



# Business Message Standard (BMS) Inventory Activity or Inventory Status

BMS Release: 2.5.0, BRG Name: eCom

*Issue 2.0.1, 06-Feb-2009*



## Document Summary

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20- Aug- 2008	John Ryu, GS1	08-000209
08- Aug- 2007	Eric Maree, Accenture	07-000309
05-Nov-2004	GS1	04-000211

## Business Requirements Document (BRAD) Reference

BRAD Title:	BRD Date:	BRAD Version
BRAD Upstream Standards - Demand & Supply Signals	01-Nov-2004	0.1.0
BRD for Inventory Activity or Inventory Status	19-Nov-2004	0.6.2

## Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
31-Dec-2004	1.0.0		Initial Version in BMS/BSD template	Migration of BRD to standard BMS/BSD format	
24-Jan-2005	1.1.0	Coen Janssen	UIM project	Draft version	
27-Jan-2005	1.1.1	Coen Janssen	Review	Changes to chapters 6, 7 and 8	
03-Mar-2005	1.1.2	Coen Janssen	XML development	Chapter 7: Moved InventoryStatusLineItem, InventoryStatusQuantitySpecification, InventoryStatusList and StructureTypeList to the Common Library.	
02-May-2005	1.2.0	Coen Janssen	Public Review Comments	Functional changes, see details in chapter 12.	

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
30-May-2005	1.2.1	Coen Janssen	Peer review comments	Changed footer text. Corrected code list name. Corrected GDD report. Corrected class diagram. Corrected use case descriptions	
09-Jun-2005	1.2.2	Coen Janssen	Updated GDD official names.		
21-Jul-2005	1.2.3	Coen Janssen	Technical Design Public Review	Several cosmetic changes. Fixed requirements references in paragraph 1.5.1.	
31-Aug-2005	1.2.4	Coen Janssen	Technical Design Public Review	Functional changes, see details in paragraph 1.10. Adjusted the examples in paragraph 1.6.	
24-Apr-2007	1.2.5	Giovanni Biffi	Editorial Changes	Minor Editorial Changes to the Document	N/A
29-Aug-2008	2.0.0	John Ryu	BMS Release 2.5.0	Noted in summary of changes	
1-Dec-2008	2.0.1	John Ryu	BMS Release 2.5.0 Final Public Review	Noted in summary of changes	
6-Feb-2009	Issue2.0.1	John Ryu	BMS Release 2.5.0 eBallot Approved	Noted in summary of changes	

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# 1. Business Domain View

## 1.1. Problem Statement / Business Need

The current inventory status advice standards allow for communication from the place where items is stored to the owner of Items. There is a need for the messages to be ex-changed between both parties, and to add additional trading partners involved in maintaining inventory levels such as the distributor, manufacturer, material supplier, retailer, warehouse, and wholesaler.

There is a need for additional functionality for the item, and additional values need to be incorporated into code lists. The Inventory Activity or Inventory Status includes all the activities and techniques of maintaining the stocks of items.

## 1.2. Objective

To supply the detail design of the (specific) business transaction needed to meet the re-quirements of the referenced BRAD(s).

## 1.3. Audience

The audience for this document is the global business community being any business that stores or owns goods at one or more points in the supply chain.

## 1.4. References

Reference Name	Description
BMS Common Library	The documented design of components that are used in multiple messages.
BRAD Upstream Standards - Demand & Supply Signals 0.1.0	
BRD Inventory Activity or Inventory Status 0.6.2	

## 1.5. Acknowledgements

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Function	Name	Organisation
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EANCOM Technical Designer	N/A	N/A
Peer Reviewer	Eric Kauz	GS1

## 2. Business Context

Context Category	Value(s)
Industry	All
Geopolitical	All
Product	All
Process	Plan, Deliver
Official Constraints	None
Roles	Inventory Reporting Party, Inventory Report To Party
System Capabilities	EANCOM, XML

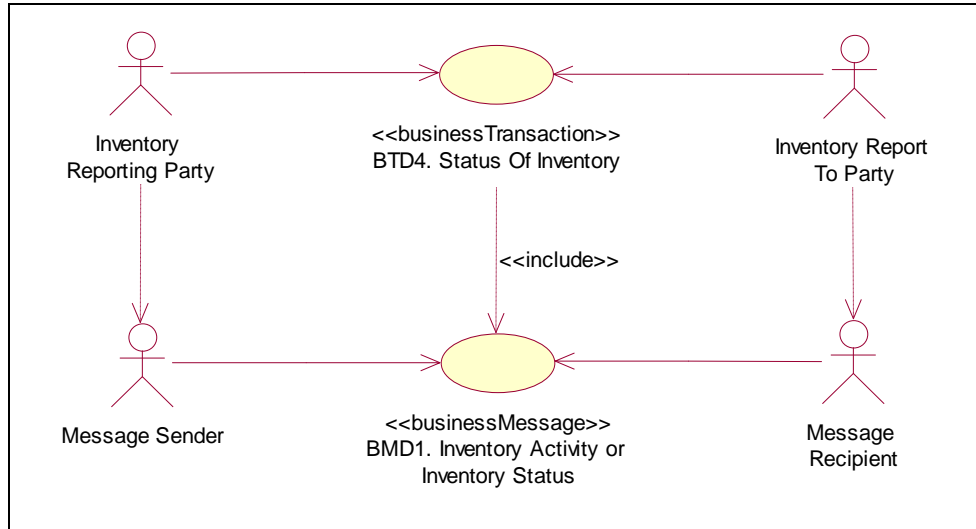
## 3. Additional Technical Requirements Analysis

