



# Business Message Standard (BMS) Consumption Report

**BMS Release: 3.0.0, BRG Name: eCom**

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13-Feb-2008	Michal Martinko, Hewlett-Packard	08-000019
05-Nov-2004	GS1	04-000211

## Business Requirements Document (BRAD) Reference

BRAD Title:	BRD 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	Model Build #
12 Jan 2012	Issue 1.0.0	Mark Van Eeghem	BMS Publication for Release 3.0.0	See summary of changes.	Not applicable

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# 1. Business Domain View

## 1.1. Problem Statement / Business Need

In consignment business scenarios the buyer needs to communicate the consumed materials or sold goods to the seller.

## 1.2. Objective

In consignment business scenarios the buyer needs to communicate the consumed materials or sold goods to the seller.

## 1.3. Audience

- Manufacturers
- Suppliers
- Logistic Service Providers

## 1.4. References

Reference Name	Description
BMS eCom Domain Common Library Release 3.0.0	The documented design of components that are used in multiple messages within the eCom domain.
BMS Shared Common Library Release 3.0.0	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	

## 1.5. Acknowledgements

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

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Function	Name	Organisation
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## 2. Business Context

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

## 3. Additional Technical Requirements Analysis

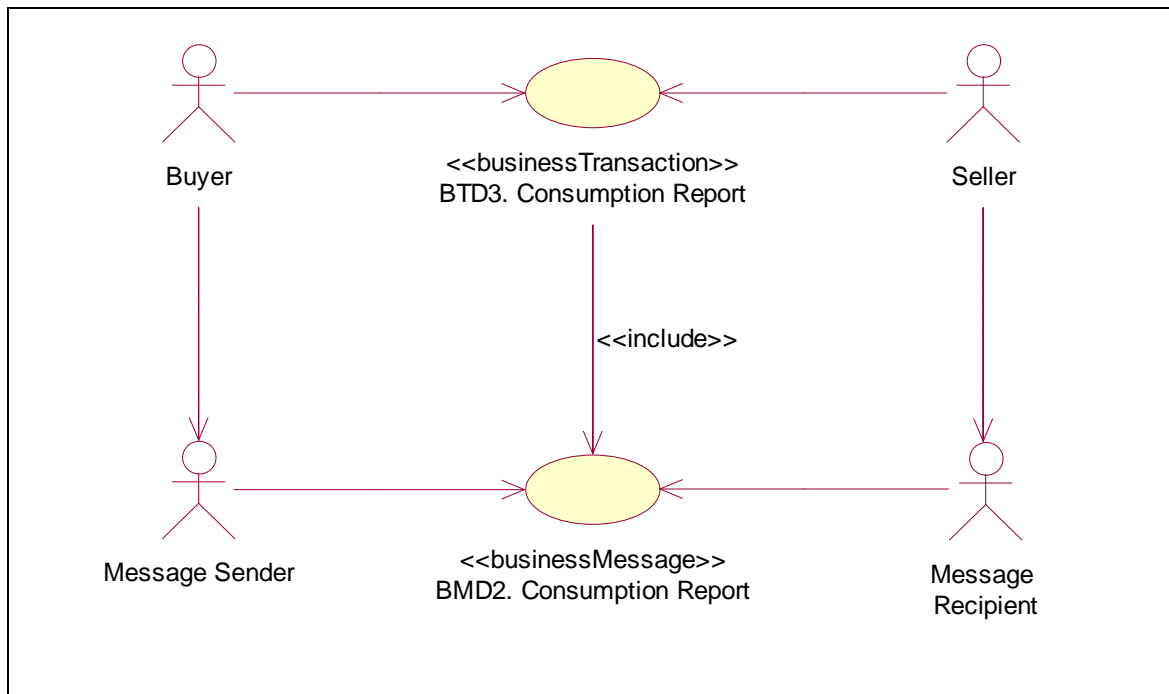
### 3.1. Technical Requirements (optional)

Not Applicable

## 4. Business Transaction View

### 4.1. Business Transaction Use Case Diagram

Figure 4-1 Use Case Diagram: Business Transaction



### 4.2. 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	<b>Begins when:</b> The Buyer has calculated the goods that were consumed during the consumption period.		
	<b>Continues with:</b>		
	Step #	Actor	Activity Step
	1.	Buyer	Sends Consumption Report message to the Seller.
	2.	Seller	Receives Consumption Report Message



