

# **Business Message Standard (BMS)**

**for**

## **Invoice Response**

**BRG: Pay  
IRT: Upstream Standards**

**BMS Release: 2.1**

**Document Version: 0.1.2**

**Date: 01.12.2005**



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CR Submitter(s):	Tom Heist
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### Business Requirements Document (BRAD) Reference

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BRAD Date:	07.12.2004
BRAD Version:	0.1.0

### 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 #
20.09.2005	0.0.1	CJ	Initial Draft		
12.10.2005	0.1.0	CJ	Motion to public review	Some textual changes in 1.1.1 and 1.6.	
01.12.2005	0.1.1	CJ	Technical public review comments	Some minor changes in 1.5.1 and 1.5.2.	
25.04.2007	0.1.2	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

For some commercial transactions the requesting party requires a formal response by the responding party in order to ensure proper and timely processing. The Invoice Response message enables the responding party to communicate his acceptance or rejection of the Invoice transaction.

#### 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

- Manufacturers
- Suppliers
- Logistic Service Providers

#### 1.1.4 Artefacts

Artefact name	State	Artefact / State description

#### 1.1.5 References

	Reference Name	Description
[Ref1]	BMS Common Library	The documented design of components that are used in multiple messages.
[Ref2]	BRAD Upstream Standards – Financial Settlement 0.1.0	

### 1.1.6 Acknowledgements

#### 1.1.6.1 BRG Members

Function	Name	Company / organisation
BRG Chair	Henry Gerstman	WELLS FARGO CENTURY
BRG Chair	Joel Goldberg	ROSENTHAL & ROSENTHAL
BRG Member	Janet Bailey	VF CORPORATION
BRG Member	J. Craig Brinkman	PROCTER & GAMBLE
BRG Member	Glenda Connoll	GS1 SOUTH AFRICA
BRG Member	Arne Dicks	GS1 GERMANY
BRG Member	Karina Duvinger	GS1 SWEDEN
BRG Member	Suzanne Fassler	JCPENNEY CO. INC.
BRG Member	Brenda Hall	WAL-MART STORES INC.
BRG Member	Sandra Hurd	THE CIT GROUP
BRG Member	Catherine Karim	GS1 FRANCE
BRG Member	Ana Paula Maniero	GS1 BRASIL
BRG Member	Patricia Owyang	LEVI STRAUSS & CO.
BRG Member	Marie Perry	COCA-COLA ENTERPRISES
BRG Member	Merriel Simmons	7-ELEVEN, INC.
BRG Member	Seiichi Saito	DCC JAPAN
BRG Member	Bill Steger	AHOLD FINANCIAL SERVICES
BRG Member	Laura Stone	PFIZER, INC.
BRG Member	Jose Falcon Tuesta	GS1 PERU
BRG Manager	Tom Heist	GS1

#### 1.1.6.2 IRT Members

Function	Name	Company / organisation
IRT Chair	Fred Kempkes	Unilever
IRT Participant	Kevin Zeng	Procter & Gamble
IRT Participant	Stephen Bell	CPG Market
IRT Participant	Roland Dachs, Olivier Grienberger, Don Reed	Crown Cork
IRT Participant	Arthur Doldersum	SCA
IRT Participant	James Kimber	General Mills, Inc.
IRT Participant	Kristen Halwachs	UCCnet
IRT Participant	Nicola Comiotto, Menno Smit	Nestlé
IRT Participant	Pawel Solowinski	Kappa Packaging
IRT Participant	Peter Broend, Johannes Lundgren	Novozymes

IRT Participant	Paul Moodey	Johnson & Johnson
IRT Participant	Wouter Crul	Nspyre
IRT Participant	Thierry Baillif, Gabriel Galeazzi	Firmenich
IRT Participant	Jan Peter Klijn	Royal Sens
IRT Participant	Yasushi Kiyama	Ajinomoto Co.
IRT Participant	Georges Socquet	Givaudan

### 1.1.6.3 ITRG Members

Function	Name	Company / organisation
ITRG Chair		
ITRG Member	Stef Spaan	GS1 Netherlands
ITRG Member		
ITRG Member		
ITRG Member		
...		

