



The Global Language of Business

# Replenishment Request Business Message Standard (BMS)

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## Document Summary

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## Work Request Reference

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20-Aug-2008	GS1 Global Office	08-000209
27-Jul-2007	Accenture	07-000309
05-Nov-2004	GS1 Global Office	04-000211
07-Feb-2014	GS1 Germany	14-000021
20-Mar-2014	GS1 Slovenia	14-000044
25-Jun-2014	GS1 Global Office	14-000110
28-Oct-2015	Philips N.V.	15-000314

## Business Requirements Document (BRAD) Reference

BRAD Title	BRAD Issue Date	BRAD Version
BRAD Upstream Standards – Demand & Supply Signals	01-Nov-2004	0.1.0
Replenishment – Business Requirement Document	30-Mar-2004	1.0.0

## 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
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

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# 1 Business Domain View

## 1.1 Introduction

### Message Definition

The Replenishment Proposal message contains the seller delivery or production plan for the buyer for given trade items and locations for specific time periods.

### Principles

In the downstream supply chain, between retailer and manufacturer, the data is based on future demand put together as finished products and time series, but it can also be restricted to actual sales data for a certain period of time. The manufacturer needs to provide feedback on its availability to deliver, taking into account available inventories of both sides.

In the upstream supply chain, between manufacturer and material supplier, the data is based on material requirements for production and the timing, the availability of material supplier to deliver and the schedule for delivery. Inventories on both sides are taken into account for the actual delivery schedule.

Based on the delivery schedule (replenishment proposal), a transport and shipping planning can be derived.

## 1.2 References

	Reference Name	Description
[Ref1]	BMS eCom Domain Common Library Release 3.3	The documented design of components that are used in multiple messages within the eCom domain.
[Ref2]	BMS Shared Common Library Release 3.3	The documented design of components that are used in both the eCom domain and GDSN.
[Ref3]	BRAD Upstream Standards - Demand & Supply Signals 0.1.0	
[Ref4]	Replenishment – Business Requirement Document 1.0.0	

# 2 Business Context

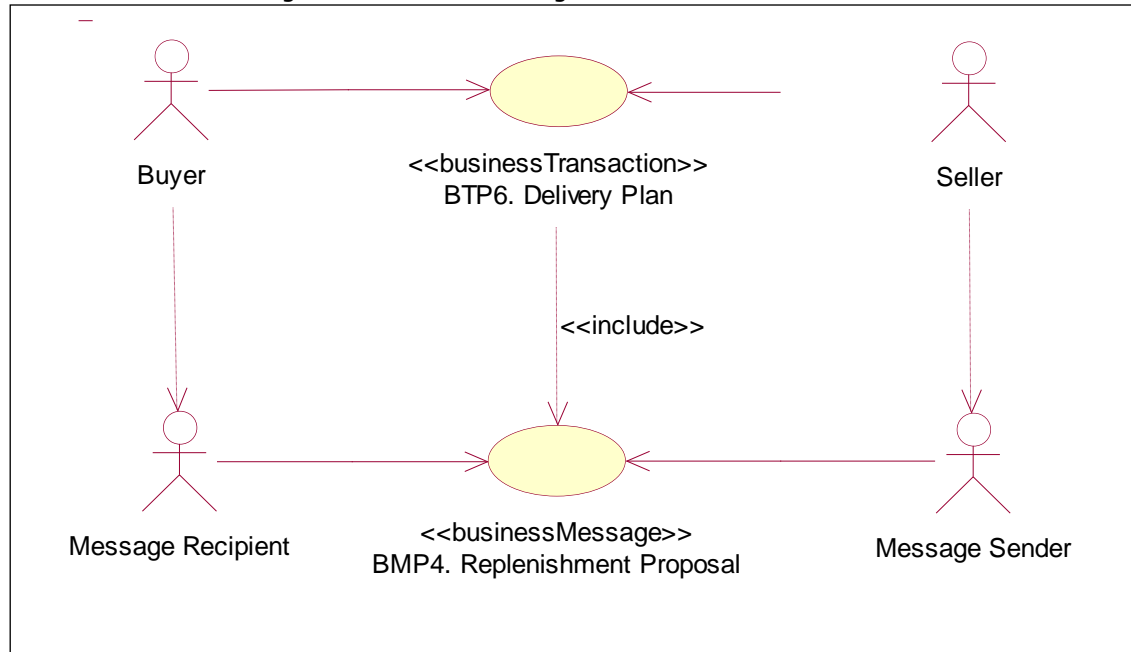
Context Category	Value(s)
Industry	All
Geopolitical	All
Product	All
Process	Plan
System Capabilities	GS1 System
Official Constraints	None