	<b>Ends when:</b>									
<b>Alternative Scenario</b>	(any alternatives to the above scenario)									
	Not Applicable									
	<table border="1"> <thead> <tr> <th>Step #</th><th>Actor</th><th>Activity Step</th></tr> </thead> <tbody> <tr> <td>1.</td><td></td><td></td></tr> <tr> <td>2.</td><td></td><td></td></tr> </tbody> </table>	Step #	Actor	Activity Step	1.			2.		
	Step #	Actor	Activity Step							
1.										
2.										
<b>Business Transaction Rules</b>	Not Applicable									
	1.									

### 4.3. Business Transaction Activity Diagram(s)

Not Applicable

### 4.4. Business Transaction Sequence Diagram(s) (optional)

Not Applicable

## 5. Information Model (Including GDD Report)

### 5.1. GDD Reports

#### GDD Report: Consumption Report

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	seller	TransactionalParty	1 ..1	Contains the identification of the party that is selling the goods.	
Association	consumptionReportIdentification	EntityIdentification	1 ..1	Contains the unique identifier of the business document.	
Association		ConsumptionReportItemLocationInformation	1..*	Contains the consumption information for given trade items and locations for specific time periods.	
Association	buyer	TransactionalParty	1 ..1	Contains the identification of the party that is buying the goods.	
Generalization		Document		Used to specify basic information about the content of the message including version number, creation date and time.	

### GDD Report: ConsumptionReportItemLocationInformation

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
ConsumptionReportItemLocationInformation				Contains the consumption information for given trade items and locations for specific time periods.	
Association		TransactionalTradeItem	1..1	Contains the identification of the trade item that applies to the reported goods consumption.	
Association	shipTo	TransactionalParty	1..1	Contains the identification of the location to which the items were shipped by the seller.	
Association		ConsumptionReportLineItem	1..*	Contains the consumption information for the specified time period.	
Association	inventoryLocation	TransactionalParty	0..1	Identification of the physical place at the receiving side where the items are stored.	
Attribute	totalConsumptionAmount	Amount	0..1	The agreed amount to be paid in agreed currency (e.g. USD, EUR, SFR) of the purchased or consumed goods for the total order per location.	

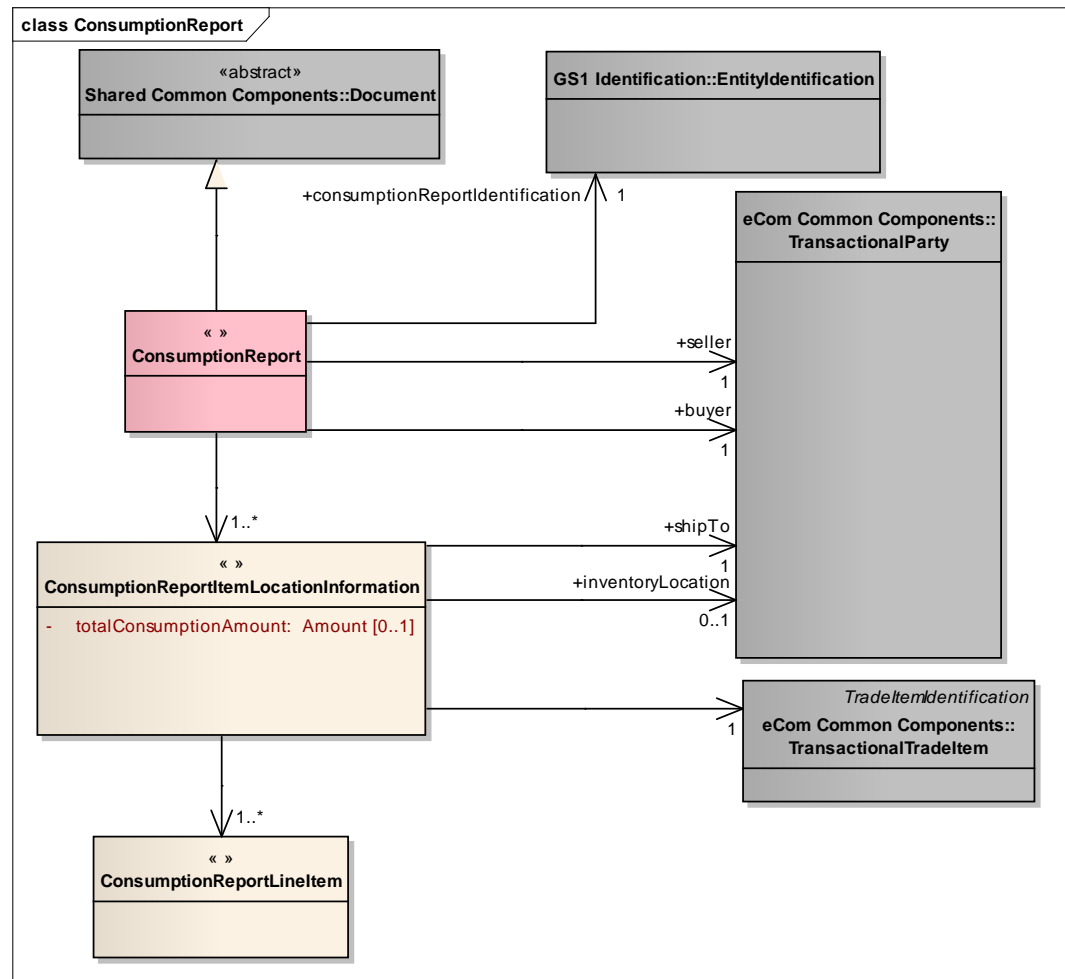
### GDD Report: ConsumptionReportLineItem

