

eInvoicing Semantic Model

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**Digital
Business
Council**

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Acknowledgements






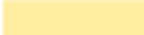










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1 Audience

			
BUSINESS ANALYSTS		APPLICATION DEVELOPERS	
<p>Business Analysts:</p> <ul style="list-style-type: none"> • Those who analyse and document business or processes or systems, assessing the business model or its integration with technology; • Those involved in the identification of business requirements for solutions to support accounts receivable, accounts payable and the electronic transmission of the associated documents between businesses. 		<p>Application Developers:</p> <ul style="list-style-type: none"> • Those involved in the design, operation and implementation of software and services for the exchange of electronic documents or messages; or • Those involved in the design, integration and operation of business applications dealing with invoicing. 	
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Primary Audience  Secondary Audience 

2 Introduction

Organisations operate in different industry, geopolitical, and regulatory contexts and these might necessitate different rules and requirements for the information they exchange in an Invoice. Consequently, some trading communities may prefer industry specific Invoices. Translation between models is usually required when two parties using different Invoice models or formats (for example, between two different communities) need to communicate. This can be a complex and expensive process that is prone to misinterpretations. For Suppliers (or Buyers) who deal with many different communities this is yet another barrier to eInvoicing.

Semantic interoperability means the ability of all trading partners (in this case Buyers and Suppliers) to understand the information they exchange. One proven approach to enabling greater interoperability is to agree upon a collection of terms with well-defined meanings that are consistent across all contexts of use. The semantic model presented here consists of a controlled vocabulary of terms and their definitions, the business requirements and rules to support these, plus the structure of the Invoice Document itself.

The eInvoicing Semantic Model is an attempt to isolate the syntax/grammar/format from information exchanges and enable us to compare one thing with another and see if they are describing the same thing.

A single common semantic model enables reliable information exchange and ensures technology neutrality. It is also easier and cheaper for organisations to subscribe to a single model as compared to several.

In the software world this is also useful because:

- Technology is constantly evolving; standardising on the semantics ensures that the Invoice information which is standardised does not need redesigning to satisfy new technologies – formats may change but semantics do not need to; and
- When transforming an Invoice between various formats, the mapping of information is easier for software developers if there is a common semantic model.

3 Scope

This eInvoicing Semantic Model Specification:

Incorporates common Invoice requirements for commercial, technical, financial and regulatory (e.g. Tax) usage;

Aligns with the Australian Reporting Dictionary (through incorporation);

Exploits the ability to share the model and gain efficiencies of a standardised data model;

Identifies a common 'Core' model;

Consistent reuse of standardised definitions and meanings provide greater opportunities to optimise Business Processes and ability to integrate information with further cost reduction; and

Makes use of a proven methodology;

The eInvoicing Semantic Model has been defined and elaborated in a consultative manner – reusing existing international standards.

4 Conformance

All eInvoices exchanged through the Council's Interoperability Framework must conform to this eInvoicing Semantic Model. Conformance to the eInvoicing Semantic Model means conformance with the content, rules and definitions given in the sections marked as 'Normative' in this Specification.

5 The Core Invoice Concept

A semantic model is based on the idea that the common pieces of information used in an Invoice may have many labels, use different terminology and be expressed in different ways, but the meanings are commonly understood. Semantic models help us identify what the equivalent pieces of information are without the distraction of how they are expressed. This is similar to how drawing pictures helps people who don't speak a common language to communicate.

Establishing a common framework for business information systems with respect to the exchange of Invoices is challenging for the following reasons:

1. The overall business environment is very diverse and consequently so is the information that needs to be exchanged between business partners;
2. Documents such as Invoices consist of many Information Elements. Attempting to define and standardise all possible occurring Information Elements would generate a very large and complex information model that no single organisation could implement entirely;

3. Even if a complete implementation of such a large model were possible, its implementation across the business environment would be very challenging and costly; and
4. As experience informs us, business partners in various industry sectors will agree on subsets of the model that are supported by their business information systems. Such variety would work against the principles of using common standards, jeopardise interoperability and result in expensive implementation projects.

This Specification uses a different approach. In contrast to collecting and meeting the requirements of all businesses, the eInvoicing Semantic Model is defined as including only the essential Information Elements (the 'Core') that an eInvoice needs to satisfy operational, financial, and regulatory (e.g. GST) requirements.

Using the eInvoicing Semantic Model should mean that business partners are able to:

- a. Interpret and understand the meaning of information on an eInvoice; and
- b. Inform their Invoice processing software providers to process Data Formats using the Information Elements in the eInvoicing Semantic Model.

The eInvoicing Semantic Model makes no assumption about the method by which an Invoice is created, delivered and processed. For example the eInvoice may be processed by business partners or by an intermediary service provider.

The eInvoicing Semantic Model also makes no assumption about the Data Format, syntax or transmission technology used. However in the Council's eInvoice Interoperability Framework the model is applied to a specific Data Format (UBL) (OASIS UBL Technical Committee, 2013).

5.1 Design Principles

The eInvoicing Semantic Model has been designed using the principle of a Core set of business requirements, rules and their supporting Information Elements.

These Core Information Elements are those that business applications must be able to recognise if they appear in an eInvoice. Not all Core Information Elements will appear in all eInvoices, these are noted as Optional. Core Information Elements noted as Mandatory must appear in every eInvoice.

In addition, most eInvoices will require additional Extension Information Elements to satisfy their specific business requirements (see Section 5.2). Figure 1 describes the relationship of these principles.

