

Business Message Standard (BMS)

for

**Deliver/Inventory Status Advice
BRG: Deliver**

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Change Request Reference

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Date of CR Submission to GSMP:	2001

Business Requirements Document (BRAD) Reference

BRAD Title: Inventory Status Advice
BRAD Date: 30/06/2003
BRAD Version: 2.4

BRAD Title:
BRAD Date:
BRAD Version:

Document Summary

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Document Version:	3.0.0
Owner:	Doug Harness, Debra Noyes
Status:	Approved
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Document Change History

Note: During development include revisions in history. Upon Approval, eliminate revisions and include only delta from previous version.

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
31/12/2004	3.0.0	N/A	Initial Version in BMS/BSD Template	Migration of BRD to standard BMS/BSD format	N/A

Business Message Standard

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Business Solution Design

1 Business Solution

1.1 Business Domain View

1.1.1 Problem Statement / Business Need

The Owner Of Goods have a need to know the levels of inventory in a warehouse, which is any inventory location, and a method to communicate the inventory levels between the warehouse and the suppliers of the inventory. The Inventory Status Advice is intended to accomplish the communication of inventory levels.

1.1.2 Objective

To supply the detail design of the Inventory Status Advice business transaction needed to meet the requirements of the referenced BRAD(s).

1.1.3 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.

1.1.4 Artefacts

(List of the artefacts that are used as either an input to the process or an output from the process, also indicating the different states that the artefact takes during the process.)

Artefact name	State	Artefact / State description

1.1.5 References

Reference Name	Description
CR 01-000083	GSMP Change Request
BRD Inventory Status Advice v2.4	Source BRD

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1.1.6 Acknowledgements

(List of the individuals—and their companies—who participated in the creation, review and approval of this BMS.)

1.1.6.1 BRG Members

Function	Name	Company / organisation
BRG Co-Chair	Doug Harness	Fleming Companies, Inc.
BRG Co-Chair	Debra Noyes	Johnsonville Sausage, L.L.C.
BRG Member	Regina a. De Baker	Watkins Associated Industries
BRG Member	Becky Dettling	3M Company
BRG Member	Sue Donarski	Schneider Logistics
BRG Member	K. Wayne Gingerich	Werner Enterprises
BRG Member	Stephanie Hodge-Daniels	Levi Strauss & Co.
BRG Member	Miriam van Kreijl	Albert Heijn
BRG Member	Kari Melhus	Target Corporation
BRG Member	Jeff Miller	Kraft Foods, Inc.
BRG Member	Mike Osiecki	Best Buy Company, Inc.
BRG Member	Stef Spaan	EAN Netherlands
BRG Manager	Phillip Jerred	e.centre
BRG Global Director	Jim Rodriguez	Uniform Code Council

1.1.6.2 ITRG Members

N/A

1.1.6.3 Distribution Task Group Participants

Function	Name	Company / organisation
Participant	Paul Martin	General Mills
Participant	Ed Jesus	CHEP
Participant	Paula Giovanetti	Arrow Products

1.1.6.4 Design Team Members

Function	Name	Organisation
Modeller	Tom Heist	GS1
XML Technical Designer	N/A	
EANCOM Technical Designer	N/A	
Peer Reviewer	N/A	

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1.2 Business Context

(Note: The business context of the business)

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

If no value use, the default of "All" except for Official Constraints where default is "None".

1.3 Additional Technical Requirements Analysis

1.3.1 Technical Requirements (optional)

Number	Statement	Rationale

1.4 Business Transaction View

1.4.1 Business Transaction Use Case Diagram

During the planning process the supplier and the warehouse shall establish:

- reporting intervals
- trade items to be reported

The warehouse shall identify:

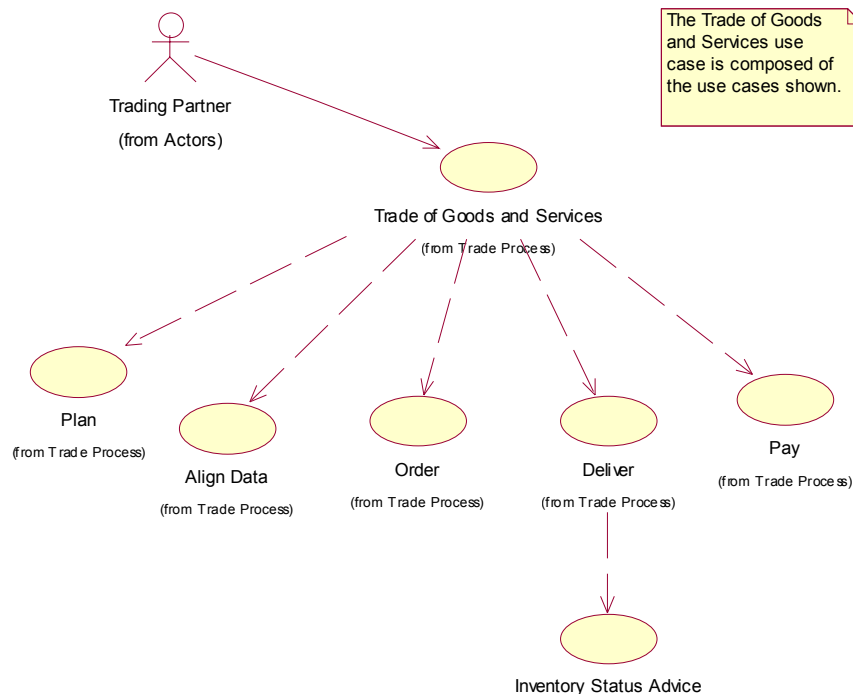
- trade items using the Global Trade Item Number (GTIN) or an alternative identifier
- their location using their Global Location Number (GLN) or an alternative identifier

The inventory status advice shall include:

- a unique identification number
- the date of the status advice
- the unit of measure for each trade item
- the quantity in inventory

The inventory status advice may include:

- the lot number(s) for the trade item



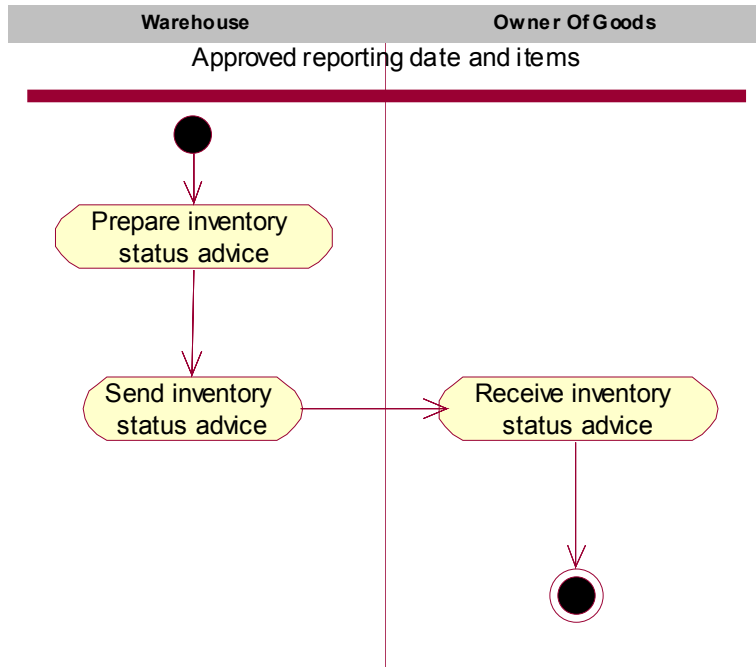
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1.4.2 Use Case Description

Use Case ID	UC-1										
Use Case Name	Advise Owner of Goods of Inventory Status										
Use Case Description	Owner Of Goods have a need to know at prescribed intervals the inventory levels of trade items in a warehouse. The warehouse will provide the inventory level information to the owner of goods using a standard message called an Inventory Status Advice.										
Actors (Goal)	<ul style="list-style-type: none"> Warehouse: any inventory location – a place where goods are stored. Owner Of Goods 										
Performance Goals	N/A										
Preconditions	The reporting dates and times have been agreed upon by both trading partners.										
Post conditions	The Owner Of Goods has received an inventory status advice.										
Scenario	<p>Begins when a trigger date and time agreed upon for sending the inventory status advice are arrived at.</p> <p>Continues with...</p> <table border="1"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Ware-house</td> <td>Warehouse prepares the inventory status advice on the specified date and time.</td> </tr> <tr> <td>2</td> <td>Ware-house</td> <td>Warehouse transmits the message.</td> </tr> </tbody> </table> <p>Ends when the Owner Of Goods receives the message.</p>		Step #	Actor	Activity Step	1	Ware-house	Warehouse prepares the inventory status advice on the specified date and time.	2	Ware-house	Warehouse transmits the message.
Step #	Actor	Activity Step									
1	Ware-house	Warehouse prepares the inventory status advice on the specified date and time.									
2	Ware-house	Warehouse transmits the message.									
Alternative Scenario	<p><i>(any alternatives to the above scenario)</i></p> <table border="1"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		Step #	Actor	Activity Step						
Step #	Actor	Activity Step									
Related Requirements	<table border="1"> <tr> <td>1</td> <td> </td> </tr> </table>		1								
1											
Related Rules	<table border="1"> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>										