### 1.1.6.4 Design Team Members

Function	Name	Organisation
Modeller	Coen Janssen	GS1 Netherlands
XML Technical Designer	Dipan Anarkat	GS1 Head Office
EANCOM Technical Designer	?	GS1 Netherlands
Peer Reviewer	John Ryu	GS1 Head Office



### 1.2 Business Context

Context Category	Value(s)
Industry	<i>All, Consumer Packaged Goods</i> All
Geopolitical	<i>All, Europe, Unites States, Japan, UK</i> All
Product	<i>All, Direct Materials, Food, Non-Food, Hard lines, Apparel</i> All
Process	<i>All, Order (Direct To Consumer), Order (Direct Store Delivery), Order, Pay (Self Billing), Deliver (Direct Store Delivery) .....</i> Plan
Official Constraints	<i>None, Value Added Tax, Sales Tax</i> None
Roles	<i>Buyer, Seller, Ship From, Ship To, Payer Payee, Data Source, Data Recipient</i> Buyer, Seller
System Capabilities	<i>All, EANCOM, XML, AIDC, EPC-network</i> EANCOM, XML

### 1.3 Additional Technical Requirements Analysis

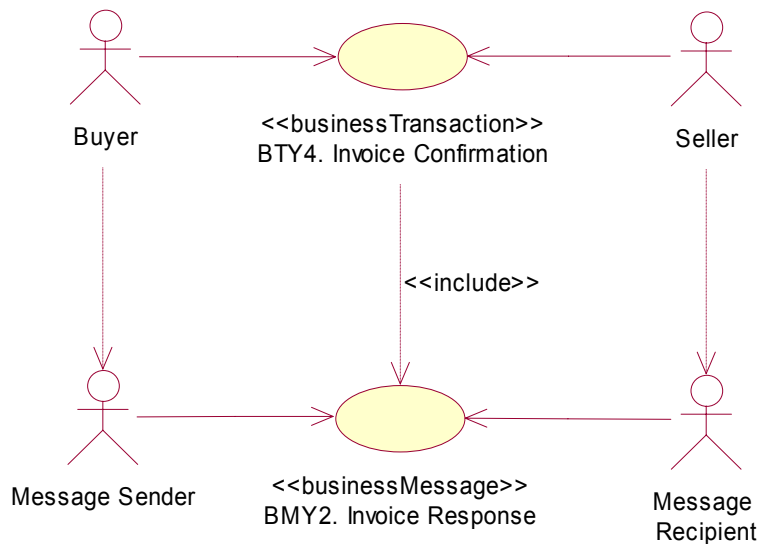
#### 1.3.1 Technical Requirements (optional)

Number	Statement	Rationale
1.		

### 1.4 Business Transaction View

#### 1.4.1 Business Transaction INVOICE CONFIRMATION

#### 1.4.2 Business Transaction Use Case Diagram



**Figure 1 – Use Case Diagram: Business Transaction**

#### 1.4.3 Use Case Description

Use Case ID	BTY4		
Use Case Name	Invoice Confirmation		
Use Case Description	The buyer confirms that he accepts and will process the Invoice he received from the seller.		
Actors (Goal)	Seller: To ensure that the Invoice is processed. Buyer: To communicate that he will process the Invoice.		
Performance Goals			
Preconditions	Invoice: COMMUNICATED		
Post conditions	Invoice: ACCEPTED or REJECTED		
Scenario	<b>Begins when:</b> Buyer receives the Invoice from the Seller.		
	<b>Continues with:</b>		
	<b>Step #</b>	<b>Actor</b>	<b>Activity Step</b>
	1.	Buyer	Sends Invoice Response message to the Seller.
	2.	Seller	Receives Invoice Response

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	Ends when: seller receives the Invoice Response		
Alternative Scenario	(any alternatives to the above scenario)		
	Step #	Actor	Activity Step
	1.		
	2.		

### 1.4.4 Business Transaction Activity Diagram(s)

None

### 1.4.5 Business Transaction Sequence Diagram(s) (optional)

None

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### 1.5 Information Model (including GDD Report)

