



Business Message Standard (BMS) Invoice

BMS Release: 2.4.0, BRG Name: eCom

Issue 0.5.3, 18-Sep -2007

Document Summary

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Change Request Reference

Date of CR Submission to GSMP:	CR Submitter(s):	Refer to Change Request (CR) Number(s):
20070621	John Ryu, GS1 Global Office	07-000243
20070529	Rob Heather, GS1 UK	07-000222
20061218	Rob Heather, GS1 UK	06-000337
20061118	Andy Kim, GS1 Australia	06-000300
20061118	Andy Kim, GS1 Australia	06-000301
20061119	Andy Kim, GS1 Australia	06-000302
20060403	Ben Holland- Accenture	06-000084
20041215	Upstream, GS1	04-000229

Business Requirements Document (BRAD) Reference

BRAD Title:	BRAD Date:	BRAD Version
BRAD Invoice Credit Note	20070524	Version 0.0.5
Invoice Enhancements	20070109	Version 0.0.1
Upstream Standards Financial Settlement	20060613	Version 0.1.1
BRD Simple Invoice Extension	20040924	Version 1.3.1

Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
20050210	0.1.0	John Ryu	Initial Version in BMS/BSD template	Migration of BRD to standard BMS/BSD format	5724

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
20050331	0.1.1	Andrew Hearn	Context Update	Updated the context listed within the document	
20050405	0.0.1	Marco Schuyt	First Draft	New invoice based on Simple Invoice and Request for Payment	
200050603	0.2.0	Marco Schuyt	Second Draft	Second draft of the new invoice, based on the Simple Invoice.	
20050615	0.2.1	Marco Schuyt	Content update	Content updated on basis of comments of BRG Pay as explained in the consolidated comment sheet.	
20050630	0.2.2	Marco Schuyt	Public review, peer review		
20050711	0.2.3	Marco Schuyt	Clarification of 3 rd party usage in the invoice.	Class diagram updated with Payee. Use case descriptions and diagram updated with 3 rd party clarification.	
20050727	0.2.4	John Ryu	Peer Review	<p>Added Float datatype in the InvoiceTotals class.</p> <p>Updated Official Dictionary Entry Name in GDD to reflect the Float datatype</p> <p>Updated code list to remove any nonalphanumeric character. SELF-BILLED_INVOICE changed to SELF_BILLED_INVOICE</p> <p>Updated the Business Document Example add currency into the invoiceAllowanceChargeAmount Change ranferOfOwnerShipDate- →transferOfOwnershipDate</p>	<p>MDL P4CL: 7189</p> <p>BSD P4CL: 7191</p>
20050818	0.2.5	John Ryu	BuildMaster incorporation and template enforcement.	<p>For consistency replaced Amount Datatype to Float in class diagram (InvoiceLineItemInformationAfterTaxes, InvoiceAllowanceCharge) and updated sample data to reflect this.</p> <p>Updated GDD.</p> <p>Updated class diagram per Modelling Best Practice renamed elements. FROM: VatTaxInform.. TO: VATTaxInformation</p> <p>FROM: EuInvoiceParty TO: EUInvoiceParty</p> <p>Reformatted per BMS/BSD template.</p>	<p>Build MDL P4CL: 7316</p> <p>BSD P4CL: 7317</p>

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
20051003	0.3.0	Coen Janssen	Technical Public Review – Upstream Standards	Several functional changes, see paragraph 1.10. Also adjusted the examples.	
20051010	0.3.1	John Ryu	Incorporate Main Harmonized Model	See paragraph 1.10 for changes.	BSD P4CL: 7542
20060206	0.3.2	Coen Janssen	Bugfix on 2.1	See paragraph 1.10 for changes	BSD P4CL: 8022
20060613	0.3.3	Mark Van Eeghem	Additional CR06-000084	Added taxAccountingCurrency for invoicetotals and taxinformation	P4CL BSD 8909 P4CL MDL 8487
20070208	0.4.0	John Ryu	Updated BMS into template version 1.6 CR 06-300/1/2 and 06-337	Changes noted in section 10. Summary of Changes	MDL P4CL: 9067 BSD P4CL: 9070
20070323	0.4.1	John Ryu	Update based on peer review eCom BRG Motioned BSD for TSD development	Changes noted in section 10 Summary of Changes.	BSD P4CL: 9130
20070412	0.4.2	John Ryu	Post for Public Review	Updated to BMS template Version 1.8	BSD P4CL: 9225
20070525	0.4.3	John Ryu	eCom BRG eBallot approved	Updated BMS to approved	BSD p4cl: 9460
20070621	0.5.0	John Ryu	Initial Draft	Based on powerpoint discussion on 20070614 Invoice Work Group Teleconference Changes detailed in Summary of Changes	BSD P4CL: 9538 MDL P4CL: 9531
20070702	0.5.1	John Ryu	Peer Review updates IWG motion for TSD Development on 20070628 Teleconference	Changes detailed in Summary of Changes	BSD P4CL: 9583

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
20070830	0.5.2	John Ryu	Incorporate Public Review	Noted in Summary Of Change section	BSD P4CL: 9880
20070918	0.5.3	John Ryu	Invoice Work Group eBallot Approved	Updated BMS to approved	BSD P4CL: 10028

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1. Business Domain View

1.1. Problem Statement / Business Need

The Invoice Message is defined as requesting payment for goods or services under conditions agreed upon between the seller and the buyer. It contains the necessary information needed for payment consisting of parties, items, prices, amounts and quantities.

