Warehousing Common Business Message Standard (BMS)

Release 3.4., Ratified, Feb 2019

Document Summary

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Business Requirements Document (BRAD) Reference

BRAD Title	BRAD Issue Date	BRAD Version
Warehousing Inbound and Outbound processes	25-Jul-2012	1.0
Warehousing Inventory Management	25-Sep-2012	0.12

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
15-Sep-2014	BMS 3.2 – Issue 1	Ewa Iwicka	BMS Release 3.2	See summary of changes
01-Mar-2017	BMS 3.3 – Issue 1	Ewa Iwicka	BMS Release 3.3	See summary of changes
15-Oct-2018	BMS 3.4 – Draft for community review	Ewa Iwicka	BMS Release 3.4	See summary of changes

Date of Change	Version	Changed By	Reason for Change	Summary of Change
10-Apr-2019	BMS 3.4 – Issue 1	Jean-Luc Champion	BMS Release 3.4	See summary of changes

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Table of Contents

1 Business Domain View

1.1 Introduction

Message Definition

This standard is part of a global GS1 solution for warehouse management that will support the optimization of warehouse management operations in a scalable way. This will ultimately take out unnecessary cost of the supply chain

Principles

This standard defines the transaction model and data model for the following business message(s):

- Logistics Inventory Report Request
- Logistics Inventory Report
- Warehousing Inbound Instruction
- Warehousing Inbound Notification
- Warehousing Operations Instruction
- Warehousing Operations Notification
- Warehousing Outbound Instruction
- Warehousing Outbound Notification

1.2 References

[LIM] GS1 Logistics Interoperability Model, 1.0, GS1 2007

[BRAD_WIO] BRAD Warehousing Inbound and Outbound Processes, 1.0, GS1 2012

[BRAD_WIM] BRAD Warehousing Inventory Management, 0.12, GS1 2012

[BMS_Shared] BMS Shared Common Library, 3.4, GS1 2016

[BMS_eCom] BMS eCom Common Library, 3.4, GS1 2016

2 Business Context

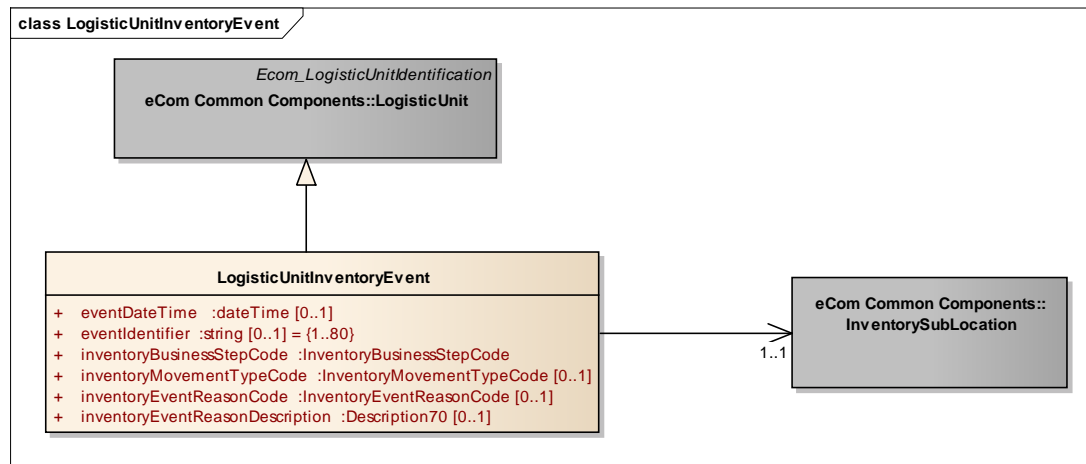| Context Category	Value(s)
Industry	All
Geopolitical	All
Product	All
Process	Warehousing
System Capabilities	GS1 System
Official Constraints	None

3 Business Transaction View

3.1 Business Transaction

Not applicable

4 Business Information View

4.1 Logistic Unit Inventory Event

Class diagram

GDD Report

The content of the LogisticUnitInventoryEvent class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:LogisticUnitInventoryEvent

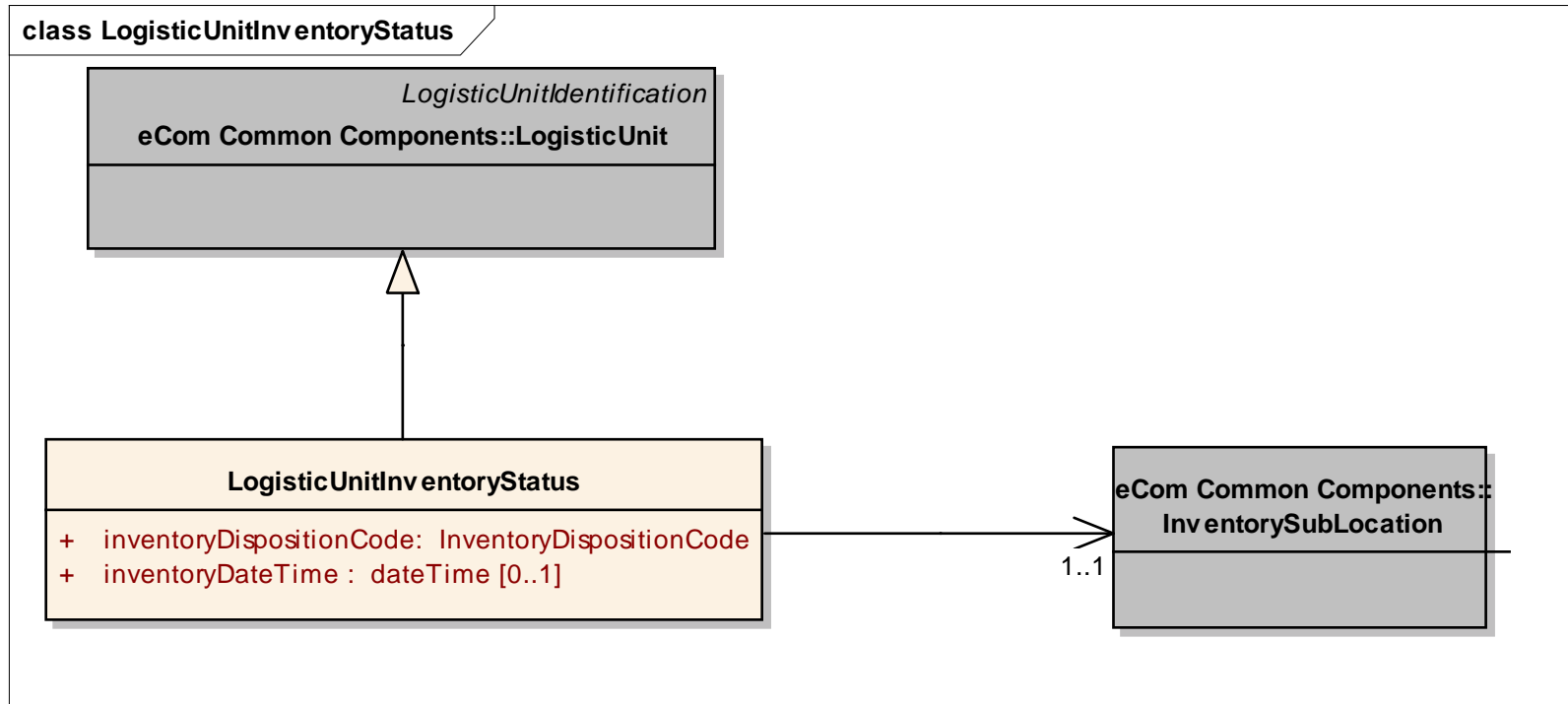| Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
LogisticUnitInventoryEvent				Information specifying an inventory activity of a specific logistic unit at a specific sub-location at a specific point in time.	
Association		InventorySubLocation	1..1	The inventory sub location related to the event.	
Generalization		LogisticUnit			
Attribute	eventDateTime	dateTime	0..1	The moment in time at which the event occurred.	