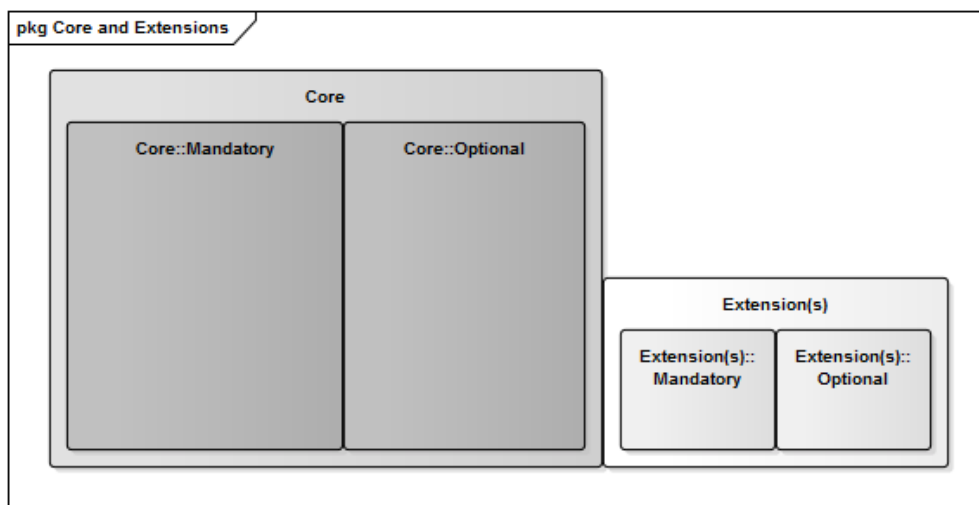


Figure 1: Principle of Core Plus Extensions

The set of Information Elements that are contained in the Core eInvoicing Semantic Model can be seen as determined by regulation (such as taxation and evidentiary legislation) or by common business practice.

The regulatory part of the eInvoicing Semantic Model supports the observance of both Tax policies and commercial law pertaining to electronic invoicing commonly in force throughout Australia. For example, the 'A New Tax System Act' (1999) (Australian Government, 1999) specifies the minimum set of criteria for a Tax Invoice.

The eInvoicing Semantic Model also identifies the business requirements and rules for commonly occurring Information Elements that are not industry, sector or regionally specific.

The eInvoicing Semantic Model builds on the work of the European standard's agency CEN and the OpenPEPPOL Association.

CEN Technical Committee 434 (Electronic Invoicing) has drafted 'Electronic Invoicing - Semantic Data Model of the Core Information Elements of an Electronic Invoice' (CEN Technical Committee 434, 2016). This European model has been adapted for an Australian context. (Note - as of March 2016 the CEN publication draft has been reviewed and is now subject to modification following comments received).

Similar to the approach of PEPPOL, the eInvoicing Semantic Model has been mapped to a subset of the standard UBL data model (OASIS UBL Technical Committee, 2013)(see Annex B). This approach will simplify the transformation to the recommended Data Format and support alignment with other international eInvoicing programmes.

5.2 Usage and Extension

If an Information Element is required for a specific Business Process (such as an industry sector's specific Invoicing practices) and it is not defined in the Core eInvoicing Semantic Model then it should be defined as an Extension to the Core.

An Extension adds to the eInvoicing Semantic Model and may include both mandatory and optional Information Elements. It is possible to define Extension Information Elements while still conforming to the eInvoicing Semantic Model (see Figure 2 - Principle of Core plus Extensions).

Extensions may be specific to a community (such as a large retailer's supply chain or the healthcare sector) or they may apply to more than one community (such as exporter's invoicing internationally). Any of these scenarios may have specific business requirements and the rules that support them could require additional Information Elements not present in the Core eInvoicing Semantic Model.

To assist in standardising the use of Extensions the underlying data structures used for the Core eInvoicing Semantic Model are based on the UBL data model (OASIS UBL Technical Committee, 2013). This data model defines many other Information Elements that may be used as Extensions to the Core while still remaining compliant. Furthermore the UBL Customization Methodology defines how to apply these extensions to the core model in a consistent way (OASIS, 2009).

Only Parties that agree to these Extensions would be expected to be able to process these Extension Information Elements.

To aid in standardising Extensions the Council will provide guidance on their governance, for example how to specify an Extension to the eInvoicing Semantic Model and register it for possible re-use by others.

6 Terms and Definitions (Normative)

Term	Definition
Business Process	A collection of related, structured activities or tasks undertaken by a business (for example, Invoicing).
Code	A set of allowed Values that have standardised meanings that can be resolved unambiguously.
Core	A business requirement, rule, Information Element or supporting XML Element that Service Interfaces must be able to recognise if they appear in a Document.
Data Format	A machine-readable language, syntax or dialect used to present the Information Elements contained in an electronic Document (for example, an eInvoice).
Document	A purposeful and self-contained, structured set of Information Elements.
eInvoice	An Invoice, RCTI, Credit Note or Adjustment exchanged using the Council's Data Format.
eInvoicing Semantic Model	A structured set of logically interrelated Information Elements used to support eInvoicing.
Extension	A business requirement, rule, Information Element or supporting XML Element that is not part of the Core Semantic Model.
Identification Scheme	The collection of Identifiers applicable for a given type of Information Element governed under a common set of rules
Identifier	A character string used to establish the identity of, and distinguish uniquely, one instance of an object within an Identification Scheme from all other objects within the same scheme. An Identifier may be a word, number, letter, symbol, or any combination of those.

Term	Definition
Information Element	A semantic concept that can be defined independent of any particular data format.
Mandatory	A business requirement, rule, Information Element or supporting XML Element that must always appear in a Document.
Optional	A business requirement, rule, Information Element or supporting XML Element that may appear on a Document.
Value	An expression that cannot be reduced any further. Values are used to express the information for an Information Element and are (generally) formatted as XML Elements.

