

# **Business Message Standard (BMS)**

**for**

**Plan/Product Activity**

**BRG: Plan**

**Version: 2.0.3**

**Date: 31.03.2005**



### Change Request Reference

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<b>CR Submitter(s):</b>	N/A
<b>Date of CR Submission to GSMP:</b>	N/A

### Business Requirements Document (BRAD) Reference

<b>BRAD Title: BRD Product Activity – Business Requirements Document</b>
<b>BRAD Date: 30.06.03</b>
<b>BRAD Version: 0.1.2</b>

<b>BRAD Title:</b>
<b>BRAD Date:</b>
<b>BRAD Version:</b>

### Document Summary

<b>Document Title:</b>	BMS for Plan/Product Activity
<b>Document Version</b>	2.0.3
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<b>BMS Template Version:</b>	1.0
<b>Targeted BMS Publication Version</b>	2.0.2

### Document Change History

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

<b>Date of Change</b>	<b>Version</b>	<b>Changed By</b>	<b>Reason for Change</b>	<b>Summary of Change</b>	<b>Model Build #</b>
31.03.05	2.0.0	Andrew Hearn	Initial Version in BMS/BSD template	Migration of BRD to standard BMS/BSD format	N/A
31.03.05	2.0.2	Andrew Hearn	Context Update	Updated the context listed within the document	N/A
27.04.2007	2.0.3	Giovanni Biffi	Editorial Changes	Minor Editorial Changes to the Document	N/A

# Business Message Standard

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### 1 Business Solution

#### 1.1 Business Domain View

##### 1.1.1 Problem Statement / Business Need

Collaborative Planning Forecasting and Replenishment (CPFR®) is a well documented nine step process developed and maintained by the Voluntary Interindustry Commerce Standards Association (VICS) for use by trading partners.

Within the CPFR® process, product activity is one type of historical data that a pair of CPFR® trading partners (a buyer and a seller) can share. Product Activity represents movement of a product through a location.

Product activity, historical product movement through a location, is always expressed in terms of the base unit of measure for the item, so no unit of measure is specified. Types of product activity include sales (which may also be interpreted as manufacturing consumption or warehouse withdrawals, depending upon the type of buyer/seller relationship), orders, cancelled orders, emergency orders, receipts, shipments and on-hand inventory. Product activity reports are collections of product activity items that indicate the quantities of product movement during the specified time intervals.

##### 1.1.2 Objective

To supply the detail design of the Product Activity business transaction needed to meet the requirements of the referenced BRAD(s).

##### 1.1.3 Audience

The audience for this document is anyone involved in collaborative planning, forecasting and replenishment.

##### 1.1.4 Artefacts

Artefact name	State	Artefact / State description

##### 1.1.5 References

Reference Name	Description
Product Activity– Business Requirement Document Version 2.0.0	The Business Requirement Document released for version 2.0 of the BMS Standard
EAN•UCC Global Business Model (Process and Data), “The Trade of Goods and Services”, October 1999	
VICS Collaborative Planning Forecasting and Replenishment (CPFR®), Global Commerce Initiative Recommendation,	

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June 30, 2001	
VICS CPFR® XML Messaging Model, June 13, 2001	

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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 Chair		
BRG Member		
BRG Member		
BRG Member		
BRG Member		
BRG Member		
BRG Member		
BRG Member		
BRG Member		
BRG Member		
BRG Member		
BRG Member		
BRG Member		
BRG Member		
BRG Member		
BRG Member		

### 1.1.6.2 ITRG Members

Function	Name	Company / organisation
ITRG Chair		
ITRG Member		
ITRG Member		
ITRG Member		
...		

### 1.1.6.3 Task/Project Group Participants (*where applicable*)

Function	Name	Company / organisation
Participant		
Participant		
Participant		
...		

