



The Global Language of Business

Consumption Report Business Message Standard (BMS)

Release 3.4.1, Draft, Nov 2019



Document Summary

Document Item	Current Value
Document Name	Consumption Report Business Message Standard (BMS)
Document Date	Nov 2019
Document Version	3.4.1
Document Issue	1
Document Status	Draft

Work Request Reference

Date of WR Submission to GSMP:	WR Submitter(s):	Refer to Work Request (WR) Number(s):
20-Aug-2008	John Ryu	08-000209
13-Feb-2008	Michal Martinko, Hewlett-Packard	08-000019
05-Nov-2004	GS1	04-000211
7-Feb-2014	GS1 Germany	14-000021
20-Mar-2014	GS1 Slovenia	14-000044
25-Jun-2014	GS1 GO	14-000110
12-Jul-2016	GS1 GO	16-000340
03-Oct-2018	GS1 GO	18-000319

Business Requirements Document (BRAD) Reference

BRAD Title	BRAD Issue Date	BRAD Version
BRAD Upstream Standards – Despatch, Receipt & Consumption	29-Nov-2004	0.1.1

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
08-Nov-2019	BMS 3.4.1 – Issue 1	Radhika Chauhan	BMS Release 3.4.1	See summary of changes

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1 Business Domain View

1.1 Introduction

Message Definition

The Consumption Report message enables the buyer needs to communicate the consumed products (e.g. used materials or sold goods) to the seller.

Principles

This information is required in consignment stock scenarios, where the invoice will be based on the consumed quantities rather than on the delivered quantities.

1.2 References

Reference Name	Description
BMS eCom Domain Common Library Release 3.4	The documented design of components that are used in multiple messages within the eCom domain.
BMS Shared Common Library Release 3.4	The documented design of components that are used in multiple messages within the eCom domain and GDSN.
BRAD Upstream Standards – Despatch, Receipt & Consumption 0.1.1	