7 Controlled Vocabulary (Normative)

Many terms used in defining the Information Elements in the eInvoicing Semantic Model refer to the following controlled vocabulary of terms.

Term	Definition	Notes
Address	A defined location.	
Address Line	The Description of an Address.	<i>For example: 'Unit 4, Number 12 Genge Street, Canberra'</i>
Allowance	A reduction in the Amount payable.	<i>May be a discount or rebate, etc.</i>
Allowance Reason	The reason why an Allowance applies.	
Amount	Expresses a numerical monetary Value.	<i>May be positive, negative or 0. For example: '1434.95', '0.0', '-345.252'</i>
Amount Due	The outstanding Amount.	
Amount Payable	The Total Amount to be paid.	
Attached Document	A separate Document included with the Invoice for Reference or audit purposes.	<i>For receipts, proof of delivery, specifications, etc.</i>
Base Amount	The Amount that may be used, in conjunction with the Allowance or Charge rate, to calculate the Allowance or Charge Amount.	

Term	Definition	Notes
Business Name	The name under which a Party conducts business.	<i>Parties must register a Business Name in Australia, unless they trade under a personal name, or fall within an exemption. (Australian Securities and Investment Commission, 2016).)</i>
Buyer	The Party that procures goods or services.	<i>See 7.1 below.</i>
Buyer Accounting Reference	Identifies where the Buyer may allocate the relevant transaction in their financial reports.	<i>A Buyer may have previously requested that the Supplier state this on their Invoice.</i>
Category	A term applied to a group of items with common characteristics.	
Charge	An increase in the Amount payable.	<i>May be a penalty or surcharge, etc.</i>
Charge Reason	The reason why a Charge applies.	
City	The common Name of a City or town.	

Term	Definition	Notes
Company Name	A company is a separate legal entity registered with ASIC. A company has its own name which is required to include the legal terms or abbreviations 'pty' and/or 'ltd' at the end of the name.	<i>A company may choose to register a Business Name if it wants to carry on a business using its name without the legal terms, or if it wants to use a different name</i> (Australian Securities and Investment Commission, 2016).
Contact	Contact for issues relating to the Invoice.	
Contact Point	Who to Contact.	<i>May be a person's Name, Contact identification, department or office identification, etc.</i>
Contract	A business or trading agreement.	
Country	A nation state.	
Country of Origin	The Country where an Item originated.	
Credit Note	A Document used to specify credits due to the Buyer from the Supplier.	
Currency	A medium of exchanging funds.	
Date	A calendar date.	
Description	Text used to provide details.	<i>For example: 'Widgets', 'Basic Rental'</i>

Term	Definition	Notes
Dispatch Advice	A Document used to describe the sending of a delivery of Items.	
Electronic Address	An end point Identifier for delivering electronic Documents.	<i>For example: 'http://receivernetwork/accesspoint/partnerXYZ'</i>
End Date	The termination Date for a Period of time.	
External Document	A separate Document not included with the Invoice but identified at another location for Reference or audit purposes.	<i>For example: 'http://partnerX/DeliveryDocket.pdf'</i>
Financial Institution	An organisation that provides financial services for its clients or members.	<i>Generically known as a Bank.</i>
Financial Institution Account	An account at a Financial Institution.	<i>Generally known as a Bank Account.</i>
Financial Institution Identifier	The office holding the Financial Institution Account.	<i>In Australia this is generally known as the Bank-State-Branch (BSB).</i>
Goods and Services Tax (GST)	The term used in Australia for consumption Tax as defined by 'A New Tax System Act' (1999) (Australian Government, 1999).	<i>Goods and Services Tax (GST) applies to Items sold or consumed in Australia.</i>
Gross Price	The unit price before Allowances and Charges.	
GST Category	A category within the GST Taxation scheme.	

Term	Definition	Notes
GST Status	The Tax status applicable to a Party within the GST system (Australian Government, 1999).	<i>For example, 'Registered' or 'Not registered'</i>
Invoice	A Document notifying an obligation to make a Payment.	<i>Definition taken from 'A New Tax System (Pay As You Go) Act 1999' (Australian Government, 1999).</i>
Invoice Currency	The system of monetary exchange used for the Invoice.	<i>For domestic Invoicing this will be Australian Dollars in the majority of cases, but it is possible to use other currencies.</i>
Invoice Level	Information that applies to the entire Invoice.	<i>Sometimes referred to as the Invoice header.</i>
Invoice Line	Defines properties of an individual Invoiced Item.	<i>Typically used to specify individual transactions.</i>
Invoice Line Extension Amount	The Net Price multiplied by the Invoice Quantity.	
Invoiced Quantity	The quantity of Items being Invoiced.	
Issue Date	The date on which the Invoice was created.	
Item	An individual article or unit.	<i>May be goods or services.</i>

Term	Definition	Notes
Item Classification	The formal classifying of an Item by its type or nature.	<i>Classification Codes are used to allow grouping of similar Items for a various purposes e.g. public procurement (CPV), e-Commerce (UNSPSC), exports (AHECC) etc.</i>
Item Property	Features of an Item.	<i>For example lengths, colours, sizes.</i>
Item Specification	A formal set of Item attributes used to satisfy the conditions of sale.	
Net Amount	The Amount is 'net' without GST, i.e. inclusive of Allowances and Charges as well as other relevant Taxes.	
Net Price	The unit price after Allowances and Charges.	
Party	An individual, a group, or an organisation having a role in a Business Process.	<i>See 7.1</i>
Payee	The Party that receives the Payment.	<i>See 7.1</i>
Payer	The Party that makes the Payment.	<i>See 7.1</i>
Payment Means	How a Payment is expected to be or has been settled.	
Period	A length or portion of time.	
Postal Address	Identifies the end point of a postal system.	
Postcode	The Identifier for an addressable group of properties according to the Australian postal service.	<i>Known as Postal Zone in some countries.</i>

