

Business Message Standard (BMS)

for

Plan/Trade Item Location Profile

BRG: Plan

Version: 2.0.2

Date: 31.03.2005



Change Request Reference

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Business Requirements Document (BRAD) Reference

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BRAD Date: 14.07.2004
BRAD Version: 1.3.5

BRAD Title:
BRAD Date:
BRAD Version:

Document Summary

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Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
31.03.2005	2.0.0	Andrew Hearn	Initial Version in BMS/BSD template	Migration of BRD to standard BMS/BSD format	N/A
31.03.2005	2.0.1	Andrew Hearn	Context Update	Updated the context listed within the document	N/A
23.04.2007	2.0.2	Giovanni Biffi	Editorial Changes	Minor Editorial Changes to the Document	N/A

Business Message Standard

Table of contents

Chapter	Page
1 Business Solution	1
1.1 Business Domain View.....	1
1.1.1 Problem Statement / Business Need.....	1
1.1.2 Objective.....	1
1.1.3 Audience.....	1
1.1.4 Artefacts	1
1.1.5 References	1
1.1.6 Acknowledgements	2
1.1.6.1 BRG Members.....	2
1.1.6.2 ITRG Members	3
1.1.6.3 Task/Project Group Participants (<i>where applicable</i>)	3
1.1.6.4 Design Team Members	3
1.2 Business Context	4
1.3 Additional Technical Requirements Analysis	4
1.3.1 Technical Requirements (optional).....	4
1.4 Business Transaction View	5
1.4.1 Business Transaction Use Case Diagram.....	5
1.4.2 Use Case Description.....	5
1.4.3 Business Transaction Activity Diagram(s).....	7
1.4.4 Business Transaction Sequence Diagram(s) (optional)	7
1.5 Information Model (including GDD Report)	8
1.5.1 Data Description:	8
1.5.2 GDD Report :	10
1.5.3 Class Diagrams	17
1.5.4 Code Lists.....	18
1.6 Business Document Example	19
1.6 Error! Bookmark not defined.	
1.7 Implementation Considerations.....	19
1.8 Testing.....	19
1.8.1 Pass / Fail Criteria	19
1.8.2 Test Data	19
1.9 Appendices.....	20

Business Message Standard

Table of contents

1.10 Summary of Changes.....	20
2 XML Technical Solution ITRG Packet.....	21

Business Solution Design

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, CPFR® requires additional trade item attributes to function and harmonize with other standards. This business requirements document identifies those attributes and the way the standards are harmonized.

The CPFR® trade item attributes in this document are focused on replenishment policies. They enable a CPFR® solution to generate an appropriate order forecast, given a particular sales forecast, and generate orders from the order forecast.

1.1.2 Objective

To supply the detail design of the Trade Item Location Profile 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
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, June 30, 2001	
VICS CPFR® XML Messaging Model, June 13, 2001	

1.1.6 Acknowledgements

Acknowledgement is also due to the work going on in the XML environment.

ebXML/SOAP
eCoFramework
RosettaNet
UN/CEFACT EWG
W3C

1.1.6.1 BRG Members

Function	Name	Company / organisation
BRG Chair	Mike Baxter	Lancome, Inc.
BRG Member	Cheryl Huckabee	May Merchandising Co.
BRG Member	Matt Johnson	Syncra Systems
BRG Member	Fred Kempkes	Unilever Bestfoods Europe
BRG Member	Victoria Kendzierski	Thomson Consumer Electronics
BRG Member	Hector Miguel Paez	EAN – Columbia
BRG Member	Renee Pfeifer-Luckett	
BRG Member	Robert Rzepka	World Wide Retail Exchange
BRG Member		

Business Solution Design

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	Tom Heist	Uniform Code Council
XML Technical Designer		
EANCOM Technical Designer		
Peer Reviewer		