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Attribute	eventIdentifier	string	0..1	The sequence number for this event.	
Attribute	inventoryBusinessStepCode	InventoryBusinessStepCode	1..1	Denotes a specific activity within a business process. The business step code of an event specifies what business process step was taking place that caused the event.	
Attribute	inventoryMovementTypeCode	InventoryMovementTypeCode	0..1	Code specifying whether the reported activity leads to an increase or decrease of the inventory quantity.	
Attribute	inventoryEventReasonCode	InventoryEventReasonCode	0..1	Code specifying the reason for this event.	
Attribute	inventoryEventReasonDescription	Description70	0..1	Textual description of the reason for this event.	

✅ **Note:** Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.2 Logistic Unit Inventory Status

Class Diagram

GDD Report

The content of the LogisticUnitInventoryStatus class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:LogisticUnitInventoryStatus

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
LogisticUnitInventoryStatus				Information specifying the inventory status of a logistic unit at a specific sub-location at a specific point in time.	
Generalization		LogisticUnit			
Association		InventorySubLocation	1..1	The inventory sub location where the inventory is located.	
Attribute	inventoryDispositionCode	InventoryDispositionCode	1..1	The inventory disposition code specifies the business condition of the inventory.	
Attribute	inventoryDateTime	dateTime	0..1	Date and time when the inventory for this item was assessed.	

Note: Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.3 Logistic Unit Reference

Class Diagram
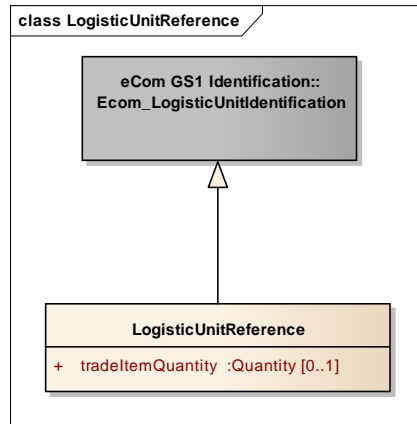
GDD Report

The content of the LogisticUnitReference class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:LogisticUnitReference

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
LogisticUnitReference				Information on the quantity of a particular trade item that is contained in a particular logistic unit.	
Generalization		Ecom_LogisticUnitIdentification			WR 15-000314
Attribute	tradeItemQuantity	Quantity	0..1	The quantity of a particular trade item contained in a particular logistic unit.	

✅ **Note:** Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.4   Returnable Packaging Inventory Event

Class Diagram

GDD Report

The content of the ReturnablePackagingInventoryEvent class, its structure and component definitions can be accessed in the Global Data Dictionary:
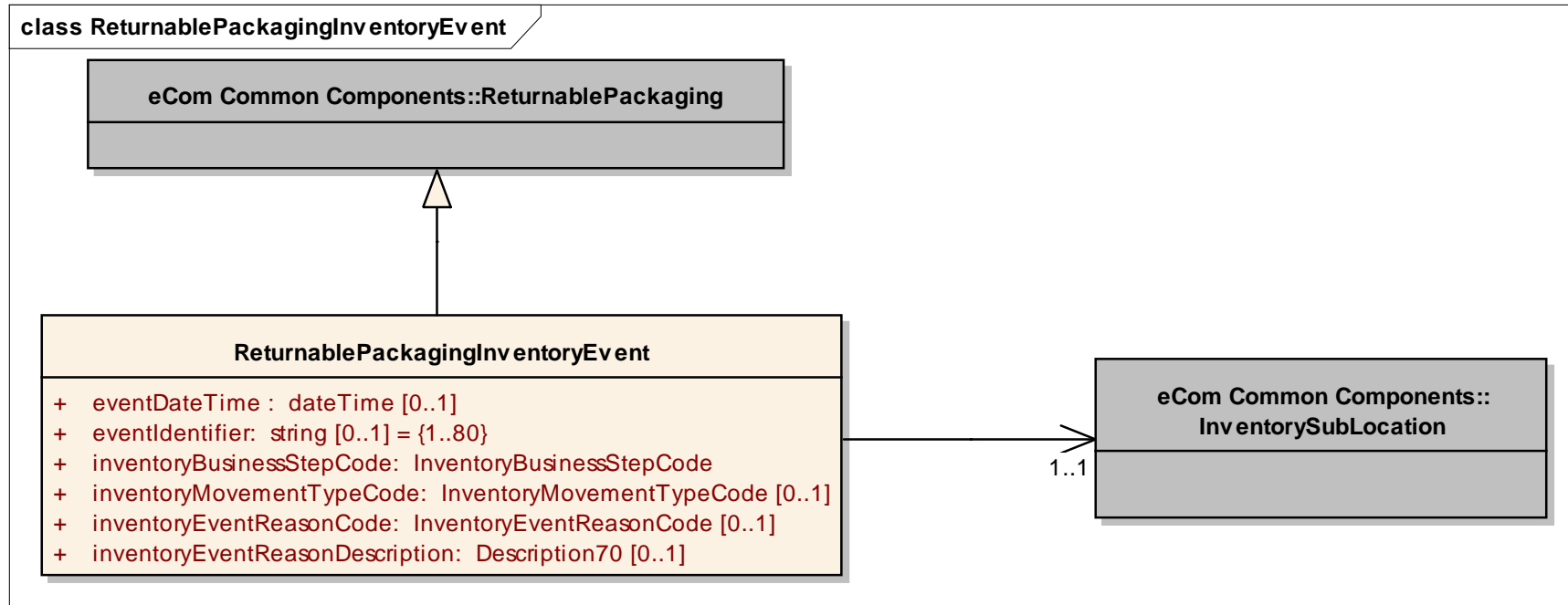*http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ReturnablePackagingInventoryEvent*