Not Applicable

## 4. Business Transaction View

### 4.1. Business Transaction STATUS OF INVENTORY

#### 4.1.1. Business Transaction Use Case Diagram



#### 4.1.2. Use Case Description

<b>Use Case ID</b>	BTD4						
<b>Use Case Name</b>	Status of Inventory						
<b>Use Case Description</b>	This use case describes the exchange of the Inventory Status. The inventory status provides the inventory levels of an item where items are stored.						
<b>Actors (Goal)</b>	<p><b>Inventory Report To Party:</b> The actor who receives the Inventory Status. This role can be played by various parties (Distributor, Manufacturer, Material Supplier, Owner of items, Place where items are stored, Retailer, Warehouse, and Wholesaler).</p> <p><b>Inventory Reporting Party:</b> The actor who transmits the Inventory Status. This role can be played by various parties (Distributor, Manufacturer, Material Supplier, Owner of items, Place where items are stored, Retailer, Warehouse, and Wholesaler).</p>						
<b>Preconditions</b>	Both trading partners have agreed upon the reporting dates and times.						
<b>Post conditions</b>	<p><b>Success:</b> The 'Inventory Report To Party' receives the Inventory Status message.</p> <p><b>Failure:</b> The 'Inventory Report To Party' does not receive the Inventory Status message.</p>						
<b>Scenario</b>	<p><b>Begins when:</b> The submitter of the inventory status prepares the inventory status message on the agreed upon date and time.</p> <p><b>Continues with:</b></p> <table border="1"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Inventory Reporting Party</td> <td>Sends the inventory status.</td> </tr> </tbody> </table> <p><b>Ends when:</b> The 'Inventory Report To Party' receives the inventory status message.</p>	Step #	Actor	Activity Step	1.	Inventory Reporting Party	Sends the inventory status.
Step #	Actor	Activity Step					
1.	Inventory Reporting Party	Sends the inventory status.					

<b>Alternative Scenario</b>	There are no alternative scenarios.
<b>Business Transaction Rules</b>	

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

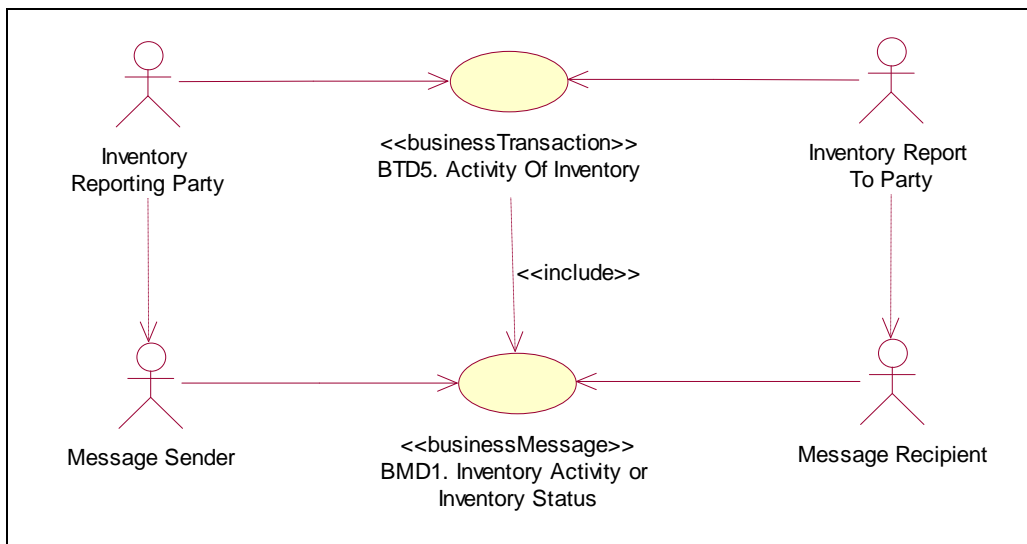
Not Applicable

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

Not Applicable

## 4.2. Business Transaction ACTIVITY OF INVENTORY

### 4.2.1. Business Transaction Use Case Diagram



### 4.2.2. Use Case Description

<b>Use Case ID</b>	BTD5
<b>Use Case Name</b>	Activity of Inventory
<b>Use Case Description</b>	This use case describes the exchange of the Inventory Activity. The inventory activity provides the activity of an item.
<b>Actors (Goal)</b>	<p><b>Inventory Report To Party:</b> The actor who receives the Inventory Activity. This role can be played by various parties (Distributor, Manufacturer, Material Supplier, Owner of items, Place where items are stored, Retailer, Warehouse, and Wholesaler).</p> <p><b>Inventory Reporting Party:</b> The actor who transmits the Inventory Activity. This role can be played by various parties (Distributor, Manufacturer, Material Supplier, Owner of items, Place where items are stored, Retailer, Warehouse, and Wholesaler).</p>
<b>Preconditions</b>	Both trading partners have agreed upon the reporting dates and times.

