



Business Message Standard (BMS) Align/FMCG Extension

BMS Release: 2.3, BRG Name: GDSN

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Business Requirements Document (BRAD) Reference

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Business Requirement Document For Data Synchronization Data Model for Trade Item(Data Definition)	13_Jun_2004	7.6
BRAD For GDSN Item Maintenance Release 2	22_Jul_2007	0.0.5

Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
31.Dec.2004	2.0.0	Eric Kauz	Initial Version in BMS/BSD template	Migration of BRD to standard BMS/BSD format	
31.Mar.2005	2.0.2	Andrew Hearn	Context Update	Updated the context listed within the document	N/A
31.Mar.2005	2.0.3	John Ryu	Added extension note		N/A
05.Jul.2006	2.0.4	Eric Kauz	Upgrade of GDD Report	Added GDD Report with definitions for classes.	N/A
14.Sep.2007	2.0.5	Giovanni Biffi/Eric Kauz	Document updated to fulfill requirements of Maintenance Release 2. See appendix for detailed information.	Changes corresponding to the GDSN Maintenance Release 2	NA

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
13.May.2008	2.1.0	Eric Kauz	MR3 Release	Changed association to FMCGTradeltemMeasurements to a cardinality of 0..1.	

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Table of Contents

1. Business Domain View	5
1.1. Problem Statement / Business Need	5
1.2. Objective	5
1.3. Audience	5
1.4. References	5
1.5. Acknowledgements	6
1.5.1. BRG Work Group	6
1.5.2. Design Team Members	6
2. Business Context	6
3. Additional Technical Requirements Analysis.....	6
3.1. Technical Requirements (optional)	6
4. Business Transaction View	7
4.1. Business Transaction Use Case Diagram	7
4.2. Use Case Description	7
4.3. Business Transaction Activity Diagram(s)	7
4.4. Business Transaction Sequence Diagram(s) (optional)	7
5. Information Model (Including GDD Report)	8
5.1. Data Description.....	8
5.2. GDD Report.....	10
5.3. Class Diagrams	12
5.4. Code Lists	14
6. Business Document Example	14
7. Implementation Considerations.....	14
8. Testing.....	14
8.1. Pass / Fail Criteria.....	14
8.2. Test Data.....	14
9. Appendices	15
10. Summary of Changes	15

1. Business Domain View

1.1. Problem Statement / Business Need

The FMCG industry needs the ability to pass measurement, packaging marking and additional identification information extending the information available in the core item message. This information is specific to the FMCG industry and includes:

- ingredientIrradiated
- rawMaterialIrradiated
- tradeItemGeneticallyModified
- tradeItemIrradiated
- degreeOfOriginalWort
- fatPercentageInDryMatter
- percentageOfAlcoholByVolume

This extension follows the extension strategy adopted for the EAN.UCC 2.0 schemas and replaces the FMCG extension mechanism available in 1.3.1 schemas.

1.2. Objective

To supply the detail design of and extension for FMCG needed to meet the requirements of the FMCG industry.

1.3. Audience

Any party interested in receiving FMCG related attributes.

1.4. References

Reference Name	Description
BRD For Data Synchronization Data Model for Trade Item(Data Definition)	This document includes the original requirements for the FMCG Extension.

1.5. Acknowledgements

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

1.5.1. BRG Work Group

Function	Name	Company / organisation
BRG Work Group Chair	Jim Funk	S.C Johnson, Inc
BRG Process Manager	Andrew Hearn	Uniform Code Council

1.5.2. Design Team Members

Function	Name	Organisation
Modeler	Eric Kauz/Giovanni Biffi	GS1
XML Technical Designer	Dipan Anarkat	GS1
EANCOM Technical Designer		
Peer Reviewer	Eric Kauz	GS1

2. Business Context

Context Category	Value(s)
Industry	FMCG
Geopolitical	All
Product	All
Process	Align
System Capabilities	EAN.UCC
Official Constraints	None

3. Additional Technical Requirements Analysis

This section documents the analysis of additional technical requirements.

