



The Global Language of Business

Consumption Report Business Message Standard (BMS)

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Date of Change	Version	Changed By	Reason for Change	Summary of Change
05-Jan-2022	BMS 3.5.1 – Issue 1	Miklos Bolyky	BMS Release 3.5.1	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 3.5.1	The documented design of components that are used in multiple messages within the eCom domain.
BMS Shared Common Library Release 3.5.1	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	

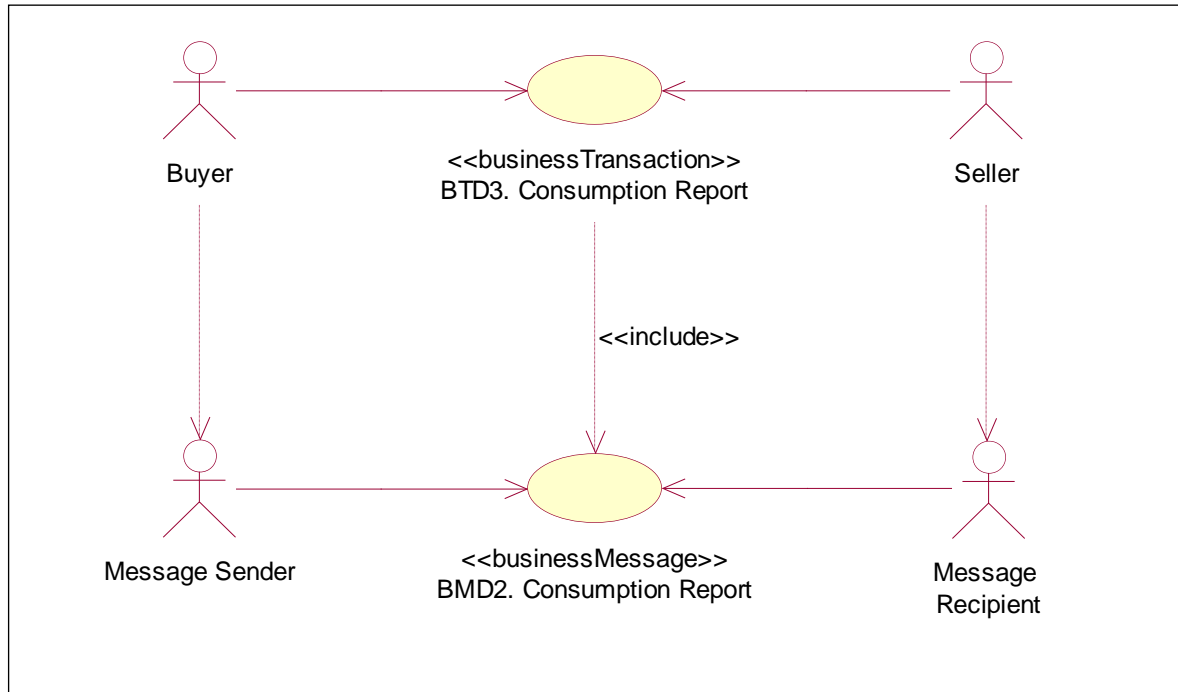
2 Business Context

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

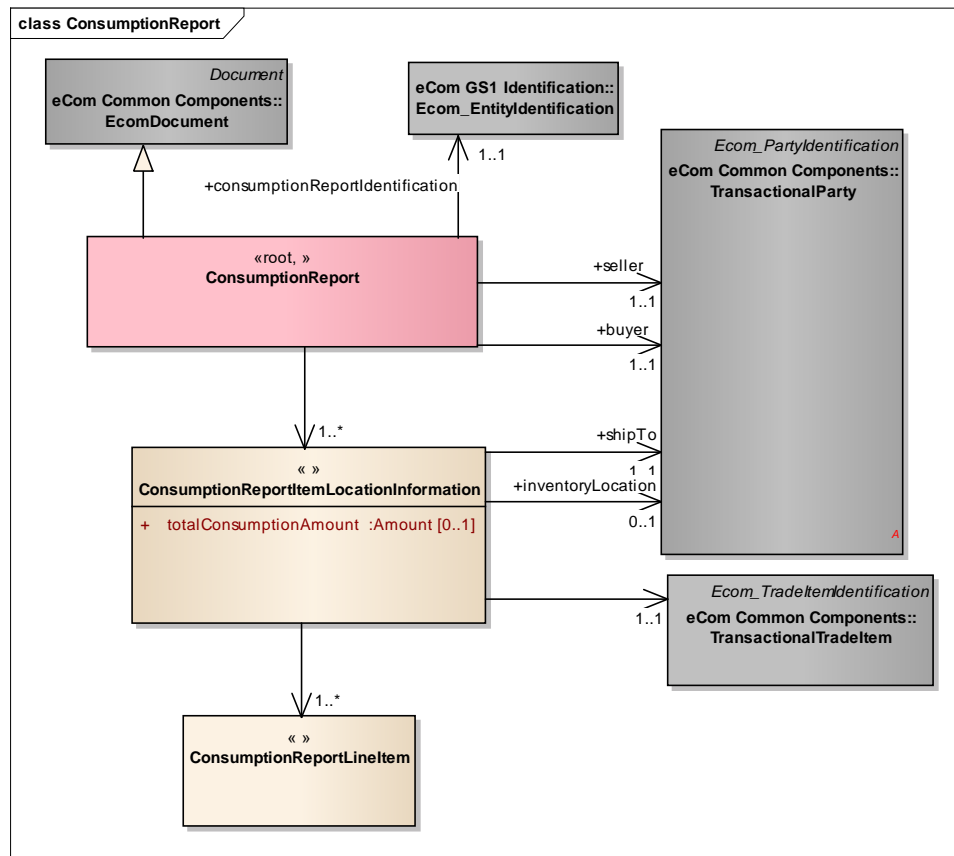
Sequence Diagram(s) (optional)

