means



5.2.13. GDD Report - Transport Status Notification - Transport Movement

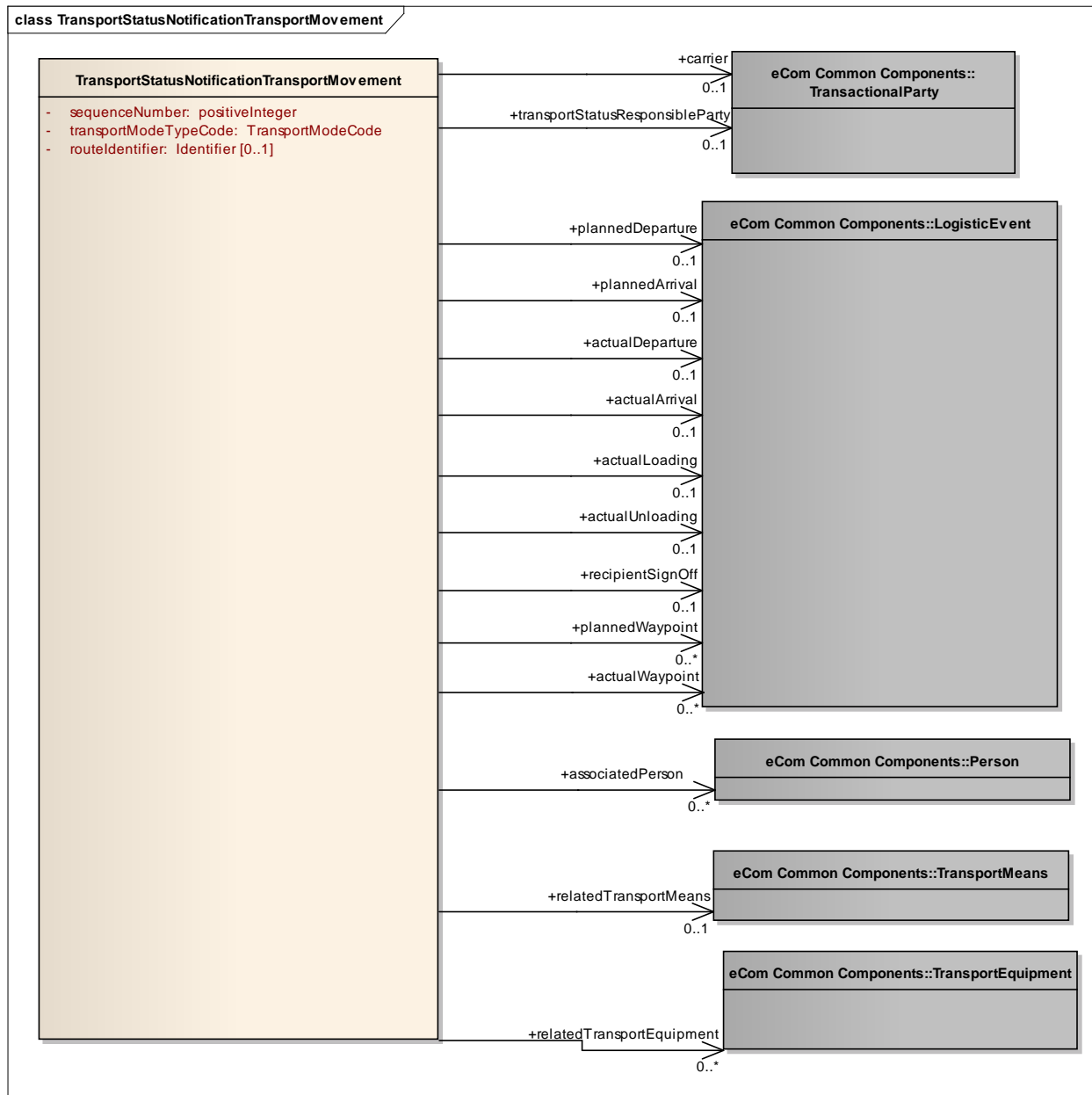
content	multiplicity	attribute / role	datatype /secondary class	definition	requirements
TransportStatusNotificationTransportMovement					
Association	0..1	relatedTransportMeans	TransportMeans	The type of vehicle, aircraft, vessel or other device used for the transport of goods in this transport movement.	BRAD TM TMV19
Association	0..*	relatedTransportEquipment	TransportEquipment	The type of trailer, container, ULD or other device used for the transport of goods in this transport movement.	BRAD TM TMV19
Association	0..1	carrier	TransactionalParty	A party that physically transports goods from one place to another.	BRAD TM TMV5
Association	0..*	associatedPerson	Person	A person associated with the execution of this transport movement, for example the driver.	BRAD TM TMV9
Association	0..1	transportStatusResponsibleParty	TransactionalParty	Party in charge of collecting and forwarding the information about the transport movement.	BRAD TM TMV17