### 3 Business Transaction View

#### 3.1 Business Transaction – Delivery Plan

##### Use Case Diagram

Figure 3-1 Use Case Diagram: Business Transaction



##### Use Case Description

Use Case ID	BTP6									
Use Case Name	Delivery Plan									
Use Case Description	The Delivery Plan is sent by the supplier and communicates to the buyer the quantities of which items will be delivered when & where by the supplier.									
Actors (Goal)	Seller: To send the Delivery Plan. Buyer: To receive the Delivery Plan.									
Performance Goals										
Preconditions	Delivery Plan: CALCULATED									
Post conditions	Delivery Plan: COMMUNICATED									
Scenario	<div><div><b>Begins when:</b> Seller has calculated the delivery plan.</div><div><b>Continues with:</b><table><thead><tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr></thead><tbody><tr><td>1.</td><td>Seller</td><td>Sends Replenishment Proposal message to the Buyer.</td></tr><tr><td>2.</td><td>Buyer</td><td>Receives Replenishment Proposal message</td></tr></tbody></table></div><div><b>Ends when:</b> Buyer receives Replenishment Proposal message</div></div>	Step #	Actor	Activity Step	1.	Seller	Sends Replenishment Proposal message to the Buyer.	2.	Buyer	Receives Replenishment Proposal message
Step #	Actor	Activity Step								
1.	Seller	Sends Replenishment Proposal message to the Buyer.								
2.	Buyer	Receives Replenishment Proposal message								
Alternative Scenario	Not Applicable									

Guidelines	Not Applicable
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**Activity Diagram(s)**