<b>Post conditions</b>	Success: The 'Inventory Report To Party' receives the Inventory Activity message. Failure: The 'Inventory Report To Party' does not receive the Inventory Activity message.						
<b>Scenario</b>	<p><b>Begins when:</b></p> <p>The submitter of the inventory activity prepares the inventory activity message on the agreed upon date and time.</p> <p><b>Continues with:</b></p> <table border="1"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Inventory Reporting Party</td> <td>Sends the inventory activity.</td> </tr> </tbody> </table> <p><b>Ends when:</b> The 'Inventory Report To Party' receives the inventory activity message.</p>	Step #	Actor	Activity Step	1.	Inventory Reporting Party	Sends the inventory activity.
Step #	Actor	Activity Step					
1.	Inventory Reporting Party	Sends the inventory activity.					
<b>Alternative Scenario</b>	There are no alternative scenarios.						
<b>Business Transaction Rules</b>							

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

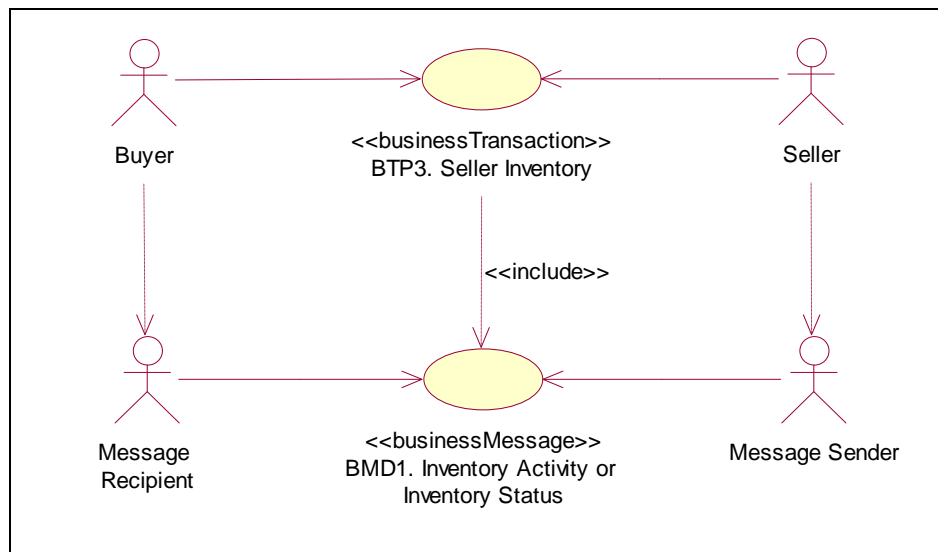
Not Applicable

#### 4.2.4. Business Transaction Sequence Diagram(s)

Not Applicable

### 4.3. Business Transaction SELLER INVENTORY

#### 4.3.1. Business Transaction Use Case Diagram



### 4.3.2. Use Case Description

<b>Use Case ID</b>	BTP3										
<b>Use Case Name</b>	Seller Inventory										
<b>Use Case Description</b>	The Seller Inventory transaction communicates at prescribed intervals the inventory levels of trade items in a specific location (plant, warehouse) to enable material requirements planning.										
<b>Actors (Goal)</b>	Buyer: To receive the inventory level information of the Seller. Seller: To communicate his inventory level information.										
<b>Preconditions</b>	Inventory Status: CALCULATED										
<b>Post conditions</b>	Inventory Status: COMMUNICATED										
<b>Scenario</b>	<p><b>Begins when:</b> The seller has calculated his inventory level.</p> <p><b>Continues with:</b></p> <table border="1"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Seller</td> <td>Sends the Inventory message to the buyer.</td> </tr> <tr> <td>2.</td> <td>Buyer</td> <td>Receives the Inventory message.</td> </tr> </tbody> </table> <p><b>Ends when:</b> buyer receives the Inventory message.</p>		Step #	Actor	Activity Step	1.	Seller	Sends the Inventory message to the buyer.	2.	Buyer	Receives the Inventory message.
Step #	Actor	Activity Step									
1.	Seller	Sends the Inventory message to the buyer.									
2.	Buyer	Receives the Inventory message.									
<b>Alternative Scenario</b>	There are no alternative scenarios.										
<b>Business Transaction Rules</b>	In the Inventory message the Buyer is the Inventory Report to Party and the Seller is the Inventory Reporting Party.										