Term	Definition	Notes
Price Base Quantity	The number of Item units to which a price applies.	
Price Discount	The total discount subtracted from the Gross Price to calculate the Net Price.	
Purchase Order	A Document used to order Items issued by the Buyer.	
Receipt Advice	A Document used to describe the acceptance of delivery of Items.	
Recipient Created Tax Invoice (RCTI)	A Tax Invoice issued by the Party that receives the goods and services, rather than the Supplier.	
Reference	The action of mentioning or alluding to something.	
Related Invoice	A previously issued Invoice.	
Response	A Document to acknowledge receipt of preceding Document.	<i>For example, acknowledging receipt of an Invoice or Credit Note.</i>
Sales Order Identifier	An Identifier for a Buyer's Purchase Order, issued by the Seller.	
Start Date	The starting Date for a Period of time.	
State	A Country sub-division or region.	<i>An Australian State or Territory.</i>
Supplier	The Party responsible for providing goods or services to the Buyer.	<i>See 7.1</i>
Supporting Document	A Document substantiating the claims made in the Invoice.	

Term	Definition	Notes
Tax	A compulsory contribution to public revenue, levied by the government on workers' income and business profits, or added to the cost of some goods, services, and transactions.	
Tax Invoice	An Invoice may be a Tax Invoice under the meaning given by subsections 29-70(1) and 48-57(1) of the GST Act (Australian Government, 1999).	See 8.1
Tax Rate	The rate that applies for a Tax.	<i>For example, GST rate.</i>
Taxable Amount	The Amount that is Taxable.	
Telephone Number	Identifies the end point of a telephony system.	
Total Amount	The sum of all Amounts.	
Trading Name	The term previously used by the Australian Business Register (ABR) for Business Name.	<i>Taken from the Australian Securities and Investment Commission definitions (Australian Securities and Investment Commission, 2016).</i>

7.1 Parties and Roles

In the Invoice process there are two primary business Parties, the Buyer and the Supplier.

For the Buyer Party the role Contracting with a Supplier to purchase goods or services is referred to as the Buyer. The role responsible for making settlement (and the recipient of the Invoice) is known as Accounts Payable. The Payer is the role that makes the Payment.

The Supplier Party has the role of Seller (the commercial role providing the goods to the Buyer), Accounts Receivable (the role who raises the Invoice and is responsible for resolving billing issues and arranging settlement) and Payee (the role that receives the Payment).

There may be additional third Parties providing services that are identified appear on the Invoice but these are considered as Extensions to the Core.

The table below summarises these roles:

Table 1: Party Roles

Actor	Role	Description
Buyer Party	Buyer	The role Contracting with the Supplier to purchase goods or services.
Buyer Party	Accounts Payable	The role making settlement relating to a purchase and resolving billing issues.
Buyer Party	Payer	The role making the Payment.
Supplier Party	Seller	The role legally responsible for providing the goods to the Buyer.
Supplier Party	Accounts Receivable	The role claiming the Payment and responsible for resolving billing issues and arranging settlement.
Supplier Party	Payee	The role receiving the Payment.
Party	Deliver To	The Party to which the Items are delivered.

7.2 Prices

There are several Information Elements related to the pricing of Items on an Invoice. The table below summarises these relationships:

Table 2: Price Relationships

Information Element	Description
Allowance	A reduction in the Amount payable.

Information Element	Description
Amount Payable	The Total Amount to be paid.
Charge	An increase in the Amount Payable.
Gross Price	The unit price before Allowances and Charges.
Invoice Line Extension Amount	The Net Price multiplied by the Invoice Quantity.
Invoiced Quantity	The quantity of Items being Invoiced.
Net Amount	The Amount is 'net' without GST, i.e. inclusive of Allowances and Charges as well as other relevant Taxes.
Net Price	The unit price after Allowances and Charges.
Price Base Quantity	The number of Item units to which a price applies.
Price Discount	The total of all Allowances subtracted from the Gross Price to calculate the Net Price.
Total Amount	The sum of all Amounts.

8 Business Processes

8.1 Invoicing

This represents the most common Invoicing process, where a Supplier (Accounts Receivable) issues an Invoice to a Buyer of goods or services (Accounts Payable).

An Invoice is a Document notifying an obligation to make a Payment, whereas a Tax Invoice is a Document that contains the information about a Taxable supply required by the Goods and Services Tax Act (1999) (Australian Government, 1999). The eInvoicing Semantic Model caters for the requirements of a Tax Invoice. References to Invoice should be assumed to encompass the Tax Invoice.

Figure 2 describes the flow of the Invoicing process.

