



# Goods Requirements

## Business Message Standard (BMS)

*Release 3.2*

*01-Dec-2014, Issue 1*



## Document Summary

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

## Work Request Reference

Date of WR Submission to GSMP:	WR Submitter(s):	Refer to Work Request (WR) Number(s):
20-Aug- 2008	GS1 Global Office	08-000209
06-Sep-2006	Accenture	07-000320
11-May-2004	GUSI	04-000211
07-Feb-2014	GS1 Germany	14-000021
20-Mar-2014	GS1 Slovenia	14-000044
25-Jun-2014	GS1 Global Office	14-000110

## Business Requirements Document (BRAD) Reference

BRAD Title	BRAD Issue Date	BRAD Version
BRAD Upstream Standards – Demand & Supply Signals	01-Nov-2004	0.1.0

## Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change
12-Jan-2012	BMS 3.0 – Issue 1	Mark Van Eeghem	BMS Release 3.0	See summary of changes
01-May-2013	BMS 3.1 – Issue 1	Coen Janssen	BMS Release 3.1	See summary of changes
01-Dec-2014	BMS 3.2 – Issue 1	Ewa Iwicka	BMS Release 3.2	See summary of changes

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# 1. Business Domain View

## 1.1. Introduction

### Message Definition

Goods Requirements message allows the buyer to inform the seller about the requirement for given trade items and locations for specific time periods.

### Principles

Goods Requirements message may be used in traditional order driven scenarios and is definitely needed in supplier managed inventory scenarios, in combination with the Inventory Report.

## 1.2. References

Reference Name	Description
[Ref1] BMS eCom Common Library 3.2	The documented design of components that are used in multiple messages. In the eCom Domain.
[Ref2] BMS Shared Common Library 3.2	The documented design of components that are used in both the eCom Domain and GDSN
Ref2] BRAD Upstream Standards - Demand & Supply Signals 0.1.0	