3.1. Technical Requirements (optional)

Not Applicable

4. Business Transaction View

4.1. Business Transaction Use Case Diagram

Not Applicable

4.2. Use Case Description

Not Applicable

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. Data Description

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	RELATED REQUIREMENT
FMCGTradeItemExtension				
		fMCGAdditionalTradeItemIdentification	AdditionalTradeItemIdentification	BRD For Data Synchronization Data Model for Trade Item (Data Definition) V.7.3
		None	FMCGTradeItemMarketing	BRD For Data Synchronization Data Model for Trade Item (Data Definition) V.7.3
		None	FMCGTradeItemMeasurements	BRD For Data Synchronization Data Model for Trade Item (Data Definition) V.7.3
FMCGTradeItemIdentification				
	type			BRD For Data Synchronization Data Model for Trade Item (Data Definition) V.7.3
	value			BRD For Data Synchronization Data Model for Trade Item (Data Definition) V.7.3

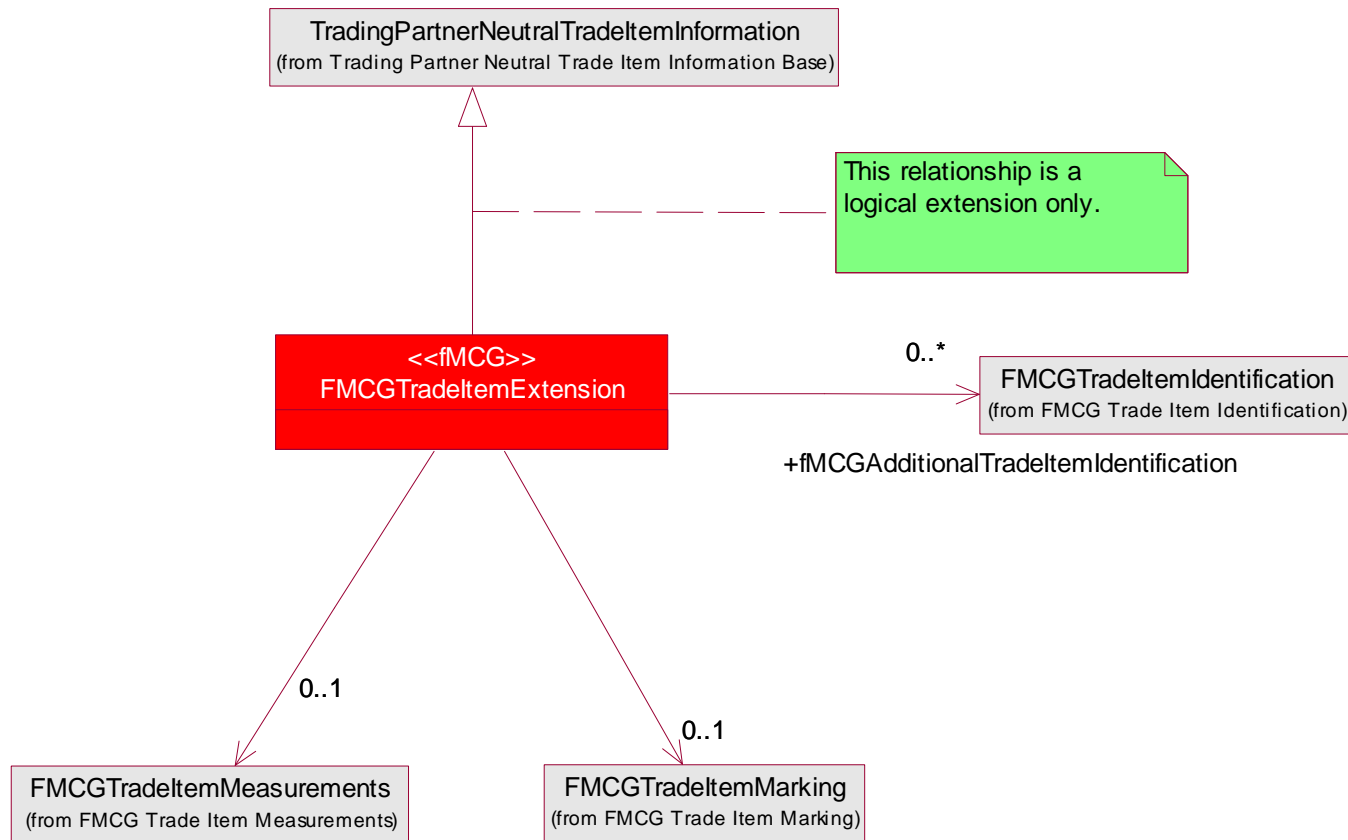
CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	RELATED REQUIREMENT
FMCGTradeItemMarking				
	ingredientIrradiatedCode			BRD For Data Synchronization Data Model for Trade Item (Data Definition) V.7.3
	rawMaterialIrradiatedCode			BRD For Data Synchronization Data Model for Trade Item (Data Definition) V.7.3
	tradeItemGeneticallyModifiedCode			BRD For Data Synchronization Data Model for Trade Item (Data Definition) V.7.3
	tradeItemIrradiatedCode			BRD For Data Synchronization Data Model for Trade Item (Data Definition) V.7.3
FMCGTradeItemMeasurements				
	degreeOfOriginalWork			BRD For Data Synchronization Data Model for Trade Item (Data Definition) V.7.3
	fatPercentageInDryMatter			BRD For Data Synchronization Data Model for Trade Item (Data Definition) V.7.3
	percentageOfAlcoholByVolume			BRD For Data Synchronization Data Model for Trade Item (Data Definition) V.7.3