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
ConsumptionReportLineItem				Contains the consumption information for the specified time period.	
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	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	purchaseConditions	DocumentReference	0..1	Contains a reference to the commercial agreement under which the goods are supplied.	
Association		LogisticUnitIdentification	0..1	Contains the identification of the logistic unit item that applies to the reported goods consumption.	
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.	

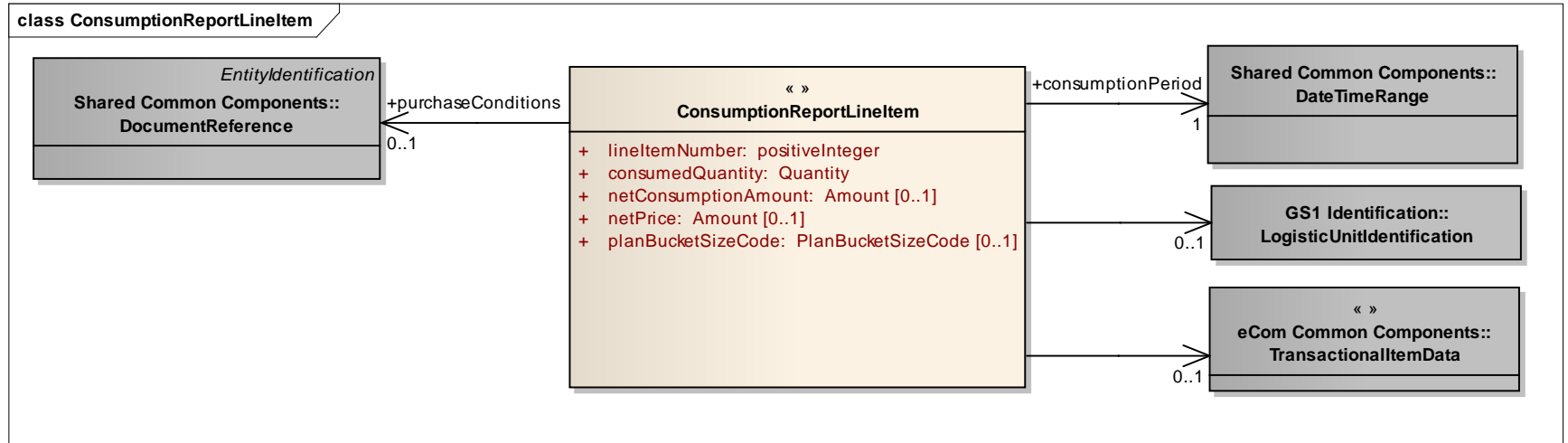
## 5.2. Class Diagrams

Figure 5-1 Class Diagram: ConsumptionReport



**Note:** Reference Shared Common Library Business Message (BMS) Release 3.0.0 and eCom Domain Common Library Business Message (BMS) Release 3.0.0 for all common information.