Not Applicable

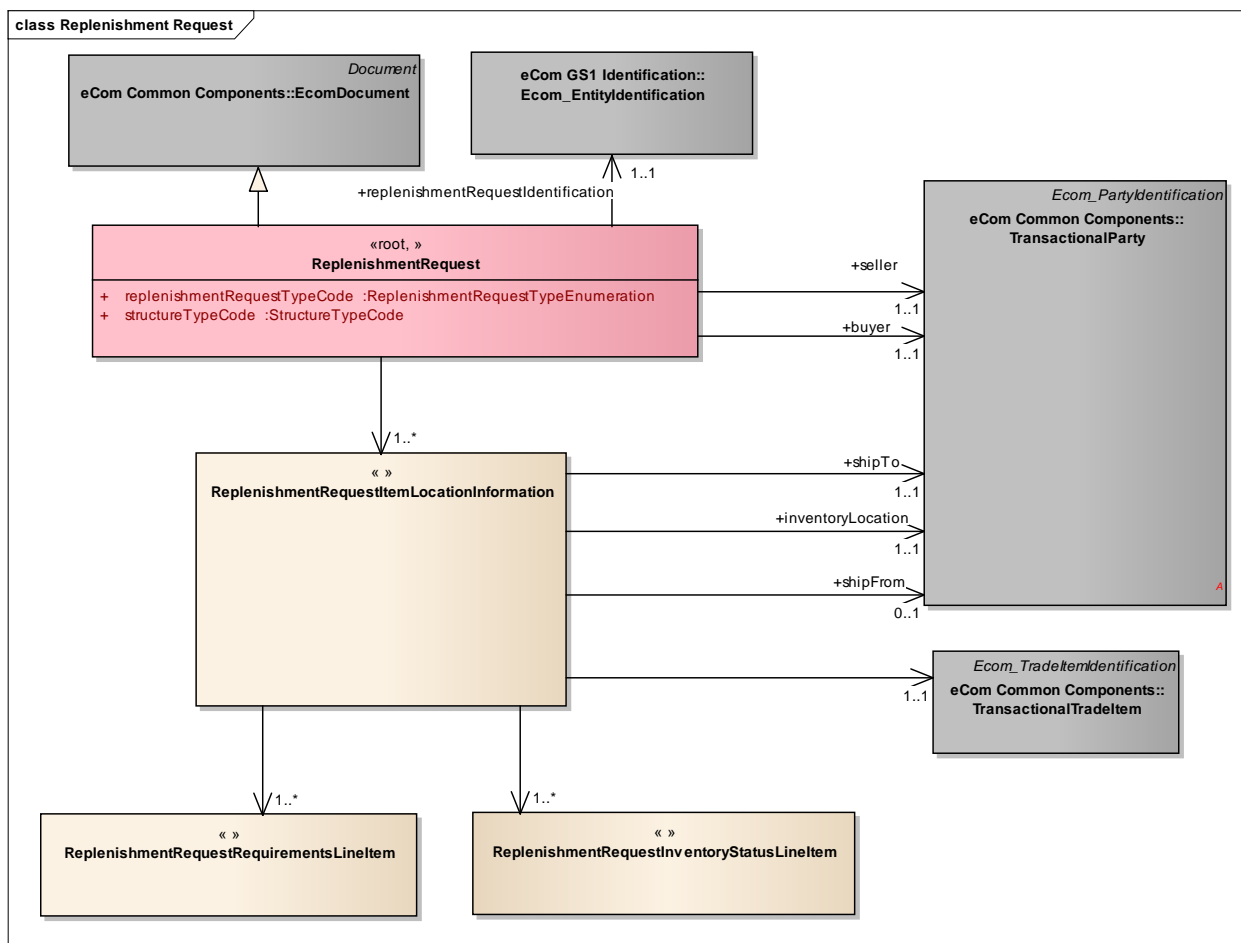
**Sequence Diagram(s)**

Not Applicable

## 4 Business Information View

### 4.1 Replenishment Request

#### Class diagram







The content of the ReplenishmentRequest class, its structure and component definitions can be accessed in the Global Data Dictionary:  
[http://apps.gs1.org/GDD/bms/Version3\\_3/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ReplenishmentRequest](http://apps.gs1.org/GDD/bms/Version3_3/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ReplenishmentRequest)

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
ReplenishmentRequest				Contains the material requirements and inventory status information from the buyer to the seller for given trade items and locations for specific time periods.	
Association	seller	TransactionalParty	1..1	Contains the identification of the party that is selling the goods.	
Association	replenishmentRequestIdentification	Ecom_EntityIdentification	1..1	Unique replenishment request number assigned by the buying party.	
Generalization		EcomDocument		Basic information about the content of the message including version number, creation date and time.	WR 14-000110
Association	buyer	TransactionalParty	1..1	Contains the identification of the party that is buying the goods.	
Association		ReplenishmentRequestItemLocationInformation	1..*	Contains the Replenishment Request for given trade items and locations for specific time periods.	
Attribute	replenishmentRequestTypeCode	ReplenishmentRequestTypeEnumeration	1..1	Contains the type of goods requirements, gross or net.	renamed from replenishmentRequestDocumentType
Attribute	structureTypeCode	StructureTypeCode	1..1	Contains the type of grouping and sequence of the business document.	
ReplenishmentRequestItemLocationInformation				Contains the Replenishment Request for a given trade item and location for specific time periods.	
Association	shipTo	TransactionalParty	1..1	Contains the identification of the location whereto the required goods will be delivered.	
Association		TransactionalTradeItem	1..1	Contains the identification of the item for which the replenishment request is specified.	
Association	shipFrom	TransactionalParty	0..1	Contains the identification of the location wherefrom the required goods will be delivered.	

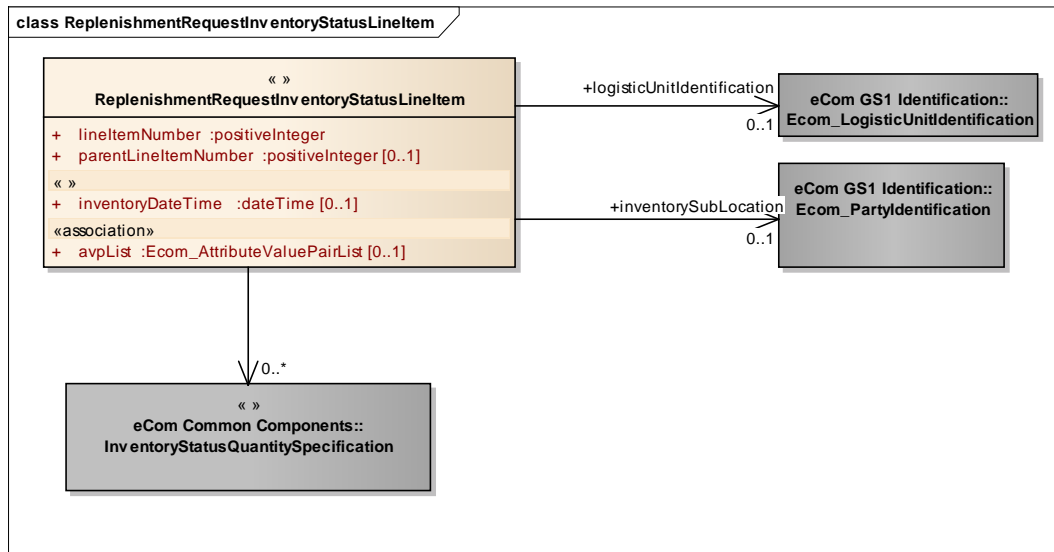
Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Association	inventoryLocation	TransactionalParty	1..1	Identification of the physical place at the receiving side where the items are to be stored.	
Association		ReplenishmentRequestRequirementsLineItem	1..*	The forecasted required quantities per time bucket.	
Association		ReplenishmentRequestInventoryStatusLineItem	1..*	Provides the details for the Replenishment Request Inventory Status Line Item.	



