Business Message Standard (BMS)
Case Level- Non GTIN Logistics Units

BMS Release: 2.2, BRG Name: GDSN

Issue 0.0.3, 06-Aug-2007

Document Summary

Document Item	Current Value
Document Title	Business Message Standard (BMS)
BMS Name	Case Level- Non GTIN Logistics Units
BMS Release	2.2
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05-Oct-2005	Masterfoods	04-000069
05-Jul-2007	GS1	07-000187

Business Requirements Document (BRAD) Reference

BRAD Title:	BRD Date:	BRAD Version
BRAD_Align_ Case_Level_Non_GTIN_Logistics_Units	21-Jul-2005	0.0.5

Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
	0.0.1	Brian Bennett	Initial Draft		
11-Mar-2005	0.0.2	Eric Kauz	Build	Fixed model to use multi-measurement	
06-Aug-2007	0.0.3	Giovanni Biffi	■ BMS Template Updated ■ Changes corresponding to GDSN Maintenance Release 2	■ Height definition updated based on the GDSN Package and Measurement Rules. ■ Rule Number 1 Updated ■ Rule Number 2 Updated	

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1.   Business Domain View

1.1.   Problem Statement / Business Need

The existing method of communicating at the "case" level information regarding the logistics unit level is being used by a number of major manufacturers in Europe and North America. Continuing to allow this method of communication avoids the unnecessary generation of GTINs that do not meet the definition criteria for a trade item. (This is taken from the change request CR 04-069).

The intention is to provide for both business practices, that is GTIN at the "pallet" level and "case" level, and to transition to the standard of GTIN at "pallet" level. Today there are two prevalent business practices for obtaining information when there is only one standard logistics unit configuration in a target market:

- At the logistics unit level when a GTIN is assigned to the logistics unit
- At the "case" level when a GTIN is not assigned to the logistics unit.

There are additional attributes that need to be added to support this "case" level processing.

If any "GTIN + GLN + TM" in the synchronized hierarchy has tradeItemUnitDescriptor = "PL" (pallet) or "MX" (mixed module) then the additional attributes cannot be populated on any "GTIN + GLN + TM" in the synchronized hierarchy.

It can only appear once in a synchronized hierarchy.

If a "case" level GTIN is never shipped as part of a standard logistic unit level then the additional attributes are not applicable. For example a case of lipsticks or nail polish may never be sold or shipped as a full pallet.

1.2.   Objective

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

1.3.   Audience

The audience includes all participants in both the (GDSN) Global Data Synchronization Network and Peer-to-Peer processing of manufacturer and supplier.

1.4.   References

Reference Name	Description
BRAD_Align_ Case_Level_Non_GTIN_Logistics_Units 0.0.5.doc	