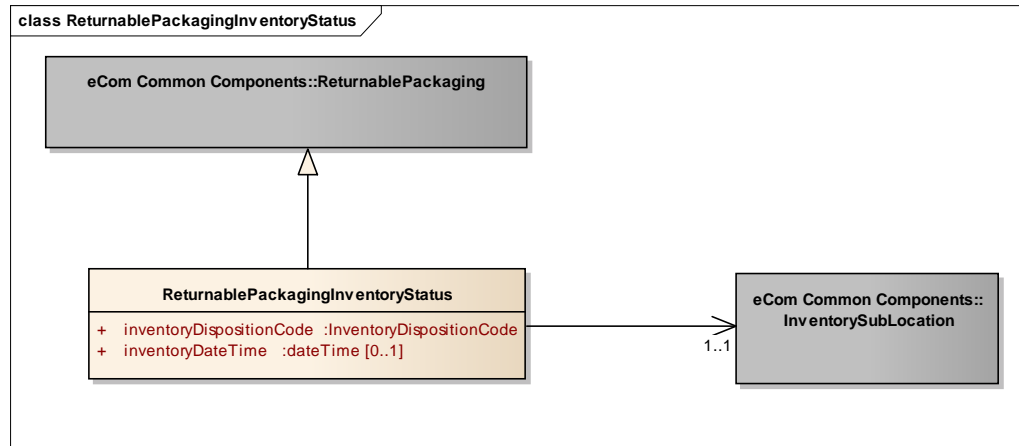| Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
ReturnablePackagingInventoryEvent				Information specifying an inventory activity of one or more returnable packaging items (of the same type) at a specific sub-location at a specific point in time.	
Generalization		ReturnablePackaging			
Association		InventorySubLocation	1..1		

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Attribute	eventDateTime	dateTime	0..1	The moment in time at which the event occurred.	
Attribute	eventIdentifier	string	0..1	The sequence number for this event.	
Attribute	inventoryBusinessStepCode	InventoryBusinessStepCode	1..1	Denotes a specific activity within a business process. The business step code of an event specifies what business process step was taking place that caused the event.	
Attribute	inventoryMovementTypeCode	InventoryMovementTypeCode	0..1	Code specifying whether the reported activity leads to an increase or decrease of the inventory quantity.	renamed from inventoryMovementIndicator
Attribute	inventoryEventReasonCode	InventoryEventReasonCode	0..1	Code specifying the reason for this event.	
Attribute	inventoryEventReasonDescription	Description70	0..1	Textual description of the reason for this event.	

Note: Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.5   Returnable Packaging Inventory Status

Class Diagram

GDD Report

The content of the ReturnablePackagingInventoryStatus class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ReturnablePackagingInventoryStatus
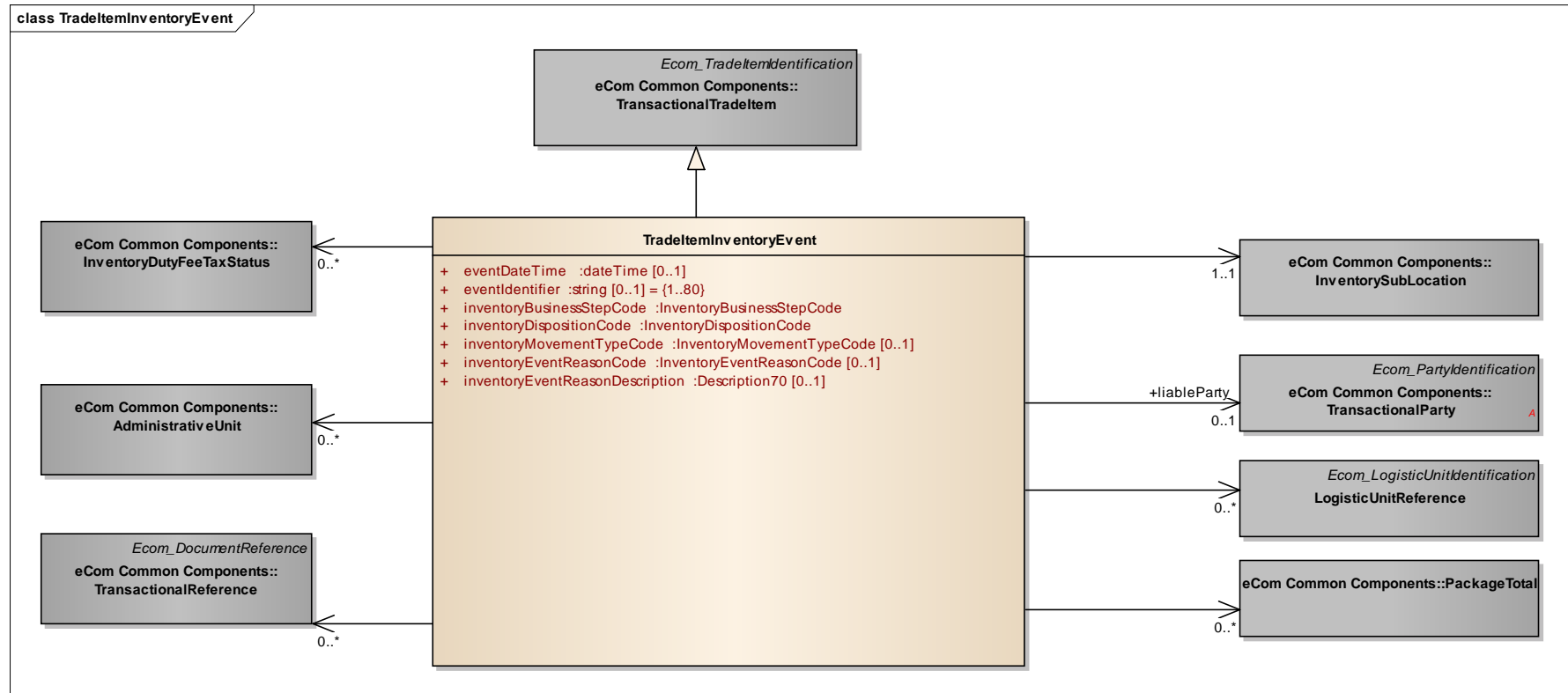
Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
ReturnablePackagingInventoryStatus				Information specifying the inventory status of a set of returnable packaging items (of the same type) at a specific sub-location at a specific point in time.	
Generalization		ReturnablePackaging			
Association		InventorySubLocation	1..1	The inventory sub location where the inventory is located.	
Attribute	inventoryDispositionCode	InventoryDispositionCode	1..1	The inventory disposition code specifies the business condition of the inventory.	
Attribute	inventoryDateTime	dateTime	0..1	Date and time when the inventory for this item was assessed.	

Note: Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.6   Trade Item Inventory Event

Class Diagram

GDD Report

The content of the TradeItemInventoryEvent class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TradeItemInventoryEvent