**Figure 5-2** Class Diagram: ConsumptionReportLineItem



**Note:** Reference Shared Common Library Business Message (BMS) Release 3.0.0 and eCom Domain Common Library Business Message (BMS) Release 3.0.0 for all common information.

## 5.3. Code Lists



**Note:** Reference Shared Common Library Business Message (BMS) Release 3.0.0 and eCom Domain Common Library Business Message (BMS) Release 3.0.0 for all Code Lists

Class	Codelist	Referenced in
ConsumptionReportLineItem	PlanBucketSizeCode	eCom Domain Common Library Business Message (BMS) Release 3.0.0

## 6. Business Document Example

The following is an example of a consumption report message. The message is sent out on February 9<sup>th</sup> at 11 AM. The message is identified with the unique identifier 2005001. The content owner is the sending party, in this case the manufacturer (Buyer 8712345678913).

The consumption report is sent by the manufacturer (Buyer 8712345678913) to the material supplier (Seller 8812345678903).

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 8712345670009) and Y (Ship To 8712345678951).

The consumption report is for one item, A (GTIN 08712345678906).

For delivery site X the reporting period is February 11-17.

For delivery site Y the reporting period is February 11, 7:00 AM – February 15, 5:00 PM

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

- 700 units.

The contract to be used for invoicing the reported consumption (2004000012) was issued by the business unit of the material supplier (content owner 8712345678999). Within the contract line 23 refers to this item.

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

- 300 units.

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

ConsumptionReport	
- creationDateTime	2005-02-09T11:00:00
- documentStatusCode	ORIGINAL
<b>EntityIdentification (+consumptionReportIdentification)</b>	
- entityIdentification	2005001
<b>PartyIdentification(+contentOwner)</b>	
- gln	8712345678913

<b>ConsumptionReport</b>	
<b>TransactionalParty (+seller)</b>	
- gln	8812345678903
<b>TransactionalParty (+buyer)</b>	
- gln	8712345678913
<b>Contact</b>	
responsibility	Material Requirements Planner
personName	Bryce Young
<b>ConsumptionReportItemLocationInformation *1</b>	
<b>TransactionalParty (+shipTo)</b>	
- gln	8712345670009
<b>TransactionalTradeItem</b>	
- gtin	08712345678906
<b>ConsumptionReportLineItem *1.1</b>	
- lineItemNumber	1
- consumedQuantity (value, unitOfMeasure)	700
- planBucketSizeCode	WEEK
<b>DateTimeRange(+consumptionPeriod)</b>	
- beginDate	2005-02-11
- endDate	2005-02-17
<b>DocumentReference (+purchaseConditions)</b>	
- entityIdentification	2004000012
- lineItemNumber	23
<b>PartyIdentification (+contentOwner)</b>	
- gln	8712345678999
<b>ConsumptionReportItemLocationInformation *2</b>	
<b>TransactionalParty (+shipTo)</b>	
- gln	8712345678951
<b>TransactionalTradeItem</b>	
- gtin	08712345678906
<b>ConsumptionReportLineItem *2.1</b>	
- lineItemNumber	2
- consumedQuantity	300
- planBucketSizeCode	WEEK
<b>DateTimeRange (+consumptionPeriod)</b>	
- beginDate	2005-02-11T07:00:00
- endDate	2005-02-15T17:00:00
<b>DocumentReference (+purchaseConditions)</b>	



ConsumptionReport	
- entityIdentification	2004000012
- lineItemNumber	23
<b><i>PartyIdentification (+contentOwner)</i></b>	
- gln	8712345678999