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

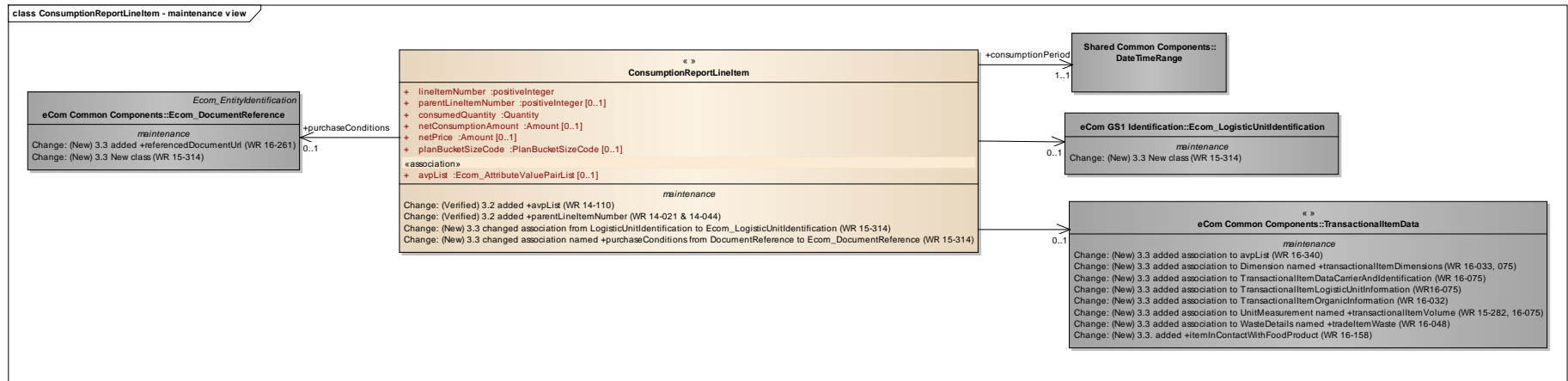
Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
ConsumptionReport				The Consumption Report message enables the buyer needs to communicate the consumed products (e.g. used materials or sold goods) to the seller. This information is required in consignment stock 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 3.5.1 and eCom Domain Common Library Business Message (BMS) Release 3.5.1 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 3.5.1 and eCom Domain Common Library Business Message (BMS) Release 3.5.1 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><div>class ConsumptionReport - maintenance view</div><div><div>«root, »</div><div>ConsumptionReport</div><div><div><div></div><div><i>maintenance</i></div></div><div>Change: (Verified) 3.2 changed generalisation from Document to eComDocument class to include AVP (WR 14-110)</div></div></div></div>	<div><div>14-000110</div><div>Add Attribute Value Pair at the root, line item and sub line item levels</div></div>

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> <p>class ConsumptionReport - maintenance view</p> <pre> classDiagram class eCom_GS1_Identification_Ecom_EntityIdentification { maintenance Change: (New) 3.3 New class (WR 15-314) } 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) } ConsumptionReport --> eCom_GS1_Identification_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> <p>class ConsumptionReportLineItem - maintenance view</p> <pre> classDiagram class eCom_Common_Components_Ecom_DocumentReference { maintenance Change: (New) 3.3 added +referenceDocumentUri (WR 16-261) Change: (New) 3.3 New class (WR 15-314) } 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 LogicalUnitIdentification to Ecom_LogicalUnitIdentification (WR 15-314) Change: (New) 3.3 changed association named +purchaseConditions from DocumentReference to Ecom_DocumentReference (WR 15-314) } eCom_Common_Components_Ecom_DocumentReference --> ConsumptionReportLineItem : +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 + parentLineItemNumber :positiveInteger [0..1] + consumedQuantity :Quantity + netConsumptionAmount :Amount [0..1] + netPrice :Amount [0..1] + planBucketSizeCode :PlanBucketSizeCode [0..1] + association + avpList :Ecom_AttributeValuePairList [0..1]</p> <p>eCom GS1 Identification::Ecom_LogisticUnitIdentification</p> <p>Change: (New) 3.3 New class (WR 15-314)</p> <p>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)</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 3.5

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

7.7 BMS Release 3.5.1

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, 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

Function	Name	Company / organisation
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Member	Ng, Ella	GS1 Australia
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Member	Shimazaki, Ayako	GS1 Japan
Member	Sion, Emilie	GS1 France
Member	Souza, Nadia	GS1 Brasil
Member	Strand, Roman	GS1 Germany
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Member	Veldhuis, Saskia	Procter & Gamble Co.
Member	Welch, Shan	GS1 UK
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Member	Wilson, Mary	GS1 US
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Member	Yang, Shaopeng	GS1 China
Member	Yusdiar, Dani	GS1 Indonesia
Member	Zwanziger, Greg	SUPERVALU

9.2 Development Team Members

Function	Name	Organisation
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Technical Development Lead	Miklos Bolyky	GS1 Global Office
Peer Review	Mark Van Eeghem	GS1 Global Office