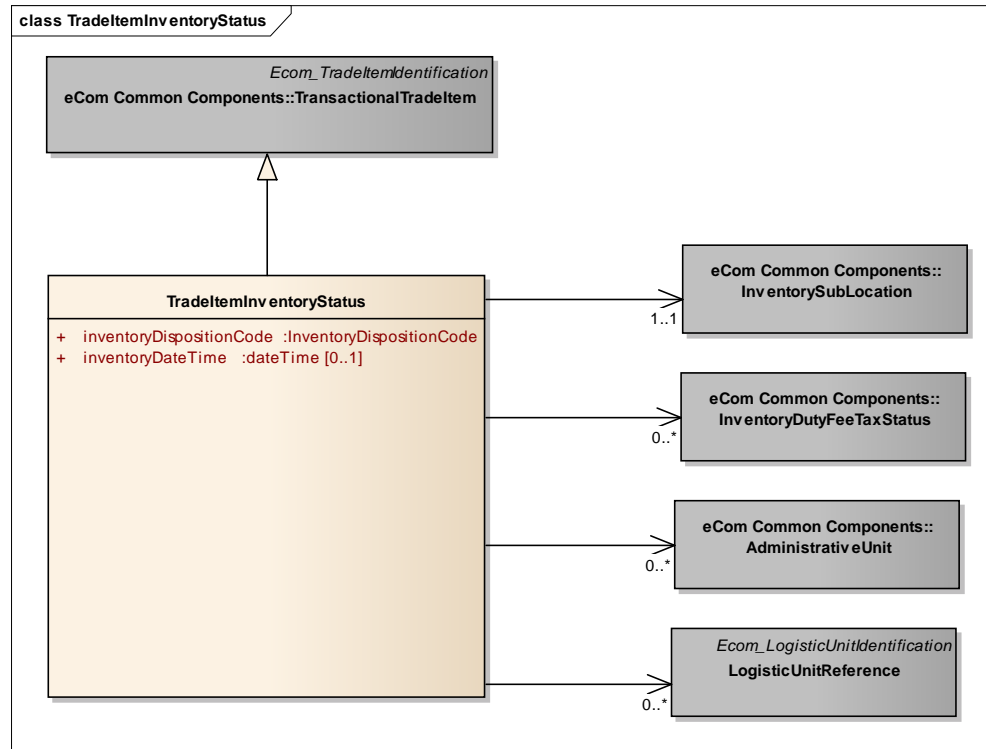| Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
TradeItemInventoryEvent				Information specifying an inventory activity of one or more trade items (of the same type) at a specific sub-location at a specific point in time.	
Association	liableParty	TransactionalParty	0..1	Party that will be held liable for the cost incurred by the event.	
Association		TransactionalReference	0..*	References to the commercial transaction or to transport or legal documents related to the item.	
Association		InventorySubLocation	1..1	The inventory sub location related to the event.	
Association		AdministrativeUnit	0..*	The administrative unit related to the event.	
Generalization		TransactionalTradeItem			
Association		InventoryDutyFeeTaxStatus	0..*	The duty, fee or tax status related to the inventory event.	
Association		PackageTotal	0..*	Aggregate information per type of package included in the inventory item.	
Association		LogisticUnitReference	0..*	The logistic units that hold the trade item subject to the event.	
Attribute	eventDateTime	dateTime	0..1	The moment in time at which the event occurred.	
Attribute	eventIdentifier	string	0..1	The sequence number for this event.	
Attribute	inventoryBusinessStepCode	InventoryBusinessStepCode	1..1	Denotes a specific activity within a business process. The business step code of an event specifies what business process step was taking place that caused the event.	
Attribute	inventoryDispositionCode	InventoryDispositionCode	1..1	The inventory disposition code specifies the business condition of the inventory that is subject of the event.	

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Attribute	inventoryMovement TypeCode	InventoryMovementTyp eCode	0..1	Code specifying whether the reported activity leads to an increase or decrease of the inventory quantity.	
Attribute	inventoryEventReas onCode	InventoryEventReason Code	0..1	Code specifying the reason for this event.	
Attribute	inventoryEventReas onDescription	Description70	0..1	Textual description of the reason for this event.	

✅ **Note:** Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.7   Trade Item Inventory Status

Class Diagram

GDD Report

The content of the TradeItemInventoryStatus class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TradeItemInventoryStatus

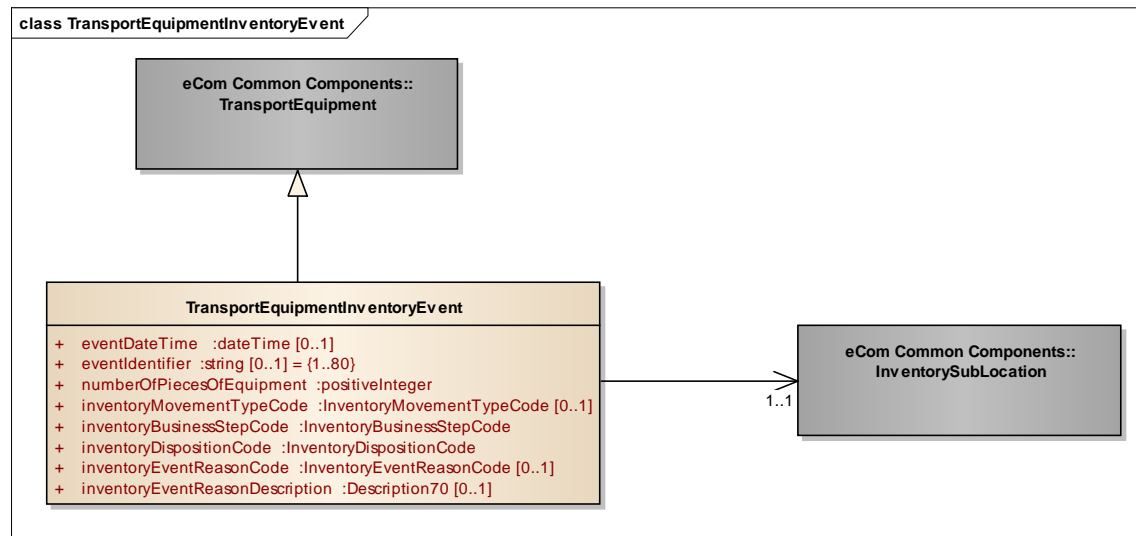| Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
TradeItemInventory Status				Information specifying the inventory status of a set of trade items (of the same type) at a specific sub-location at a specific point in time.	

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Association		InventoryDutyFeeTaxStatus	0..*	The duty, fee and tax status of the inventory.	
Association		AdministrativeUnit	0..*	The administrative unit to which the inventory has been allocated.	
Association		InventorySubLocation	1..1	The inventory sub location where the inventory is located.	
Association		LogisticUnitReference	0..*	The logistic units that contain the trade item.	
Generalization		TransactionalTradeItem			
Attribute	inventoryDispositionCode	InventoryDispositionCode	1..1	The inventory disposition code specifies the business condition of the inventory.	
Attribute	inventoryDateTime	dateTime	0..1	Date and time when the inventory for this item was assessed.	