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 & SON, INC.
BRG Work Group Chair	Eduardo Tovar	PROCTER & GAMBLE COMPANY
BRG Work Group Member	Javier Arias	GS1 SPAIN
BRG Work Group Member	Neale Austen	GS1 AUSTRALIA
BRG Work Group Member	Michael Bammer	CVS PHARMACY, INC.
BRG Work Group Member	Giovanni Biffi	GS1 COLOMBIA
BRG Work Group Member	Loek Boortman	GS1 NEDERLAND
BRG Work Group Member	Benjamin Couty	GS1 FRANCE
BRG Work Group Member	MaryAnn Goodrich	UNILEVER HOME & PERSONAL CARE NA
BRG Work Group Member	Hideki Ichihara	GS1 JAPAN
BRG Work Group Member	Nancy Laskero	SEARS, ROEBUCK AND CO
BRG Work Group Member	Hanjoerg Lerch	METRO GROUP BUYING GMBH
BRG Work Group Member	Markus Mathar	SINFOS GMBH
BRG Work Group Member	Roberto Matsubayashi	GS1 BRASIL
BRG Work Group Member	Alistair McArthur	ALLIED DOMECQ SPIRITS & WINE LTD
BRG Work Group Member	Michael Moise	NESTLE AG
BRG Work Group Member	Olivier Mouton	CARREFOUR
BRG Work Group Member	Barbara Munro	KRAFT FOODS, INC
BRG Work Group Member	Staffan Olsson	GS1 SWEDEN
BRG Work Group Member	Anakaryna Palacios	GS1 VENEZUELA
BRG Work Group Member	Hector German Piñeros	IBC SOLUTIONS COLOMBIA
BRG Work Group Member	Paul Povey	PROCTER & GAMBLE COMPANY
BRG Work Group Member	Rebecca Quigley	COCA-COLA BOTTLERS SALES AND SERVICES
BRG Work Group Member	Julie Rodriguez	LEVI STRAUSS & CO
BRG Work Group Member	Joy Schneck	GENERAL MILLS, INC.
BRG Work Group Member	Peggy Spofford	3M COMPANY
BRG Work Group Member	Lionel Tussau	GEORGIA-PACIFIC CORPORATION
BRG Work Group Member	Steve Vazzano	TRANSORA
BRG Work Group Member	Patricia Vessey	BEST BUY COMPANY, INC.
BRG Work Group Member	Marcel Yska	AHOLD NV
BRG Work Group Member	Greg Zwanziger	SUPERVALU, INC.
BRG Participant	Bud Babcock	P&G
BRG Participant	Brendon Beumer	Ahold
BRG Participant	Susan Brozas	UCCnet
BRG Participant	Jill Buss	3 M

Function	Name	Company / organisation
BRG Participant	Jean-Paul Clement	NATREL,Inc.
BRG Participant	Claudia Ferreira	EAN Brazil
BRG Participant	Vera Feuerstein	Nestle
BRG Participant	Jim Funk	SC Johnson
BRG Participant	Paula Giovannetti	ISMA
BRG Participant	Jeffery Grove	Land-o-lakes
BRG Participant	Bruce Hawkins	Wal-Mart
BRG Participant	Hidecki Ichihara	EAN Japan
BRG Participant	Bob James	Gallo Wines
BRG Participant	Grant Kille	WWRE
BRG Participant	Yasushi Kiyama	AJINOMOTO
BRG Participant	Corchia Laurence	Mattel
BRG Participant	Hanjoerg Lerch	Metro
BRG Participant	Michael Moise	Nestle
BRG Participant	Olivier Mouton	Carrefour
BRG Participant	Doug Naal	Kraft
BRG Participant	Paul Nutter	TESCO
BRG Participant	Bob Pannacio	P&G
BRG Participant	Nadine Radomski	Dean Foods
BRG Participant	Walter Satterthwaite	Masterfoods
BRG Participant	Joy Schneck	General Mills
BRG Participant	Mike Smith	Schering-Plough
BRG Participant	Nick White	Unilever
BRG Participant	Jennifer Xiques	UCCnet
BRG Participant	Greg Zwanzinger	Supervalu

1.5.2. Design Team Members

Function	Name	Organisation
Modeler	Brian Bennett, 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	All
Geopolitical	All
Product	All
Process	Align_Item_Case_Level_Non_GTIN_Logistics_Unit
System Capabilities	All
Official Constraints	None

3. Additional Technical Requirements Analysis

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

Use Case ID	UC-1	
Use Case Name	Align Item (Case Level- Non GTIN Logistics Units)	
Use Case Description	This Use Case is an extension of the Align Item Use Case but involves the sending of pallet information in the event that the pallet does not have a GTIN.	
Actors (Goal)	See Use Case For Align Trade Item	
Performance Goals	See Use Case For Align Trade Item	
Preconditions	See Use Case For Align Trade Item	
Post conditions	See Use Case For Align Trade Item	
Scenario	See Use Case For Align Trade Item	
Alternative Scenario	NA	
Related Requirements	See related data requirements in associated BRAD	
Related Rules	1	If one of the following is populated then all must be populated. • Logistics Unit Gross Weight • Logistics Unit Depth • Logistics Unit Height