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

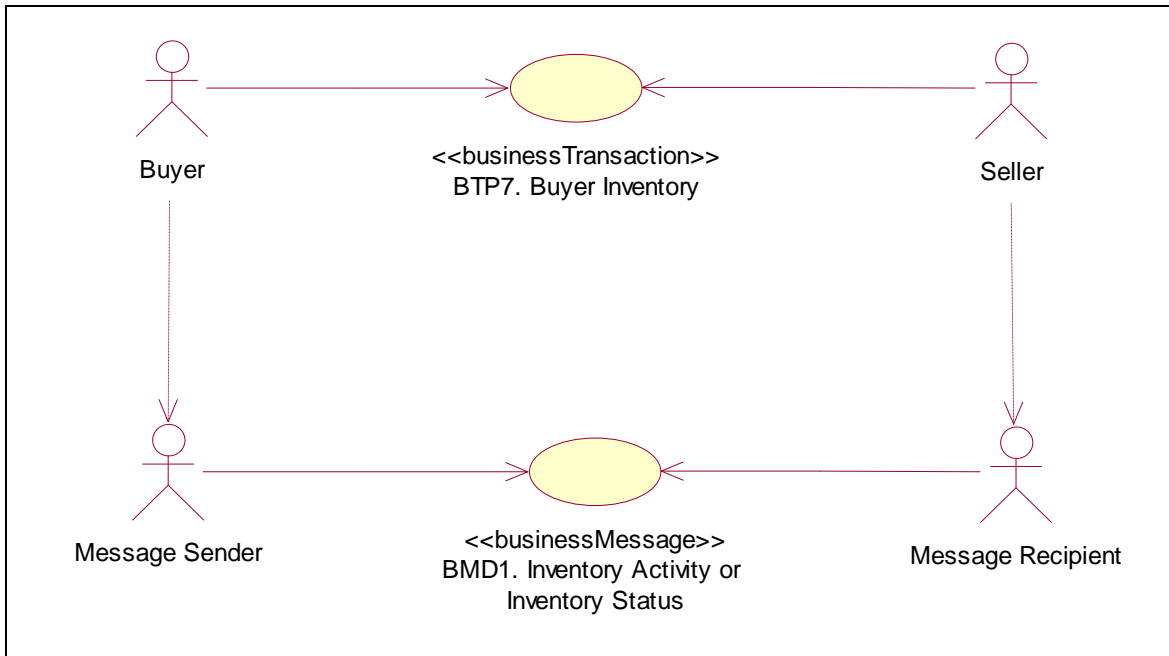
Not Applicable

### 4.3.4. Business Transaction Sequence Diagram(s)

Not Applicable

## 4.4. Business Transaction BUYER INVENTORY

### 4.4.1. Business Transaction Use Case Diagram



### 4.4.2. Use Case Description

<b>Use Case ID</b>	BTP7										
<b>Use Case Name</b>	Buyer Inventory										
<b>Use Case Description</b>	The Buyer Inventory transaction communicates at prescribed intervals the inventory levels of trade items in a specific location (plant, warehouse) to enable material requirements planning.										
<b>Actors (Goal)</b>	Seller: To receive the inventory level information of the buyer. Buyer: To communicate his inventory level information.										
<b>Preconditions</b>	Inventory Status: CALCULATED										
<b>Post conditions</b>	Inventory Status: COMMUNICATED										
<b>Scenario</b>	<p><b>Begins when:</b> The buyer has calculated his inventory level.</p> <p><b>Continues with:</b></p> <table border="1"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Buyer</td> <td>Sends the Inventory message to the seller.</td> </tr> <tr> <td>2.</td> <td>Seller</td> <td>Receives the Inventory message.</td> </tr> </tbody> </table> <p><b>Ends when:</b> seller receives the Inventory message.</p>		Step #	Actor	Activity Step	1.	Buyer	Sends the Inventory message to the seller.	2.	Seller	Receives the Inventory message.
Step #	Actor	Activity Step									
1.	Buyer	Sends the Inventory message to the seller.									
2.	Seller	Receives the Inventory message.									
<b>Alternative Scenario</b>	There are no alternative scenarios.										
<b>Business Transaction Rules</b>	In the Inventory message the Seller is the Inventory Report to Party and the Buyer is the Inventory Reporting Party.										

#### **4.4.3. Business Transaction Activity Diagram(s)**

Not Applicable

#### **4.4.4. Business Transaction Sequence Diagram(s)**

Not Applicable



## 5. Information Model (Including GDD Report)

### 5.1. GDD Inventory Activity or Inventory Status

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
InventoryActivityLineItem				Inventory Activity Line Item. Details	None				
	inventoryBeginDateTime			Inventory Activity Line Item.Inventory Begin Date Time.Date Time		0..1	Date Time. Content Date Time. Format. Text		No restrictions
	inventoryEndDateTime			Inventory Activity Line Item.Inventory End Date Time.Date Time		0..1	Date Time. Content Date Time. Format. Text		No restrictions
			InventoryActivityQuantitySpecification	Inventory Activity Line Item. Association. Inventory Status Quantity Specification		1..*			
			LineItem	Inventory Activity Line Item. Generalization. Line Item		1..1			
			LogisticUnitIdentification	Inventory Activity Line Item. Association. Logistic Unit Identification		0..1			
		inventorySublocation	PartyIdentification	Inventory Activity Line Item. Inventory Sublocation. Party Identification		0..1			
InventoryActivityOrInventoryStatus				Inventory Activity Or Inventory Status. Details	Provides the Inventory Activity or Inventory Status information.				
	beginDateTime			Inventory Activity Or Inventory Status. Begin Date Time_ Date Time. Date Time	Represents the begin date time of the inventory activity or inventory status.	1..1	Date Time. Content Date Time. Format. Text	BRD Inventory Activity or Inventory Status 0.6.2{2.1.1-5}	Facets constrained by code list values