Note: Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.8   Transport Equipment Inventory Event

Class Diagram

GDD Report

The content of the TransportEquipmentInventoryEvent class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportEquipmentInventoryEvent

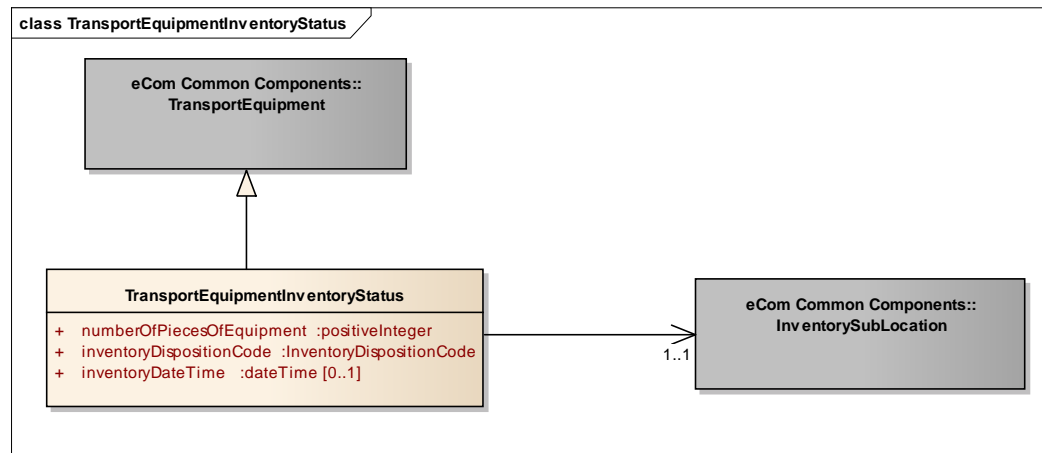| Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
TransportEquipment InventoryEvent				Information specifying an inventory activity of one or more pieces of transport equipment (of the same type) at a specific sub-location at a specific point in time.	
Association		InventorySubLocation	1..1		
Generalization		TransportEquipment			
Attribute	eventDateTime	dateTime	0..1	The moment in time at which the event occurred.	

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Attribute	eventIdentifier	string	0..1	The sequence number for this event.	
Attribute	numberOfPiecesOfEquipment	positiveInteger	1..1	The total number of pieces of the specified type of transport equipment.	
Attribute	inventoryMovementTypeCode	InventoryMovementTypeCode	0..1	Code specifying whether the reported activity leads to an increase or decrease of the inventory quantity.	renamed from inventoryMovementIndicator
Attribute	inventoryBusinessStepCode	InventoryBusinessStepCode	1..1	Denotes a specific activity within a business process. The business step code of an event specifies what business process step was taking place that caused the event.	
Attribute	inventoryDispositionCode	InventoryDispositionCode	1..1	The disposition code of an event specifies the business condition of the (remaining) inventory subsequent to the event. The disposition is assumed to hold true until another event indicates a change of disposition.	
Attribute	inventoryEventReasonCode	InventoryEventReasonCode	0..1	Code specifying the reason for this event.	
Attribute	inventoryEventReasonDescription	Description70	0..1	Textual description of the reason for this event.	

Note: Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.9 Transport Equipment Inventory Status

Class Diagram

GDD Report

The content of the TransportEquipmentInventoryStatus class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:TransportEquipmentInventoryStatus

| Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
TransportEquipment InventoryStatus				Information specifying the inventory status of a set of pieces of transport equipment (of the same type) at a specific sub-location at a specific point in time.	
Generalization		TransportEquipment			
Association		InventorySubLocation	1..1	The inventory sub location where the inventory is located.	
Attribute	numberOfPiecesOfE quipment	positiveInteger	1..1	The total number of pieces of the specified type of transport equipment.	
Attribute	inventoryDisposition Code	InventoryDispositionCo de	1..1	The inventory disposition code specifies the business condition of the inventory.	

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Attribute	inventoryDateTime	dateTime	0..1	Date and time when the inventory for this item was assessed.	

Note: Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.10 Warehousing Quantity Variance

Class Diagram

```
class WarehousingQuantityVariance

        WarehousingQuantityVariance
+   varianceQuantity  :Quantity
+   warehousingQuantityVarianceCode  :WarehousingQuantityVarianceCode
```
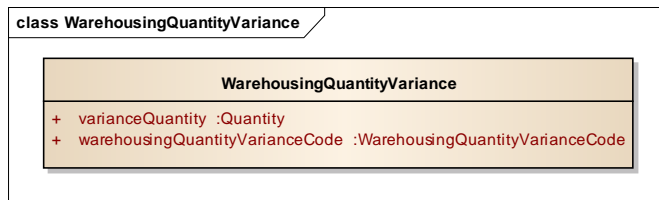
GDD Report

The content of the WarehousingQuantityVariance class, its structure and component definitions can be accessed in the Global Data Dictionary:
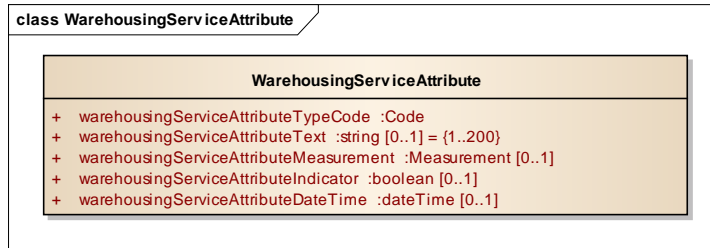*http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:WarehousingQuantityVariance*

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
WarehousingQuantity Variance				Quantity and reason of a shortage or surplus occurring in a warehousing process.	
Attribute	varianceQuantity	Quantity	1..1	The number of units of the variance.	
Attribute	warehousingQuanti tyVarianceCode	WarehousingQuantityV arianceCode	1..1	Code specifying the type and / or reason for the variance.	

Note: Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.11 Warehousing Service Attribute

Class Diagram

GDD Report

The content of the WarehousingServiceAttribute class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:WarehousingServiceAttribute
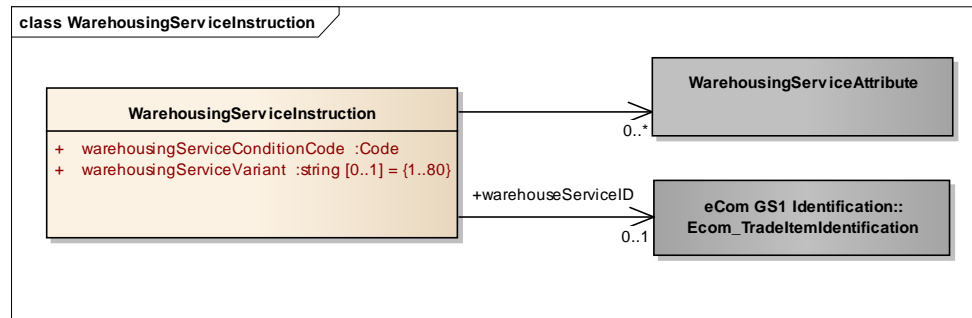
Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
WarehousingServiceAttribute				Piece of information used to further specify the details of a warehousing service.	
Attribute	warehousingServiceAttributeTypeCode	Code	1..1	Code specifying the type of warehousing service attribute. NOTE: For this attribute a GS1 code list is available (see paragraph 4.17.7 Warehousing Service Attribute Type Code), but also other code lists may be applied.	
Attribute	warehousingServiceAttributeText	string	0..1	Textual value of the warehousing service attribute.	
Attribute	warehousingServiceAttributeMeasurement	Measurement	0..1	Measurement value of the warehousing service attribute.	
Attribute	warehousingServiceAttributeIndicator	boolean	0..1	Boolean value of the warehousing service attribute.	
Attribute	warehousingServiceAttributeDateTime	dateTime	0..1	Date time value of the warehousing service attribute.	

Note: Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.12 Warehousing Service Instruction

Class Diagram

GDD Report

The content of the WarehousingServiceInstruction class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:WarehousingServiceInstruction

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
WarehousingServiceInstruction				Instruction specifying a service to be carried out by the logistic services seller during a warehousing process, for example during inbound or outbound.	
Association	warehouseServiceID	Ecom_TradeItemIdentification	0..1	Uniquely identifies warehouse service.	WR 15-000101 WR 15-000314
Association		WarehousingServiceAttribute	0..*	Information further specifying the details of a warehousing service.	
Attribute	warehousingServiceConditionCode	Code	1..1	Code specifying the type of warehousing service.	