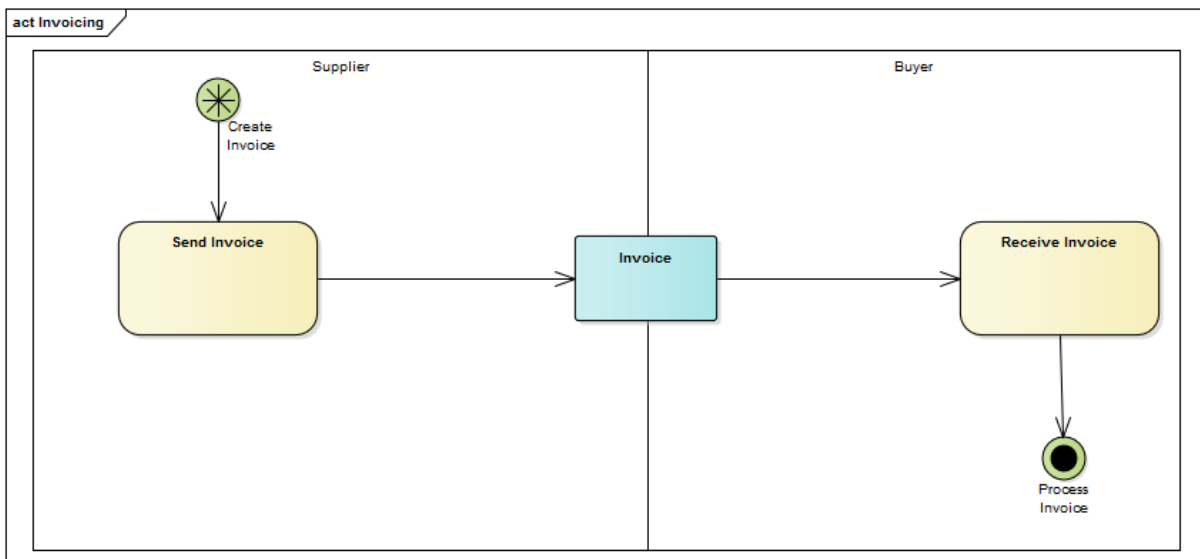


Figure 2: The Invoicing Process

8.1.1 Recipient Created Tax Invoicing (RCTI)

Recipient Created Tax Invoicing is a specialised type of Invoicing process. With Recipient Created Tax Invoicing a Tax Invoice is issued by the Party that receives the goods and services (normally the Buyer), rather than the Supplier (Australian Government, 1999).

For example, a sugar cane farmer and a mill have entered into an agreement that the Buyer will Invoice and provide Payment for a delivery of cane based on the quality of the cane. On a delivery of cane to the mill, the Buyer creates a RCTI.

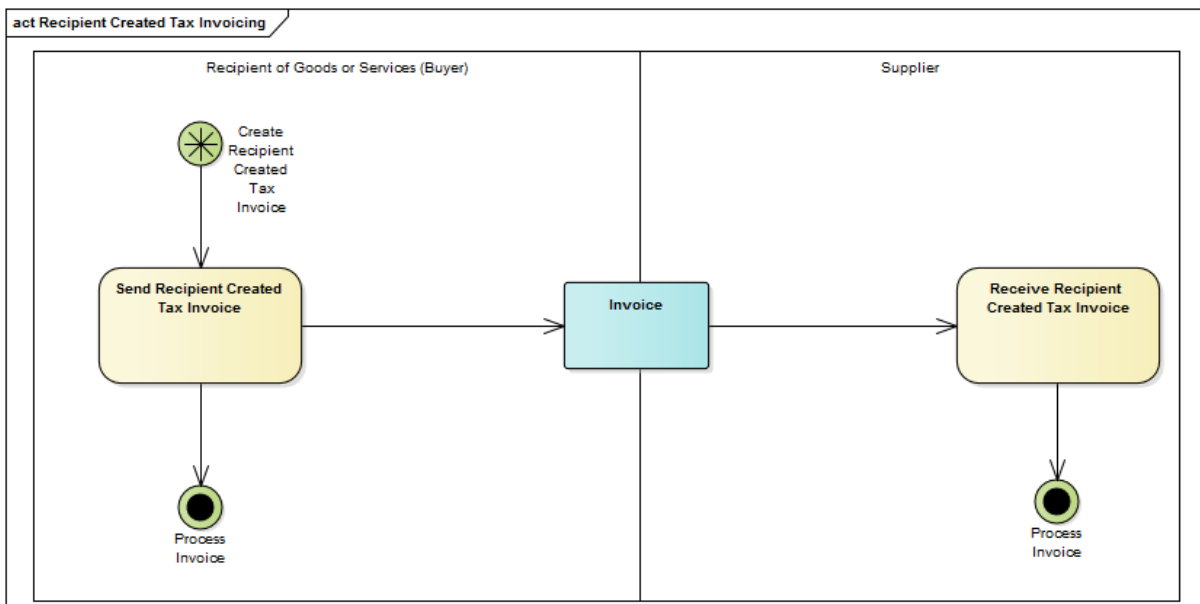


Figure 3: The Recipient Created Tax Invoicing Process

8.2 Adjustment Invoicing

After an Invoice is created, it is sometimes necessary to adjust the information. For example, an adjustment may be needed when:

There is an error in the relevant Invoice, for example it is to the wrong Buyer, at the wrong time or the wrong amount was charged;

The Amount of the original Invoice no longer reflects the amount the Buyer owes, for example due to Items being returned or a dispute about Items provided; or

The supply becomes Taxable or stops being Taxable.

This process is described in Figure 4. The two common processes for adjustment Invoicing are described below.

8.2.1 Credit Notes

The Supplier may create and issue a Credit Note that acts as a 'negative Invoice' to offset a previous Invoice.

Credit Notes may also be known as Adjustment Notes for Tax reporting purposes (Australian Government, 1999) and ATO GST ruling GSTR 2013/2 (Australian Government, 2013); and

8.2.2 Copy, Duplicate and Replacement Invoices

After an Invoice has been received, additional versions of the Invoice may be sent:

A copy of the original Invoice may be sent;

A duplicate Invoice may be sent accidentally; and

A replacement Invoice, with different details, may be sent to replace an existing Invoice.