### 1.1.6.4 Design Team Members

Function	Name	Organisation
Modeller		
XML Technical Designer		
EANCOM Technical Designer		
Peer Reviewer		



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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	Plan
System Capabilities	EAN.UCC
Official Constraints	None

### 1.3 Additional Technical Requirements Analysis

#### 1.3.1 Technical Requirements (optional)

*(User Interface, Security, Performance, Quality, etc.)*

Number	Statement	Rationale

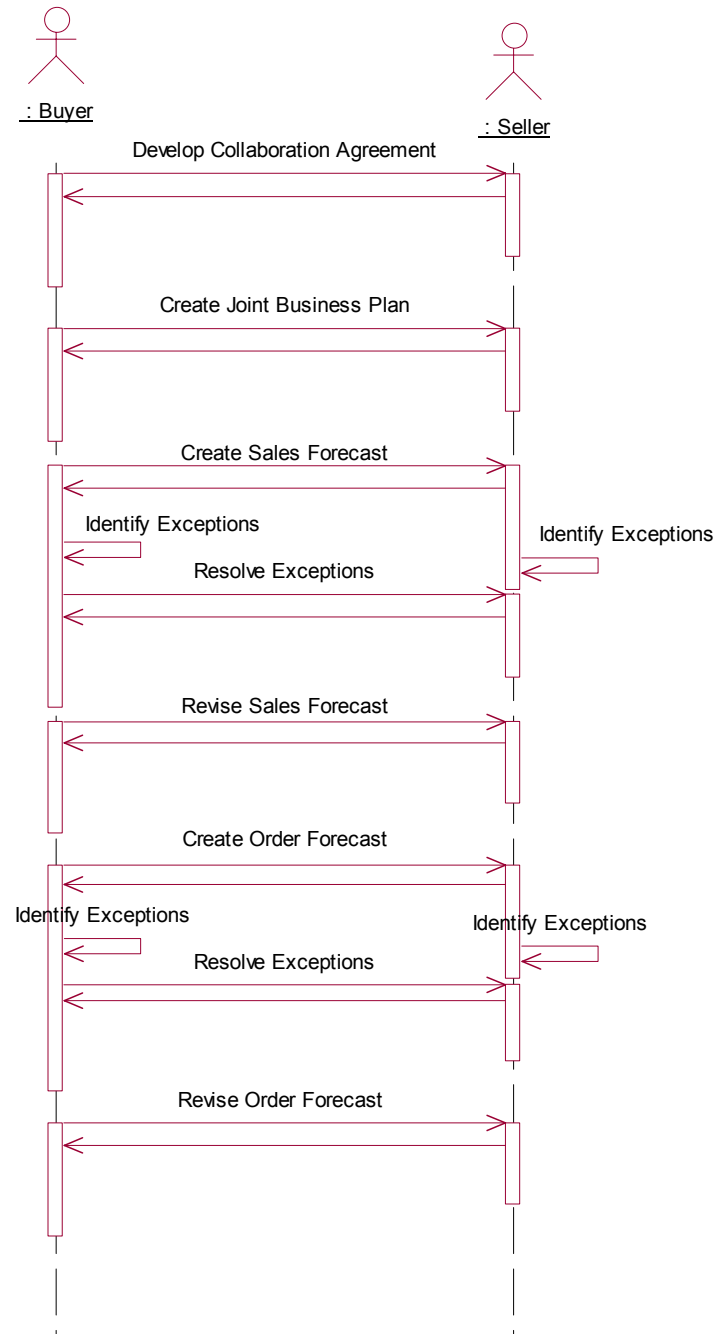
### **1.4 Business Transaction View**

Exception criteria are rules that describe the thresholds for forecast variance, product activity, and performance history beyond which exceptions to sales forecasts and order forecasts are noted and resolved between a pair of trading partners.

Product Activity is used for operational exceptions.

The collaboration for these exceptions and resolution to exceptions occurs between a pair of trading partners for a single location.