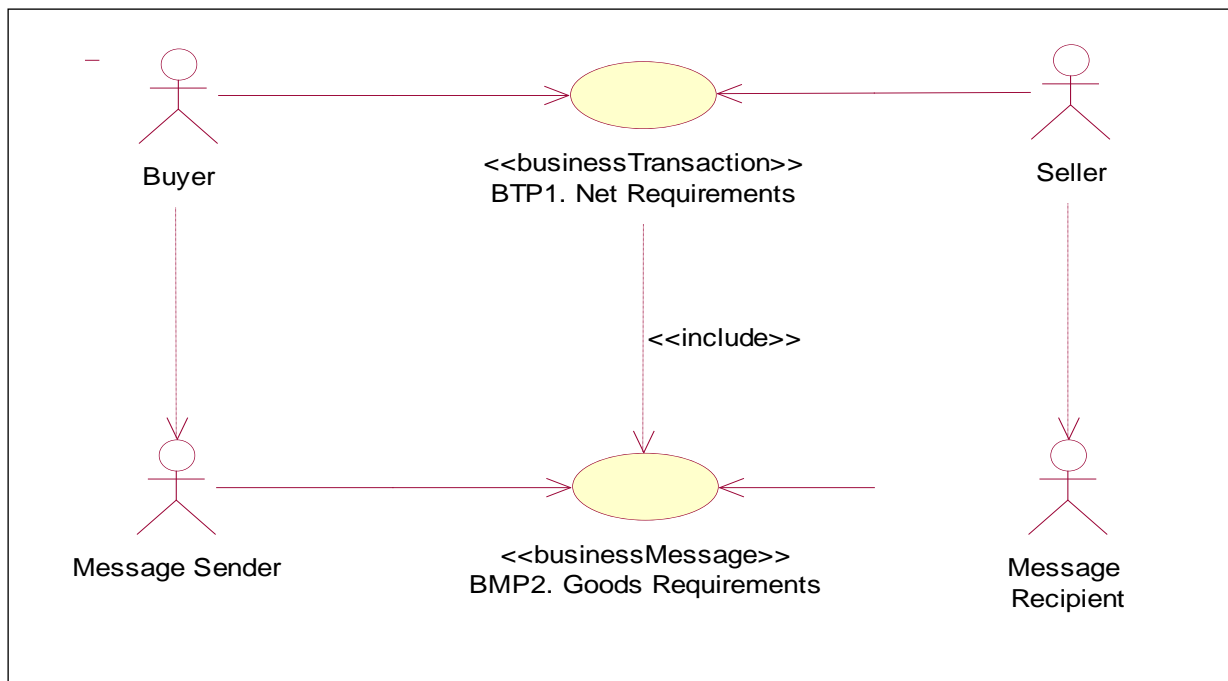
# 2. Business Context

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

## 3. Business Transaction View

### 3.1. Business Transaction – Net Requirements

#### Use Case Diagram



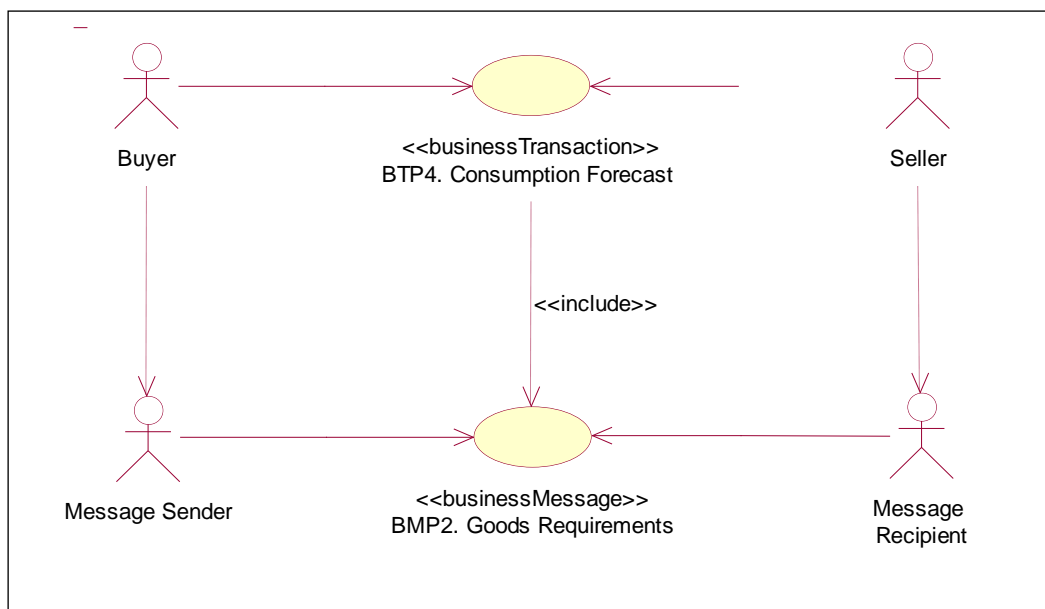
#### Use Case Description

Use Case ID	BTP1		
Use Case Name	Net Requirements		
Use Case Description	The buyer communicates his net requirements to the seller.		
Actors (Goal)	Buyer: To send the net requirements. Seller: To receive the net requirements.		
Performance Goals	Not Applicable		
Preconditions	Net Requirements: CALCULATED		
Post conditions	Net Requirements: COMMUNICATED		
Scenario	<b>Begins when:</b> Buyer has calculated his net requirements.		
	<b>Continues with:</b>		
	<b>Step #</b>	<b>Actor</b>	<b>Activity Step</b>
	1.	Buyer	Sends Goods Requirements message to the Seller.
	2.	Seller	Receives Goods Requirements Message

	<b>Ends when:</b>		
<b>Alternative Scenario</b>	<i>(any alternatives to the above scenario)</i>		
	<b>Step #</b>	<b>Actor</b>	<b>Activity Step</b>
			Not Applicable
<b>Business Transaction Rules</b>			
	1.	For communicating the consumption forecast use the goodsRequirementsType with value NET_REQUIREMENTS	