Note: Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.13   Warehousing Shipment

Class Diagram
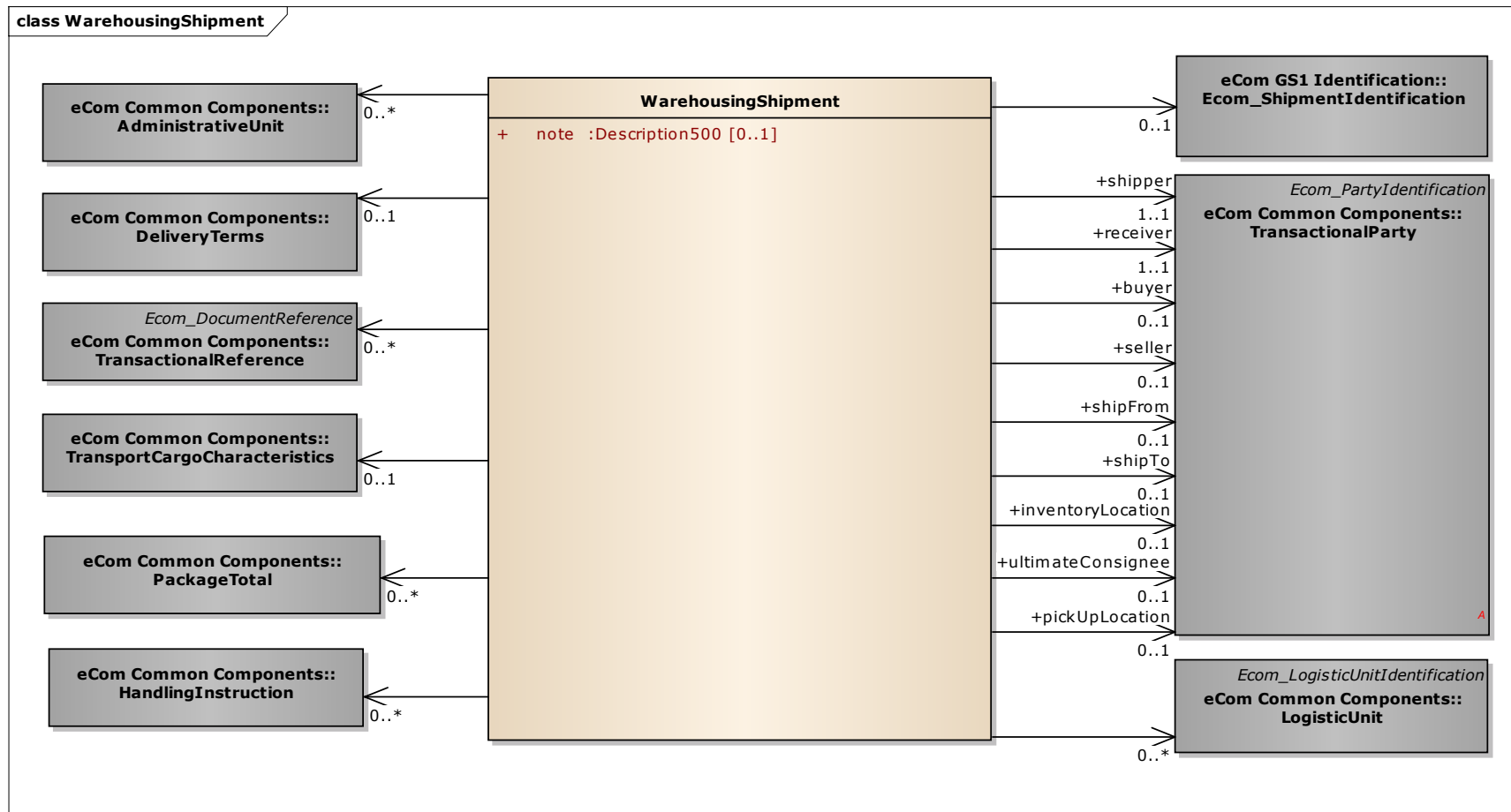
GDD Report

The content of the WarehousingShipment class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:WarehousingShipment

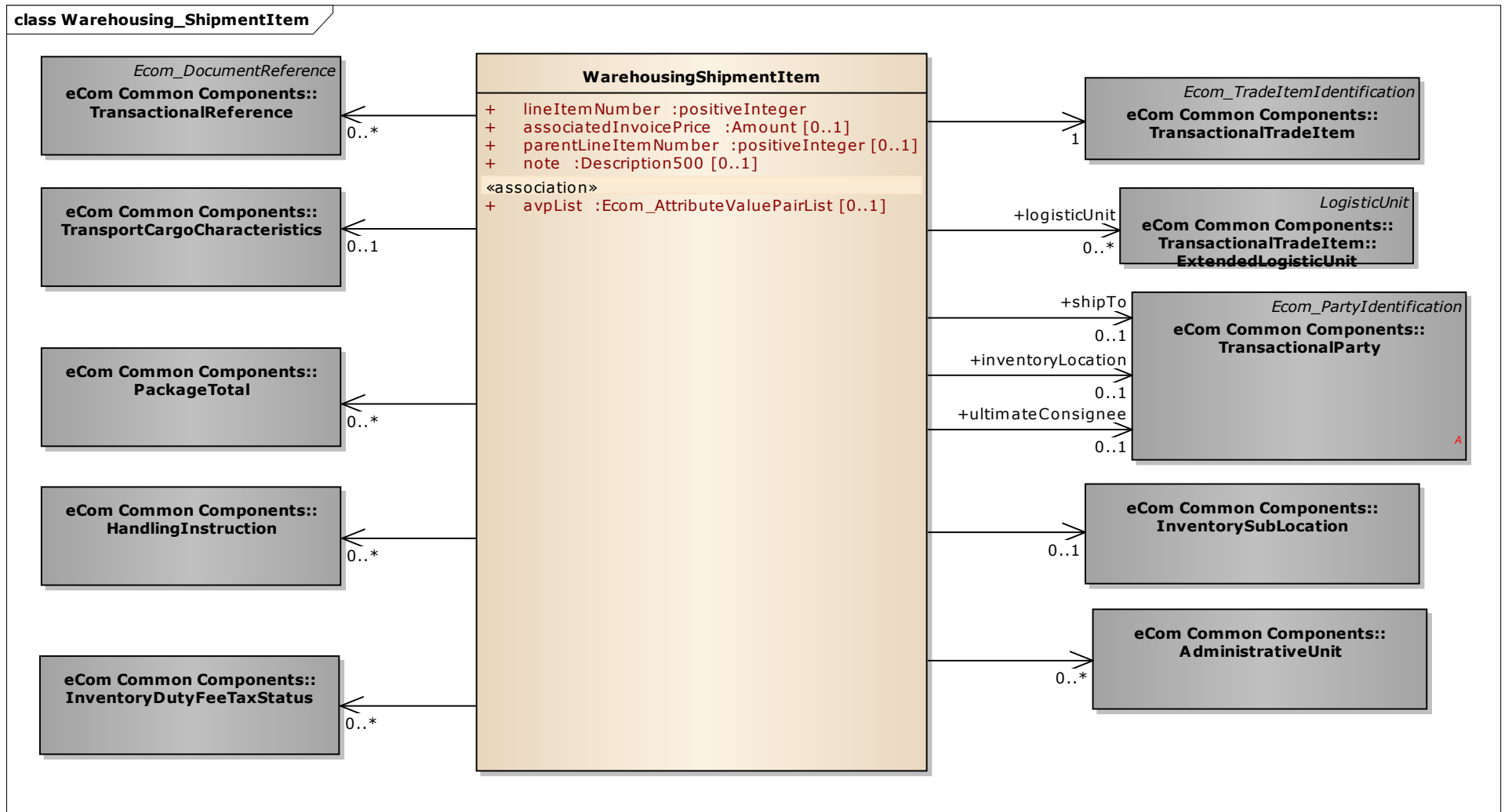| Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
WarehousingShipment				A shipment is an identifiable collection of one or more Trade Items available to be transported together from the shipper (Original Consignor/Shipper), to the receiver (Final/Ultimate Consignee).	[brad-whiop:shm-1]
Association	seller	TransactionalParty	0..1	Identifies the party which sells products or services to a buyer.	[brad-wio:shm-1.3]
Association	buyer	TransactionalParty	0..1	Identifies the party to which products or services are sold.	[brad-wio:shm-1.2]
Association		AdministrativeUnit	0..*	On or more administrative units related to the shipment.	[brad-wio:shm-1.10]
Association	receiver	TransactionalParty	1..1	A party which engages in receiving this shipment of goods.	[brad-wio:shm-1.5]
Association	shipper	TransactionalParty	1..1	A party which engages in shipping this shipment of goods.	[brad-wio:shm-1.4]
Association		PackageTotal	0..*	Aggregate information per type of package contained in the shipment.	[brad-wio:shm-1.14]
Association		Ecom_ShipmentIdentification	0..1		[brad-whiop:shm-1.1] WR 15-000314
Association		TransportCargoCharacteristics	0..1	Aggregate information on the goods that are contained in this shipment.	[brad-wio:shm-1.13]
Association		TransactionalReference	0..*	One or more references to associated information in support of related business processes. E.g. a purchase order, a return authorization number.	[brad-wio:shm-1.12]
Association		HandlingInstruction	0..*	One or more instructions on the way to treat the goods during transport and storage.	[brad-wio:shm-1.15]
Association	shipFrom	TransactionalParty	0..1	The physical location from where goods will be or have been shipped.	[brad-wio:shm-1.6]