**Note:** Reference Shared Common Library Business Message (BMS) Release 3.3 and eCom Domain Common Library Business Message (BMS) Release 3.3 for all common information.

## 4.2 Replenishment Request Inventory Status Line Item

### Class Diagram



## GDD Report

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

[http://apps.gs1.org/GDD/bms/Version3\\_3/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ReplenishmentRequestInventoryStatusLineItem](http://apps.gs1.org/GDD/bms/Version3_3/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ReplenishmentRequestInventoryStatusLineItem)

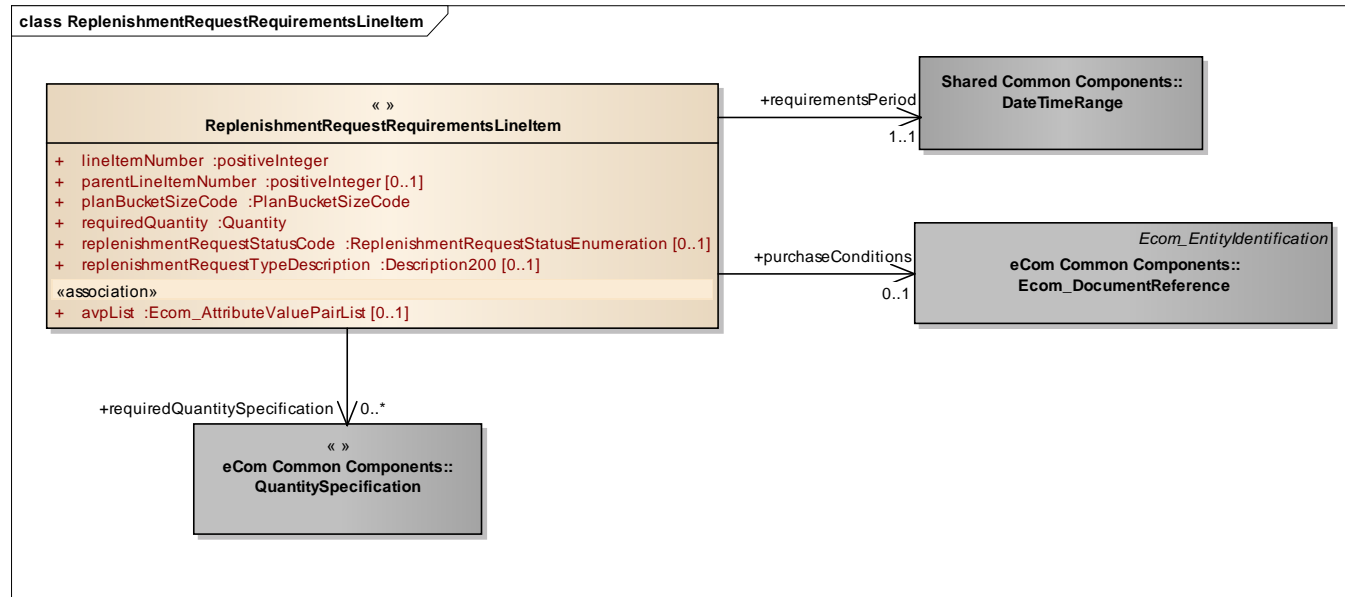
Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
ReplenishmentRequestInventoryStatusLineItem				Information specifying the inventory status of a specific trade item at a specific location at a specific point in time.	
Association	logisticUnitIdentification	Ecom_LogisticUnitIdentification	0..1	Detailed identification of the logistic unit that contains the goods.	WR 15-000314
Association	inventorySubLocation	Ecom_PartyIdentification	0..1	Detailed identification of the location at which the goods are stored.	WR 15-000314
Association		InventoryStatusQuantitySpecification	0..*	Information about the stored goods per inventory status.	
Attribute	lineItemNumber	positiveInteger	1..1	Provides the line number associated to the Replenishment Request Inventory Status Line Item.	
Attribute	inventoryDateTime	dateTime	0..1	Date and time the inventory for this line item was assessed. If this is not provided the beginDateTime provided at the business document level represents the inventoryDateTime.	
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	avpList	Ecom_AttributeValuePairList	0..1	Temporary attributes introduced between minor versions.	WR 14-000110



**Note:** Reference Shared Common Library Business Message (BMS) Release 3.3 and eCom Domain Common Library Business Message (BMS) Release 3.3 for all common information.