## 3.2. Business Transaction - Consumption Forecast

### Use Case Diagram



## Use Case Description

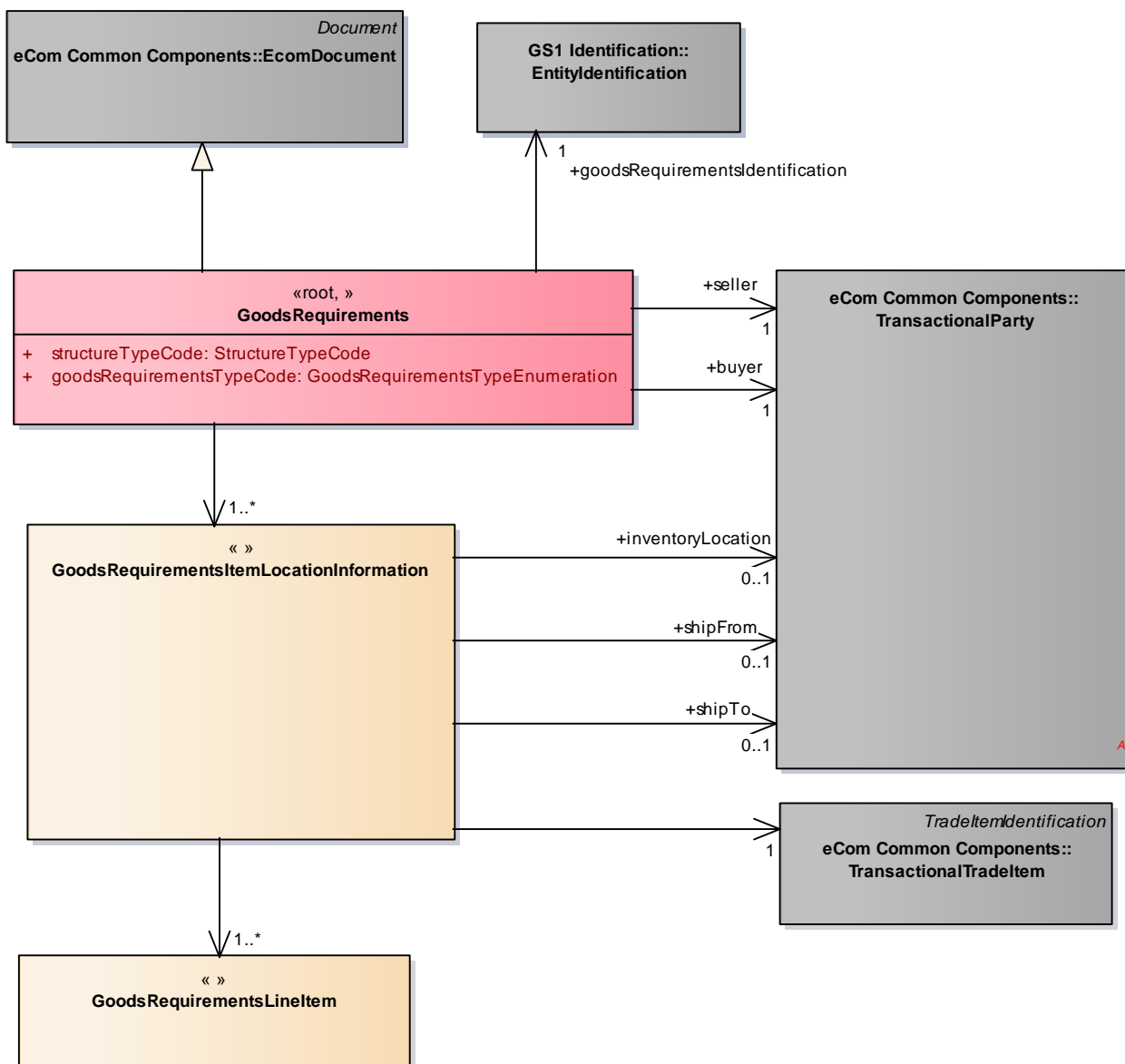
Use Case ID	BTP4		
Use Case Name	Consumption Forecast		
Use Case Description	The buyer communicates his forecasted consumption to the seller.		
Actors (Goal)	Buyer: To send the consumption forecast. Seller: To receive the consumption forecast.		
Performance Goals	Not Applicable		
Preconditions	Consumption Forecast: CALCULATED		
Post conditions	Consumption Forecast: COMMUNICATED		
Scenario	<b>Begins when:</b> Buyer has calculated his forecasted consumption.		
	<b>Continues with:</b>		
	<b>Step #</b>	<b>Actor</b>	<b>Activity Step</b>
	1.	Buyer	Sends Goods Requirements message to the Seller.
	2.	Seller	Receives Goods Requirements Message
	<b>Ends when:</b>		
Alternative Scenario	<i>(any alternatives to the above scenario)</i>		
	<b>Step #</b>	<b>Actor</b>	<b>Activity Step</b>
			Not Applicable
Business Transaction Rules			
	1	For communicating the consumption forecast use the goodsRequirementsType with value GROSS_REQUIREMENTS	