Business Solution Design

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

Business Solution Design

1.4 Business Transaction View

1.4.1 Business Transaction Use Case Diagram

1.4.2 Use Case Description

Use Case ID	UC-1																			
Use Case Name	Trade Item Location Profile																			
Use Case Description	The objective is to provide trading partners with a profile for trade items, their locations along with effective periods.																			
Actors (Goal)	Trade Item Location Profile is a two-actor system involving a buyer and a seller.																			
Performance Goals																				
Preconditions	A collaboration agreement and joint business plan must be in place.																			
Post conditions	<p>Successful: Trade items, their locations and effective dates are established.</p> <p>Unsuccessful: Profiles do not correctly match trade items to locations along with effective periods.</p>																			
Scenario	<p>Begins when the trading partners are establishing order forecasts and generating orders from the order forecast.</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>Buyer, Seller</td> <td>Both trading partners agree to the trade items in the order forecast.</td> </tr> <tr> <td>2</td> <td>Buyer, Seller</td> <td>Both trading partners agree to the locations for each trade item in the order forecast.</td> </tr> <tr> <td>3</td> <td>Buyer, Seller</td> <td>Both trading partners agree to the selected effective dates for the trade item location profiles.</td> </tr> <tr> <td>4</td> <td>Buyer, Seller</td> <td>Trading partners create the trade item location profile.</td> </tr> <tr> <td>5</td> <td>Buyer, Seller</td> <td>Both trading partners continue to create the order forecasts from which orders can be generated.</td> </tr> </tbody> </table> <p>Ends when the creation, acceptance, discontinuance, rejection or revision to the profile.</p>		Step #	Actor	Activity Step	1	Buyer, Seller	Both trading partners agree to the trade items in the order forecast.	2	Buyer, Seller	Both trading partners agree to the locations for each trade item in the order forecast.	3	Buyer, Seller	Both trading partners agree to the selected effective dates for the trade item location profiles.	4	Buyer, Seller	Trading partners create the trade item location profile.	5	Buyer, Seller	Both trading partners continue to create the order forecasts from which orders can be generated.
Step #	Actor	Activity Step																		
1	Buyer, Seller	Both trading partners agree to the trade items in the order forecast.																		
2	Buyer, Seller	Both trading partners agree to the locations for each trade item in the order forecast.																		
3	Buyer, Seller	Both trading partners agree to the selected effective dates for the trade item location profiles.																		
4	Buyer, Seller	Trading partners create the trade item location profile.																		
5	Buyer, Seller	Both trading partners continue to create the order forecasts from which orders can be generated.																		
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																				

Business Solution Design

	1		
Related Rules			

Business Solution Design

1.4.3 Business Transaction Activity Diagram(s)

1.4.4 Business Transaction Sequence Diagram(s) (optional)

Business Solution Design

1.5 Information Model (including GDD Report)

1.5.1 Data Description:

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Re-quirements
CollaborativeTradeItem				BRD for Trade Item Location Profile V 1.3.5
		buyerLocation	PartyIdentification	BRD for Trade Item Location Profile V 1.3.5
		sellerLocation	PartyIdentification	BRD for Trade Item Location Profile V 1.3.5
		product	TradeItemIdentification	BRD for Trade Item Location Profile V 1.3.5
ItemManagementProfile				BRD for Trade Item Location Profile V 1.3.5
	frozenPeriodDays			BRD for Trade Item Location Profile V 1.3.5
	orderingLeadTimeDays			BRD for Trade Item Location Profile V 1.3.5
	orderIntervalDays			BRD for Trade Item Location Profile V 1.3.5
	orderQuantityMinimum			BRD for Trade Item Location Profile V 1.3.5
	orderQuantityMultiple			BRD for Trade Item Location Profile V 1.3.5
	replenishmentOwner			BRD for Trade Item Location Profile V 1.3.5
	roundingRulesDescription			BRD for Trade Item Location Profile V 1.3.5
	targetInventory			BRD for Trade Item Location Profile V 1.3.5
	targetServiceLevel			BRD for Trade Item Location Profile V 1.3.5
		None	CollaborativeTradeItem	BRD for Trade Item Location Profile V 1.3.5
PlanDocument				BRD for Trade Item Location Profile V 1.3.5
	dataSourceCode			BRD for Trade Item Location Profile V 1.3.5
	plannerIdentification			BRD for Trade Item Location Profile V 1.3.5
		None	Document	BRD for Trade Item Location Profile V 1.3.5
		buyer	PartyIdentification	BRD for Trade Item Location Profile V 1.3.5
		seller	PartyIdentification	BRD for Trade Item Location Profile V 1.3.5
		period	TimePeriodDue	BRD for Trade Item Location Profile V 1.3.5
TradeItemLocationProfile				BRD for Trade Item Location Profile V 1.3.5

Business Solution Design

	profileStatus			BRD for Trade Item Location Profile V 1.3.5
		profile	ItemManagementProfile	BRD for Trade Item Location Profile V 1.3.5
		None	PlanDocument	BRD for Trade Item Location Profile V 1.3.5

Business Solution Design

1.5.2 GDD Report :

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
CollaborativeTradeItem				Collaborative Item. Details	!! 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.	
		buyerLocation	PartyIdentification	Collaborative Item. Buyer Location. Party Identification	None	1..1
		sellerLocation	PartyIdentification	Collaborative Item. Seller Location. Party Identification	None	1..1
		product	TradeItemIdentification	Collaborative Item. Product. Trade Item Identification	None	1..1
ItemManagementProfile				Trade Item Management Profile Line. Details	!! This class provides the CPFR profile for one or many items in the item location profile. The item management attributes	