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Association		DeliveryTerms	0..1	The applicable legal, customs, financial and insurance terms that have been agreed for the shipment.	[brad-wio:shm-1.11]
Association	ultimateConsignee	TransactionalParty	0..1	Identifies the party that is the final destination for the shipment.	[brad-wio:shm-1.9]
Association	inventoryLocation	TransactionalParty	0..1	Identification of the location (premises) where the goods will be stored.	[brad-wio:shm-1.8]
Association	shipTo	TransactionalParty	0..1	The physical location to where goods will be or have been shipped.	[brad-wio:shm-1.7]
Association		LogisticUnit	0..*	The logistic units contained in the shipment.	[brad-wio:shm-1.16]
Association	pickUpLocation	TransactionalParty	0..1	Party where goods are collected or taken over by the carrier.	WR 18-000137
Attribute	note	Description500	0..1	Free text used to convey information that is not processed by applications. Only meant to present the information to a user as on a screen, in a browser, etc.	

✅ **Note:** Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.14   Warehousing Shipment Item

Class Diagram

GDD Report

The content of the WarehousingShipmentItem class, its structure and component definitions can be accessed in the Global Data Dictionary:
http://apps.gs1.org/GDD/bms/Version3_4/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:WarehousingShipmentItem

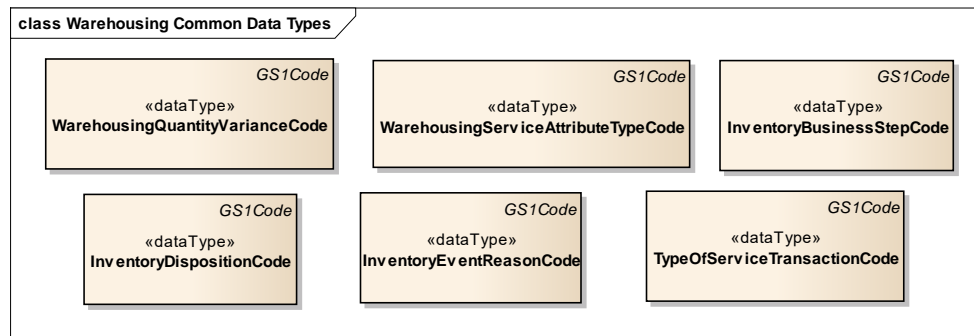| Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
WarehousingShipmentItem				A shipment item is collection of trade items and related logistic units that can each be identified (uniquely) within a shipment.	[brad-whiop:shm-2]
Association		TransportCargoCharacteristics	0..1	Aggregate information on the goods that are contained in this shipment item.	[brad-wio:shm-2.10]
Association		InventorySubLocation	0..1	Identification of the inventory sub-location where goods are stored.	[brad-wio:shm-2.4]
Association	shipTo	TransactionalParty	0..1	The physical location to where goods will be or have been shipped.	
Association		PackageTotal	0..*	Aggregate information per type of package contained in the shipment item.	[brad-wio:shm-2.11]
Association		AdministrativeUnit	0..*	One or more administrative units related to the shipment item.	
Association		InventoryDutyFeeTaxStatus	0..*	The duty, fee and / or tax status related to the goods.	
Association		TransactionalTradeItem	1..1	Information on the trade item contained in the shipment.	[brad-wio:shm-2.2]
Association		HandlingInstruction	0..*	One or more instructions on the way to treat the goods during transport and storage.	[brad-wio:shm-2.12]
Association	logisticUnit	ExtendedLogisticUnit	0..*	Information on the logistic unit quantity of the trade item contained in it and additional details, such as batch, lot and serial number of items contained.	[brad-wio:shm-1.16] WR 17-000142
Association	inventoryLocation	TransactionalParty	0..1	Identification of the location where the goods are stored.	[brad-wio:shm-2.3]
Association	ultimateConsignee	TransactionalParty	0..1	Identifies the party that is the final destination of the goods.	[brad-wio:shm-2.5]
Association		TransactionalReference	0..*	One or more references to associated information in support of related business processes. E.g. a purchase order, a return authorization number.	[brad-wio:shm-2.9]

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Attribute	lineItemNumber	positiveInteger	1..1	The sequence number for this shipment item. BRAD SHI2	
Attribute	associatedInvoicePrice	Amount	0..1	The unit price of the trade item excluding taxes.	[brad-wio:ecom-5]
Attribute	parentLineItemNumber	positiveInteger	0..1	The number of line item containing information about the parent of the current item. It allows establishing hierarchical link between the two items.	WR 14-000021 WR 14-000044
Attribute	note	Description500	0..1	Free text used to convey information that is not processed by applications. Only meant to present the information to a user as on a screen, in a browser, etc.;	
Attribute	avpList	Ecom_AttributeValuePairList	0..1	Temporary attributes introduced between minor versions.	WR 14-000110

Note: Reference Shared Common Library Business Message (BMS) Release 3.4 and eCom Domain Common Library Business Message (BMS) Release 3.4 for all common information.