## 4. Business Information View

### 4.1. Goods Requirements

#### Class Diagram



## GDD Report

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

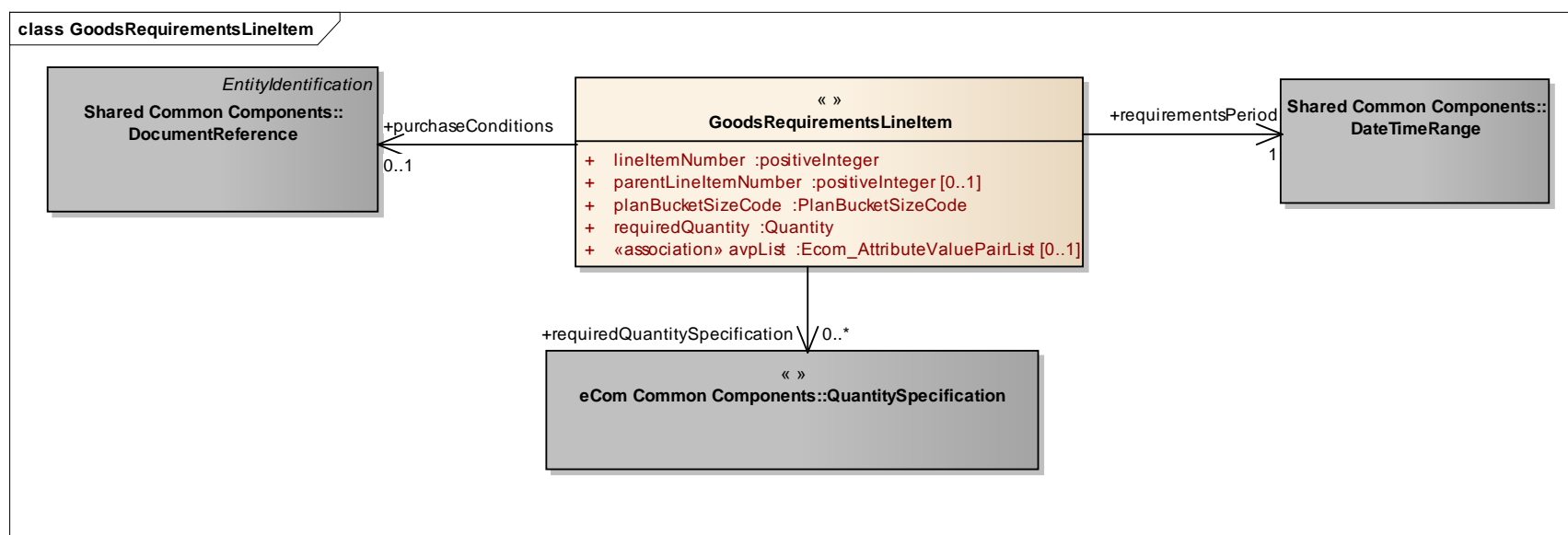
[http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:GoodsRequirements](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:GoodsRequirements)

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
GoodsRequirements				Contains the Goods Requirements from the buyer to the seller for given trade items and locations for specific time periods.	
Association		GoodsRequirementsItemLocationInformation	1..*	Contains the Goods Requirements for given trade items and locations for specific time periods.	
Association	goodsRequirementsIdentification	EntityIdentification	1..1	Contains the unique identifier of the business document.	
Association	buyer	TransactionalParty	1..1	The buyer associated with the goods requirements for given trade items and locations for specific time periods.	
Association	seller	TransactionalParty	1..1	The seller associated with the goods requirements for given trade items and locations for specific time periods.	
Generalization		EcomDocument		Basic information about the content of the message including version number, creation date and time.	WR 14-000110
Attribute	goodsRequirementsTypeCode	GoodsRequirementsTypeEnumeration	1..1	Contains the type of Goods Requirements, gross or net.	
Attribute	structureTypeCode	StructureTypeCode	1..1	Contains the type of grouping and sequence of the business document.	
GoodsRequirementsItemLocationInformation				Contains the Goods Requirements for a given trade item and location for specific time periods.	
Association	shipTo	TransactionalParty	0..1	The ship to location associated with a goods requirement.	
Association	shipFrom	TransactionalParty	0..1	The ship from location associated with a goods requirement.	
Association		TransactionalTradeItem	1..1	The trade item associated with a goods requirement.	