#### 1.5.1 Data Description

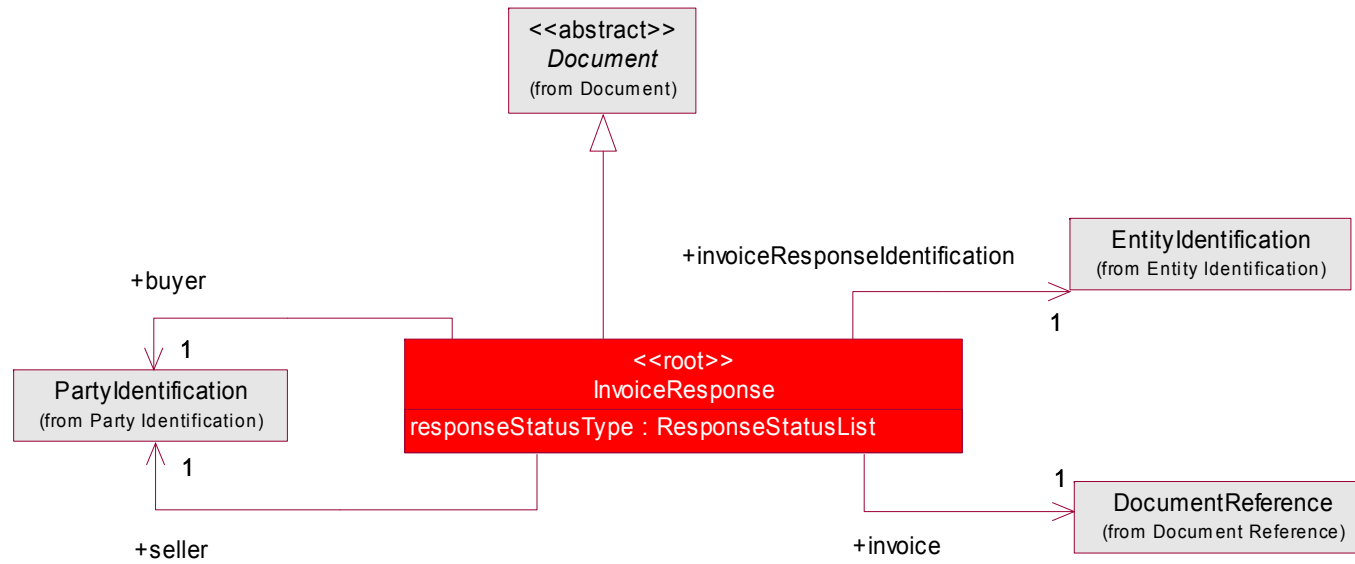
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirement
InvoiceResponse				
	responseStatusType			[ref2] {7.5.1-6}
		<<is a>>	Document	[ref2] {7.5.1-2}
		buyer	PartyIdentification	[ref2] {7.5.1-3}
		seller	PartyIdentification	[ref2] {7.5.1-4}
		invoiceResponseIdentification	EntityIdentification	[ref2] {7.5.1-1}
		invoice	DocumentReference	[ref2] {7.5.1-5}

#### 1.5.2 GDD Report

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
InvoiceResponse					Contains the response to the invoice message	
	responseStatusType				Indication that specifies whether the invoice has been accepted or rejected by the buyer.	1..1
		<<is a>>	Document			1..1
		buyer	PartyIdentification		Contains the identification of the party that is buying the goods.	1..1
		seller	PartyIdentification		Contains the identification of the party that is selling the goods.	1..1
		invoiceResponseIdentification	EntityIdentification		Contains the unique identifier of the business document.	1..1
		invoice	DocumentReference		Contains the reference to the invoice message.	1..1

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### 1.5.3 Class Diagrams



**Figure 2 – Class Diagram: Business Document**

### 1.5.4 Code Lists

None

### 1.6 Business Document Example

The manufacturer (buyer 8712345678911) sends a response to the material supplier (seller 8812345678901) indicating that he has accepted the Invoice that he received from the material supplier (Invoice 2005081).

InvoiceResponse	
- creationDateTime	2005-01-11T11.01.00
- documentStatus	ORIGINAL
- responseStatusType	ACCEPTED
EntityIdentification (+invoiceResponseIdentification)	
- uniqueCreatorIdentification	0012
PartyIdentification (+contentOwner)	
- gLN	8712345678911
PartyIdentification (+seller)	
- gLN	8812345678901
PartyIdentification (+buyer)	
- gLN	8712345678911
DocumentReference(+invoice)	
EntityIdentification	
- uniqueCreatorIdentification	2005081
PartyIdentification (+contentOwner)	
- gLN	8812345678901

### 1.7 Implementation Considerations

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### 1.8 Testing

#### 1.8.1 Pass / Fail Criteria

*Unit testing criteria for business solution.*

Number	Test Criteria	Related Requirement	Design Element	Pass Criteria	Fail Criteria
1	Reflects a specific business requirement from a related BRAD. For example: When goods are ordered, the buyer requires an answer from the suppliers that the order has been received.	BRAD Name.Version. Req #	Message, role, attribute	Result which determines that requirement has been satisfied: For example:  Seller is able to create and send an Order Receipt Acknowledgement.	Result which shows that requirement has not been satisfied: For example:  Buyer does not receive the Order Receipt Acknowledgement.
2					
3					

#### 1.8.2 Test Data

Attribute	Value
Attribute Name. For example "orderQuantity"	Valid value associated with the attribute. For example "5".

### 1.9 Appendices

#### 1.10 Summary of Changes

*(Details changes to BMS for each version by BMS Section)*

Change	BMS Version	Associated CR Number
•		

### 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