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 of the standards would be any participant in the global supply chain. This would include retailers, manufacturers, service providers, and other third parties

1.4. References

Reference Number	Reference Name	Description
[Ref1]	BRAD Upstream Standards	Financial Settlement Version 0.1.0 Version Financial requirements for the Upstream IRT
[Ref2]	BRD Request for Payment	
[Ref3]	BRD Simple Invoice Extensions	
[Ref4]	BRAD Invoice Enhancements	Version 0.0.1
[Ref5]	BMS Common Library	BMS Version Release 2.3
[Ref6]	BMS Common Library	BMS Version Release 2.4
[Ref7]	BRAD Invoice Credit Note	BRAD Version 0.0.5

1.5. Acknowledgements

1.5.1. Invoice Work Group

Function	Name	Company / Organisation
Invoice Work Group Chair	Chris EMMENT	Compass
Invoice Work Group Vice Chair	Rob HEATHER	GS1 UK
Invoice Work Group Manager	John RYU	GS1
Invoice Work Group Member	Ralph BLACK	Food Partners
Invoice Work Group Member	Mike BLANK	3663
Invoice Work Group Member	Karina DUVINGER	GS1 Sweden

Function	Name	Company / Organisation
Invoice Work Group Member	Klaus FORDERER	GS1 Germany
Invoice Work Group Member	James HALL	Coca-Cola Enterprises Ltd.
Invoice Work Group Member	Doug HILL	GS1 Denmark
Invoice Work Group Member	Steve HAMMOND	Compass
Invoice Work Group Member	Richard KAY	Russell Hume
Invoice Work Group Member	Fred KEMPKE	Unilever Europe
Invoice Work Group Member	Justin MILLS	Brakes Foodservice
Invoice Work Group Member	Frank OSEI	Reynolds
Invoice Work Group Member	Matthew PEARCE	Mitchell's & Butlers
Invoice Work Group Member	Marie PERRY	Coca -Cola
Invoice Work Group Member	Alex PROTASIUK	Brakes Foodservice
Invoice Work Group Member	Jon SCUDAMORE	First Choice Coffee
Invoice Work Group Member	Robert SIMMONS	Rollover Hot Dog
Invoice Work Group Member	Stef SPAAN	GS1 Netherlands

1.5.2. Design Team Members

Function	Name	Organisation
Modeler	John RYU	GS1 Global Office
XML Technical Designer	Dipan ANARKAT	GS1 Global Office
EANCOM Technical Designer	Not Applicable	
Peer Reviewer	Giovanni BIFFI	GS1 Global Office

2. Business Context

Context Category	Value(s)
Industry	All
Geopolitical	Global
Product	All
Process	Pay
System Capabilities	GS1 System
Official Constraints	European VAT Regulation and Sales Tax Local Country or Regional Regulation and Sales Tax,

3. Additional Technical Requirements Analysis

Not Applicable

3.1. Technical Requirements

Number	Statement	Rationale

4. Business Transaction View

4.1. Business Transaction Use Case Diagram

The diagram below illustrates the parties and the roles they (can) play in the invoicing and payment processes.

- Amongst others, the invoice transaction sets the preconditions for the payment process. Therefore the invoice also contains information about the parties that will become active during the payment process, i.e. the payer and the payee.
- Furthermore there might be a third party involved, such as a factor.