content	multiplicity	attribute / role	datatype /secondary class	definition	requirements
Association	0..1	recipientSignOff	LogisticEvent	Details on the sign-off of the receipt at the arrival location, such as the responsible person.	BRAD TM - new requirement
Association	0..1	actualArrival	LogisticEvent	The actual time of arrival on the designated arrival location.	BRAD TM TMV11
Association	0..1	actualDeparture	LogisticEvent	The actual time of departure from the designated departure location.	BRAD TM TMV10
Association	0..1	actualLoading	LogisticEvent	The actual time and location of loading.	BRAD TM TMV14
Association	0..1	actualUnloading	LogisticEvent	The actual time and location of unloading.	BRAD TM TMV15
Association	0..1	plannedDeparture	LogisticEvent	The expected time of departure from the designated departure location.	BRAD TM TMV12

content	multiplicity	attribute / role	datatype /secondary class	definition	requirements
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..*	actualWaypoint	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	plannedArrival	LogisticEvent	The expected time of arrival on the designated arrival location.	BRAD TM TMV13
Attribute	1..1	sequenceNumber	positiveInteger	Unique number identifying the sequence of this transport movement with respect to the other specified movements.	
Attribute	1..1	transportModeTypeCode	TransportModeCode	Code specifying the transportation mode used for this transport movement.	BRAD TMV2

content	multiplicity	attribute / role	datatype /secondary class	definition	requirements
Attribute	[0..1]	routeIdentifier	Identifier	Unique identifier of the standard route that will be used for this transport movement.	BRAD TMV8

5.2.14. Class Diagram - Transport Status Notification - Transport Movement



5.3. Enumerations (message specific)

5.3.1. TransportStatusInformationEnumeration

Code	Code Description
STATUS_ONLY	Only the transport status details are included.
EVENT_LOG_ONLY	Only the event log details are included.
STATUS_AND_MOVEMENT	Transport status and transport movement details are included.
STATUS_MOVEMENT_AND_EVENT_LOG	Transport status, transport movement and transport tracking details are included.
INFORMATION_ON_DELIVERY	The information represents the Information on Delivery (IoD): The formal report on the final execution status of deliveries specified in a transport instruction.

5.3.2. TransportStatusObjectEnumeration

Code	Code Description
CONSIGNMENT	The primary object for the transport status report is a consignment. Information on the related transport means and equipment may be provided.
SHIPMENT	The primary object for the transport status report is a shipment. Information on the related transport means and equipment may be provided.
LOGISTIC_UNIT	The primary object for the transport status report is a logistic unit. Information on the related transport means and equipment may be provided.
TRANSPORT_MEANS	The primary object for the transport status report is a transport means.
TRANSPORT_EQUIPMENT	The primary object for the transport status report is a piece of transport equipment.

5.4. 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
TransportStatusNotificationConsignment	CargoTypeCode	eCom Domain Common Library Business Message (BMS) Release 3.0.0
TransportStatusNotificationTransportMovement	TransportModeCode	eCom Domain Common Library Business Message (BMS) Release 3.0.0

6. Business Document Examples

6.1. Status Request - Consignment Status and Movement

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

6.2. Status Notification - Consignment Status and Movement

TransportStatusNotification	
creationDateTime	2011-01-12T12:10:00
documentStatus	ORIGINAL
transportStatusInformationCode	STATUS_AND_MOVEMENT
transportStatusObjectCode	CONSIGNMENT
EntityIdentification (+transportStatusNotificationIdentification)	
uniqueCreatorIdentification	TRSN00001
TransactionalParty (+transportStatusRequestor)	
gln	7365566156190
TransactionalParty (+transportStatusProvider)	
gln	4048623000003

DocumentReference (+transportStatusRequest)	
uniqueCreatorIdentification	TRSR00001
TransportStatusNotificationConsignment	
Ginc	7365566156191234567
cargoType	21
TransactionalParty (+consignor)	
Gln	7365566156190
TransactionalParty (+consignee)	
Gln	7300011234566
TransportStatus	
transportStatusConditionCode	29
TransportStatusNotificationTransportMovement	
sequenceNumber	1
transportModeTypeCode	30
LogisticEvent (+actualDeparture)	
DateOptionalTime (+logisticEventDateTime)	
date	2011-01-14
time	11:08:00
LogisticLocation	
Address	
city	Stockholm
LogisticEvent (+actualArrival)	
DateOptionalTime (+logisticEventDateTime)	
date	2011-01-14
time	18:08:00
LogisticLocation	
Address	
city	Lund