5.2. GDD Report

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
FMCGTradeItemExtension				FMCG_Extension_TradeItem_Details	The root class for the FMCG Extension which extends the trade item document with attributes associated with the Fast Moving Consumer Goods Industry.	
		fmCGAdditionalTradeItemIdentification	AdditionalTradeItemIdentification	FMCG_Extension_TradeItem_Additional_Identification_Association. Non GTIN_Trade Item Identification	A trade item identifier usually associated with a specific business need, that is in addition to the GTIN, for example, a buyer's, or seller's item number. The additional identification should be associated with a specific business need.	0..*
		None	FMCGTradeItemMarking	FMCG_Extension_TradeItem_Association. FMCG_Trade Item Marking	This information on FMCGTradeItemMarking for FMCGTradeItemExtension.	0..1
		None	FMCGTradeItemMeasurements	FMCG_Extension_TradeItem_Association. FMCG_Trade Item Dimensions	This information on FMCGTradeItemMeasurements for FMCGTradeItemExtension.	0..1
FMCGTradeItemIdentification				Non GTIN_FMCG_TradeItem Identification. Details	This optional code will be used to cross-reference the Vendors internal trade item number to the GTIN in a one to one relationship.	
	Type			Non GTIN_FMCG_TradeItem Identification. Identification Type. Code	Indicator identifying the type and format of the FMCG Additional Trade Item Identification Value	1..1
	Value			Non GTIN_FMCG_TradeItem Identification. Identification. Code	A trade item identifier, usually associated with a specific business need, that is in addition to the GTIN	1..1
FMCGTradeItemMarking				FMCG_Trade Item Marking. Details	!! Fast Moving Consumer Goods specific Class	
	ingredientIrradiatedCode			FMCG_Trade Item Marking. Ingredient_Irradiated. NonBinaryLogic_Code	Indicates if radiation has been applied to a trade item's ingredient.	0..1