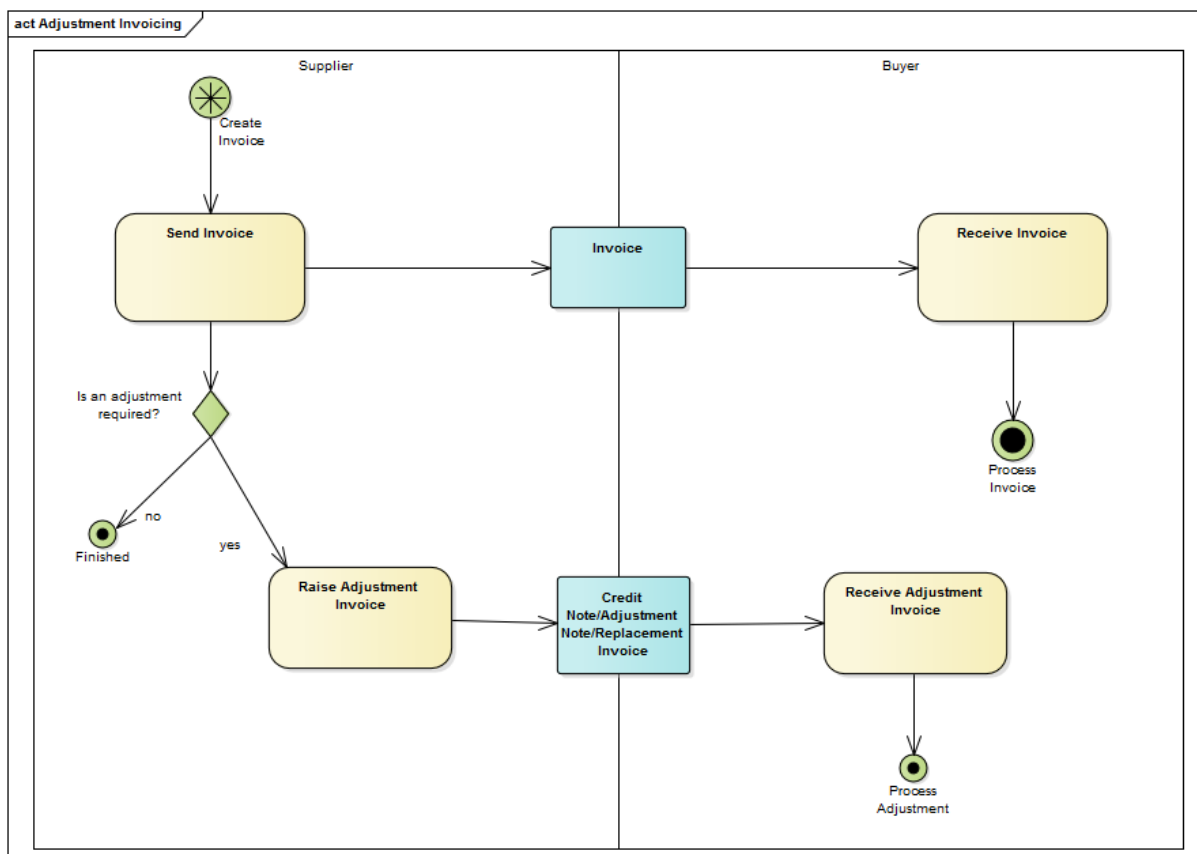


Figure 4: The Adjustment Invoicing Process

8.3 Acknowledging Invoices

With an eInvoicing process it is not uncommon for the recipient (e.g. Buyer) to respond to the eInvoice by sending an acknowledgement in the form of a Response document. Figure 5 describes the flow of a common eInvoicing process with an acknowledgement.

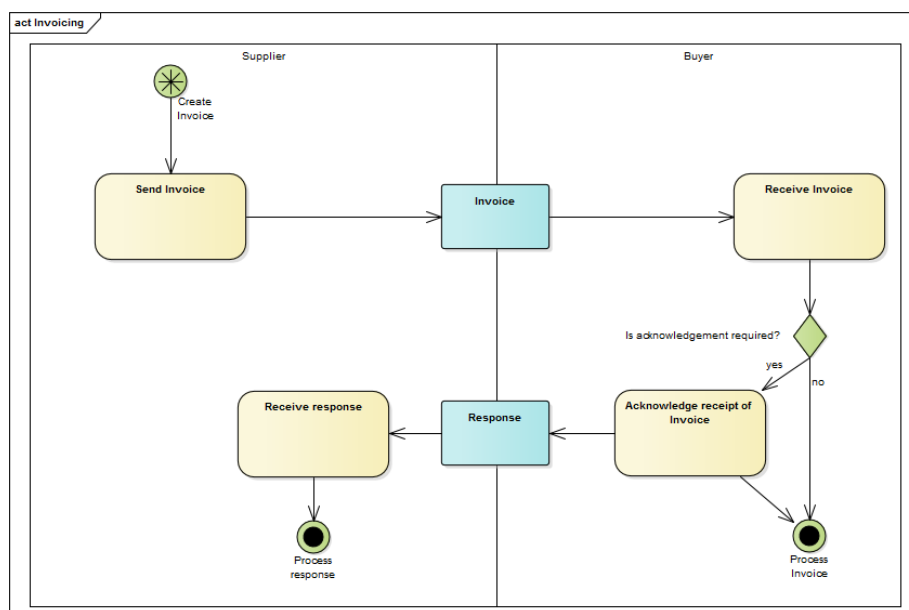


Figure 5: An Invoicing Process with Acknowledgement

Responses may also be sent to acknowledge Recipient Created Tax Invoices and adjustment Invoices.

8.4 Business Requirements

An Invoice needs to support a number of related business functions. The eInvoicing Semantic Model supports:

- Tax reporting;
 - Conforming to the Goods and Services Tax Act (1999) (Australian Government, 1999).
- Verification;
 - Allowing identification of the commercial transaction covered by the Invoice.
- Matching; and
 - Matching against known accounts payable information, such as purchase order numbers.
- Payment;
 - Specifying how payments are to be made.

