

Business Message Standard (BMS)

for

Case Level- Non GTIN Logistics Units

BRG: Align

(Process/Sub-process/Industry and/or Product/Geopolitical)

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(dd.mm.cyyy example 27.10.2004)



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CR Submitter(s):	Walter Saterthwaite
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Business Requirements Document (BRAD) Reference

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BRAD Title:
BRAD Date:
BRAD Version:

Document Summary

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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 #
	0.0.1	Brian Bennett	Initial Draft		
03.11.2005	0.0.2	Eric Kauz	Build	Fixed model to use multi-measurement.	
25.04.2007	0.0.3	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 :	9
1.5.3 Class Diagram	11
1.5.4 Code Lists.....	11
1.6 Business Document Example	12
1.7 Implementation Considerations	12
1.8 Testing.....	12
1.8.1 Pass / Fail Criteria	12
1.8.2 Test Data	12
1.9 Appendices.....	12

Business Message Standard

Table of contents

1.10 Summary of Changes.....	12
2 Technical Solution Design.....	13

Business Solution Design

1 Business Solution

1.1 Business Domain View

Not Applicable

1.1.1 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:

- A. At the logistics unit level when a GTIN is assigned to the logistics unit
- B. 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.

1.1.2 Objective

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

1.1.3 Audience

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

1.1.4 Artefacts

Not Applicable

1.1.5 References

Reference Name	Description
BRAD_Align_Case_Level_Non_GTIN_Logistics_Units 0.0.5.doc	

1.1.6 Acknowledgements

1.1.6.1 BRG Members

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

1.1.6.2 ITRG Members

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

Function	Name	Company / organisation
Participant	Bud Babcock	P&G
Participant	Brendon Beumer	Ahold
Participant	Susan Brozas	UCCnet
Participant	Jill Buss	3 M
Participant	Jean-Paul Clement	NATREL, Inc.
Participant	Claudia Ferreira	EAN Brazil
Participant	Vera Feuerstein	Nestle
Participant	Jim Funk	SC Johnson
Participant	Paula Giovannetti	ISMA
Participant	Jeffery Grove	Land-o-lakes
Participant	Bruce Hawkins	Wal-Mart
Participant	Hidecki Ichihara	EAN Japan
Participant	Bob James	Gallo Wines
Participant	Grant Kille	WWRE
Participant	Yasushi Kiyama	AJINOMOTO
Participant	Corchia Laurence	Mattel
Participant	Hanjoerg Lerch	Metro
Participant	Michael Moise	Nestle
Participant	Olivier Mouton	Carrefour
Participant	Doug Naal	Kraft
Participant	Paul Nutter	TESCO
Participant	Bob Pannacio	P&G
Participant	Nadine Radomski	Dean Foods
Participant	Walter Satterthwaite	Masterfoods
Participant	Joy Schneck	General Mills
Participant	Mike Smith	Schering-Plough
Participant	Nick White	Unilever
Participant	Jennifer Xiques	UCCnet
Participant	Greg Zwanzinger	Supervalu

1.1.6.4 Design Team Members

Function	Name	Organisation
Modeller	Brian Bennett	GS1
XML Technical Designer		
EANCOM Technical Designer		
Peer Reviewer	Eric Kauz	GS1

1.2 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

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

Not Applicable

1.4.2 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	Not Applicable				
Related Requirements	See related data requirements in associated BRAD				
Related Rules	<table border="1"> <tr> <td style="text-align: center;">1</td> <td> <p>If one of the following is populated then all must be populated.</p> <ul style="list-style-type: none"> ▪ Logistics Unit gross weight ▪ Logistics Unit Depth ▪ Logistics Unit Height ▪ Logistics Unit Width ▪ Logistics Unit Stacking Factor ▪ Platform Terms and conditions ▪ Platform Type ▪ QuantityOfLayersPer Pallet ▪ QuantityOfTradeItemsContainedInACompleteLayer </td> </tr> <tr> <td style="text-align: center;">2</td> <td> <p>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.</p> <p>It can only appear once in a synchronized hierarchy.</p> <p>This rule applies to the following attributes:</p> </td> </tr> </table>	1	<p>If one of the following is populated then all must be populated.</p> <ul style="list-style-type: none"> ▪ Logistics Unit gross weight ▪ Logistics Unit Depth ▪ Logistics Unit Height ▪ Logistics Unit Width ▪ Logistics Unit Stacking Factor ▪ Platform Terms and conditions ▪ Platform Type ▪ QuantityOfLayersPer Pallet ▪ QuantityOfTradeItemsContainedInACompleteLayer 	2	<p>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.</p> <p>It can only appear once in a synchronized hierarchy.</p> <p>This rule applies to the following attributes:</p>
1	<p>If one of the following is populated then all must be populated.</p> <ul style="list-style-type: none"> ▪ Logistics Unit gross weight ▪ Logistics Unit Depth ▪ Logistics Unit Height ▪ Logistics Unit Width ▪ Logistics Unit Stacking Factor ▪ Platform Terms and conditions ▪ Platform Type ▪ QuantityOfLayersPer Pallet ▪ QuantityOfTradeItemsContainedInACompleteLayer 				
2	<p>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.</p> <p>It can only appear once in a synchronized hierarchy.</p> <p>This rule applies to the following attributes:</p>				

	<ul style="list-style-type: none"> ▪ Logistics Unit gross weight ▪ Logistics Unit Depth ▪ Logistics Unit Height ▪ Logistics Unit Width ▪ Logistics Unit Stacking Factor ▪ Platform Terms and conditions ▪ Platform Type ▪ QuantityOfLayersPer Pallet ▪ QuantityOfTradeItemsContainedInACompleteLayer
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.	The value of quantityOfTradeItemsContainedInACompleteLayer must be available when non-GTIN logistic unit shipments are made
11.	Quantityoftradeitemspallet. must be provided when "cases" are shipped on logistic units for which no GTIN is required.
12.	Quantityoftradeitemspalletlayer must be provided when "cases" are shipped on logistic units for which no GTIN is required.