## 4.3 Replenishment Request Requirements Line Item

### Class Diagram



### GDD Report

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

[http://apps.gs1.org/GDD/bms/Version3\\_3/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ReplenishmentRequestRequirementsLineItem](http://apps.gs1.org/GDD/bms/Version3_3/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ReplenishmentRequestRequirementsLineItem)

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
ReplenishmentRequestRequirementsLineItem				The forecasted required quantities per time bucket.	
Association	requirementsPeriod	DateTimeRange	1..1	Contains the start and end dates and optionally start and end times of the requirements period.	
Association	requiredQuantitySpecification	QuantitySpecification	0..*	Specifies the cumulative quantity already received for the specified time bucket.	

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Association	purchaseConditions	Ecom_DocumentReference	0..1	Contains a reference to the commercial agreement under which the goods are supplied.	WR 15-000314
Attribute	lineItemNumber	positiveInteger	1..1	Provides the line number associated to the Replenishment Request Line Item.	
Attribute	planBucketSizeCode	PlanBucketSizeCode	1..1	Code specifying the duration of the requirements period.	renamed from timeBucketSizeType
Attribute	requiredQuantity	Quantity	1..1	The number of units required in the specified requirements period.	
Attribute	replenishmentRequestStatusCode	ReplenishmentRequestStatusEnumeration	0..1	Code specifying the status of the requirements: committed or planned.	attribute moved here from ReplenishmentCondition
Attribute	replenishmentRequestTypeDescription	Description200	0..1	Description of the type of requirement.	attribute moved here from ReplenishmentCondition, added Description to name
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	avpList	Ecom_AttributeValuePairList	0..1	Temporary attributes introduced between minor versions.	WR 14-000110



**Note:** Reference Shared Common Library Business Message (BMS) Release 3.3 and eCom Domain Common Library Business Message (BMS) Release 3.3 for all common information.

## 4.4 Enumerations (message specific)

Not applicable

## 4.5 Code Lists

Class	Codelist	GDD Link
ReplenishmentRequest	ReplenishmentRequestTypeEnumeration	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:qdd:cl:ReplenishmentRequestTypeEnumeration">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:qdd:cl:ReplenishmentRequestTypeEnumeration</a>
ReplenishmentRequestRequirementsLineItem	ReplenishmentRequestStatusEnumeration	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:qdd:cl:ReplenishmentRequestStatusEnumeration">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:qdd:cl:ReplenishmentRequestStatusEnumeration</a>
ReplenishmentRequest	StructureTypeCode	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:qdd:cl:StructureTypeCode">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:qdd:cl:StructureTypeCode</a>
ReplenishmentRequestRequirementsLineItem	PlanBucketSizeCode	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:qdd:cl:PlanBucketSizeCode">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:qdd:cl:PlanBucketSizeCode</a>



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

## 5 Business Message Examples

### 5.1 Example

This is an example of a Replenishment Request message used to communicate gross requirements and inventory. The message is sent out on February 9th at 11 AM. The message is identified with the unique identifier RR295001.

The gross requirements are sent by the manufacturer - Buyer (GLN 5412345000013) to the material supplier - Seller (GLN 4098765000010).

#### Party Information

GS1 Global Location Number	Party Type
5412345000013	Buyer
4098765000010	Seller
4098765000997	Ship From Z
5412345000174	Ship to X
5412345000228	Ship to Y
8712345634537	Inventory Location

For informational purposes the manufacturer includes the name of his material requirements planner (Mr. Gilgamesh). The gross requirements are for two delivery sites, X (Ship To 5412345000174) and Y (Ship To 5412345000228).

The gross requirements are for one item, A (GTIN 40987650000223).

For item A and delivery site X the gross requirements are:

- Week February 11-17: 1000 units, of which 500 units have already been received.
- Week February 18-25: 200 units.

The inventory for item A on site X is 100 units (available for sale) and 15 (expired).

The contract to be used for the requirements in week February 11-17 (PC356987) was issued by the business unit of the material supplier (GLN 4098765000010). Within the contract line 23 refers to this item.

For the requirements in week February 18-25 no contract has been specified.

For item A and delivery site Y the gross requirements are:

- Week February 11-17: 300 units.
- Week February 18-25: 1200 units.

The inventory for item A on site Y is 50 units (available for sale).