Figure 4-1 Parties and roles in the invoicing and payment processes

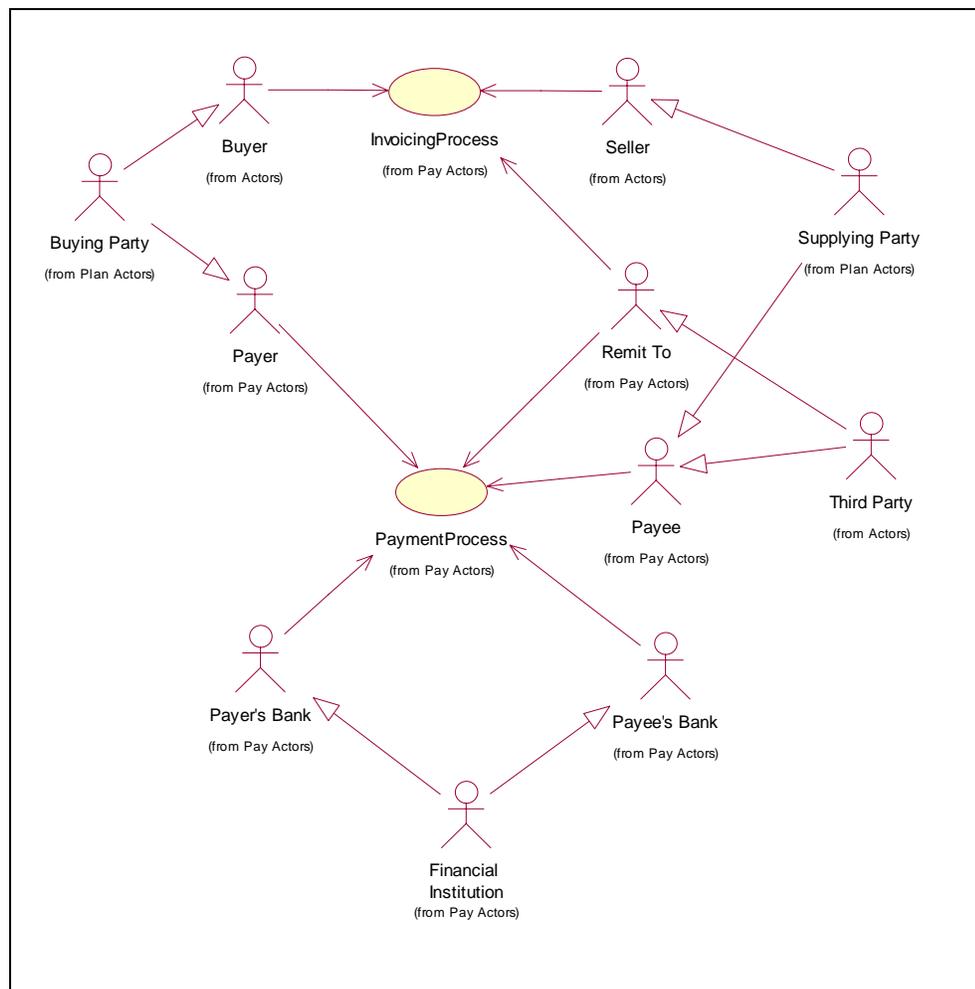
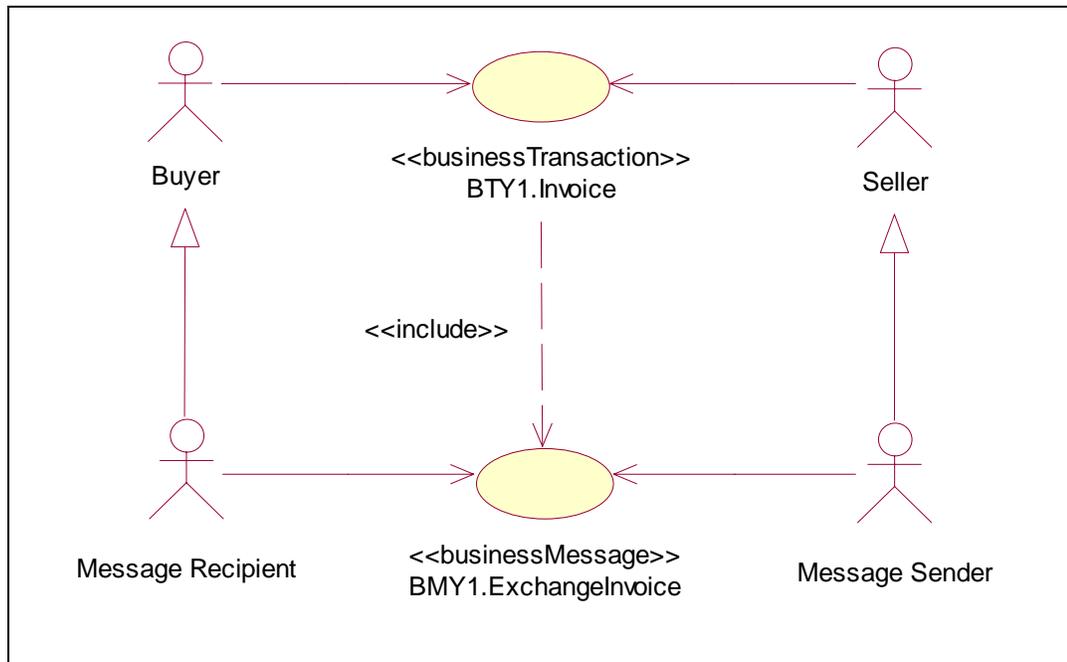


Figure 4-2 Use Case Diagram: Invoice Business Transaction


4.2. Use Case Description

Use Case ID	BMY-1									
Use Case Name	Exchange Invoice									
Use Case Description	The invoice message enables the seller to send an invoice to the buyer related to delivered goods (in case of non consignment scenario) or to used (consumed) goods (in case of a consignment scenario)									
Actors (Goal)	Buyer: To receive the invoice Seller: To send the invoice Remit-to: To receive the invoice									
Performance Goals	None									
Preconditions	None									
Post conditions	None									
Scenario	<p>Begins when...</p> <p>The seller generates an invoice based on the goods deliveries or consumption reports (in case of consignment).</p> <p>Continues with...</p> <table border="1" data-bbox="597 1608 1451 1772"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Seller</td> <td>Issues and sends the invoice to the buyer.</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Ends when The buyer receives the invoice.</p>	Step #	Actor	Activity Step	1	Seller	Issues and sends the invoice to the buyer.			
Step #	Actor	Activity Step								
1	Seller	Issues and sends the invoice to the buyer.								

Alternative Scenario	<p>Begins when...</p> <p>The seller generates an invoice based on the goods delivered or consumption reports (in case of consignment) and the payment is to be made to a remit-to</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #003366; color: white;"> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Seller</td> <td>Issues and sends the invoice to the buyer and to the remit-to</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>Ends when:</p> <p>The buyer and remit-to receives the invoice</p>	Step #	Actor	Activity Step	1	Seller	Issues and sends the invoice to the buyer and to the remit-to			
Step #	Actor	Activity Step								
1	Seller	Issues and sends the invoice to the buyer and to the remit-to								
Related Requirements	No Related Requirements									
Related Rules	No Related Rules									

Use Case ID	ICN -1									
Use Case Name	Issue Credit Note									
Use Case Description	The credit note enables the seller to provide credit information to the relevant party.									
Actors (Goal)	Buyer: To receive the credit note Seller: To send the credit note									
Performance Goals	None									
Preconditions	The buyer receives an invoice which they are in dispute of.									
Post conditions	None									
Scenario	<p>Begins when...</p> <p>In case of invoice disputes, the buyer requests the invoice to be corrected (manual process).</p> <p>Continues with...</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #003366; color: white;"> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Seller</td> <td>The seller issues and sends a credit note with the agreed corrections.</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Buyer</td> <td>The buyer receives the credit note.</td> </tr> </tbody> </table> <p>Ends when... The buyer receives the credit note.</p>	Step #	Actor	Activity Step	1	Seller	The seller issues and sends a credit note with the agreed corrections.	2	Buyer	The buyer receives the credit note.
Step #	Actor	Activity Step								
1	Seller	The seller issues and sends a credit note with the agreed corrections.								
2	Buyer	The buyer receives the credit note.								
Alternative Scenario	None									
Related Requirements	Not Applicable									
Related Rules	In case of this transaction the invoice type CREDIT_NOTE must be used.									