1.4.1 Business Transaction Use Case Diagram



## Business Solution Design

### 1.4.2 Use Case Description

Use Case ID	UC-1															
Use Case Name	Product Activity															
Use Case Description	The objective is for a pair of trading partners to elaborate upon operational conditions and key metrics that would identify exceptions to sales and order forecasts.															
Actors (Goal)	Product Activity is a two-actor system involving a collaborative effort between a buyer and a seller for a single location. The lead actor in the collaboration depends upon the scenario most appropriate to the trading partner's business situation.															
Performance Goals																
Preconditions	A collaboration agreement and joint business plan must be in place and a forecast is prepared and received by the trading partners.															
Post conditions	Successful: Exceptions, when identified, are noted and resolved.  Unsuccessful: Operational activities and key metrics identifying exceptions to forecasts are not identified and resolved.															
Scenario	<p>Begins with the receipt a forecast</p> <p>Continues with...</p> <table><thead><tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr></thead><tbody><tr><td>1</td><td>Buyer, Seller</td><td>Establishes exception criteria</td></tr><tr><td>2</td><td>Buyer, Seller</td><td>Establish the value limits set by the exception criteria</td></tr><tr><td>3</td><td>Buyer, Seller</td><td>Upon receipt of a forecast (sales or order), the appropriate trading partner retrieves exception criteria data</td></tr><tr><td>4</td><td>Buyer, Seller</td><td>If forecast is within the value limits, no exception occurs or If forecast is outside the value limits, an exception is identified and processed</td></tr></tbody></table> <p>Ends with the resolution of exceptions</p>	Step #	Actor	Activity Step	1	Buyer, Seller	Establishes exception criteria	2	Buyer, Seller	Establish the value limits set by the exception criteria	3	Buyer, Seller	Upon receipt of a forecast (sales or order), the appropriate trading partner retrieves exception criteria data	4	Buyer, Seller	If forecast is within the value limits, no exception occurs or If forecast is outside the value limits, an exception is identified and processed
Step #	Actor	Activity Step														
1	Buyer, Seller	Establishes exception criteria														
2	Buyer, Seller	Establish the value limits set by the exception criteria														
3	Buyer, Seller	Upon receipt of a forecast (sales or order), the appropriate trading partner retrieves exception criteria data														
4	Buyer, Seller	If forecast is within the value limits, no exception occurs or If forecast is outside the value limits, an exception is identified and processed														
Alternative Scenario	<p>(any alternatives to the above scenario)</p> <table><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><tr><td>1</td><td></td></tr></table>	1														
1																
Related Rules	<table><tr><td></td><td></td></tr><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)**

### **1.4.4 Business Transaction Sequence Diagram(s) (optional)**

## Business Solution Design

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### 1.5 Information Model (including GDD Report)

#### 1.5.1 Data Description:

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirements
PlanDocument				BRD for Product Activity V 0.1.2
	dataSourceCode			BRD for Product Activity V 0.1.2
	plannerIdentification			BRD for Product Activity V 0.1.2
		None	Document	BRD for Product Activity V 0.1.2
		buyer	PartyIdentification	BRD for Product Activity V 0.1.2
		seller	PartyIdentification	BRD for Product Activity V 0.1.2
		period	TimePeriodDue	BRD for Product Activity V 0.1.2
ProductActivity				BRD for Product Activity V 0.1.2
		None	PlanDocument	BRD for Product Activity V 0.1.2
		activityDataItem	ProductActivityDataItem	BRD for Product Activity V 0.1.2
ProductActivityDataItem				BRD for Product Activity V 0.1.2
	activityType			BRD for Product Activity V 0.1.2
		None	TimeSeriesDataItem	BRD for Product Activity V 0.1.2
TimeSeriesDataItem				BRD for Product Activity V 0.1.2
		None	CollaborativeTradeItem	BRD for Product Activity V 0.1.2
		quantity	MultiMeasurementValue	BRD for Product Activity V 0.1.2
		period	TimePeriod	BRD for Product Activity V 0.1.2

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### 1.5.2 GDD Report :

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
PlanDocument				Plan Document. Details	!! This external class originates in Plan Common and is a class that is used in more than one CPFR class diagram. Plan Document class is the EAN•UCC System equivalent to CPFR Message class. This class has an attribute that provides the identification of the planner, identifies the source of the data, the time period for the document and the buyer and seller.	
	dataSourceCode			Plan Document. Data Source. Data Source_Code	!! This external class originates in Plan Common and is a class that is used in more than one CPFR class diagram. The source of a forecast data item exception shall be identified. This class provides the codes. The data source code list has the following attributes: Buyer, Seller.	1..1
	plannerIdentification			Plan Document. Planner Identification. Text		0..1
		None	Document	Plan Document. Association. Electronic_Document	None	1..1
		buyer	PartyIdentification	Plan Document. Buyer. Party Identification	None	1..1
		seller	PartyIdentification	Plan Docu-	None	1..1

## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				ment. Seller. Party Identification		
		period	TimePeriodDue	Plan Document. Period. Time Period	None	1..1
ProductActivity				Product Activity. Details	The Product Activity based on agreed upon operational values serves as an exception message for either a Sales Forecast and an Order Forecast from which the resolution will create a Forecast Revision.	
		None	PlanDocument	Product Activity. Inheritance. Association. Plan Document	None	1..1
		activityDataItem	ProductActivityDataItem	Product Activity. Association. Product Activity. Time Stamped Trade Item Quantity	!! This class associates a product activity to one or more product activity data items. This class has not attributes.	1..*
ProductActivityDataItem				Product Activity. Time Stamped Trade Item Quantity. Details	!! This class associates a product activity to one or more product activity data items. This class has no attributes.	
	activityType			Product Ac-	!! This external class originates in Plan Common	1..1



## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Activity_ Time Stamped Trade Item Quantity. Activity. Activity Criteria Type_ Code	and is a class that is used in more than one CPFR class diagram. This class identifies the activity type code for an operational exception. The activity type code list has the following attributes: Canceled orders, Emergency orders , On hand, Orders, Receipts, Sales, Shipments	
		None	TimeSeriesDataItem	Product Activity_ Time Stamped Trade Item Quantity. Association. Time Stamped Trade Item Quantity	None	1..1
TimeSeriesDataItem				Time Stamped Trade Item Quantity. Details	!! This external class originates in Plan Common and is a class that is used in more than one CPFR class diagram. This class links a Time Period, Measurement for the quantity involved, and to Collaborative Trade Item for the required product. It has no attributes.	
		None	CollaborativeTradeItem	Time Stamped Trade Item Quantity. Item. Collaborative Item	!! This external class originates in Plan Common and is a class that is used in more than one CPFR class diagram. Collaborative Trade Item identifies the product with the buyer and seller locations.	1..1

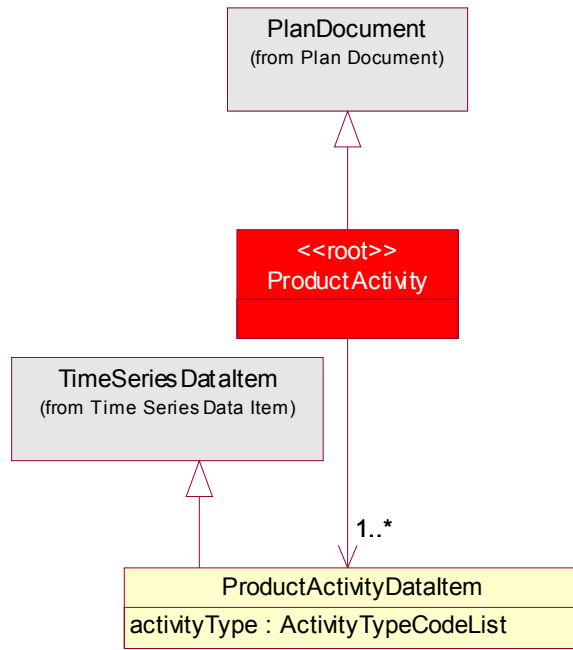
## Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
		quantity	MultiMeasurementValue	Time Stamped Trade Item Quantity. Quantity. Multi-unit Measure	!! This external class originates in Plan Common and is a class that is used in more than one CPFR class diagram. Collaborative Trade Item identifies the product with the buyer and seller locations.	1..1
		period	TimePeriod	Time Stamped Trade Item Quantity. Association. Date_ Time Period	!! This external class originates in Plan Common and is a class that is used in more than one CPFR class diagram. Collaborative Trade Item identifies the product with the buyer and seller locations.	1..1

## Business Solution Design

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### 1.5.3 Class Diagrams



### 1.5.4 Code Lists

Code List Name	Code List Description
ActivityTypeCodeList	
Code Name	Code Description
CANCELED_ORDERS	N/A
EMERGENCY_ORDERS	N/A
ON_HAND	N/A
ORDERS	N/A
RECEIPTS	N/A
SALES	N/A
SHIPMENTS	N/A

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### 1.6 Business Document Example

### 1.7 Implementation Considerations

### 1.8 Testing

#### 1.8.1 Pass / Fail Criteria

Number	Test Criteria	Related Requirement	Design Element	Pass Criteria	Fail Criteria
1					
2					
3					

#### 1.8.2 Test Data

Attribute	Value

## Business Solution Design

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### 1.9 Appendices

#### 1.10 Summary of Changes

Change	BMS Ver- sion	Associated Number	CR
•			

### 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](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](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