The contract used for the requirements in week February 11-17 (PC356987) is the same as for delivery site X.

For the requirements in week February 18-25 no contract has been specified.

#### Message Example

Attribute	Value
<b>ReplenishmentRequest</b>	
creationDateTime	2005-02-09T11.00.00
documentStatusCode	ORIGINAL
replenishmentRequestTypeCode	GROSS_REQUIREMENTS_AND_INVENTORY
structureTypeCode	ITEM_BY_LOCATION

Attribute	Value
<b>EntityIdentification (+replenishmentRequestIdentification)</b>	
entityIdentification	RR295001
<b>PartyIdentification (+contentOwner)</b>	
Gln	5412345000013
<b>TransactionalParty (+seller)</b>	
Gln	4098765000010
<b>TransactionalParty (+buyer)</b>	
Gln	5412345000013
<b>Contact</b>	
personName	Gilgamesh
Responsibility	Material Requirements Planner
<b>ReplenishmentRequestItemLocationInformation *1</b>	
<b>TransactionalParty (+shipTo)</b>	
gln	5412345000174
<b>TransactionalParty (+inventoryLocation)</b>	
gln	8712345634537
<b>TransactionalTradeItemIdentification</b>	
gtin	40987650000223
<b>ReplenishmentRequestRequirementsLineItem *1.1</b>	
lineItemNumber	1
planBucketSizeCode	WEEK
requiredQuantity	1000
<b>DateTimeRange (+requirementsPeriod)</b>	
<b>TimePeriod</b>	
beginDate	2005-02-11
endDate	2005-02-17
<b>DocumentReference (+purchaseConditions)</b>	
entityIdentification	PC356987
lineItemNumber	23
<b>PartyIdentification (+contentOwner)</b>	
gln	4098765000010
<b>QuantitySpecification (+requiredQuantitySpecification)</b>	
quantitySpecificationType	RECEIVED
specificQuantity (value, unitOfMeasure)	500
<b>ReplenishmentRequestRequirementsLineItem *1.2</b>	
lineItemNumber	2
planBucketSizeCode	WEEK
requiredQuantity	1200
<b>DateTimeRange (+requirementsPeriod)</b>	



Attribute	Value
beginDate	2005-02-18
endDate	2005-02-25
<b>ReplenishmentRequestInventoryStatusLineItem *1.3</b>	
lineItemNumber	3
<b>InventoryStatusQuantitySpecification</b>	
inventoryStatusType	AVAILABLE_FOR_SALE
quantityOfUnits	100
<b>InventoryStatusQuantitySpecification</b>	
inventoryStatusType	EXPIRED
quantityOfUnits	10
<b>ReplenishmentRequestItemLocationInformation *2</b>	
<b>TransactionalParty (+shipTo)</b>	
gln	5412345000228
<b>TransactionalParty (+inventoryLocation)</b>	
gln	8712345674451
<b>TransactionalTradeItem</b>	
gtin	40987650000223
<b>ReplenishmentRequestRequirementsLineItem *2.1</b>	
lineItemNumber	4
planBucketSizeCode	WEEK
requiredQuantity	300
<b>DateTimeRange (+requirementsPeriod)</b>	
beginDate	2005-02-11
endDate	2005-02-17
<b>DocumentReference (+purchaseConditions)</b>	
entityIdentification	PC356987
lineItemNumber	23
<b>PartyIdentification (+contentOwner)</b>	
gln	4098765000010
<b>ReplenishmentRequestRequirementsLineItem *2.2</b>	
lineItemNumber	5
planBucketSizeCode	WEEK
requiredQuantity	1200
<b>DateTimeRange (+requirementsPeriod)</b>	
beginDate	2005-02-18
endDate	2005-02-25
<b>ReplenishmentRequestInventoryStatusLineItem *2.1</b>	
lineItemNumber	6
<b>InventoryStatusQuantitySpecification</b>	

Attribute	Value
inventoryStatusType	AVAILABLE_FOR_SALE
quantityOfUnits	50

## 6 Implementation Considerations

### 6.1 User Guide

The Functional User Guide contains more information about the structure and content of the Replenishment Request message: [http://www.gs1.org/docs/ecom/xml/3/3.3/eCom-Trade\\_messages.html#ReplenishmentRequest](http://www.gs1.org/docs/ecom/xml/3/3.3/eCom-Trade_messages.html#ReplenishmentRequest)