4.3. Business Transaction Activity Diagram(s)

No Activity Diagram

4.4. Business Transaction Sequence Diagram(s)

No Sequence Diagram

5. Information Model (Including GDD Report)

5.1. GDD Report

5.1.1. Invoice

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Definition	Multiplicity	Data Type Components	Related Requirements
DigitalSignature				When a digital signature is included as part of the invoice, the digital signature must be encrypted using an approved GS1 encryption technique.			
Invoice				The Invoice message is sent by the supplier to the customer claiming payment for goods or services supplied under conditions agreed by the seller and the buyer. This same message with correct data qualification also covers the functions of proforma invoice, debit and credit note. The seller may invoice for one or more transactions referring to goods and services related to one or more order, delivery instruction, call off, etc. The invoice may contain references to payment terms, transport details and additional information for customs or statistical purposes in the case of cross-border transaction.			
	countryOfSupplyOfGoods			The country from which the delivery has taken place.	0..1	Code. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-8}
	creditReason			Reason why the credit was issued.	0..1	Credit Reason Code List	[BRAD Invoice Credit Note V5] BR 7

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Definition	Multiplicity	Data Type Components	Related Requirements
	invoiceCurrency			The monetary unit used for calculation in an invoice.	1..1	Code. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-4}
	invoiceType			Code specifying the type of invoice.	1..1	Code. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-3}
		taxCurrencyInformation	CurrencyExchangeRateInformation	Contains the currency in which taxes will be paid, as well as the exchange rate against the invoice currency.	0..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-9+10}
		None	DigitalSignature	A character string, generated using an asymmetric technique, which provides message non-repudiation, integrity checking and authentication.	0..1		[BRD Simple Invoice Extension] {1.1-1}
		None	Document	Used to specify basic information about the content of the message including version number; creation date and time.	1..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-2+11}
		deliveryNote	DocumentReference	Reference to the delivery note which is usually a paper document issued by the delivering party which accompanies delivery of goods specifying the item and quantity of goods. This is usually signed by the receiving party and retained by the delivering party as proof of delivery for reconciliation.	0..1		[BRAD Invoice Credit Note V5] BR 5
		despatchAdvice	DocumentReference	Reference to the commercial document issued by the seller to inform buyer about despatch of goods, detailed content of a shipment, and to provide means for shipment tracing.	0..1		[BRAD Invoice Credit Note V5] BR 6

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Definition	Multiplicity	Data Type Components	Related Requirements
		invoice	DocumentReference	Reference to the original invoice which is an itemized statement of money owed for goods shipped or services rendered.	0..1		[BRAD Invoice Credit Note V5] BR 1 & 2
		orderIdentification	DocumentReference	Reference to the purchase order which is a commercial document issued by a buyer to a seller, indicating the item, quantities for products or services that the seller will provide to the buyer.	0..1		[BRAD Invoice Credit Note V5] BR 3
		orderResponse	DocumentReference	Reference to the order response which is a commercial document issued by a seller to inform the buyer regarding the response to the order.	0..1		[BRAD Invoice Credit Note V5] BR 4
		promotionalDeal	DocumentReference	Reference assigned by one of the trading partners to a specific Promotional activity. Promotional Deal is associated with promotional activity which has a start and end date with incentive provided by one of the trading partners.	0..*		[BRAD Invoice Credit Note V5] BR 9
		receivingAdvice	DocumentReference	Reference to the commercial document related to the goods receipt, and it is used to report the physical receipt of goods.	0..1		[BRAD Invoice Credit Note V5] BR 12
		invoiceIdentification	EntityIdentification	Contains the unique identifier of the business document.	1..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-1}
		None	InvoiceAllowanceCharge	The allowances and/or charges applicable to the invoice.	0..*		[BRD Simple Invoice Extension] {1.1-1}
		None	InvoiceLineItem	Contains the specification of the Invoice Line Item.	1..*		[BRD Simple Invoice Extension] {1.1-1}

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Definition	Multiplicity	Data Type Components	Related Requirements
		buyer	InvoiceParty	Party to whom merchandise and/or service is sold.	1..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-12+13+14+16}
		payee	InvoiceParty	Identifies the credit party when other than the beneficiary.	0..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-30+31+32+34}
		payer	InvoiceParty	Party initiating payment.	0..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-24+25+26+28}
		remitTo	InvoiceParty	The party (account owner) that receives a payment when such party is not the same as the seller.	0..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-24+25+26+28}
		seller	InvoiceParty	Party selling merchandise to a buyer.	1..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-18+19+20+22}
		taxRepresentative	InvoiceParty	The party who is responsible for declaring the Value Added Tax (VAT) on the sale of goods or services.	0..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-36+37+38}

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Definition	Multiplicity	Data Type Components	Related Requirements
		None	InvoiceTotals	The specification of the prepaid amounts, or total monetary values due for the entire invoice.	1..1		[BRD Simple Invoice Extension] {1.1-1}
		None	PaymentTerms	The specification of the payment terms applicable to this invoice.	0..*		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-7+40+41+42}
		shipTo	ShipToLogistics	Party to where goods will be or have been shipped.	0..1		[BRAD Invoice Enhancement V 0.0.1] {BR# 2} [BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-39}
		invoicingPeriod	TimePeriod	Period for which an invoice is issued.	0..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-5+6}
InvoiceLineItem				To identify an invoice line item and it's configuration.			
	amountExclusiveAllowancesCharges			The sum of the line item amount. Including Invoice line charges and allowances.The line amount = quantity * Price + Charges – Allowances.	0..1	Numeric. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-59}
	amountInclusiveAllowancesCharges			The sum of the line item amount.Excluding Invoice line charges and allowances.The line amount = quantity * Price.	0..1	Numeric. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-58}