6.3. Status Notification – Shipment - Information on Delivery (IoD)

TransportStatusNotification	
creationDateTime	2011-01-15T14:10:00
documentStatusCode	ORIGINAL
transportStatusInformationCode	INFORMATION_ON_DELIVERY
transportStatusObjectCode	SHIPMENT
EntityIdentification (+transportStatusNotificationIdentification)	
uniqueCreatorIdentification	TRSN00001

TransactionalParty (+transportStatusRequestor)	
gln	7365566156190
TransactionalParty (+transportStatusProvider)	
gln	4048623000003
TransportStatusNotificationShipment	
gsin	37365560000834055
LogisticUnitIdentification (+includedLogisticUnits)	
sscc	373655600812834054
LogisticUnitIdentification (+includedLogisticUnits)	
sscc	373655600812834061
LogisticUnitIdentification (+includedLogisticUnits)	
sscc	373655600812834078
TransportStatus	
transportStatusConditionCode	21
TransportStatusNotificationTransportMovement	
sequenceNumber	1
transportModeTypeCode	30
TransactionalParty (+carrier)	
Address	
name	DSV
LogisticEvent (+actualDeparture)	
DateOptionalTime (+logisticEventDateTime)	
date	2009-01-13
time	09:00:00
LogisticLocation	
Address	
city	Eindhoven
LogisticEvent (+actualArrival)	
DateOptionalTime (+logisticEventDateTime)	
date	2009-01-13
time	18:00:00
LogisticLocation	
Address	
city	Rotterdam
TransportMeans (+relatedTransportMeans)	
transportMeansType	31
transportMeansID	TF-69-XX
TransportEquipment (+relatedTransportEquipment)	

transportEquipmentTypeCode	14
ReturnableAssetIdentification (+individualReturnableAssetTypeIdentification)	
grai	00000000000000
additionalReturnableAssetIdentification	TRL-ABC-912; OWNER_ASSIGNED
TransportStatusNotificationTransportMovement	
sequenceNumber	2
transportModeTypeCode	10
TransactionalParty (+carrier)	
Address	
name	P&O
LogisticEvent (+actualDeparture)	
DateOptionalTime (+logisticEventDateTime)	
date	2009-01-14
time	14:00:00
LogisticLocation	
unLocationCode	NL RTM
LogisticEvent (+actualArrival)	
DateOptionalTime (+logisticEventDateTime)	
date	2009-02-23
Time	18:00:00
LogisticLocation	
unLocationCode	ZA CPT
TransportMeans (+relatedTransportMeans)	
transportMeansType	13
transportMeansName	SS Copenhagen
TransportEquipment (+relatedTransportEquipment)	
transportEquipmentTypeCode	20
ReturnableAssetIdentification(+individualReturnableAssetTypeIdentification)	
grai	00000000000000
additionalReturnableAssetIdentification	BCN001213; OWNER_ASSIGNED
TransportStatusTransportMovement	
sequenceNumber	3
transportModeTypeCode	30
TransactionalParty (+carrier)	
Address	
name	Boer Trucking

LogisticEvent (+actualDeparture)	
DateOptionalTime (+logisticEventDateTime)	
date	2009-02-25
time	09:00:00
LogisticLocation	
Address	
city	Cape Town
LogisticEvent (+actualArrival)	
DateOptionalTime (+logisticEventDateTime)	
date	2009-02-28
time	18:00:00
LogisticLocation	
Address	
city	Johannesburg
TransportMeans (+relatedTransportMeans)	
transportMeansType	31
transportMeansID	123-XYZ-76

7. Implementation Considerations

(Insert Content Here)

8. Testing

This section describes the testing criteria for business solutions.

8.1. Pass / Fail Criteria

No.	Test Criteria	Related Requirement	Design Element	Pass Criteria	Fail Criteria
1					
2					
3					

8.2. Test Data

Attribute	Value

Attribute	Value

9. Appendices

None.