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
	rawMaterialIrradiatedCode			FMCG_ Trade Item Marking. Raw Material_Irradiated. NonBinaryLogic_Code	Indicates if radiation has been applied to a trade item's raw material.	0..1
	tradeItemGeneticallyModifiedCode			FMCG_ Trade Item Marking. Genetically Modified. NonBinaryLogic_Code	Used to indicate whether trade item contains genetically modified contents.	0..1
	tradeItemIrradiatedCode			FMCG_ Trade Item Marking. Trade Item_Irradiated. NonBinaryLogic_Code	Indicates if radiation has been applied to a trade item.	0..1
FMCGTradeItemMeasurements				FMCG_ Trade Item Dimensions. Details	!! Fast Moving Consumer Goods specific Class	
	degreeOfOriginalWort			FMCG_ Trade Item Dimensions. Original Wort_Content. Percent_Text	Specification of the degrees of original wort.	0..1
	fatPercentageInDryMatter			FMCG_ Trade Item Dimensions. Fat In Dry Matter_Content. Percent_Numeric	The amount of fat contained in the base product expressed in percentage	0..1
	percentageOfAlcoholByVolume			FMCG_ Trade Item Dimensions. Alcohol_Content. Percent_Numeric	Percentage of alcohol contained in the base unit trade item.	0..1

5.3. Class Diagrams



Note: The relationship between the extension and the Trading Partner Neutral Trade Item Information class is logical only and does not designate the physical location of the extension tag in the Schema. This relationship states that, logically, the information contained in the extension belongs with other Trading Partner Neutral Trade Item Information such as packaging marking and item dimensions. The physical placement of the extension tag is a technical decision as long as it allows the implementers to relate the extensions to a specific trade item.

FMCG Trade Item Identification

FMCGTradeItemIdentification
type : FMCGTradeItemIdentificationList
value : String

FMCG Trade Item Marking

FMCGTradeItemMarking
ingredientIrradiatedCode[0..1] : NonBinaryLogicCodeList
rawMaterialIrradiatedCode[0..1] : NonBinaryLogicCodeList
tradeItemGeneticallyModifiedCode[0..1] : NonBinaryLogicCodeList
tradeItemIrradiatedCode[0..1] : NonBinaryLogicCodeList

FMCG Trade Item Measurements

FMCGTradeItemMeasurements
degreeOfOriginalWort[0..1] : String{1..3}
fatPercentageInDryMatter[0..1] : Percentage{3,2}
percentageOfAlcoholByVolume[0..1] : Percentage{3,2}

5.4. Code Lists

Code List Name	Code List Description
FMCGTradeItemIdentificationList	Measurement, packaging marking and additional identification information extending the information available in the core item message.
Code Name	Code Description
ISBN_NUMBER	N/A
ISSN_NUMBER	N/A
LOTTERY_GAME_NUMBER	N/A
LOTTERY_PACK_BOOK_NUMBER	N/A
MANUFACTURER_PART_NUMBER	N/A
NABCA_PRODUCT_CODE	N/A

6. Business Document Example

Not Applicable

7. Implementation Considerations

Not Applicable

8. Testing

Not Applicable

8.1. Pass / Fail Criteria

Not Applicable

8.2. Test Data

Attribute	Value
ingredientIrradiatedCode	FALSE
rawMaterialIrradiatedCode	FALSE
tradeItemGeneticallyModifiedCode	FALSE
tradeItemIrradiatedCode	FALSE
degreeOfOriginalWort	1
fatPercentageInDryMatter	3.22
percentageOfAlcoholByVolume	10.75
fMCGAdditionalIdentification - Value	1000756

Attribute	Value
fMCGTrade ItemIdentification - Type	MANUFACTURER_PART_NUMBER

9. Appendices

Not Applicable

10. Summary of Changes

Change	BSD Version	Associated CR Number
<ul style="list-style-type: none"> ■ Template Migrated ■ Change cardinality of FMCCTradeItemMarking to 0..1 ■ Changed the attribute isIngredientIrradiated to ingredientIrradiatedCode and changed the data type and cardinality ■ Changed the attribute isRawMaterialIrradiated to rawMaterialIrradiatedCode and changed the data type and cardinality ■ Changed the attribute isTradeItemIrradiated to tradeItemIrradiatedCode and changed the data type and cardinality ■ Changed the attribute isTradeItemGeneticallyModified to tradeItemGeneticallyModifiedCode and changed the data type and cardinality 	2.0.5	CR07-000187
<ul style="list-style-type: none"> ■ Updated Model to make FMCCTradeItemMeasurements optional. ■ Removed Non-Binary Logic Code List to BMS Common document. 	2.1.0 (V 2.3)	