4.15   Warhousing Common Data Types

Class Diagram

GDD Report

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
InventoryBusinessStepCode					
Generalization		GS1Code			
InventoryDispositionCode					
Generalization		GS1Code			
InventoryEventReasonCode					
Generalization		GS1Code			
TypeOfServiceTransactionCode					
Generalization		GS1Code			
WarehousingQuantityVarianceCode					
Generalization		GS1Code			
WarehousingServiceAttributeTypeCode					
Generalization		GS1Code			

4.16 Enumerations (message specific)

Not applicable

4.17 Code Lists

Class	Codelist	GDD Link
LogisticUnitInventoryEvent, ReturnablePackagingInventoryEvent, TradeItemInventoryEvent, TransportEquipmentInventoryEvent	InventoryBusinessStepCode	*http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:InventoryBusinessStepCode*
LogisticUnitInventoryEvent, ReturnablePackagingInventoryEvent, TradeItemInventoryEvent, TransportEquipmentInventoryEvent	InventoryMovementTypeCode	*http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:InventoryMovementTypeCode*
LogisticUnitInventoryEvent, ReturnablePackagingInventoryEvent, TradeItemInventoryEvent, TransportEquipmentInventoryEvent	InventoryEventReasonCode	*http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:InventoryEventReasonCode*
LogisticUnitInventoryStatus, ReturnablePackagingInventoryStatus, TradeItemInventoryEvent, TradeItemInventoryStatus, TransportEquipmentInventoryEvent, TransportEquipmentInventoryStatus	InventoryDispositionCode	*http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:InventoryDispositionCode*
LogisticsInventoryReport	TypeOfServiceTransactionCode	*http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:TypeOfServiceTransactionCode*
WarehousingQuantityVariance	WarehousingQuantityVarianceCode	*http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:WarehousingQuantityVarianceCode*

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

5 Business Message Examples

Not applicable

6 Implementation Considerations

6.1 User Guide

The Functional User Guide contains more information about the structure and content of the Warehousing Common message: *http://www.gs1.org/docs/ecom/xml/3/3.4/eCom-Trade_messages.html#WarehousingCommon*

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 3.1
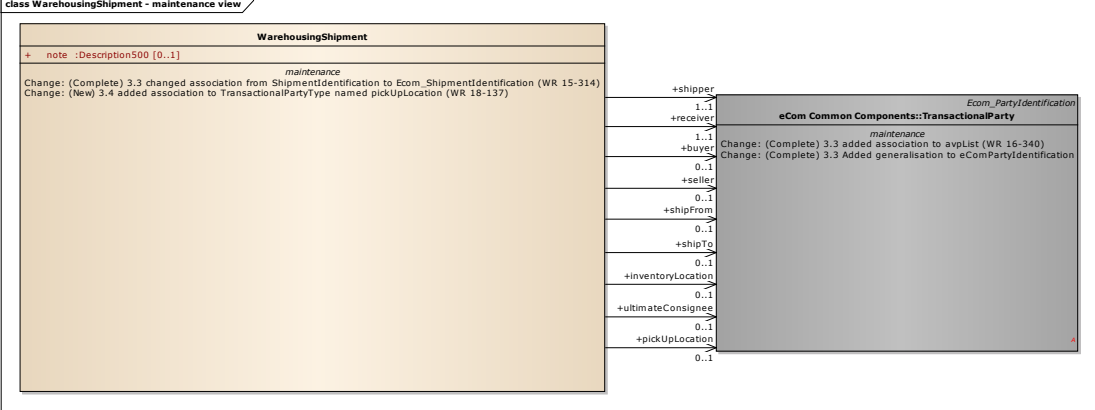
First publication of this standard.
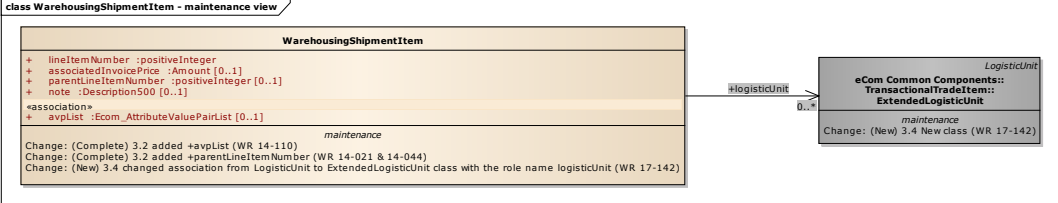
7.2   BMS Release 3.2

Change	Associated WR
■ Added a reference to parent line number to all LineItem classes, to support hierarchical items (WRs 14-021 & 14-044) ■ Add Attribute Value Pair at the root, line item and sub line item levels (WR 14-110) **class WarehousingShipmentItem - maintenance view** **WarehousingShipmentItem** + lineItemNumber :positiveInteger + associatedInvoicePrice :Amount [0..1] + parentLineItemNumber :positiveInteger [0..1] + note :Description500 [0..1] + «association» avpList :Ecom_AttributeValuePairList [0..1] *maintenance* Change: (Verified) 3.2 added +avpList (WR 14-110) Change: (Verified) 3.2 added +parentLineItemNumber (WR 14-021 & 14-044)	**14-000021** **14-000044** **14-000110**

7.3 BMS Release 3.3

Change	Associated WR
Added association to Ecom_TradeItemIdentification named warehouseServiceID in WarehousingServiceInstruction class 	**15-000101** Add identification of cash services in the WarehousingOutboundInstruction and WarehousingInboundInstruction
Created class typeOfServiceTransactionCode and added TypeOfServiceTransactionCode in LogisticsInventoryReport class 	**15-000046** Add Type Of Service Transaction in the Logistics Inventory Report
Created Ecom_LogisticUnitIdentification class and changed association from the previous LogisticUnitIdentification 	**15-000314** Make GS1 identification keys optional in GS1 EDI XML
Created Ecom_ShipmentIdentification class and changed association from the previous ShipmentIdentification 	**15-000314** Make GS1 identification keys optional in GS1 EDI XML

7.4   BMS Release 3.4

Change	Associated WR
Created ExtendedLogisticUnit class (see: 3.1.9) and added association to WarehousingShipmentItem class named logisticUnit 	**18-000137** Add pick up spot to warehousing messages
Added association to TransactionalParty named pickUpLocation from WarehousingShipmentclass 	**17-000142** Add possibility to specify in what SSCC a batch or serial number is contained, in the warehousing messages

8   Appendices

Not Applicable

9   Acknowledgements

9.1   Work Group

Function	Name	Company / organisation
Co-chair	Rossner (Pottier), Natascha	GS1 France
Co-chair	Schmidt, Tom Eric	August Storck KG
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Function	Name	Company / organisation
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