10. Summary of Changes

Change	BSD Version	Associated CR Number
<p>Added section 5.4 Codelists, and populated the section. Moved section "Architecture Principles" after Summary of Changes. Fixed typo in header of section 11: "Principals" -> "Principles" Updated business examples to match the pilot issue resolution and the resequencing of attributes and associations.</p> <p>Updated class diagram and GDD report for Transport Status Notification Transport Movement:</p> <ul style="list-style-type: none"> Added associations plannedWaypoint (0..*) and actualWaypoint (0..*) to LogisticEvent. GDD Definition: 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, ... <p>Updated class diagram and GDD report for Transport Status Notification Consignment:</p> <ul style="list-style-type: none"> Deleted association includedTransportEquipment to ReturnableAssetIdentification Added association includedTransportEquipment to TransportEquipment 	1.1.0	N/A

11. Adherence to Architectural Principles

#	AG Principle	BSD Adherence Statement	Does BSD Adhere?	Comment
2.1	The GS1 Architecture shall be fully aligned to GS1 Strategy, Vision, & Mission	The solution in the BSD is aligned with the business problem as defined in the CR and BCD.	<input checked="" type="checkbox"/>	
2.2	The GS1 Architecture shall leverage the use of GS1 Keys	The solution maintains the GS1 keys as the primary, mandatory identifiers.	<input checked="" type="checkbox"/>	
2.3	The GS1 Architecture shall leverage the common GS1 Global Data Dictionary (GDD)	The solution does not alter the formats of primary identifiers and complies with data elements as defined in the Global Data Dictionary.	<input checked="" type="checkbox"/>	
2.4	The GS1 Architecture shall be forward-looking, provide for migration strategies and backward compatibility, and support adaptable and flexible solutions	The solution is backwards compatible according to the stated scope in the document. The solution takes into consideration the potential impact of the standard, especially with respect to implementation and maintenance. Any potential known impact is documented.	<input checked="" type="checkbox"/>	
2.5	The GS1 Architecture shall support business processes tied to trading partner needs, relevant, and committed to demonstrable business value	All business requirements contained in the related BRAD come from trading partners or representatives with a genuine intention to implement the standards when developed. All requirements are driven by the business needs of the trading partners.	<input checked="" type="checkbox"/>	
2.6	The GS1 Architecture shall enable security where appropriate	Security solutions are included where appropriate.	<input checked="" type="checkbox"/>	
2.7	The GS1 Architecture shall be consistent	The solution does not violate consistency of the data architecture within each layer and between each layer of the GS1 System. For example, requirements do not alter a key used across GS1 standards or alter a reusable object without applying this change across related standards.	<input checked="" type="checkbox"/>	
2.8	The GS1 Architecture shall be royalty-free	The solution supports this principal where possible. The solution may include the use of other standards organizations that may not be royalty free.	<input checked="" type="checkbox"/>	

#	AG Principle	BSD Adherence Statement	Does BSD Adhere?	Comment
3.1	The GS1 Architecture should promote the achievement of the best overall value at the lowest total cost of ownership	The solution promotes the achievement of the best overall value at the lowest total cost of ownership.	<input checked="" type="checkbox"/>	
3.2	The GS1 Architecture should promote scalability	The solution takes into consideration the potential scalability of the standard. Any potential known impact to scalability is documented.	<input checked="" type="checkbox"/>	
3.3	The GS1 Architecture should promote seamless integration	The BSD promotes seamless integration with other GS1 Standards if in scope.	<input checked="" type="checkbox"/>	
3.4	The GS1 Architecture should promote interoperability and compliance	The solution takes into consideration data and process interoperability. For example, any shared objects between interoperable messages must remain consistent. Any potential known impact to interoperability is documented.	<input checked="" type="checkbox"/>	
3.5	The GS1 Architecture should promote simplicity and standard interfaces	The solution does not threaten the standardisation of the interfaces of the GS1 System. Interfaces are not limited to references to technology but also include such ideas as business interfaces and process interfaces.	<input checked="" type="checkbox"/>	
3.6	The GS1 Architecture should avoid duplication	The solution does not create duplications with existing GS1 components. If there are potential duplications, these are documented with a stated rationale for the duplication.	<input checked="" type="checkbox"/>	
3.7	The GS1 Architecture should promote technology independence and a layered approach	The solution does not impose implicit or explicit restrictions of any technology.	<input checked="" type="checkbox"/>	
3.8	The GS1 Architecture should promote global cross-sector definitions and leverage the best of global and the best of local	The solution takes into account a global perspective.	<input checked="" type="checkbox"/>	
3.9	The GS1 Architecture shall leverage a common strategy for extensibility	This solution uses consistent and common, extensibility approaches, methodologies and technology where available and applicable.	<input checked="" type="checkbox"/>	
4.1	In support of a common GS1 Architecture, GS1 shall leverage work of other standards bodies wherever possible.	This solution utilizes works of other standards bodies wherever possible.	<input checked="" type="checkbox"/>	

#	AG Principle	BSD Adherence Statement	Does BSD Adhere?	Comment
4.2	In support of a common GS1 Architecture, GS1 shall strive to eliminate exceptions and variances wherever possible	The solution strives to eliminate exceptions and variances wherever possible and does not create new variances.	<input checked="" type="checkbox"/>	