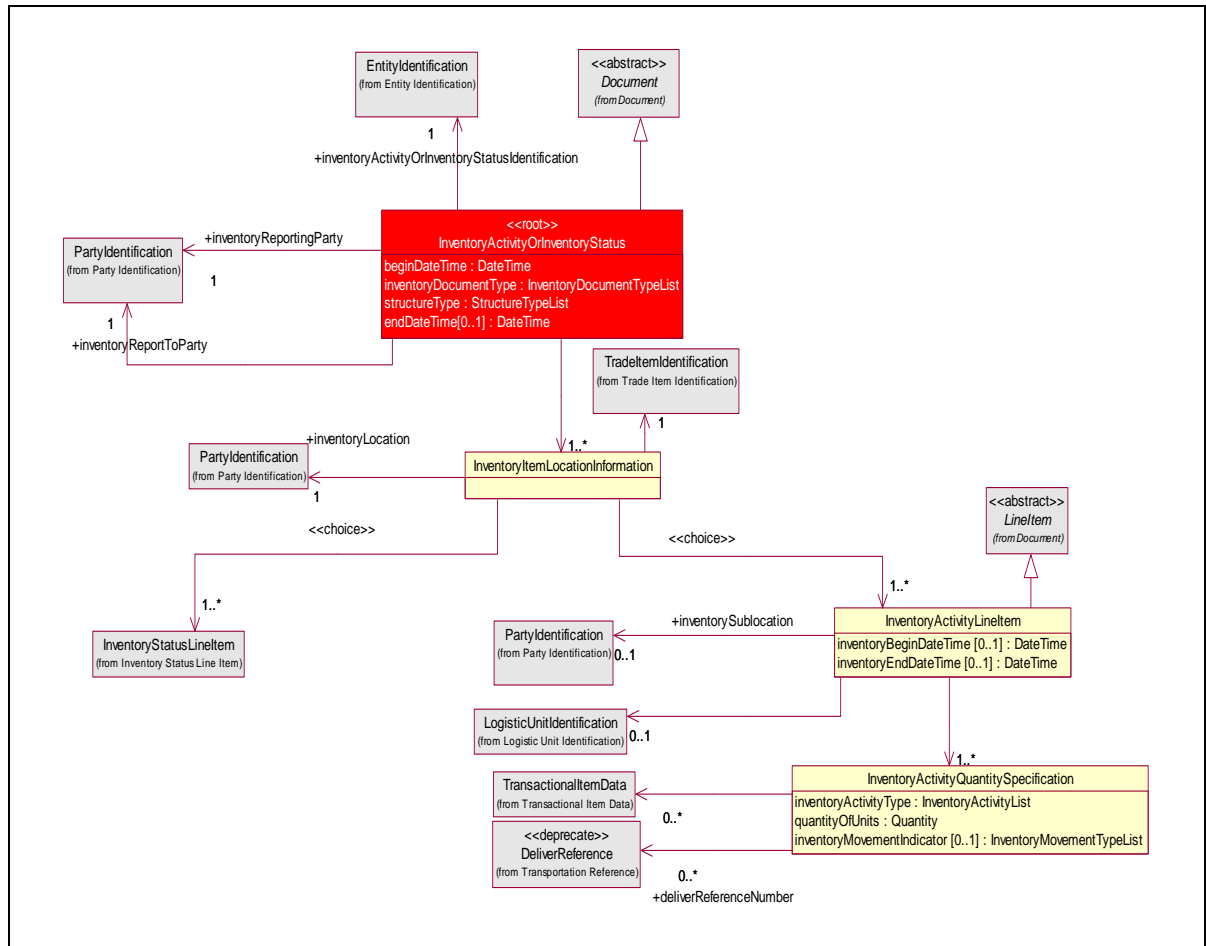
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
	endDateTime			Inventory Activity Or Inventory Status. End Date Time_ Date Time. Date Time	Represents the end date time of the inventory activity or inventory status.	0..1	Date Time. Content Date Time. Format. Text	BRD Inventory Activity or Inventory Status 0.6.2{2.1.1-5}	Facets constrained by code list values
	inventoryDocumentType			Inventory Activity Or Inventory Status. Inventory Document Type_ Type. Code	Inventory Document type identifies the process as an inventory status or an inventory activity.	1..1	Code. Content Code List. Agency. Identifier Code List. Agency Name. Text	BRD Inventory Activity or Inventory Status 0.6.2{2.1.1-3}	Facets constrained by code list values
	structureType			Inventory Activity Or Inventory Status. Structure Type_ Type. Code	The structure format of the inventory activity or Inventory Status message.	1..1	Code. Content Code List. Agency. Identifier Code List. Agency Name. Text	BRD Inventory Activity or Inventory Status 0.6.2{2.1.1-3}	Facets constrained by code list values
			Document	Inventory Activity Or Inventory Status. Inheritance_ Association. Electronic_ Document	This information on Document for InventoryActivityOrInventoryStatus.	1..1		BRD Inventory Activity or Inventory Status 0.6.2{7.1.1-2+3}	
		inventoryActivityOrInventoryStatusIdentification	EntityIdentification	Inventory Activity Or Inventory Status. Association. Entity Identification	Uniquely identifies the Inventory Activity or Inventory Status Message.	1..1		BRD Inventory Activity or Inventory Status 0.6.2{2.1.1-4} BRAD Upstream Standards - Demand & Supply Signals 0.1.0{7.1.1-1}	
			InventoryItemLocationInformation	Inventory Activity Or Inventory Status. Association. Inventory Item Location Information	Location where the items are stored.	1..*			

