

Business Message Standard (BMS)

for

**Candidate Attribute Extension of
EAN.UCC standards for Bar Code
Attributes**

BRG: Align

BMS Release: 2.1

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CR Submitter(s):	Grant Kille
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Business Requirements Document (BRAD) Reference

BRAD Title:
BRAD Date:
BRAD Version:

BRAD Title:
BRAD Date:
BRAD Version:

Document Summary

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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 #
7/10/2006	0.0.1	Brian Bennett	Initial Document Creation	Initial Document Creation	
24/04/2007	0.0.2	Giovanni Biffi	Editorial Changes	Minor Editorial Changes to the Document	N/A

Business Message Standard

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1 Business Solution

1.1 Business Domain View

1.1.1 Problem Statement / Business Need

Data pool communities currently engaged in data synchronization solutions currently utilize barcode related attributes to identify the bar code information on the product packaging. These attributes do not currently exist in the EAN.UCC standards.

Parties receiving Trade Item Information need to know the actual product identifier that is physically on the trade item and the related barcode symbology. Recipients also need to know if the physical product identifier can be derived from the 14-digit GTIN data structure, particularly in instances where the same physical trade item product identifier may be contained in multiple trade item configurations.

1.1.2 Objective

The objective of the suggested changes is to make the Trade Item standard fulfil the needs and business requirements for parties currently involved in data synchronisation.

1.1.3 Audience

The intended audience for this standard includes manufacturers and retailer and any other actors interested in developing software or other IT-based services complying with the EAN.UCC standards.

1.1.4 Artefacts

N/A

1.1.5 References

Reference Number	Reference Name	Description
1	Business Requirements Document (BRD) for Extension of EAN.UCC standards for Bar Code Attributes	Version 0.0.2

Business Solution Design

1.1.6 Acknowledgements

1.1.6.1 BRG Members

Function	Name	Company / organisation
BRG Chair		
BRG Member		
BRG Member		
BRG Member		

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

Function	Name	Company / organisation
Participant		
Participant		
Participant		
...		

1.1.6.4 Design Team Members

Function	Name	Organisation
Modeller	Eric Kauz	GS1
XML Technical Designer	Dipan Anarkat	GS1
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	Align_Item
System Capabilities	EAN.UCC
Official Constraints	None

1.3 Additional Technical Requirements Analysis

1.3.1 Technical Requirements

N/A

1.4 Business Transaction View

1.4.1 Business Transaction Use Case Diagram

N/A

1.4.2 Use Case Description

Handled by Align_Item Use Case.

1.4.3 Business Transaction Activity Diagram(s)

N/A

1.4.4 Business Transaction Sequence Diagram(s)

N/A

Business Solution Design

1.5 Information Model

1.5.1 Data Description:

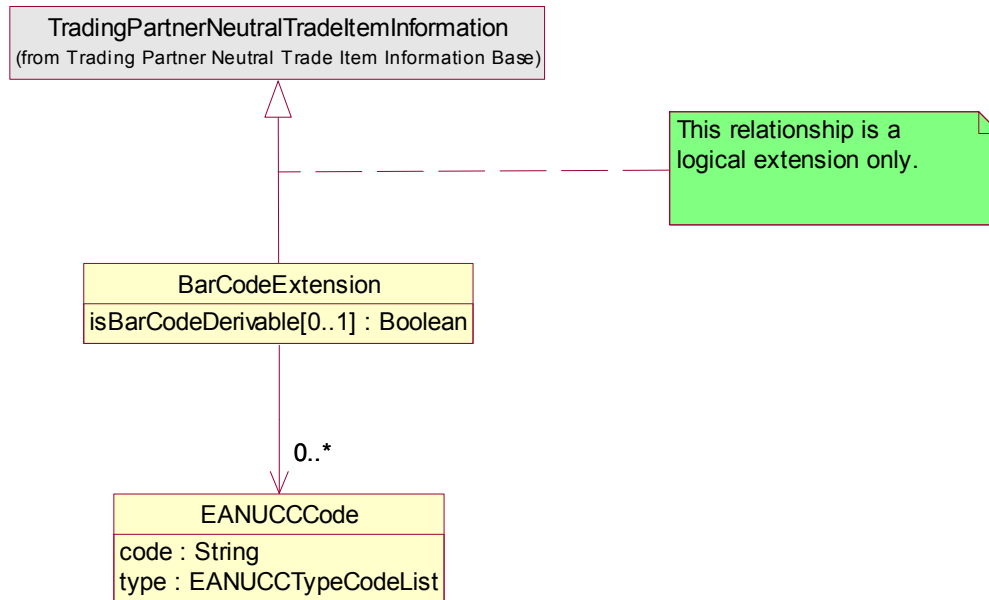
CLASS	ATTRIBUTE	ASSOCIATION	SECONDARY CLASS	RELATED REQUIREMENT
BarCodeExtension				Ref 1: Req1
	isBarCodeDerivable			Ref 1: Req4
			EANUCCCode	Ref 1: Req2
EANUCCCode				Ref 1: Req2
	code			Ref 1: Req2
	type			Ref 1: Req3

1.5.2 Data Report:

CLASS	ATTRIBUTE	ASSOCIATION	SECONDARY CLASS	Definition	Multiplicity
BarCodeExtension				Bar Code Extension is the root class for the extension	
	isBarCodeDerivable			A boolean field determining that the data structure on the trade item can be derived from the GTIN	0..1
		None	EANUCCCode	Information on EANUCCCode in BarCodeExtension	0..*
EANUCCCode				An optional class containing both the EAN_UCC code and its associated EAN UCC Type. The EAN_UCC code identifies trade items and special applications.	
	Code			The EAN_UCC code is a code that identifies trade items and special applications.	1..1
	Type			An attribute representing the data structure type used for the barcode. Valid values include but may not be limited to: UN UPC Case Code Number UP UCC-12 UA UPC/EAN Case Code UD UPC/EAN Consumer Package Code UE UPC/EAN Module Code EN EAN.UCC-13 UK EAN.UCC-14 U2 UPC Shipping Container Code UG Drug UPC Consumer Package Code UH Drug UPC Shipping Container Code UI UPC Consumer Package Code EO EAN.UCC-8	1..1

1.5.3 Class Diagrams

Class Diagram: Bar Code Extension



1.5.4 Code Lists

Code List Name	Code List Description
EANUCCTypeCode-List	Represents the data structure type used for the barcode.
Code Name	Code Description
EN	EAN.UCC-13
EO	EAN.UCC-8
U2	UPC Shipping Container Code
UA	UPC/EAN Case Code
UD	UPC/EAN Consumer Package Code
UE	UPC/EAN Module Code
UG	Drug UPC Consumer Package Code
UH	Drug UPC Shipping Container Code
UI	UPC Consumer Package Code
UK	EAN.UCC-14
UN	UPC Case Code Number
UP	UCC-12

1.6 Business Document Example

N/A

1.7 Implementation Considerations

N/A

Business Solution Design

1.8 Testing

1.8.1 Pass / Fail Criteria

N/A

1.8.2 Test Data

Attribute	Value
isBarcodeDerivable	Yes
code	008421042708
type	UP

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
Initial Document created from BRD	V 0.0.1	04-00112

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