## 7. Implementation Considerations

NOT APPLICABLE

## 8. Testing

### 8.1. Pass / Fail Criteria

NOT APPLICABLE

### 8.2. Test Data

NOT APPLICABLE

## 9. Appendices

NOT APPLICABLE

## 10. Adherence to Architectural Principles

#	AG Principle	BSD Adherence Statement	Does BSD Adhere?	Comment
2.1	The GS1 Architecture shall be fully aligned to GS1 Strategy, Vision, & Mission	The solution in the BSD is aligned with the business problem as defined in the CR and BCD.	<input checked="" type="checkbox"/>	
2.2	The GS1 Architecture shall leverage the use of GS1 Keys	The solution maintains the GS1 keys as the primary, mandatory identifiers.	<input checked="" type="checkbox"/>	
2.3	The GS1 Architecture shall leverage the common GS1 Global Data Dictionary (GDD)	The solution does not alter the formats of primary identifiers and complies with data elements as defined in the Global Data Dictionary.	<input checked="" type="checkbox"/>	
2.4	The GS1 Architecture shall be forward-looking, provide for migration strategies and backward compatibility, and support adaptable and flexible solutions	The solution is backwards compatible according to the stated scope in the document. The solution takes into consideration the potential impact of the standard, especially with respect to implementation and maintenance. Any potential known impact is documented.	<input checked="" type="checkbox"/>	
2.5	The GS1 Architecture shall support business processes tied to trading partner needs, relevant, and committed to demonstrable business value	All business requirements contained in the related BRAD come from trading partners or representatives with a genuine intention to implement the standards when developed. All requirements are driven by the business needs of the trading partners.	<input checked="" type="checkbox"/>	
2.6	The GS1 Architecture shall enable security where appropriate	Security solutions are included where appropriate.	<input checked="" type="checkbox"/>	
2.7	The GS1 Architecture shall be consistent	The solution does not violate consistency of the data architecture within each layer and between each layer of the GS1 System. For example, requirements do not alter a key used across GS1 standards or alter a reusable object without applying this change across related standards.	<input checked="" type="checkbox"/>	
2.8	The GS1 Architecture shall be royalty-free	The solution supports this principle where possible. The solution may include the use of other standards organizations that may not be royalty free.	<input checked="" type="checkbox"/>	

#	AG Principle	BSD Adherence Statement	Does BSD Adhere?	Comment
3.1	The GS1 Architecture should promote the achievement of the best overall value at the lowest total cost of ownership	The solution promotes the achievement of the best overall value at the lowest total cost of ownership.	<input checked="" type="checkbox"/>	
3.2	The GS1 Architecture should promote scalability	The solution takes into consideration the potential scalability of the standard. Any potential known impact to scalability is documented.	<input checked="" type="checkbox"/>	
3.3	The GS1 Architecture should promote seamless integration	The BSD promotes seamless integration with other GS1 Standards if in scope.	<input checked="" type="checkbox"/>	
3.4	The GS1 Architecture should promote interoperability and compliance	The solution takes into consideration data and process interoperability. For example, any shared objects between interoperable messages must remain consistent. Any potential known impact to interoperability is documented.	<input checked="" type="checkbox"/>	
3.5	The GS1 Architecture should promote simplicity and standard interfaces	The solution does not threaten the standardisation of the interfaces of the GS1 System. Interfaces are not limited to references to technology but also include such ideas as business interfaces and process interfaces.	<input checked="" type="checkbox"/>	
3.6	The GS1 Architecture should avoid duplication	The solution does not create duplications with existing GS1 components. If there are potential duplications, these are documented with a stated rationale for the duplication.	<input checked="" type="checkbox"/>	
3.7	The GS1 Architecture should promote technology independence and a layered approach	The solution does not impose implicit or explicit restrictions of any technology.	<input checked="" type="checkbox"/>	
3.8	The GS1 Architecture should promote global cross-sector definitions and leverage the best of global and the best of local	The solution takes into account a global perspective.	<input checked="" type="checkbox"/>	
3.9	The GS1 Architecture shall leverage a common strategy for extensibility	This solution uses consistent and common, extensibility approaches, methodologies and technology where available and applicable.	<input checked="" type="checkbox"/>	
4.1	In support of a common GS1 Architecture, GS1 shall leverage work of other standards bodies wherever possible.	This solution utilizes works of other standards bodies wherever possible.	<input checked="" type="checkbox"/>	

#	AG Principle	BSD Adherence Statement	Does BSD Adhere?	Comment
4.2	In support of a common GS1 Architecture, GS1 shall strive to eliminate exceptions and variances wherever possible	The solution strives to eliminate exceptions and variances wherever possible and does not create new variances.	<input checked="" type="checkbox"/>	

## 11. Summary of Changes

Change	BSD Version	Associated CR Number
Updated BMS for Major Release 3.0 Updated document to reflect changes in modelling methodology.	Issue 1.0.0	Not Applicable
<b>Updated for BMS Publication (Release 3.0.0):</b> Changed status from Draft to Approved Removed copyright year in footer of document Updated architectural principles section to correct fields.	Issue 1.0.0	Not Applicable