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Definition	Multiplicity	Data Type Components	Related Requirements
	creditLineIndicator			An indicator that allows users to interpret a standard invoice line as being a credit line.	0..1	String{1..70}	[BRAD Invoice Credit Note V5] BR 8
	creditReason			Reason why the credit was issued.	0..1	Credit Reason Code List	[BRAD Invoice Credit Note V5] BR 7
	deliveredQuantity			The actual quantity delivered.	0..1	Quantity	[BRAD Invoice Credit Note V5] BR 10
	invoicedQuantity			The quantity as per invoice.	1..1	Quantity. Content Quantity Unit. Code Quantity Unit. Code List Agency. Identifier	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-56+57}
	itemDescription			A short textual description of the invoiced item. Is legally required in some countries.	0..1	Text. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-48}
	itemPriceBasisQuantity			To specify the basis for a unit price.	0..1	Quantity. Content Quantity Unit. Code Quantity Unit. Code List Agency. Identifier	BRAD Upstream Standards – Financial Settlement 0.1.0 {7.1.1-48}
	itemPriceExclusiveAllowancesCharges			The price stated is the gross price excluding all allowances, charges and taxes. Allowances and charges must be stated for net calculation purposes.	0..1	Numeric. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-61}
	itemPriceInclusiveAllowancesCharges			The price stated is the net price including all allowances and charges and excluding taxes. Allowances and charges may be stated for information purposes only.	0..1	Numeric. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-61}

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Definition	Multiplicity	Data Type Components	Related Requirements
	transferOfOwnershipDate			The date on which the economic transfer of the goods took place. The tax authorities stipulate the specification of this date in invoices for goods and services.	1..1	Date Time. Content Date Time. Format. Text	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-54}
		consumptionReport	DocumentOrDocumentLineReference	A reference number identifying a consumption report.	0..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-51}
		despatchAdvice	DocumentOrDocumentLineReference	A reference number identifying a despatch advice.	0..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-49}
		invoice	DocumentOrDocumentLineReference	A reference number identifying an invoice.	0..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-49}
		orderIdentification	DocumentOrDocumentLineReference	Reference number assigned by the buyer to an order.	0..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-52}
		promotionalDeal	DocumentOrDocumentLineReference	Reference assigned by one of the trading partners to a specific Promotional activity. Promotional Deal is associated with promotional activity which has a start and end date with incentive provided by one of the trading partners.	0..1		[BRAD Invoice Credit Note V5] BR 9

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Definition	Multiplicity	Data Type Components	Related Requirements
		purchaseConditions	DocumentOrDocumentLineReference	A reference number identifying the purchase conditions.	0..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-53}
		receivingAdvice	DocumentOrDocumentLineReference	A reference number identifying a receiving advice.	0..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-50}
		invoiceLineAllowanceCharge	InvoiceAllowanceCharge	The allowances and/or charges applicable to the invoice line.	0..*		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-64+65+66+67}
		None	InvoiceLineItemInformationAfterTaxes	This is the invoice line amount including tax.	0..1		[BSD Invoice Version 0.3.2]
		invoiceLineTaxInformation	InvoiceTaxInformation	Information about the tax applicable to the invoice line.	0..*		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-60}
		None	LineItem	Used to specify basic information about the content of the line item including line item number.	1..1		BRD Simple Invoice Extensions
		deliveryNote	Reference	Reference number assigned by the issuer to a delivery note.	0..1		BRD Simple Invoice Extensions
		None	TradeItemIdentification	The identification of any item (product or service) upon which there is a need to retrieve pre-defined information and that may be priced, ordered, or invoiced at any point in any supply chain.	1..1		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-47}



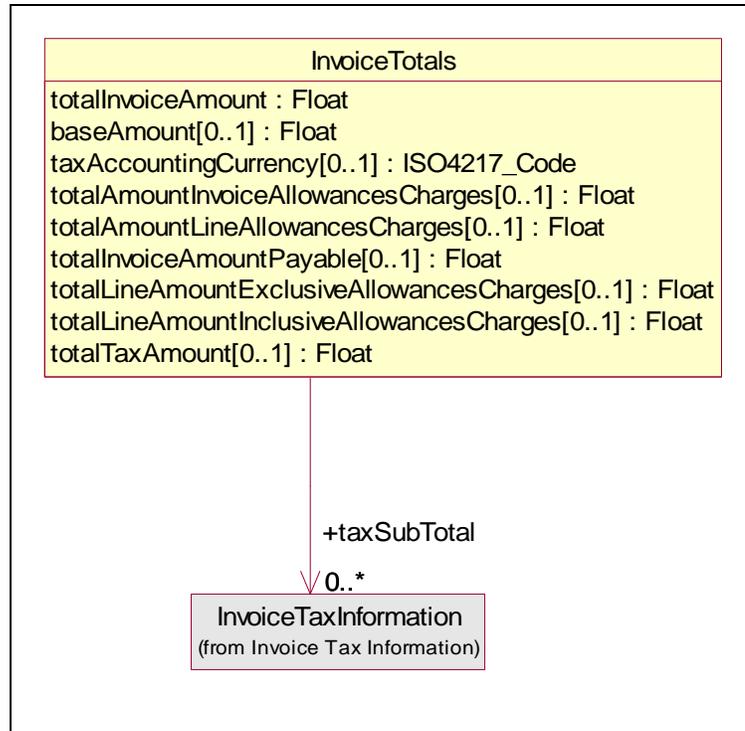
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Definition	Multiplicity	Data Type Components	Related Requirements
InvoiceLineItemInformationAfterTaxes				Contains the invoice line amount including tax.			
	amountExclusiveAllowancesCharges			The amount excluding the allowances and/or charges.	0..1	Numeric. Content	[BSD Invoice Version 0.3.2]
	amountInclusiveAllowancesCharges			The amount including the allowances and/or charges.	0..1	Numeric. Content	[BSD Invoice Version 0.3.2]
InvoiceTotals				The specification of the prepaid amounts, or total monetary values due for the entire invoice.			
	baseAmount			Value of the invoice that is subject to discount and / or penalties.	0..1	Float	[BRAD Invoice Credit Note V5] BR 11
	taxAccountInCurrency			The monetary unit used for calculation in an invoice.	0..1	Code. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-78}
	totalAmountInvoiceAllowancesCharges			The amount specified is the total of all invoice charges/allowances.	0..1	Numeric. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-76}
	totalAmountLineAllowancesCharges			The amount specified is the total of all invoice line charges/allowances.	0..1	Numeric. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-77}
	totalInvoiceAmount			Total sum charged in respect of a single Invoice in accordance with the terms of delivery.	1..1	Numeric. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-79}



Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Definition	Multiplicity	Data Type Components	Related Requirements
	totalInvoiceAmountPayable			Total amount including taxes (gross amount) that needs to be paid.	0..1	Numeric. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-79}
	totalLineAmountExclusiveAllowancesCharges			The sum of all the line item amounts.Excluding Invoice line charges and allowances.The line amount = quantity * Price.	0..1	Numeric. Content	BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-76}
	totalLineAmountInclusiveAllowancesCharges			The sum of all the line item amounts. Including Invoice line charges and allowances.The line amount = quantity * Price + Charges – Allowances.	0..1	Numeric. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-77}
	totalTaxAmount			Total of all duty/tax/fee amounts.	0..1	Numeric. Content	[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-78}
		taxSubTotal	InvoiceTaxInformation	The Tax sub total specifies the total tax amounts for each tax rate.	0..*		[BRAD Upstream Standards – Financial Settlement 0.1.0] {7.1.1-73+74+75}

5.2.2. Class Diagram Invoice Totals

Figure 5-2 Class Diagram Invoice Totals



5.3. Code Lists

5.3.1. Credit Reason Code List

Code List Name	Code List Description
CreditReasonCodeList	Reason why the credit was issued.
Code Name	Code Description
AGREED_SETTLEMENT	An adjustment made based on an agreement between partners, and selected when the available credit reason codes are not applicable.
BELOW_SPECIFICATION	The goods delivered are of a lower specification than the agreed specification between the buyer and seller.
CASH_DISCOUNT	An adjustment has been made due to the application of a cash discount.
DAMAGED_GOODS	An adjustment due to the damage of goods. Note where damage is identifiable as being caused during transit then transport damage reason code should be used.
DISCOUNT_FOR_LATE_DELIVERY	Penalty amount deducted for late delivery.

Code List Name	Code List Description
EARLY_PAYMENT_ALLOWANCE_ADJUSTMENT	Adjustment results from the application of an early payment allowance this could be for the whole invoice or specific items within the invoice.
GOODS_NOT_DELIVERED	Buyer has not received the goods.
GOODS_ON_CONSIGNMENT	Buyer does not accept invoice(s) charge as it relates to goods where the ownership remains with the seller until sold.
INCORRECT_CHARGE	A charge that was not agreed with the buyer, hence the reason for the credit.
INCORRECT_DISCOUNT	Seller has applied incorrect discount calculation on invoices.
INCORRECT_DUE_DATE_FOR_MONETARY_AMOUNT	Adjustment has been made because an incorrect due date was referred to the previous invoice with regard to the monetary amount.
INVOICE_ERROR	Invoice not in accordance with the order.
PRICE_DISCREPANCY	Seller has charged a price on the invoice that was not agreed with the buyer.
SHORT_DELIVERY	When there is shortage on the delivery. Example There is a shortage of 4 units when 10 units are ordered and invoiced, but only 6 units were delivered.
TRADE_DISCOUNT	A discount from the list price of a commodity allowed by a seller to a buyer.
TRANSPORT_DAMAGE	Damage occurred during transit of goods. Note where damage is identifiable as being caused during transit then transport damage reason code should be used.
WRONG_DELIVERY	Goods returned not ordered.
WRONG_INVOICE	Wrong monetary amount resulting from incorrect free goods quantity.

5.3.2. Invoice Type Code List

Code List Name	Code List Description
InvoiceTypeCodeList	
Code Name	Code Description
AGREED_TERMS	Claim for payment of goods or services based upon terms agreed on a bi-lateral basis between the trading partners.
CORRECTED_INVOICE	Claim for payment of goods and services that includes revised information differing from an earlier submission of the same
CREDIT_NOTE	Credit correction of an earlier exchanged claim for payment by an invoice or any other claim for an identified and agreed financial discrepancy.

Code List Name	Code List Description
DEBIT_NOTE	Debit correction of an earlier exchanged claim for payment by an invoice or any other claim for an identified and agreed financial discrepancy.
INVOICE	Claim for payment for goods or services supplied under conditions agreed between the seller and the buyer, seller originated.
PRO_FORMA_INVOICE	Document or message serving as a preliminary invoice, containing – on the whole - the same information as the final invoice, but not actually claiming payment.
SELF_BILLED_INVOICE	Claim for payment for goods or services supplied under conditions agreed between the seller and the buyer, buyer originated.
TAX_INVOICE	Claim for payment for goods or services supplied under conditions agreed between the seller and the buyer, seller originated for taxation purposes.