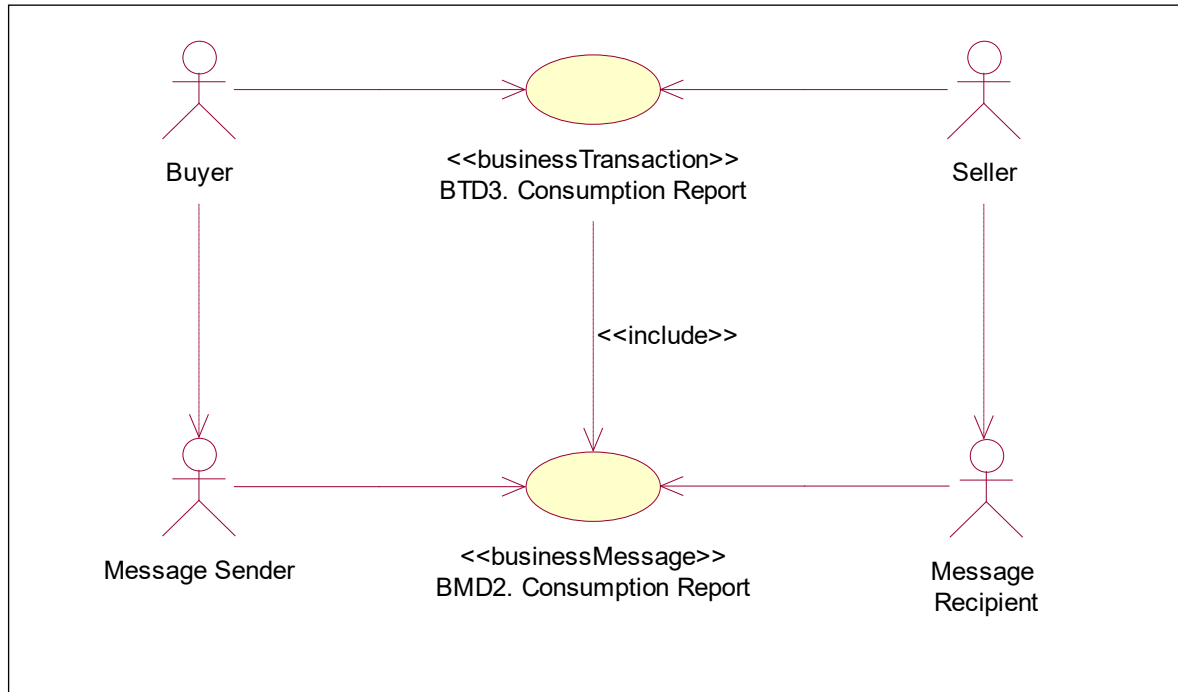
2 Business Context

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

3 Business Transaction View

3.1 Business Transaction – Consumption Report

Use Case Diagram



Use Case Description

Use Case ID	BTD3									
Use Case Name	Consumption Report									
Use Case Description	The buyer communicates the consumed goods to the seller.									
Actors (Goal)	Buyer: To send the consumption report. Seller: To receive the consumption report.									
Performance Goals										
Preconditions	Goods Consumption: CALCULATED									
Post conditions	Goods Consumption: COMMUNICATED									
Scenario	Begins when: The Buyer has calculated the goods that were consumed during the consumption period.									
	Continues with:									
	<table><tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr><tr><td></td><td>Buyer</td><td>Sends Consumption Report message to the Seller.</td></tr><tr><td></td><td>Seller</td><td>Receives Consumption Report Message</td></tr></table>	Step #	Actor	Activity Step		Buyer	Sends Consumption Report message to the Seller.		Seller	Receives Consumption Report Message
	Step #	Actor	Activity Step							
		Buyer	Sends Consumption Report message to the Seller.							
	Seller	Receives Consumption Report Message								
	Ends when:									
Alternative Scenario	Not Applicable									

Business Transaction Rules	<i>Not Applicable</i>

Activity Diagram(s)

Not Applicable

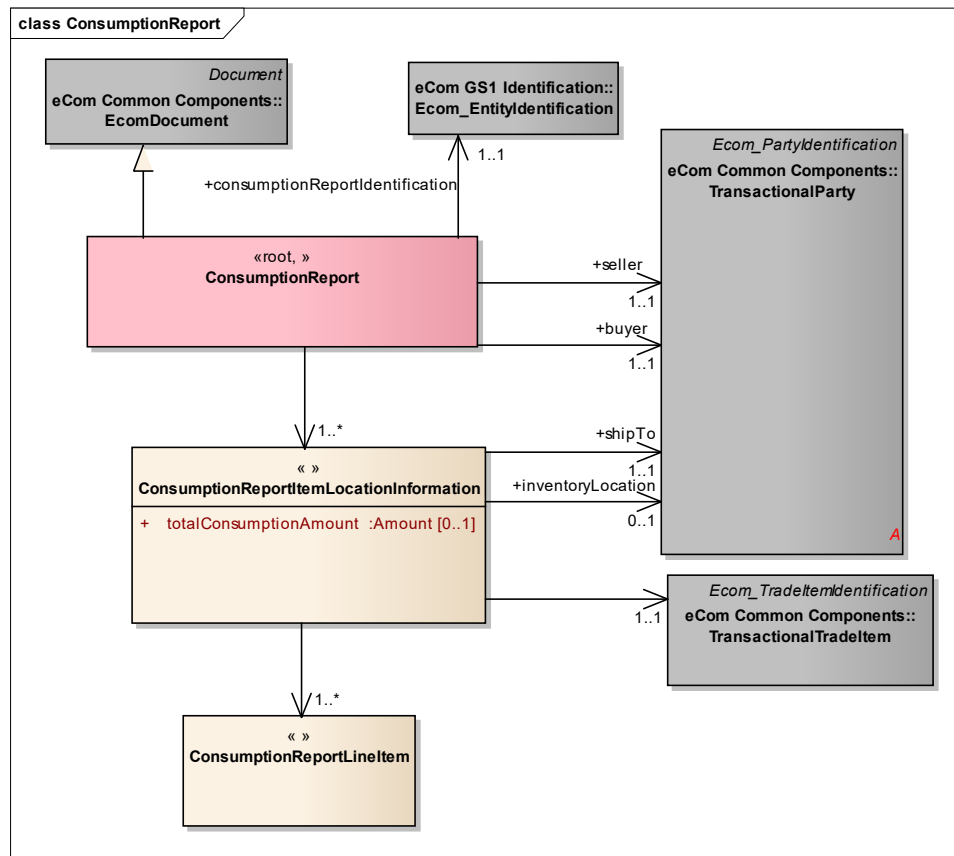
Sequence Diagram(s) (optional)

Not Applicable

4 Business Information View

4.1 Consumption Report

Class diagram



GDD report

The content of the ConsumptionReport 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:ConsumptionReport

