



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

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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 | <ul style="list-style-type: none"> ■ BMS Template Updated ■ Changes corresponding to GDSN Maintenance Release 2 | <ul style="list-style-type: none"> ■ Height definition updated based on the GDSN Package and Measurement Rules. ■ Rule Number 1 Updated ■ Rule Number 2 Updated | |
| 13-Oct-2008 | 0.0.4 | Eric Kauz | <ul style="list-style-type: none"> ■ Template Update | | |



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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 |
|-----------------------|-----------------------|---------------------------------------|
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1.5.2. Design Team Members

| Function | Name | Organisation |
|---------------------------|-------------------------------|--------------|
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| 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. <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 ■ 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: <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 ■ 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

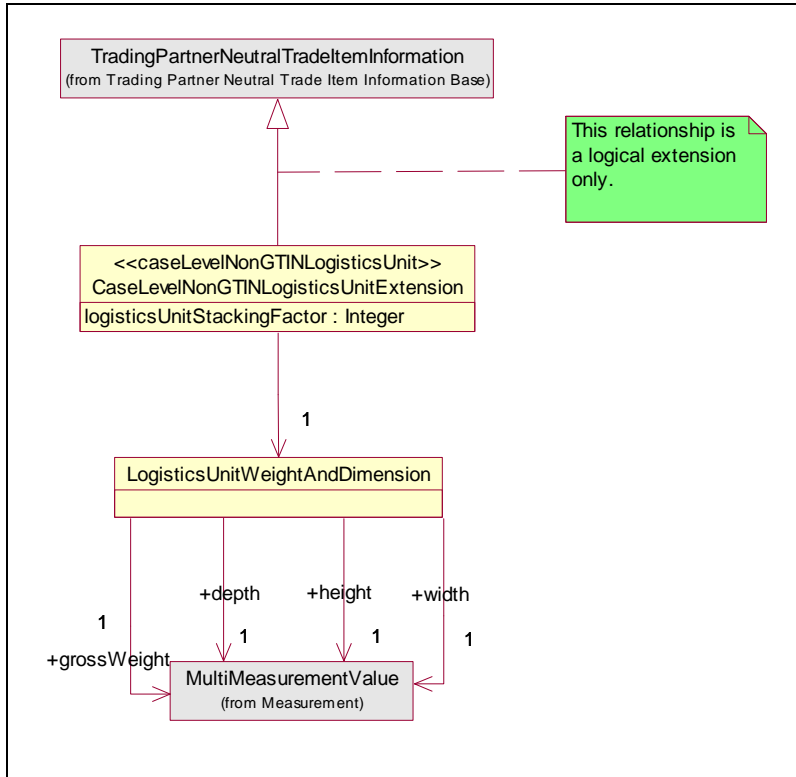
5. Information Model (Including GDD Report)

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. | | |
| | 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 | 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 | 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 | Ref1 BR2 |
| | | grossWeight | 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 there is one. | 1..1 | Ref1 BR1 |
| | | 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 base to the top. | 1..1 | Ref1 BR3 |
| | | 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 | 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 | <pre> <diameter> unitOfMeasure="cm"> </measurementValue> </diameter> <measurementValue <value>2</value> </measurementValue> </pre> |

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 |
| <ul style="list-style-type: none"> ■ 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 |