5.3.3. VAT Category Code List

Code List Name	Code List Description
VATCategoryCodeList	
Code Name	Code Description
DOMESTIC_REVERSE_CHARGE	Code specifying that the rate is based upon the domestic reverse charge VAT treatment. This code value is particularly pertinent to the UK context.
EXEMPT_FROM_TAX	Code specifying that taxes are not applicable. All items in the transaction or a specific line item are exempt from tax.
FREE_EXPORT_ITEM	Code specifying that the item is free export and taxes are not charged.
HIGHER_RATE	Code specifying a higher rate. All items in the transaction or a specific line item are taxed at the higher rate of tax.
LOWER_RATE	A code specifying a lower rate. All items in the transaction or a specific line item are taxed at the lower rate of tax.
MIXED_TAX_RATE	Code specifying that the rate is based on mixed tax. Transaction includes item taxed at different rates.
SERVICES_OUTSIDE_SCOPE_OF_TAX	Code specifying that taxes are not applicable to the services.
STANDARD_RATE	Code specifying the standard rate. All items in the transaction or a specific line item are taxed at the standard rate of tax.
VALUE_ADDED_TAX_NOT_NOW_DUE_FOR_PAYMENT	A code to indicate that the Value Added Tax (VAT) amount which is due on the current invoice is to be paid on receipt of a separate VAT payment request. The value added tax is not due for payment now.
ZERO_RATED_GOODS	Code specifying that the goods are at a zero rate. All items in the transaction or a specific line item are zero tax rated.

6. Business Document Example

6.1. Invoice

- The following is an example of an invoice message. The message is sent out on April 5th at 11 AM. The message is identified with the unique identifier 2005001.
- The invoice is sent by the seller (8712345678913) to the buyer (8812345678903).
- The invoice consists of 2 Items 08712345678906 and 08712345678883. Both are subject to 19% VAT.

The ship to Non Commercial Information

GS1 Global Trade Item Number	Quantity	Consumer information	Delivery Date
00074562000525	2	Carol Johnson 1600 Pennsylvania Avenue Pembroke Pines FL 33028 US Telephone Number: 123.456.7890	2005-02-04

6.2. Invoice Credit Note

- The following is an example of an invoice message used as a credit note. The message is sent out on June 22, 2007 at 11:20 AM. The message is identified with the unique identifier CN3391.
- The invoice currency is Euros
- The credit note is sent by the seller (8712345678913) to the buyer (8812345678903).
- The credit note refers order PO33 created on February 19 2007.
- The credit note refers to Invoice INV13 created on March 3, 2007.
- The reason why the credit note has been raised is that the goods were damaged

7. Implementation Considerations

Not Applicable

8. Testing

8.1. Pass / Fail Criteria

No.	Test Criteria	Related Requirement	Design Element	Pass Criteria	Fail Criteria
1	None				

8.2. Test Data

8.2.1. Invoice Test Data

Invoice	
- creationDateTime	2005-06-27T11:00:00
- documentStatus	ORIGINAL
- invoiceType	INVOICE
- invoiceCurrency	EUR
- countryOfSupplyOfGoods	NL
EntityIdentification (+invoiceIdentification)	
- uniqueCreatorIdentification	2005001
PartyIdentification (+contentOwner)	
- gLN	8712345678913
InvoiceParty (+buyer)	
- gLN	8812345678903
InvoiceParty (+seller)	
- gLN	8712345678913
ShipToLogistics(+shipTo)	
ShipToNonCommercial	
NameAndAddress	
name	Carol Johnson
streetAddressOne	1600 Pennsylvania Avenue
city	Pembroke Pines
state	FL
postalCode	33028
countryISOCCode	US
Contact	
MultiDescription (+personOrDepartmentName)	Carol Johnson, ENG
CommunicationChannel	
communicationNumber	123.456.7890
communicationChannelCode	TELEPHONE
- timePeriod	DAYS
- value	30
VATTaxInformationExtension	
- vATCategory	STANDARD_RATE
- rate	19
InvoiceAllowanceCharge	
- invoiceAllowanceChargeAmount	50

Invoice	
- invoiceAllowanceChargeType	CHARGE_GLOBAL
- invoiceAllowanceOrChargeType	CHARGE
InvoiceTaxInformation	
- dutyTaxFeeType	VALUE_ADDED_TAX
VATTaxInformationExtension	
- vATCategory	LOWER_RATE
- rate	19
InvoiceLineItem *1	
- lineNumber	1
- InvoicedQuantity	50
- transferOfOwnershipDate	2005-06-24
- itemPriceInclusiveAllowancesCharges	10
- amountInclusiveAllowancesCharges	500
InvoiceTaxInformation (+ invoiceLineTaxInformation)	
- dutyTaxFeeType	VALUE_ADDED_TAX
VATTaxInformationExtension	
- vATCategory	STANDARD_RATE
- rate	19
TradeItemIdentification	
- gTIN	00074562000525
DocumentOrDocumentLineReference (+despatchAdvice)	
- uniqueCreatorIdentification	200506001
InvoiceLineItem *2	
- lineNumber	2
- InvoicedQuantity	10
- transferOfOwnershipDate	2005-06-24
- itemPriceInclusiveAllowancesCharges	15
- amountInclusiveAllowancesCharges	150
InvoiceTaxInformation (+ invoiceLineTaxInformation)	
- dutyTaxFeeType	VALUE_ADDED_TAX
VATTaxInformationExtension	
- vATCategory	STANDARD_RATE
- rate	19
TradeItemIdentification	
- gTIN	00074562000525
DocumentOrDocumentLineReference (+despatchAdvice)	
- uniqueCreatorIdentification	2005JE001