			▪ Logistics Unit Width ▪ Logistics Unit Stacking Factor ▪ Platform Terms and conditions ▪ Platform Type ▪ Quantity Of Layers Per Pallet ▪ Quantity Of Trade Items Per Pallet Layer ▪ Quantity Of Trade Items Per Pallet	
	2	If any " GTIN + GLN + TM" in the synchronized hierarchy has tradeItemUnitDescriptor = "PL" (pallet) or " MX " (mixed module) then the additional attributes cannot be populated on any "GTIN + GLN + TM" in the synchronized hierarchy. It can only appear once in a synchronized hierarchy. This rule applies to the following attributes: ▪ Logistics Unit Gross Weight ▪ Logistics Unit Depth ▪ Logistics Unit Height ▪ Logistics Unit Width ▪ Logistics Unit Stacking Factor ▪ Platform Terms and conditions ▪ Platform Type ▪ Quantity Of Layers Per Pallet ▪ Quantity Of Trade Items Per Pallet Layer ▪ Quantity Of Trade Items Per Pallet	
	3.	Logistics unit gross weight must be available when non-GTIN logistic unit shipments are made.	
	4.	Logistics unit loading depth must be available when non-GTIN logistic unit shipments are made. Refer to the General Specifications section 6.8.1.2 for the conversion and rounding rules between metric and imperial systems.	
	5	Logistics unit loading height must be available when non-GTIN logistic unit shipments are made. Refer to the General Specifications section 6.8.1.2 for the conversion and rounding rules.	
	6.	Logistics unit loading width must be available when non-GTIN logistic unit shipments are made. Refer to the General Specifications section 6.8.1.2 for the conversion and rounding rules.	
	7.	Logistics unit stacking factor must be available when non-GTIN logistic unit shipments are made.	
	8.	Platform Terms and Conditions must be provided when "cases" are shipped on logistic units for which no GTIN is required .	
	9.	The value of quantityOfLayersPerPallet must be available when non-GTIN logistic unit shipments are made.	
	10.	quantityOfTradeItemsPerPallet. must be provided when "cases" are shipped on logistic units for which no GTIN is required.	
	11.	quantityOfTradeItemsPerPalletLayer must be provided when "cases" are shipped on logistic units for which no GTIN is required.	

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. GDD Report

Case Level Non-GTIN Logistics Unit Extension

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirements
CaseLevelNonGTINLogisticsUnitExtension				Case Level NonGTIN Logistics Unit Extension. Details	The root class of a trade item extension containing pallet details.		
	logistics UnitStackingFactor			Case Level NonGTIN Logistics Unit Extension. Logistics Unit_ Stacking Factor. Integer_ Numeric	The stacking factor of both the unit load (content) and the platform upon which the goods are carried, if there is one. A stacking factor deter-mines the maximum stacking for the product. Indicates the number of levels the product may be stacked.	1..1	Ref1 BR5
		None	LogisticsUnitWeightAndDimension	Case Level NonGTIN Logistics Unit Extension. Association. Logistics Unit_ Trade Item Dimensions	Not Available	1..1	
LogisticsUnitWeightAndDimension				Logistics Unit_ Trade Item Dimensions. Details	Provides the dimensions for a unit used for shipping.		
		depth	MultiMeasurement Value	Logistics Unit_ Trade Item Dimensions. Depth. Multi-unit Measure	The depth of both the unit load (content) and the plat-form upon which the goods are carried, if there is one. Depth is the measurement from front to back.	1..1	Ref1 BR2
		grossWeight	MultiMeasurement Value	Logistics Unit_ Trade Item Dimensions. Gross_ Weight. Multi-unit Measure	The weight of both the unit load (content) and the plat-form upon which the goods are carried, if there is one.	1..1	Ref1 BR1
		height	MultiMeasurement Value	Logistics Unit_ Trade Item Dimensions. Height. Multi-unit Measure	This is the height of both the unit load (content) and the platform upon which the goods are carried, if there is one. Height is the vertical dimension from the base to the top.	1..1	Ref1 BR3