1.4.3 Business Transaction Activity Diagram(s)

1.4.3.1 Processing the Inventory Status Advice



1.4.4 Business Transaction Sequence Diagram(s) (optional)

N/A

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1.5 Information Model (including GDD Report)

1.5.1 Data Description:

(Contains list of attributes included in the model and the related requirement, which led to its inclusion in the design)

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	RELATED REQUIREMENT
Document				
	contentVersion			
	creationDate			
	documentStatus			
	documentStructureVersion			
	lastUpdateDate			
EntityIdentification				
	uniqueCreatorIdentification			
		contentOwner	PartyIdentification	
InventoryStatusAdvice				BRD Inventory Status Advice, V2.4, 30-06-03
		InventoryStatusAdvice	Document	
		inventoryStatusAdviceIdentification	EntityIdentification	
			InventoryTradeItem	
		alternateWarehouseLocation	PartyIdentification	
		warehouseLocation	PartyIdentification	
InventoryTradeItem				BRD Inventory Status Advice, V2.4, 30-06-03
	availableForSaleDate			
	expirationDate			
	productionDate			

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	quantityOfUnits			
	tradeItemLotNumber			
	tradeItemStatus			
			TradeItemIdentification	
PartyIdentification				
	globalLocationNumber			
			AdditionalPartyIdentification	
TradeItemIdentification				
	globalTradeItemNumber			
	globalTradeItemNumber			
		additionalTradeItemIdentification	AdditionalTradeItemIdentification	

1.5.2 GDD Report :

(Output from GDD should be pasted in this section.)

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
Document				Electronic_ Document. Details	Used to specify basic information about the content of the message including version number; creation date and time.	
	contentVersion			Electronic_ Document. Content_ Version. Identifier	N/A	0..1
	creationDateTime			Electronic_ Document. Creation_ Date. Date Time	N/A	1..1
	documentStatus			Electronic_ Document. Status. Identifier	Indicates if the document is a copy or an original.	1..1

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	documentStructureVersion			Electronic_ Document. Document Structure_ Version. Identifier	N/A	0..1
	lastUpdateDate			Electronic_ Document. Last Update_ Date. Date Time	N/A	0..1
EntityIdentifica- tion				Entity Identification. De- tails	The unique identification of a doc- ument.	
	uniqueCreatorIdentification			Entity Identification. Identifi- cation. Identifier	N/A	1..1
		contentOwner	PartyIdentification	Entity Identification. Con- tent Owner. Party Identifi- cation	N/A	1..1
InventoryS- tatusAdvice				Inventory Status Advice. Details	!! Inventory Status Advice is the root class for these business re- quirements. There are two possi- ble associations with Party Identifi- cation class; --for Warehouse Loca- tion (mandatory); --for an alternate Warehouse Location (optional); possible multiple occurrences. There are two mandatory associa- tions with Entity Identification with an inventory status advice identifi- cation; with Inventory Trade Item (possible multiple occurrences). The root class has no attributes."	
		InventoryStatusAd- vice	Document	Inventory Status Advice. Inheritance_ Association. Electronic_ Document		1..1
		inventoryStatusAd- viceIdentification	EntityIdentifica- tion	Inventory Status Advice. Inventory Status Advice Identification. Entity Identifi- cation	Provides a unique identification number to the inventory status ad- vice message.	1..1
			InventoryTrade- Item	Inventory Status Advice. Association. Inventory Trade Item	N/A	1..*