Invoice	
InvoiceTotals	
- totalInvoiceAmount	752
- totalLineAmountInclusiveAllowancesCharges	650
- totalTaxAmount	152
- totalAmountInvoiceAllowancesCharges	50
InvoiceTaxInformation (+ TaxSubTotal)	
- dutyTaxFeeType	VALUE_ADDED_TAX
- taxAmount	152
- taxableAmount	800
VATTaxInformationExtension	
- vATCategory	STANDARD_RATE
- rate	19

8.2.2. Invoice Credit Note Test Data

Invoice	
- creationDateTime	2007-06-22T11:20:00
- documentStatus	ORIGINAL
- invoiceType	CREDIT_NOTE
- invoiceCurrency	EUR
- creditReason	DAMAGED_GOODS
EntityIdentification (+invoiceIdentification)	
- uniqueCreatorIdentification	CN3391
PartyIdentification (+contentOwner)	
- gLN	8712345678913
InvoiceParty (+buyer)	
- gLN	8812345678903
InvoiceParty (+seller)	
- gLN	8712345678913
InvoiceTotals	
- totalInvoiceAmount	1003
- baseAmount	50
DocumentReference (+orderIdentification)	
- creationDateTime	2007-02-19T00:00:00
EntityIdentification	
- uniqueCreatorIdentification	PO33
PartyIdentification (+contentOwner)	
- gLN	8712345678913

Invoice	
DocumentReference (+invoice)	
- creationDateTime	20070303 T00:00:00
EntityIdentification	
- uniqueCreatorIdentification	INV13
PartyIdentification (+contentOwner)	
- gLN	8712345678913
InvoiceLineItem *1	
- lineItemNumber	1
- InvoicedQuantity	50
- transferOfOwnershipDate	2007-06-18
TradeItemIdentification	
- gTIN	08712345678906

9. Appendices

None

10. Summary of Changes

Change	BSD Version	Associated CR Number
Invoice (class) added new association to CurrencyExchangeRateInformation with rolename of +taxCurrencyInformation. InvoiceLineItem added new attribute itemDescription InvoiceParty added attribute companyRegistrationNumber (see next) EUInvoicePartyExtension renamed class into VATInvoicePartyExtension removed attribute companyRegistrationNumber VATTaxInformationExtension removed attribute taxCurrency removed attribute currencyExchangeRate	0.3.0	04-000229
Changed location of packages/folders internally in General Business Model Invoice Party Invoice Totals Invoice Tax Information Invoice Allowance Charge	0.3.1	

Change	BSD Version	Associated CR Number
InvoiceTotals Added new optional attribute totalInvoiceAmountPayable	0.3.2	n/a
InvoiceTotals Added new optional attribute taxAccountingCurrency	0.3.3	06-000084
InvoiceTax Information Added new optional attributes taxAmountInTaxAccountingCurrency and taxableAmountInTaxAccountingCurrency	0.3.3	06-000084
VATCategoryCodeList Added LOWER_RATE InvoiceTypeCodeList Added TAX_INVOICE Invoice Added optional(0..1)(+shipTo) association to ShipToLogistics Removed optional Association(0..1) (+shipTo) to PartyIdentification InvoiceTaxInformation Added attribute taxPercentage[0..1] : Percentage{3.2} Updated Example and Test Data Updated GDD Report with inclusion of Related Requirements.	0.4.0	06-000300 06-000301 06-000302 06-000337
Incorporated peer review comments Added Invoice Totals class diagram to illustrate the contents of Invoice Totals. Added Not Applicable to sections not used. Corrected font size.	0.4.1	
Posting for Public Review and update to latest BMS Template Version 1.8	0.4.2	

Change				BSD Version	Associated CR Number
Additions for credit note functionality in the Invoice BMS				0.5.0	07-000243 07-000222 (addition of Domestic Reverse Charge to VAT Category Code List)
Header Reference Addition					
BR	Data	Cardinality	Type		
1	Invoice Reference	0..1	Header Reference		
3	Order Identification	0..1	Header Reference		
4	Order Response	0..1	Header Reference		
5	Delivery Note	0..1	Header Reference		
6	Despatch Advice	0..1	Header Reference		
9	Promotional Deal	0..*	Header Reference		
12	Receiving Advice	0..1	Header Reference		
Line Item Level Reference Addition					
BR	Data	Cardinality	Type		
9	Promotional Deal	0..1	Line item		
Invoice Line Item Addition					
BR	Data	Cardinality	Type		
7	Credit Reason	0..1	Line Item		
8	Credit Line Indicator	0..1	Line Item		
10	Delivered Quantity	0..1	Line Item		
Invoice Header Addition					
BR	Data	Cardinality	Type		
7	Credit Reason	0..1	Invoice Addition		
Added baseAmount in InvoiceTotals					
BR	Data	Cardinality			
11	baseAmount	0..1			
Added Credit Reason Code List					
Added DOMESTIC_REVERSE_CHARGE to VAT Category Code List					
Added Issue Credit Note Use Case Description					
Added Invoice Credit Note business example					

Change	BSD Version	Associated CR Number
Updated to the GDD. Corrected datatype in the GDD platform per the peer review. Peer Review CL: 9582	0.5.1	N/A
Incorporate Peer Review Comment Section 8.2.2 Invoice Credit Note Test Data Removed the creditLineIndicator in the Invoice Line Item Posted for eBallot	0.5.2	N/A
Invoice Work Group eBallot Approved Updated BMS to approved	0.5.3	N/A