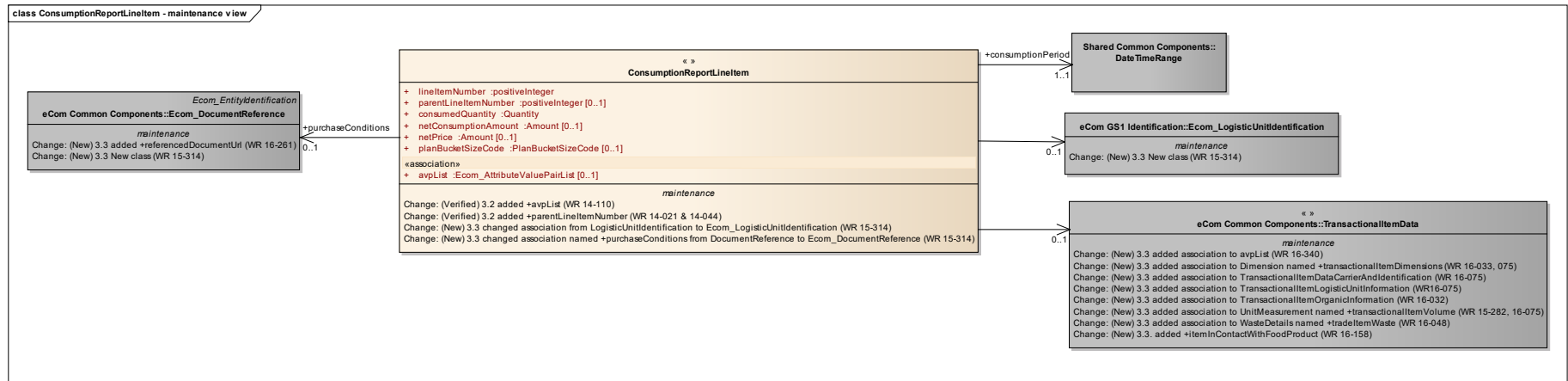
Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
ConsumptionReport				The Consumption Report message enables the buyer needs to communicate the consumed products (e.g. used materials or sold goods) to the seller. This information is required in consignment stock scenarios, where the invoice will be based on the consumed quantities rather than on the delivered quantities.	
Association		ConsumptionReportItemLocationInformation	1..*	Contains the consumption information 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.	
Association	buyer	TransactionalParty	1..1	Contains the identification of the party that is buying the goods.	
Association	seller	TransactionalParty	1..1	Contains the identification of the party that is selling the goods.	
Association	consumptionReportIdentification	Ecom_EntityIdentification	1..1	Contains the unique identifier of the business document.	



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 Consumption Report Line Item

Class Diagram



GDD Report

The content of the ConsumptionReportLineItem 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:ConsumptionReportLineItem

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
ConsumptionReportLineItem				Contains the consumption information for the specified time period.	
Association	consumptionPeriod	DateTimeRange	1..1	Contains the start and end dates and optionally start and end times of the period in which the goods were consumed.	
Association		Ecom_LogisticUnitIdentification	0..1	Contains the identification of the logistic unit item that applies to the reported goods consumption.	
Association		TransactionalItemData	0..1	Contains additional item data such as batch number and best before date that apply to the reported goods consumption.	

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
Association	purchaseConditions	Ecom_DocumentReference	0..1	Contains a reference to the commercial agreement under which the goods are supplied.	
Attribute	lineItemNumber	positiveInteger	1..1	Provides the line number associated to the Consumption Report Line Item.	
Attribute	consumedQuantity	Quantity	1..1	The number of units consumed.	
Attribute	netConsumptionAmount	Amount	0..1	The agreed amount to be paid for the total number of units (E.g. KG, EA, Pallet) in agreed currency (e.g. USD, EUR, SFR) of the purchased or consumed goods.	
Attribute	netPrice	Amount	0..1	The agreed amount to be paid per unit (E.g. KG, EA, Pallet) in agreed currency (e.g. USD, EUR, SFR) of the purchased or consumed goods.	
Attribute	planBucketSizeCode	PlanBucketSizeCode	0..1	Contains a code describing the size of the consumption period.	
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.	
Attribute	avpList	Ecom_AttributeValuePairList	0..1	Temporary attributes introduced between minor versions.	