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		alternateWarehouseLocation	PartyIdentification	Inventory Status Advice. Alternate Warehouse Location. Party Identification	!! This class originates from Trade Item Identification in the common library and is used to provide the location of a party using the Global Location Number (GLN) or an alternate party identifier that can be selected from the alternate party identification list. The inventory status advice requires that the warehouse be identified. This class provides for that identification and also for the use of an alternative warehouse location. This class is mandatory for the warehouse and optional for the alternate warehouse location.	0..1
		warehouseLocation	PartyIdentification	Inventory Status Advice. Warehouse Location. Party Identification	This class originates from Trade Item Identification in the common library and is used to provide the location of a party using the Global Location Number (GLN) or an alternate party identifier that can be selected from the alternate party identification list. The inventory status advice requires that the warehouse be identified. This class provides for that identification and also for the use of an alternative warehouse location. This class is mandatory for the warehouse and optional for the alternate warehouse location.	1..1
Inventory-TradeItem				Inventory Trade Item. Details	This class is used to provide the reporting of one or many trade items in the inventory status advice. This class is mandatory and has 4 attributes. The dates are related to	

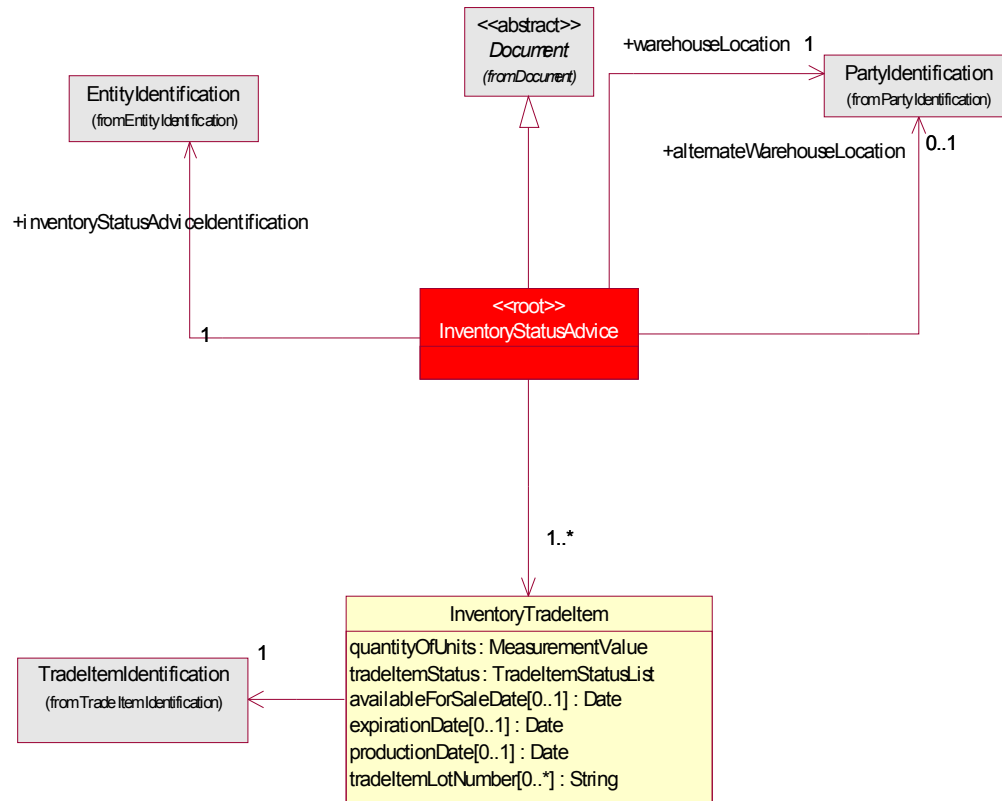
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					the trade items or the lot of trade item (identified as the Trade Item Lot Number) - Available For Sale Date --Expiration Date --Production Date --Trade Item Lot Number	
	availableForSaleDate			Inventory Trade Item. Available For Sale_ Date. Date Time	N/A	0..1
	expirationDate			Inventory Trade Item. Expiration_ Date. Date Time	N/A	0..1
	productionDate			Inventory Trade Item. Production_ Date. Date Time	N/A	0..1
	quantityOfUnits			Inventory Trade Item. Quantity Of Units. Quantity	!! This external class originates from Measurement and is a class that is used in many class diagrams. This class includes the number of units (quantity) and unit of measure being reported as the inventory.	1..1
	tradeItemLotNumber			Inventory Trade Item. Trade Item_ Lot Number. Identifier	N/A	0..*
	tradeItemStatus			Inventory Trade Item. Trade Item Status. Trade Item Status_ Code	N/A	1..1
			TradeItemIdentification	Inventory Trade Item. Item Identification. Trade Item Identification	!! Provide the identification of trade items using the Global Trade Identification Number (GTIN) or an alternate trade item identification. All trade items shall be identified and this class provides for the identification of trade items. This class is mandatory.	1..1
PartyIdentification				Party Identification. Details	Unique location number identifying the Party for which the rest of the	