Deleted:

1.4.3 Business Transaction Activity Diagram(s)

Not Applicable

1.4.4 Business Transaction Sequence Diagram(s) (optional)

Not Applicable

Business Solution Design

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
CaseLevelNonG-TINLogisticsUnitExtension				
	logisticsUnitStackingFactor			Ref1 BR5
LogisticsUnitWeightAndDimension		logisticsUnit	LogisticsUnitWeightAndDimension	
		depth	MultiMeasurementValue	Ref1 BR2
		grossWeight	MultiMeasurementValue	Ref1 BR1
		height	MultiMeasurementValue	Ref1 BR3
		width	MultiMeasurementValue	Ref1 BR4

1.5.2 GDD Report :

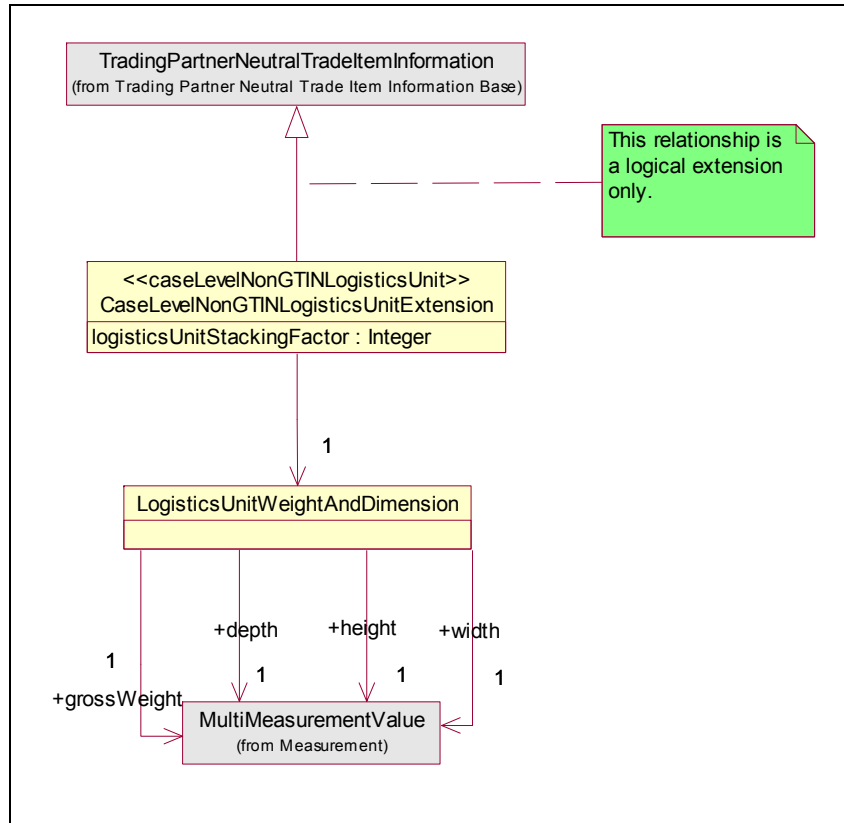
Case Level NonGTIN Logistics Unit Extension

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
CaseLevelNonGTINLogisticsUnitExtension				Case Level NonGTIN Logistics Unit Extension. Details	Not Available	
	logisticsUnitStackingFactor			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 determines the maximum stacking for the product. Indicates the number of levels the product may be stacked.	1..1
		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	Not Available	
		depth	MultiMeasurementValue	Logistics Unit_ Trade Item Dimensions. Depth. Multi-unit Measure	The depth of both the unit load (content) and the platform upon which the goods are carried, if there is one. Depth is the measurement from front to back.	1..1
		gross-Weight	MultiMeasurementValue	Logistics Unit_ Trade Item Dimensions. Gross_ Weight. Multi-unit Measure	The weight of both the unit load (content) and the platform upon which the goods are carried, if	1..1

Business Solution Design

					there is one.	
		height	MultiMeasurementValue	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 lowest extremity to the highest extremity.	1..1
		width	MultiMeasurementValue	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

1.5.3 Class Diagram



1.5.4 Code Lists
Not Applicable

1.6 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>
width	<diameter> <measurementValue unitOfMeasure="cm"> <value>2</value> </measurementValue> </diameter>

1.7 Implementation Considerations

Not Applicable

1.8 Testing

Not Applicable

1.8.1 Pass / Fail Criteria

1.8.2 Test Data

1.9 Appendices

Not Applicable

1.10 Summary of Changes

Change	BMS Version	Associated CR Number
<ul style="list-style-type: none">Initial Draft	V 0.1	CR 04-00069

2 Technical Solution Design

This section provides the specifications for the standards content ITRG approves. It is called the Technical Solution Design (TSD).

The Technical Solution Design contains:

- TSD Zip file Table of Contents
- Business Message Standard Section Technical Level GDD Report
- XSD (XML Schema Documents)
- XML Instance File and HTML Form View (XML and HTML files containing sample data specified in Section 1.6)

In the process of approving the Technical Solution Design, the ITRG will be provided the following artefacts:

- Any relevant Business Requirements Analysis Document (BRAD)
- Any relevant Business Requirements Document (BRD)
- Section 1 of Business Message Standard (Business Solution Design)
- Comment Resolution Template from Technical Public Review
- XML Test Report
- Change Request
- Other informative or reference documents