### 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

Change	Associated CR
For BMS Release 3.0.0 Update to modelling methodology for Release 3.0.0	Not Applicable
For Issue Resolution: Cleaned up summary of changes Edited Business Example to reflect sequencing changes	Not Applicable
<b>For XSD Peer Review:</b> Updated Business Example: Under GoodsRequirementsItemLocationInformation *2, inventoryLocation was missing; this is a mandatory attribute.	Not Applicable
<b>XSD Development (10-Oct-2011)</b> Updated Business Example, renamed GoodsRequirementsItemLocationInformation into ReplenishmentRequestItemLocationInformation Removed {1..80} restriction in replenishmentRequestTypeDescription	Not Applicable
<b>Public Review</b> Removed the following code values from ReplenishmentRequestTypeEnumeration <ul style="list-style-type: none"> <li>MATERIAL_REQUIREMENTS</li> <li>MATERIAL_REQUIREMENTS_AND_INVENTORY</li> </ul>	Not applicable
<b>Corrected example. Under</b> GoodsRequirementsItemLocationInformation *1, inventoryLocation was missing; this is a mandatory attribute.	Not applicable
<b>Publication</b> <ul style="list-style-type: none"> <li>Added Copyright R in GS1 Logo</li> <li>Changed Status to Approved</li> <li>Removed year reference in footer copyright statement</li> <li>Replaced Section 10 with updated AG Principles</li> </ul>	Not Applicable

### 7.2 BMS Release 3.1

No work requests. Indirect changes due to upgrade to new Shared and eCom Common libraries.

## 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> class ReplenishmentRequest - maintenance view <div> <div>«root, » <b>ReplenishmentRequest</b></div> <div> + replenishmentRequestTypeCode :ReplenishmentRequestTypeEnumeration  + structureTypeCode :StructureTypeCode </div> <div> maintenance  Change: (Verified) 3.2 changed generalisation from Document to eComDocument class to include AVP (WR 14-110) </div> </div> </div>	<b>14-000110</b>
<ul style="list-style-type: none"> <li>■ Add a reference to parent line number to all LineItem classes, to support hierarchical items (WRs 14-021 &amp; 14-044)</li> <li>■ Added Attribute Value Pair at the root, line item and sub line item levels (WR 14-110)</li> </ul> <div> class ReplenishmentRequestRequirementsLineItem - maintenance view <div> <div>« » <b>ReplenishmentRequestRequirementsLineItem</b></div> <div> + lineItemNumber :positiveInteger  + planBucketSizeCode :PlanBucketSizeCode  + requiredQuantity :Quantity  + replenishmentRequestStatusCode :ReplenishmentRequestStatusEnumeration [0..1]  + replenishmentRequestTypeDescription :Description200 [0..1]  + parentLineItemNumber :positiveInteger [0..1]  + «association» avpList :Ecom_AttributeValuePairList [0..1] </div> <div> maintenance  Change: (Verified) 3.2 added +avpList (WR 14-110)  Change: (Verified) 3.2 added +parentLineItemNumber (WR 14-021 &amp; 14-044) </div> </div> </div>	<b>14-000021</b> <b>14-000044</b> <b>14-000110</b>
<ul style="list-style-type: none"> <li>■ Add a reference to parent line number to all LineItem classes, to support hierarchical items (WRs 14-021 &amp; 14-044)</li> <li>■ Added Attribute Value Pair at the root, line item and sub line item levels (WR 14-110)</li> </ul> <div> class ReplenishmentRequestInventoryStatusLineItem - maintenance view <div> <div>« » <b>ReplenishmentRequestInventoryStatusLineItem</b></div> <div> + lineItemNumber :positiveInteger  + inventoryDateTime :dateTime [0..1]  + parentLineItemNumber :positiveInteger [0..1]  + «association» avpList :Ecom_AttributeValuePairList [0..1] </div> <div> maintenance  Change: (Verified) 3.2 added +avpList (WR 14-110)  Change: (Verified) 3.2 added +parentLineItemNumber (WR 14-021 &amp; 14-044) </div> </div> </div>	<b>14-000021</b> <b>14-000044</b> <b>14-000110</b>

## 7.4 BMS Release 3.3

Change	Associated WR
<p>Created Ecom_EntityIdentification class and changed association from the previous EntityIdentification</p> <p><b>class ReplenishmentRequest - maintenance view</b></p>	<p><b>15-000314</b></p> <p>Make GS1 identification keys optional in GS1 EDI XML</p>
<p>Created Ecom_DocumentReference class and changed association from the previous DocumentReference</p> <p><b>class ReplenishmentRequestRequirementsLineItem - maintenance view</b></p>	<p><b>15-000314</b></p> <p>Make GS1 identification keys optional in GS1 EDI XML</p>
<ul style="list-style-type: none"> <li>Created Ecom_LogisticUnitIdentification class and changed association from the previous LogisticUnitIdentification, added role name logisticUnitIdentification to preserve backward compatibility</li> <li>Created Ecom_PartyIdentification class and changed association from the previous PartyIdentification</li> </ul> <p><b>class ReplenishmentRequestInventoryStatusLineItem - maintenance view</b></p>	<p><b>15-000314</b></p> <p>Make GS1 identification keys optional in GS1 EDI XML</p>