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
		inventoryReportingParty	PartyIdentification	Inventory Activity Or Inventory Status. Inventory Reporting Party. Party Identification	The identification of the party reporting about the inventory.	1..1		BRD Inventory Activity or Inventory Status 0.6.2{2.1.1-2} BRAD Upstream Standards - Demand & Supply Signals 0.1.0{7.1.1-4}	
		inventoryReportToParty	PartyIdentification	Inventory Activity Or Inventory Status. Inventory Report To Party. Party Identification	The identification of the party to which the inventory is being reported.	1..1		BRAD Upstream Standards - Demand & Supply Signals 0.1.0{7.1.1-5}	
InventoryActivityQuantitySpecification				Inventory Status Quantity Specification. Details	Supplies the inventory activity item information with the quantity of units, inventory activity type, an optional inventory movement indicator, and an optional reference number.			BRD Inventory Activity or Inventory Status 0.6.2{2.1.1-8}	
	inventoryActivityType			Inventory Activity Quantity Specification.Details.Inventory Activity Type.Inventory Activity_Code	The inventory activity type for the Inventory Activity Item from the Inventory Activity List.	1..1	Code. Content		Facets constrained by code list values
	inventoryMovementIndicator			Inventory Activity Quantity Specification.Details.Inventory Movement Indicator.Inventory Movement Type	This indicator will identify to increase or decrease the quantity in their systems.	0..1	Code. Content		Facets constrained by code list values
	quantityOfUnits			Inventory Activity Quantity Specification.Details.Quantity Of Units.Quantity	The number of units and the unit of measure associated to the Inventory Item.	1..1	Quantity. Content Quantity Unit. Code Quantity Unit. Code List Agency. Identifier		No Restrictions

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
		deliverReferenceNumber	DeliverReference	Inventory Status Quantity Specification. Deliver Reference Number. Entity Reference	Provides the deliver reference number	0..*			
			TransactionalItemData	Inventory Status Quantity Specification. Association. Transactional Item Data	Provides the transactional item data details.	0..*			
InventoryItemLocationInformation				Inventory Item Location Information. Details	Location where the items are stored.			BRAD Upstream Standards - Demand & Supply Signals 0.1.0 {7.1.1-18 partially covered}	
			InventoryActivityLineItem	Inventory Item Location Information. Choice_Association. Inventory Activity Line Item		1..*		BRAD Upstream Standards - Demand & Supply Signals 0.1.0{7.1.1-7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18}	
			InventoryStatusLineItem	Inventory Item Location Information. Choice_Association. Inventory Status Line Item		1..*		BRAD Upstream Standards - Demand & Supply Signals 0.1.0{7.1.1-7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18}	

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
		inventoryLocation	PartyIdentification	Inventory Item Location Information. Inventory Location. Party Identification	The party identification for the place where items are stored.	1..1		BRD Inventory Activity or Inventory Status 0.6.2{2.1.1-2}BRAD Upstream Standards - Demand & Supply Signals 0.1.0{7.1.1-6}	
			TradeItemIdentification	Inventory Item Location Information. Association. Trade Item Identification	Identification of the inventory item.	1..1		BRD Inventory Activity or Inventory Status 0.6.2{2.1.1-7}BRAD Upstream Standards - Demand & Supply Signals 0.1.0{7.1.1-10}	

## 5.2. Class Diagrams



- ✔ **Note:** Reference Common Library Business Message (BMS) Release 2.5.0 for all common information.

## 5.3. Code Lists

- ✔ **Note:** Reference Common Library Business Message Release 2.5.0 for all Code Lists

# 6. Business Document Example

## 6.1. Inventory Status Example

The following is an example of an inventory status message. The message is sent out on February 9th at 11 AM. The message is identified with the unique identifier **2005001**. The content owner is the sending party, in this case the manufacturer (Inventory Reporting Party **999999999999**).

The inventory information is sent by the manufacturer (Inventory Reporting Party **9999999999991**) to the material supplier (Inventory Report To Party **9999999999992**).

The inventory status information is for two inventory locations; X (Inventory Location **9999999999993**) and Y (Inventory Location **9999999999994**).

The inventory status information is for three items; A (GTIN **01111111111111**), B (GTIN **02222222222222**) and C (GTIN **03333333333333**).

All inventories have been assessed at February 9<sup>th</sup> at 8 AM, except for the inventory of item C at location X, this has been assessed at 12 PM the previous day.

### Location X

For item A the inventory status is:

- Total inventory 25 of which 15 available for sale and 10 expired.
- For item B the inventory status is:
- Total inventory 50, completely on hand, containing 30 units with production date **2004-11-24** and 20 units with production date **2004-11-17**.
- For item C the inventory status is:
- Total inventory 325, of which 300 units are on hold and 25 units are damaged..

### Location Y

For item A the inventory status is:

- Total inventory 160 of which 80 are located on pallet **88888888888888881** and 80 on pallet **88888888888888882**. Of the items on pallet 1 25 are available for sale, and 55 are expired. The items on pallet 2 are all available for sale.