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
Association	inventoryLocation	TransactionalParty	0..1	The location of inventory associated with a goods requirement.	
Association		GoodsRequirementsLineItem	1..*	Specifies the projected goods requirements for a given location / item.	

## 4.2. Goods Requirements Line Item

### Class Diagram



## GDD Report

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

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
GoodsRequirement sLineItem				Specifies the projected goods requirements for a given location / item.	
Association	purchaseCondi tions	DocumentReference	0..1	Contains a reference to the commercial agreement under which the goods are supplied.	
Association	requiredQuantity Specification	QuantitySpecification	0..*	Specifies the cumulative quantity already received for the specified time bucket.	
Association	requirementsPeri od	DateTimeRange	1..1	Contains the start and end dates and optionally start and end times of the requirements period.	
Attribute	lineItemNumber	positiveInteger	1..1	Provides the line number associated to the Goods Requirements Line Item.	
Attribute	parentLineItemN umber	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	planBucketSizeC ode	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	avpList	Ecom_AttributeValuePair List	0..1	Temporary attributes introduced between minor versions.	WR 14-000110



**Note:** Reference Shared Common Library Business Message (BMS) Release 3.2.0 and eCom Domain Common Library Business Message (BMS) Release 3.2.0 for all common information.

## 4.3. Code Lists

Class	Codelist	GDD Link
GoodsRequirements	GoodsRequirementsTypeEnumeration	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:GoodsRequirementsTypeEnumeration">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:GoodsRequirementsTypeEnumeration</a>
GoodsRequirements	StructureTypeCode	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:StructureTypeCode">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:StructureTypeCode</a>
GoodsRequirementsLineItem	PlanBucketSizeCode	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:PlanBucketSizeCode">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd: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 Goods Requirements message, communicating gross requirements. The message is sent out on 9<sup>th</sup> of February 2011 at 11 AM. The message is identified with the unique identifier GR205666.

#### Party Information

GS1 Global Location Number	Party Type
5412345000013	Buyer
4098765000010	Seller
5412345000174	Ship to X
5412345000228	Ship to Y

The gross requirements are sent by the Buyer (GLN 5412345000013) to the Seller (GLN 4098765000010). For informational purposes the Seller 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 the 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 contract to be used for the requirements in week February 11-17 (2004000012) was issued by the business unit of the Seller (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 contract used for the requirements in week February 11-17 (2004000012) 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>GoodsRequirements</b>	
creationDateTime	2011-02-09 11.00
documentStatusCode	ORIGINAL
structureTypeCode	ITEM_BY_LOCATION
goodsRequirementsTypeCode	GROSS_REQUIREMENTS
<b>EntityIdentification (+goodsRequirementsIdentification)</b>	
entityIdentification	GR205666
<b>PartyIdentification (+contentOwner)</b>	
gln	5412345000013
<b>TransactionalParty (+seller)</b>	
gln	4098765000010
<b>TransactionalParty (+buyer)</b>	
gln	5412345000013
<b>Contact</b>	
personName	Gilgamesh
responsibility	goodsRequirementsPlanner
<b>GoodsRequirementsItemLocationInformation *1</b>	
<b>TransactionalParty (+shipTo)</b>	
gln	5412345000174
<b>TransactionalTradeItem</b>	
gtin	40987650000223
<b>GoodsRequirementsLineItem *1.1</b>	
lineItemNumber	1
planBucketSizeCode	WEEK
requiredQuantity	1000
<b>DateTimeRange (+requirementsPeriod)</b>	
beginDate	2011-02-11
endDate	2011-02-17
<b>DocumentReference (+purchaseConditions)</b>	
lineItemNumber	23
entityIdentification	PC356987
<b>PartyIdentification (+contentOwner)</b>	
gln	4098765000010