Other requirements such as international (cross border) Invoicing or Invoice routing within organisations or networks may be considered as Extensions to these Core requirements.

The table below identifies the eInvoicing Semantic Model Core business requirements and the Mandatory and Optional rules that support them. Note that some Extension requirements are also shown to provide examples.

Table3: Core Business Requirements and Rules for Tax Invoices

Requirement	Rule(s)	Mandatory	Optional	Extension
	All Tax Invoices shall contain the minimum information stated in section 29-70 of the GST Act (Australian Government, 1999) and explained in Goods and Services Tax Ruling GSTR 2013/1 (Australian Government, 2013).			
	1. An Invoice of more than \$82.50 (including GST) to a GST-registered Buyer MUST be a Tax Invoice.	X		
	A Tax Invoice shall identify that the Document is intended to be a Tax Invoice or a Recipient Created Tax Invoice.			
	2. An Invoice MUST contain a Document Type Code.	X		
	An adjustment note or a recipient created adjustment note shall use the terms to identify the document as described in GST Ruling GSTR 2013/2 paragraph 31 (Australian Government, 2013)			
	3. An Invoice MUST contain a Document Type Code indicating it is an adjustment document.	X		
	A Tax Invoice shall identify the Supplier.			
	4. An Invoice MUST contain the Supplier's Business Name or the ABN of the Supplier.	X		
	A Tax Invoice for sales of \$1,000 or more shall contain a Buyer's GST Identifier.			
	5. An Invoice with a Total Amount greater than \$1000 MUST have either the Buyer's Business Name or the ABN of the Buyer.	X		
	Tax Invoices issued by GST branches of Suppliers shall contain have the ABN plus the GST branch number on the Tax invoice (Australian Government, 1999).			
	6. An Invoice MAY contain the ABN plus a GST branch number for Suppliers with GST branches registered with the ATO.		X	

Requirement	Rule(s)	Mandatory	Optional	Extension
A Tax Invoice shall identify the date the Invoice was issued.				
	7. An Invoice MUST contain an Invoice Issue Date.	X		
A Tax Invoice shall contain a brief description of the items sold.				
	8. An Invoice Line MUST have a Description.	X		
	9. Invoice MAY contain a Description of Properties of Invoiced Items.		X	
A Tax Invoice shall identify the quantity sold (if applicable).				
	10. An Invoice Line MAY contain an Invoiced Quantity.		X	
A Tax Invoice shall identify the price of the Items sold.				
	11. An Invoice Line MUST contain the Invoice Line Extension Amount (Net Price multiplied by Invoiced Quantity) (excluding GST) for the Items sold.	X		
	12. An Invoice MUST contain the sum total of all Invoice Line Extension Amounts.	X		
A Tax Invoice shall identify the GST Amount of the Items sold (if any)				
	13. An Invoice Line MUST contain the GST Amount for the Items sold or indicate the extent to which Items are taxable.	X		
A Tax Invoice shall identify the GST inclusive Price of the Items sold.				
	15. An Invoice Line MUST contain the Amount Payable (Invoice Line Extension Amount plus GST Amount) for the Items sold.	X		

Requirement	Rule(s)	Mandatory	Optional	Extension
A Tax Invoice shall identify the price of the Items sold.				
	100. A Tax Invoice for goods or services that do not all include GST (mixed supplies) shall indicate which goods or services do not include GST.	X		
	18. An Invoice Line MAY contain a GST Amount of zero.		X	
	19. An Invoice Line MAY specify a GST Category.		X	
If more than one Tax Category is used on a Tax Invoice, the GST Amount shall be distinguishable from the Tax total Amount.				
	20. An Invoice MUST contain the Invoice level Tax Amount exclusive of GST.	X		
	22. An Invoice MUST contain the Invoice level GST Total Amount.	X		
Tax Invoices created by the recipient rather than the supplier (RCTI) shall detail the Buyer's identity or ABN.				
	21. A Recipient Created Tax Invoice MUST contain either the Business Name or the ABN of the Buyer.	X		
Tax Invoices created by the recipient rather than the Supplier (RCTI) shall show that, if GST is payable, it is payable by the Supplier.				
	23. A Recipient Created Tax Invoice MUST contain the Payee Name if GST is payable.	X		
An RCTI should have the ability to be an agreement for recognising an RCTI process.				

Requirement	Rule(s)	Mandatory	Optional	Extension
	<p>101. An RCTI MAY contain the following statement:</p> <p>“The recipient and the supplier declare that this agreement applies to supplies to which this tax invoice relates. The recipient can issue tax invoices in respect of these supplies. The supplier will not issue tax invoices in respect of these supplies. The supplier acknowledges that it is registered for GST and that it will notify the recipient if it ceases to be registered. The recipient acknowledges that it is registered for GST and that it will notify the supplier if it ceases to be registered for GST. Acceptance of this RCTI constitutes acceptance of the terms of this written agreement.</p> <p>Both parties to this supply agree that they are parties to an RCTI agreement. The supplier agrees to notify the recipient if the supplier does not wish to accept the proposed agreement within 21 days of receiving this document.”</p>		X	

Table 4: Core Business Requirements for Invoice Verification

Requirement	Rule(s)	Mandatory	Optional	Extension
An Invoice shall identify the business transaction.				
	24. An Invoice MUST have an Invoice Identifier.	X		
	25. An Invoice MUST have a Supplier Business Name.	X		
	26. An Invoice MUST have a valid Document Type Code.	X		