### Summarized:

Line	InventoryLocation	TradeItem	LogisticUnit
1	9999999999993	011111111111111	n/a
2	9999999999993	022222222222222	n/a
3	9999999999993	033333333333333	n/a
4	9999999999994	033333333333333	88888888888888881
5	9999999999994	033333333333333	88888888888888882

InventoryActivityOrInventoryStatus	
- creationDateTime	2005-02-09T11.00.00
- documentStatus	ORIGINAL
- beginDateTime	2005-02-09T08.00.00
- inventoryDocumentType	INVENTORY_STATUS
- structureType	LOCATION_BY_ITEM
EntityIdentification (+InventoryActivityOrInventoryStatusIdentification)	
- uniqueCreatorIdentification	2005001
PartyIdentification (+contentOwner)	
- gLN	9999999999991

InventoryActivityOrInventoryStatus	
PartyIdentification (+inventoryReportToParty)	
- gLN	9999999999992
PartyIdentification (+inventoryReportingParty)	
- gLN	9999999999991
InventoryItemLocationInformation *1	
PartyIdentification (+inventoryLocation)	
- gLN	9999999999993
TradeItemIdentification	
- gTIN	01111111111111
InventoryStatusLineItem *1.1	
- lineItemNumber	1
InventoryStatusQuantitySpecification	
- inventoryStatusType	AVAILABLE_FOR_SALE
- quantityOfUnits (value, unitOfMeasure)	15
InventoryStatusQuantitySpecification	
- inventoryStatusType	EXPIRED
- quantityOfUnits (value, unitOfMeasure)	10
InventoryItemLocationInformation *2	
PartyIdentification (+inventoryLocation)	
- gLN	9999999999993
TradeItemIdentification	
- gTIN	02222222222222
InventoryStatusLineItem *2.1	
- lineItemNumber	2
InventoryStatusQuantitySpecification	
- inventoryStatusType	ON_HAND
- quantityOfUnits (value, unitOfMeasure)	50
TransactionItemData	
- productionDate	2004-11-24
MultiMeasurementValue	
measurementValue (value, unitOfMeasure)	30, PCS
TransactionItemData	
- productionDate	2004-11-17
MultiMeasurementValue	
measurementValue (value, unitOfMeasure)	20, PCS
InventoryItemLocationInformation *3	
PartyIdentification (+inventoryLocation)	
- gLN	9999999999993



InventoryActivityOrInventoryStatus	
TradeItemIdentification	
- gTIN	03333333333333
InventoryStatusLineItem *3.1	
- lineItemNumber	3
- inventoryDateTime	2005-02-09T00.00.00
InventoryStatusQuantitySpecification	
- inventoryStatusType	ON_HOLD
- quantityOfUnits (value, unitOfMeasure)	300
InventoryStatusQuantitySpecification	
- inventoryStatusType	DAMAGED
- quantityOfUnits (value, unitOfMeasure)	25
InventoryItemLocationInformation *4	
PartyIdentification (+inventoryLocation)	
- gLN	9999999999994
TradeItemIdentification	
- gTIN	03333333333333
InventoryStatusLineItem *4.1	
- lineItemNumber	4
LogisticUnitIdentification	
- sSSC	8888888888888881
InventoryStatusQuantitySpecification	
- inventoryStatusType	AVAILABLE_FOR_SALE
- quantityOfUnits (value, unitOfMeasure)	25, PCS
InventoryStatusQuantitySpecification	
- inventoryStatusType	EXPIRED
- quantityOfUnits (value, unitOfMeasure)	55, PCS
InventoryStatusLineItem *4.2	
- lineItemNumber	5
LogisticUnitIdentification	
- sSSC	8888888888888882
InventoryStatusQuantitySpecification	
- inventoryStatusType	AVAILABLE_FOR_SALE
- quantityOfUnits (value, unitOfMeasure)	80, PCS

## 6.2. Inventory Activity Example

The following is an example of an inventory activity message. The message is sent out on February 9th at 11 AM. The message is identified with the unique identifier **2005001**. The content owner is the sending party, in this case the manufacturer (Inventory Reporting Party **9999999999991**).

The inventory information is sent by the retailer (Inventory Reporting Party 9999999999991) to the manufacturer (Inventory Report To Party **9999999999992**).

The inventory activity information is for three inventory locations; X (Inventory Location **9999999999993**), Y (Inventory Location **9999999999994**) and Z (Inventory Location **9999999999995**).

The inventory status information is for four items; A (GTIN 0111111111111), B (GTIN **0222222222222**), C (GTIN **0333333333333**) and D (GTIN **0444444444444**).

The activities reported all took place between 10 PM on February 7<sup>th</sup> and 10 PM February 8<sup>th</sup>, except for Item A at location Y, there the end time is 11 PM.

**Item A**

On location X the following activity is reported:

- Quarantine 15, Recall 10

On location Y the following activity is reported:

- Destroyed 10 (decrease of inventory)

**Item B**

On location X the following activity is reported:

- Distressed 20 KGM, originating from lotnumber 123456789

**Item C**

On location X the following activity is reported:

- Despatch discrepancy of 300 units, received 25 units

On location Y the following activity is reported:

- Physical count 250 units

**Item D**

On location Z the following activity is reported:

- Damaged in facility 250 units.

**Summarized:**

Line	TradeItem	InventoryLocation
1	011111111111111	9999999999993
2	011111111111111	9999999999994
3	022222222222222	9999999999993
4	033333333333333	9999999999993
5	033333333333333	9999999999994
6	044444444444444	9999999999995

InventoryActivityOrInventoryStatus	
- creationDateTime	2005-02-09T11.00.00
- documentStatus	ORIGINAL