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					message defines.	
	globalLocationNumber			Party Identification. Primary_ Identification. GLN_ Identifier	!! The Global Location Number (GLN) is a structured Identification of a physical location, legal or functional entity within an enterprise. The GLN is the recommended primary party identifier. Each party identified in the trading relationship must have a primary party identification. We recommend use of GLN. However, we have allowed for use of alternate party identification for transition.	1..1
			AdditionalParty-Identification	Party Identification. Additional. Non GLN_ Party Identification	N/A	0..*
TradeItemIdentification				Trade Item Identification. Details	N/A	
	globalTradeItemNumber			Trade Item Identification. GTIN. GTIN_ Identifier	A particular Global trade item Number; a numerical value used to uniquely identify a trade item. A trade item is any trade item (trade item or service) upon which there is a need to retrieve pre-defined information and that may be planned; priced; ordered; delivered and or invoiced at any point in any supply chain.	1..1
			AdditionalTrade-ItemIdentification	Trade Item Identification. Additional. Non GTIN_ Trade Item Identification	N/A	0..*

1.5.3 Class Diagrams



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1.5.4 Code Lists

Code List Name	Code List Description
TradeItemStatusList	Provides an enumeration list for the reporting of an trade item's status.
Code Name	Code Description
ALLOCATED_FOR_ORDER	N/A
AVAILABLE_FOR_SALE	N/A
DAMAGED	N/A
IN_TRANSIT	N/A
ON_HAND	N/A
ON_HOLD	N/A
RECALL	N/A
RETURNS	N/A

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1.6 Business Document Example

1.7 Implementation Considerations

1.8 Testing

1.8.1 Pass / Fail Criteria

N/A

Number	Test Criteria	Related Requirement	Design Element	Pass Criteria	Fail Criteria
1	<i>Reflects a specific business requirement from a related BRAD. For example: When goods are ordered, the buyer requires an answer from the suppliers that the order has been received.</i>	<i>BRAD Name.Version. Req #</i>	<i>Message, role, attribute</i>	<i>Result which determines that requirement has been satisfied: For example: Seller is able to create and send an Order Receipt Acknowledgement.</i>	<i>Result which shows that requirement has not been satisfied: For example: Buyer does not receive the Order Receipt Acknowledgement.</i>
2					
3					

1.8.2 Test Data

Attribute	Value
<i>Attribute Name. For example "orderQuantity"</i>	<i>Valid value associated with the attribute. For example "5".</i>

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1.9 Appendices

1.10 Summary of Changes

(Details changes to BMS for each version by BMS Section)

Change	BMS Version	Associated CR Number

2 XML Technical Solution ITRG Packet

The Technical Representation of the Business process is documented in a Technical Solution ITRG Packet containing all supplemental XML artefacts and is used by the Information Requirements Group (ITRG) to evaluate the solution. Upon approval from the Information Technical Requirements Group (ITRG), the Technical Solution ITRG Packet is updated to the Technical Solution Implementers Packet and published with the Business

Message Standard at:

http://www.ean-ucc.org/global_smp/ean.ucc_standards.htm.

Technical Solution ITRG Packet Content:

- Business Message Standard (BMS)
- ITRG Review Packet
 - Style Sheet: This HTML has been created using a Style Sheet that is a visual representation of the data. It is not an actual Style Sheet, but an ex-ample of what a Style Sheet may look like.
 - Instance File: The Instance File is an example of what the schema may look like when it includes live data. This can be used as comparison to a completed schema and can serve as a point of reference for development.
 - Technical Level GDD Report

Technical Solution Implementers Packet Content:

Contains all the message specific.XSD files required to implement

Example:

- AS2Envelope
- Command.xsd
- DocumentCommand.xsd
- Proxy.xsd
- ComponentLibrary.xsd

Both the Business Message Standard and the Implementers Packet are available during the ITRG Review Period in the working documents section of the ITRG eRoom:

http://eroom.uncouncil.org/eRoom/facility/InformationTechnicalAssessmentGroupITAG/0_14f7

All documents for review will be in this folder listed by name of the Change Request and Change Request Number. The Business Message Standard is not open for review, but offered as the basis for determining the suitability of the technical solutions.

This eRoom may be accessed by using the following User Name and Password:

User Name: guest

Password: guest