Attribute	Value
<b>QuantitySpecification (+requiredQuantitySpecification)</b>	
quantitySpecificationType	RECEIVED
specificQuantity (value, unitOfMeasure)	500
<b>GoodsRequirementsLinItem *1.2</b>	
linItemNumber	2
planBucketSizeCode	WEEK
requiredQuantity	1200
<b>DateTimeRange (+requirementsPeriod)</b>	
beginDate	2011-02-18
endDate	2011-02-25
<b>GoodsRequirementsItemLocationInformation *2</b>	
<b>TransactionalParty (+shipTo)</b>	
gln	5412345000228
<b>TransactionalTradeItem</b>	
gtin	40987650000223
<b>GoodsRequirementsLinItem *2.1</b>	
linItemNumber	1
planBucketSizeCode	WEEK
requiredQuantity	300
<b>DateTimeRange (+requirementsPeriod)</b>	
beginDate	2005-02-11
endDate	2005-02-17
<b>DocumentReference (+purchaseConditions)</b>	
linItemNumber	23
entityIdentification	PC356987
<b>PartyIdentification (+contentOwner)</b>	
gln	4098765000010
<b>GoodsRequirementsLinItem *2.2</b>	
linItemNumber	2
planBucketSizeCode	WEEK
requiredQuantity (value, unitOfMeasure)	1200
<b>DateTimeRange</b>	
beginDate	2011-02-18
endDate	2011-02-25



## 6. Implementation Considerations

### 6.1. User Guide


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

### 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	BSD Version	Associated CR Number
For BMS Release 3.0.0 Updated to reflect changes in modelling methodology.	Issue 1.0.0	Not Applicable
For Issue Resolution: <ul style="list-style-type: none"> <li>Fixed typo in title section 11: "Principals" -&gt; "Principles"</li> <li>Updated business example and test data for the changes in sequencing and issue resolution.</li> </ul>	Issue 1.0.0	Not Applicable
For Peer Review: <ul style="list-style-type: none"> <li>Changed font in alternate scenario in use case section 4.2 from Times New Roman to Arial</li> <li>Changed font in alternate scenario in use case section 4.4 from Times New Roman to Arial</li> <li>Changed alignment in the business rule in section 4.2 to left.</li> <li>Changed alignment in the business rule in section 4.4 to left.</li> </ul>	Issue 1.0.0	Not Applicable
For Publication <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>	Issue 1.0.0	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 GoodsRequirements - maintenance view <div> <div>«root, »</div> <div>GoodsRequirements</div> <div> + structureTypeCode: StructureTypeCode  + goodsRequirementsTypeCode: GoodsRequirementsTypeEnumeration </div> <div> maintenance  Change: (Verified) 3.2 changed generalisation from Document to eComDocument class to include AVP (WR 14-110) </div> </div> </div>	14-000110
<ul style="list-style-type: none"> <li>Added Attribute Value Pair at the root, line item and sub line item levels (WR 14-110)</li> <li>Added a reference to parent line number to all Lineltem classes, to support hierarchical items. (WRs 14-021 &amp; 14-044)</li> </ul> <div> class GoodsRequirementsLineltem - maintenance view <div> <div>« »</div> <div>GoodsRequirementsLineltem</div> <div> + lineltemNumber :positiveInteger  + parentLineltemNumber :positiveInteger [0..1]  + planBucketSizeCode :PlanBucketSizeCode  + requiredQuantity :Quantity  + «association» avpList :Ecom_AttributeValuePairList [0..1] </div> <div> maintenance  Change: (Verified) 3.2 added +avpList (WR 14-110)  Change: (Verified) 3.2 added +parentLineltemNumber (WR 14-021 &amp; 14-044) </div> </div> </div>	14-000021 14-000044 14-000110

## 8. Appendices

Not Applicable

## 9. Acknowledgements

The following is a list of individuals (and their companies) who participated in the creation, review and approval of this BMS.

### 9.1.1. Work Group

Function	Name	Company / organisation
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, Rebone	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
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Member	Dicks, Arne	GS1 Germany
Member	Duvinger, Karina	GS1 Sweden
Member	Foerderer, Klaus	GS1 Germany
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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
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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
Standards Content Lead	Coen Janssen, Ewa Iwicka	GS1 Global Office
Technical Development Lead	Ewa Iwicka	GS1 Global Office
Peer Review	Eric Kauz	GS1 Global Office