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
					are: Frozen period days, Minimum Inventory, Order interval days, Ordering lead time days, Order quantity minimum, Order quantity multiple, Replenishment Owner , Target Inventory	
	frozenPeriodDays			Trade Item Management Profile Line. Frozen Period Days. Quantity		1..1
	orderingLeadTimeDays			Trade Item Management Profile Line. Ordering Lead Time Days. Quantity		1..1
	orderIntervalDays			Trade Item Management Profile Line. Order Interval Days. Quantity		1..1
	orderQuantityMinimum			Trade Item Management Profile Line. Minimum_		1..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Order Quantity. Quantity		
	orderQuantityMultiple			Trade Item Management Profile Line. Multiple_ Order Quantity. Quantity		1..1
	replenishmentOwner			Trade Item Management Profile Line. Replenishment_ Owner. Text	Not Available	1..1
	roundingRulesDescription			Trade Item Management Profile Line. Routing Rules. Text		1..1
	targetInventory			Trade Item Management Profile Line. Target Inventory. Measure	The target inventory expressed by a qualifier such as turns, total dollar value or total quantity.	1..1
	targetServiceLevel			Trade Item Management Profile Line. Target Ser-	A percentage designed to specify what Unit Service Level the trading partners expect to be maintained.	1..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				vice Level. Percent_Numeric	Can be used as a driver for a safety stock calculation.	
		None	CollaborativeTradeItem	Trade Item Management Profile Line. Association. 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
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_	!! This external class originates in Plan Common and is a class that is used in more than one	1..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Code	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.	
	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 Document. Seller. Party Identification	None	1..1
		period	TimePeriodDue	Plan Document. Period. Time Period	None	1..1
TradeItemLocationProfile				Trade Item Management	!! The Trade Item Location Profile classes are	

Business Solution Design

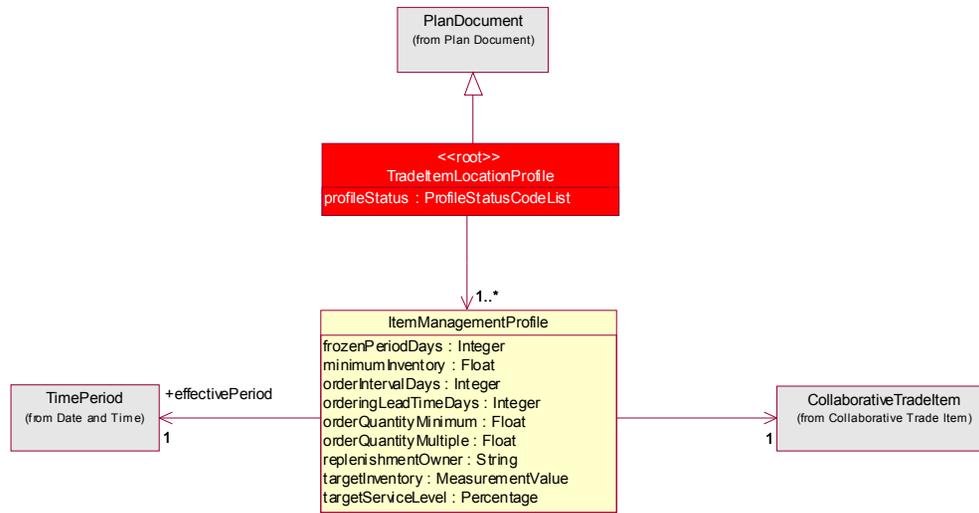
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Profile. Details	pictured and are listed here alphabetically. These include: Collaborative Trade Item, Item Management Profile, Plan Document, Profile Status Code List, Time Period, Trade Item Location Profile	
	profileStatus			Trade Item Management Profile. Profile Status. Profile Status_Code	!! This class identifies the profile status of the trade item location profile. The profile status is selected from the list of attributes. The Profile Status Code List attributes are: Accepted, Discontinued, New, Rejected, Revised.	1..1
		profile	ItemManagementProfile	Trade Item Management Profile. Profile. Trade Item Management Profile Line	!! This class provides the CPFR profile for one or many items in the item location profile. The item management attributes are: Frozen period days, Minimum Inventory, Order interval days, Ordering lead time days, Order quantity minimum, Order quantity multiple, Replenishment Owner, Target Inventory.	1..*
		None	PlanDocument	Trade Item	!! This class provides the	1..1

Business Solution Design

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				Management Profile. Inheritance Association. Plan Document	CPFR profile for one or many items in the item location profile. The item management attributes are: Frozen period days; Minimum Inventory; Order interval days; Ordering lead time days; Order quantity minimum; Order quantity multiple; Replenishment Owner; Target Inventory.	

Business Solution Design

1.5.3 Class Diagrams



Business Solution Design

1.5.4 Code Lists

Code List Name	Code List Description
ProfileStatusCodeList	
Code Name	Code Description
ACCEPTED	Accepted profile
DISCONTINUED	Discontinued profile
NEW	New profile
REJECTED	Rejected profile
REVISED	Revised profile

Business Solution Design

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

1.9 Appendices

1.10 Summary of Changes

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

Change	BMS Ver- sion	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