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 Enumerations (message specific)

Not Applicable

4.4 Code Lists

Class	Codelist	Referenced in
ConsumptionReportLineItem	PlanBucketSizeCode	http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:PlanBucketSizeCode



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 Consumption Report message. The message is sent on July 17th 2011 at 11.45 AM, for goods received on April 11th at 11PM. The message is identification number is CR3548.

Party Information

GS1 Global Location Number	Party Type
5412345000013	Buyer
4098765000010	Seller
5412345000990	Ship to X
5412345000112	Ship to Y

The consumption report is sent by the Buyer (GLN 5412345000013) to the Seller (GLN 4098765000010).

For informational purposes the manufacturer includes the name of his material requirements planner (Mr. Bryce).

The consumption report is for two delivery sites, X (Ship To 5412345000990) and Y (Ship To 5412345000112).

The consumption report is for one item, A (GTIN 40987650000223).

For delivery site X the reporting period is July 01-07.

For delivery site Y the reporting period is July 01, 7:00 AM – July 07, 5:00 PM

For item A and delivery site X the reported consumption is:

- 15 units.

The contract to be used for invoicing the reported consumption (PC356987) was issued by the business unit of the Seller (GLN 4098765000010). Within the contract line 23 refers to this item.

For item A and delivery site Y the reported consumption is:

- 22 units.

The contract to be used for invoicing the reported consumption is the same as for delivery site X.

Message Example

Attribute	Value
ConsumptionReport	
creationDateTime	2011-07-17 11:45
documentStatusCode	ORIGINAL
EntityIdentification (+consumptionReportIdentification)	
entityIdentification	CR3548
PartyIdentification (+contentOwner)	
gln	5412345000013
TransactionalParty (+seller)	
gln	4098765000010
TransactionalParty (+buyer)	
gln	5412345000013

Attribute	Value
Contact	
responsibility	Material Requirements Planner
personName	Bryce Young
ConsumptionReportItemLocationInformation *1	
TransactionalParty (+shipTo)	
- gln	5412345000990
TransactionalTradeItem	
- gtin	40987650000223
ConsumptionReportLineItem *1.1	
- lineItemNumber	1
- consumedQuantity (value, unitOfMeasure)	15
- planBucketSizeCode	WEEK
DateTimeRange (+consumptionPeriod)	
- beginDate	2011-07-01
- endDate	2011-07-07
DocumentReference (+purchaseConditions)	
- entityIdentification	PC356987
- lineItemNumber	23
PartyIdentification (+contentOwner)	
- gln	4098765000010
ConsumptionReportItemLocationInformation *2	
TransactionalParty (+shipTo)	
- gln	5412345000112
TransactionalTradeItem	
- gtin	40987650000223
ConsumptionReportLineItem *2.1	
- lineItemNumber	2
- consumedQuantity	22
- planBucketSizeCode	WEEK
DateTimeRange (+consumptionPeriod)	
- beginDate	2011-07-01 07:00
- endDate	2011-07-07 17:00
DocumentReference (+purchaseConditions)	
- entityIdentification	PC356987
- lineItemNumber	23
PartyIdentification (+contentOwner)	
- gln	4098765000010

6 Implementation Considerations

6.1 User Guide

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

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 Number
Updated BMS for Major Release 3.0 Updated document to reflect changes in modelling methodology.	Not Applicable
Updated for BMS Publication (Release 3.0.0): Changed status from Draft to Approved Removed copyright year in footer of document Updated architectural principles section to correct fields.	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
<div> class ConsumptionReport - maintenance view <div> <div>«root, »</div> <div>ConsumptionReport</div> <div>maintenance</div> <div>Change: (Verified) 3.2 changed generalisation from Document to eComDocument class to include AVP (WR 14-110)</div> </div> </div>	14-000110 Add Attribute Value Pair at the root, line item and sub line item levels

Change	Associated WR
<p>class ConsumptionReportLineItem - maintenance view</p> <pre> classDiagram class ConsumptionReportLineItem { +lineItemNumber: positiveInteger +consumedQuantity: Quantity +netConsumptionAmount: Amount [0..1] +netPrice: Amount [0..1] +planBucketSizeCode: PlanBucketSizeCode [0..1] +parentLineItemNumber: positiveInteger [0..1] <<association>> +avpList: Ecom_AttributeValuePairList [0..1] } class maintenance { Change: (Verified) 3.2 added +avpList (WR 14-110) Change: (Verified) 3.2 added +parentLineItemNumber (WR 14-021 & 14-044) } </pre>	<p>14-000110 Add Attribute Value Pair at the root, line item and sub line item levels</p> <p>14-000021 & 14-000044 Add a reference to parent line number to all LineItem classes, to support hierarchical items.</p>