<b>InventoryActivityOrInventoryStatus</b>	
- beginDateTime	2005-02-07T22.00.00
- endDateTime	2005-02-08T22.00.00
- inventoryDocumentType	INVENTORY_STATUS
- structureType	ITEM_BY_LOCATION
EntityIdentification (+InventoryActivityOrInventoryStatusIdentification)	
- uniqueCreatorIdentification	2005001
PartyIdentification (+contentOwner)	
- gLN	9999999999991
PartyIdentification (+inventoryReportToParty)	
- gLN	9999999999992
PartyIdentification (+inventoryReportingParty)	
- gLN	9999999999991
InventoryItemLocationInformation *1	
PartyIdentification (+inventoryLocation)	
- gLN	9999999999993
TradeItemIdentification	
- gTIN	01111111111111
InventoryActivityLineItem *1.1	
- lineItemNumber	1
InventoryActivityQuantitySpecification	
- inventoryActivityType	QUARANTINE
- quantityOfUnits (value, unitOfMeasure)	15
InventoryActivityQuantitySpecification	
- inventoryActivityType	RECALL
- quantityOfUnits (value, unitOfMeasure)	10
InventoryItemLocationInformation *2	
PartyIdentification (+inventoryLocation)	
- gLN	9999999999994
TradeItemIdentification	
- gTIN	01111111111111
InventoryActivityLineItem *2.1	
- lineItemNumber	2
- inventoryBeginDateTime	2005-02-07T22.00.00
- inventoryEndDateTime	2005-02-08T23.00.00
InventoryActivityQuantitySpecification	
- inventoryActivityType	DESTROYED
- quantityOfUnits (value, unitOfMeasure)	10

InventoryActivityOrInventoryStatus	
- inventoryMovementIndicator	MOVING_PRODUCT_OUT_OF_INVENTORY
DeliverReference	
- deliverReferenceIdentification	444
- deliverReferenceType	RETURN_MATERIAL_AUTHORIZATION_NUMBER
InventoryItemLocationInformation *3	
PartyIdentification (+inventoryLocation)	
- gLN	9999999999993
TradeItemIdentification	
- gTIN	02222222222222
InventoryActivityLineItem *3.1	
- lineItemNumber	3
InventoryActivityQuantitySpecification	
- inventoryActivityType	DISTRESSED
- quantityOfUnits (value, unitOfMeasure)	20, KGM
TransactionItemData	
- lotNumber	123456789
MultiMeasurementValue	
measurementValue (value, unitOfMeasure)	20, KGM
InventoryItemLocationInformation *4	
PartyIdentification (+inventoryLocation)	
- gLN	9999999999993
TradeItemIdentification	
- gTIN	03333333333333
InventoryActivityLineItem *4.1	
- lineItemNumber	4
InventoryActivityQuantitySpecification	
- inventoryActivityType	DESPATCH_DISCREPANCY
- quantityOfUnits (value, unitOfMeasure)	300, PCS
DeliverReference	
- deliverReferenceIdentification	3391
- deliverReferenceType	PACKAGE_NUMBER
InventoryActivityQuantitySpecification	
- inventoryActivityType	RECEIPTS
- quantityOfUnits (value, unitOfMeasure)	25, PCS
- inventoryMovementIndicator	MOVING_PRODUCT_INTO_INVENTORY
DeliverReference	
- deliverReferenceIdentification	HIGH TICKET ITEM 4433

InventoryActivityOrInventoryStatus	
- deliverReferenceType	RETURNED_GOODS_AUTHORIZATION_NUMBER
InventoryItemLocationInformation *5	
PartyIdentification (+inventoryLocation)	
- gLN	9999999999994
TradeItemIdentification	
- gTIN	03333333333333
InventoryActivityLineItem *5.1	
- lineItemNumber	5
InventoryActivityQuantitySpecification	
- inventoryActivityType	PHYSICAL_COUNT
- quantityOfUnits (value, unitOfMeasure)	250, PCS
InventoryItemLocationInformation *4	
PartyIdentification (+inventoryLocation)	
- gLN	9999999999995
TradeItemIdentification	
- gTIN	04444444444444
InventoryActivityLineItem *4.1	
- lineItemNumber	6
InventoryActivityQuantitySpecification	
- inventoryActivityType	DAMAGED_IN_FACILITY
- quantityOfUnits (value, unitOfMeasure)	250, PCS
- inventoryMovementIndicator	MOVING_PRODUCT_OUT_OF_INVENTORY

## 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. Summary of Changes

Change	BMS Version	Associated CR Number
InventoryActivityLineItem <ul style="list-style-type: none"> <li>■ Added association to LogisticUnitIdentification [0..1]</li> <li>■ Added two attributes: inventoryBeginDateTime [0..1] and inventoryEndDateTime [0..1]</li> </ul> InventoryStatusLineItem (Common Library) <ul style="list-style-type: none"> <li>■ removed attribute inventoryStatusQuantity</li> <li>■ changed multiplicity of association to InventoryStatusQuantitySpecification from [0..*] into [1..*]</li> </ul>	1.2.0	
InventoryActivitySpecification: <ul style="list-style-type: none"> <li>■ removed attribute referenceNumer [0..1]</li> <li>■ added association to class DeliverReference with multiplicity of [0..*].</li> </ul>	1.2.4	
BMS Release 2.5.0 Inventory Status List has been modified and details are in common library Release 2.5.0	2.0.0	0 7-309 08-209
BMS Final Public Review  eCom BRG decision on 20081203 teleconference Changed UML and GDD to match XML FROM: InventoryActivityQuantitySpecification+(0..*)DeliverReference TO: InventoryActivityQuantitySpecification+deliverReferenceNumber(0..*)DeliverReference	2.0.1	Not Applicable
Updated BMS to Approved Status eBallot Approved Release 2.5.0	Issue 2.0.1	