## 8 Appendices

Not Applicable

## 9 Acknowledgments

### 9.1.1 Work Group

Function	Name	Company / organisation
Co-chair	Rossner (Pottier), Natascha	GS1 France
Co-chair	Schmidt, Tom Eric	August Storck KG
Member	Bemrose, Jonathan	R&R Ice Cream
Member	Bodemer, Petra	dm-drogerie markt GmbH + Co. KG
Member	Boikanyo, Rebhone	GS1 South Africa / Consumer Goods Council of South Africa
Member	Canada, ON	M3B 3L1
Member	Carlson, Jim	General Mills, Inc.
Member	Chresta, Richard	GS1 Switzerland
Member	Cook, Don	Wal-Mart Stores, Inc.
Member	Cox, Marc	Philips Electronics N.V.
Member	Darnell, David	Systrends
Member	De Flou, Nele	GS1 Belgium & Luxembourg
Member	Dicks, Arne	GS1 Germany
Member	Duvinger, Karina	GS1 Sweden
Member	Foerderer, Klaus	GS1 Germany
Member	Gathmann, Stefan	GS1 Ireland
Member	Grangard, Anders	GS1 Global Office
Member	Harpell, Eileen	GS1 Community Room Staff
Member	Hand, Phil	JDA Software
Member	Herregodts, Kurt	GS1 Belgium & Luxembourg
Member	Kempkes, Fred	Unilever N.V.
Member	Kernan, Brendan	GS1 Ireland
Member	Kidd, Robin	Nestle
Member	Krid, Anne-Claire	GS1 France
Member	Lanoue, Tom	General Mills, Inc.
Member	Laur, Rita	GS1 Canada
Member	Lenman, Mia	GS1 Sweden
Member	Lerch, Hanjoerg	METRO Group
Member	Moberg, Dale	Axway
Member	Montes de Oca, Alejandra	GS1 Mexico
Member	Ng, Ella	GS1 Australia
Member	Peelen, Esther	GS1 Netherlands
Member	Pelekies, Andreas	GS1 Germany

Function	Name	Company / organisation
Member	Perrier, Patricia	GS1 France
Member	Przybilla, Christian	GS1 Germany
Member	Pujol, Xavier	GS1 Spain
Member	Racek, Greg	Wal-Mart Stores, Inc.
Member	Repetto, Mirko	GS1 Italy
Member	Robba, Steven	1WorldSync Holdings, Inc.
Member	Rosell, Pere	GS1 Spain
Member	Rosenberg, Steven	GS1 US
Member	Schmid, Sue	GS1 Australia
Member	Schneider, Christian	GS1 Switzerland
Member	Sehorz, Eugen	GS1 Austria
Member	Sharma, Vishal	General Mills, Inc.
Member	Shimazaki, Ayako	GS1 Japan
Member	Sion, Emilie	GS1 France
Member	Souza, Nadia	GS1 Brasil
Member	Strand, Roman	GS1 Germany
Member	Tan, Milton	GS1 Malaysia
Member	Tompsett, Simon	Waitrose
Member	Trelle, Ute	1WorldSync Holdings, Inc.
Member	Tse, Steve	GS1 Hong Kong
Member	Tyson, Betty	Knouse Foods Cooperative, Inc
Member	Van den Bergh, Senne	GS1 Belgium & Luxembourg
Member	Van der Eijk, Pim	OASIS - Sonnenglanz Consulting BV
Member	Veldhuis, Saskia	Procter & Gamble Co.
Member	Welch, Shan	GS1 UK
Member	Westerkamp, Jan	GS1 Netherlands
Member	Wilson, Mary	GS1 US
Member	Windsperger, Bekki	Best Buy Co., Inc.
Member	Yang, Shaopeng	GS1 China
Member	Yusdiar, Dani	GS1 Indonesia
Member	Zwanziger, Greg	SUPERVALU

### 9.1.2 Development Team Members

Function	Name	Organisation
GSMP Process Lead	Jean-Luc Champion	GS1 Global Office
Technical Development Lead	Ewa Iwicka	GS1 Global Office
Peer Review	Mark Van Eeghem	GS1 Global Office