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirements
		width	MultiMeasurement Value	Logistics Unit_ Trade Item Dimensions. Width. Multi-unit Measure	The width of both the unit load (content) and the platform upon which the goods are carried, if there is one. Width is the measurement from left to right.	1..1	Ref1 BR4

5.2. Class Diagrams
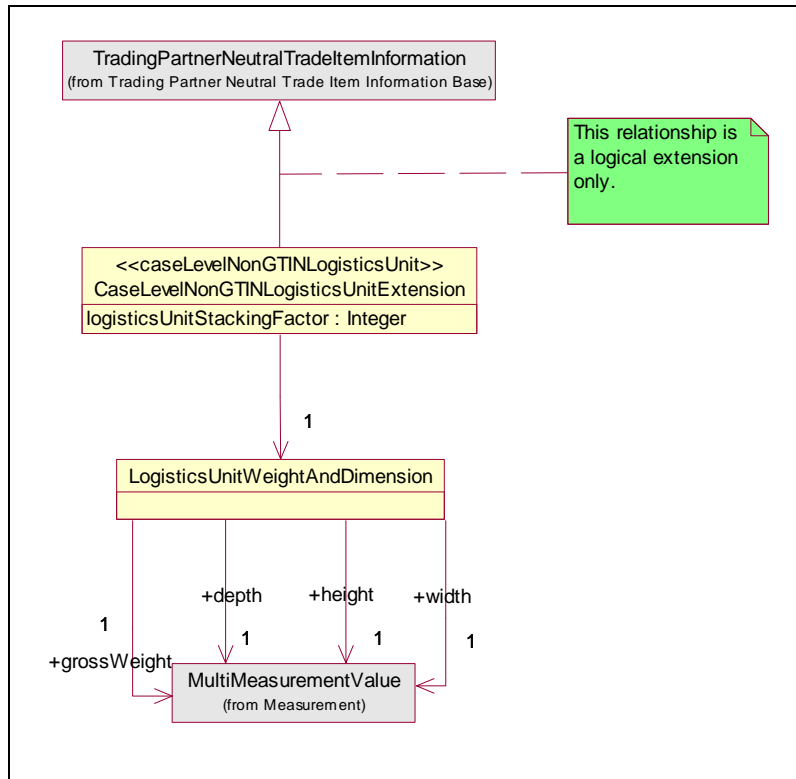
5.3. Code Lists

Not Applicable

6. Business Document Example

Attribute	Value
logisticsUnitStackingFactor	4

Depth	`<measurementValue unitOfMeasure="cm">`
	        `<value>20</value>`
	`</measurementValue>`

grossWeight	`<measurementValue unitOfMeasure="kgs">`
	        `<value>20</value>`
	`</measurementValue>`

Height	`<height>`
	        `<measurementValue unitOfMeasure="cm">`
	            `<value>20</value>`
	        `</measurementValue>`
	`</height>`

Attribute	Value
Width	<diameter> unitOfMeasure="cm"> <measurementValue <value>2</value> </measurementValue> </diameter>

7. Implementation Considerations

Not Applicable

8. Testing

Not Applicable

8.1. Pass / Fail Criteria

Not Applicable

8.2. Test Data

Not Applicable

9. Appendices

Not Applicable

10. Summary of Changes

Change	BSD Version	Associated CR Number
Initial Draft	V0.1	CR 04-000069
■ Height definition updated to comply with the GDSN Package and Measurement Rules v1.6 ■ Updated Rule 1 deleting the attribute Quantity Of Trade Items Contained In A Complete Layer and adding Quantity Of Trade Items Per Pallet Layer and Quantity Of Trade Items Per Pallet ■ Updated Rule 2 deleting Quantity Of Trade Items Contained In A Complete Layer and adding Quantity Of Trade Items Per Pallet Layer and Quantity Of Trade Items Per Pallet ■ Rule 10 from previous BSD version removed	V0.0.3	CR 07-000187