7.4 BMS Release 3.3

Change	Associated WR
<p>Created Ecom_EntityIdentification class and changed association from the previous EntityIdentification</p> <pre> classDiagram class ConsumptionReport { <<root>> maintenance Change: (Verified) 3.2 changed generalisation from Document to eComDocument class to include AVP (WR 14-110) Change: (New) 3.3 changed association from EntityIdentification to Ecom_EntityIdentification (WR 15-314) } class Ecom_EntityIdentification { maintenance Change: (New) 3.3 New class (WR 15-314) } ConsumptionReport --> Ecom_EntityIdentification : +consumptionReportIdentification 1..1 </pre>	<p>15-000314 Make GS1 identification keys optional in GS1 EDI XML</p>
<p>Created Ecom_DocumentReference class and changed association from the previous DocumentReference</p> <pre> classDiagram class ConsumptionReportLineItem { +lineItemNumber: positiveInteger +parentLineItemNumber: positiveInteger [0..1] +consumedQuantity: Quantity +netConsumptionAmount: Amount [0..1] +netPrice: Amount [0..1] +planBucketSizeCode: PlanBucketSizeCode [0..1] <<association>> +avpList: Ecom_AttributeValuePairList [0..1] } class maintenance { Change: (Verified) 3.2 added +avpList (WR 14-110) Change: (Verified) 3.2 added +parentLineItemNumber (WR 14-021 & 14-044) Change: (New) 3.3 changed association from LogisticUnitIdentification to Ecom_LogisticUnitIdentification (WR 15-314) Change: (New) 3.3 changed association named +purchaseConditions from DocumentReference to Ecom_DocumentReference (WR 15-314) } class Ecom_EntityIdentification { maintenance Change: (New) 3.3 added +referencedDocumentURL (WR 16-261) Change: (New) 3.3 New class (WR 15-314) } class Ecom_DocumentReference { maintenance Change: (New) 3.3 New class (WR 15-314) } ConsumptionReportLineItem --> Ecom_EntityIdentification : +purchaseConditions 0..1 </pre>	<p>15-000314 Make GS1 identification keys optional in GS1 EDI XML</p>

Change	Associated WR
<p>Created Ecom_LogisticUnitIdentification class and changed association from the previous LogisticUnitIdentification</p> <p>class ConsumptionReportLineItem - maintenance view</p> <p>ConsumptionReportLineItem</p> <p>+ lineItemNumber : positiveInteger</p> <p>+ parentLineItemNumber : positiveInteger [0..1]</p> <p>+ consumedQuantity : Quantity</p> <p>+ netConsumptionAmount : Amount [0..1]</p> <p>+ netPrice : Amount [0..1]</p> <p>+ planBucketSizeCode : PlanBucketSizeCode [0..1]</p> <p>+ association</p> <p>+ avpList : Ecom_AttributeValuePairList [0..1]</p> <p>Change: (Verified) 3.2 added +avpList (WR 14-110)</p> <p>Change: (Verified) 3.2 added +parentLineItemNumber (WR 14-021 & 14-044)</p> <p>Change: (New) 3.3 changed association from LogisticUnitIdentification to Ecom_LogisticUnitIdentification (WR 15-314)</p> <p>Change: (New) 3.3 changed association named +purchaseConditions from DocumentReference to Ecom_DocumentReference (WR 15-314)</p> <p>eCom GS1 Identification::Ecom_LogisticUnitIdentification</p> <p>Change: (New) 3.3 New class (WR 15-314)</p>	<p>15-000314</p> <p>Make GS1 identification keys optional in GS1 EDI XML</p>

7.5 BMS Release 3.4

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

7.6 BMS Release 3.4.1

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

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
Member	Bemrose, Jonathan	R&R Ice Cream
Member	Bodemer, Petra	dm-drogerie markt GmbH + Co. KG
Member	Boikanyo, Rebene	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

Function	Name	Company / organisation
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Member	Herregodts, Kurt	GS1 Belgium & Luxembourg
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Member	Krid, Anne-Claire	GS1 France
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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
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
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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

Function	Name	Company / organisation
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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

9.2 Development Team Members

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