Requirement	Rule(s)	Mandatory	Optional	Extension
	7. An Invoice MUST have an Issue Date.	X		
	28. An Invoice MAY have a Delivery Date.		X	
	29. An Invoice MAY have an Invoice Period.		X	
	30. An Invoice Period MAY have an Invoice Period Start Date.		X	
	31. An Invoice Period MAY have an Invoice Period End Date.		X	
	32. An Invoice Period End Date MUST be later or equal to an Invoice Period Start Date.	X		
	33. An Invoice MAY have a Sales Order Identifier.		X	
	34. An Invoice MAY have a Purchase Order Identifier.		X	
	35. An Invoice MAY have a Contract Identifier.		X	
	36. An Invoice MAY have an Electronic Address.			X
An Invoice shall identify the supply of Items Invoiced.				
	37. An Invoice MUST have at least one Invoice Line.	X		
	38. An Invoice Line Item MAY have a Suppliers Item Identifier.		X	
	39. An Invoice Line Item MUST have a Description.	X		

Requirement	Rule(s)	Mandatory	Optional	Extension
	40. An Invoice Line MAY have a Quantity.		X	
	41. An Invoice Line MAY have a Net Amount.		X	
An Invoice may identify the proof of dispatch.				
	42. An Invoice MAY have a Dispatch Advice Identifier.		X	
An Invoice may identify the proof of receipt.				
	43. An Invoice MAY have a Receipt Advice Identifier		X	
An Invoice may identify the Party who received the Items.				
	44. An Invoice MAY have a delivery Address.			X
An Invoice Item may identify the Country of Origin				
	45. An Invoice Line Item MAY have a Country of Origin.			X
An Invoice may contain supporting Documentation.				
	46. An Invoice MAY have one or more Document References.		X	
An Invoice may describe the composition of the total Amount of the Invoice.				
	47. The Invoice Level Net Amount MUST be equal to the sum of Invoice Line Net Amounts.	X		

Requirement	Rule(s)	Mandatory	Optional	Extension
	48. The Invoice Level Allowance Amount MUST be equal to the sum of Invoice Line Allowances plus any Invoice Level Allowances.	X		
	49. The Invoice Level Charge Amount MUST be equal to the sum of Invoice Line Charges plus any Invoice Level Charges.	X		
	50. The Invoice Level Net Amount MUST be equal to the Invoice Level Gross Amount - Invoice Level Allowance Amount + Invoice Level Charge Amount.	X		
	51. The Invoice Level GST Amount MUST be equal to the sum of Invoice Line GST Amounts.	X		
	52. The Invoice Level Total Amount MUST be equal to the Invoice Level Net Amount + the Invoice Level Tax Amount.	X		
An Invoice may describe the composition of the Amount Due for Payment of the Invoice.				
	53. An Invoice MAY have an Amount Payable.		X	
	54. An Invoice MUST have an Invoice Level Total Amount.	X		
	55. An Invoice MAY have an Invoice Level Net Amount.		X	
	56. An Invoice MAY have a Related Invoice Identifier.		X	
A Credit Note may identify the Invoice(s) to which it applies.				

Requirement	Rule(s)	Mandatory	Optional	Extension
	57. A Credit Note MAY have a Related Invoice Identifier.		X	

Table 5: Core Business Requirements for Invoice Matching

Requirement	Rule(s)	Mandatory	Optional	Extension
An Invoice shall contain information at Invoice Level that identifies a debit Amount.				
	53. An Invoice MAY have an Amount Payable.		X	
	59. An Invoice MAY have one or more Document References.		X	
	60. An Invoice Level Total Amount MUST be greater than 0.	X		
An Invoice shall contain information at Invoice Line level that identifies a debit or credit Amount.				
	61. An Invoice Line MAY have a Net Amount.		X	
	62. An Invoice Line Extended Amount after all allowances and charges MUST NOT be negative.	X		
	63. An Invoice Line Price MUST be 0 or more.	X		
An Invoice shall contain information at Invoice Line level about Net Price.				
	64. An Invoice Line Item MUST have a Net Price.	X		
An Invoice shall contain information at Invoice Line level about quantity on which the Net Price is based.				

Requirement	Rule(s)	Mandatory	Optional	Extension
	65. An Invoice Line MAY have a Quantity.		X	
An Invoice may contain information about Allowances at Invoice Level.				
	66. An Invoice MAY have an Allowance Rate and Base Amount at Invoice Level.		X	
	67. An Invoice Level Allowance MUST be greater than 0.	X		
	68. An Invoice Level Allowance MAY have a GST Category.		X	
	70. An Invoice Level Allowance Reason Description MUST match the Invoice Level Allowance Reason Code (if any).	X		
An Invoice may contain information about Charges at Invoice Level.				
	71. An Invoice MAY have a Charge Rate and Base Amount at Invoice Level.		X	
	72. An Invoice Level Charge MUST be greater than 0.	X		
	73. An Invoice Level Charge MAY have a GST Category.		X	
	75. An Invoice Level Charge Reason Description MUST match the Invoice Level Charge Reason Code (if any).	X		
An Invoice may contain information about Allowances at Invoice Line level.				
	76. An Invoice Line MAY have an Allowance Rate and Base Amount.		X	
	77. An Invoice Line Allowance MUST be greater than 0.	X		

Requirement	Rule(s)	Mandatory	Optional	Extension
	78. An Invoice Line Allowance MUST have an Allowance Reason Description.	X		
	79. An Invoice Line Allowance Reason Description MUST match the Invoice Line Allowance Reason Code (if any).	X		
An Invoice may contain information about Charges at Invoice Line level.				
	80. An Invoice Line MAY have a Charge Rate and Base Amount.		X	
	81. An Invoice Line Charge MUST be greater than 0.	X		
	82. An Invoice Line Charge MUST have a Charge Reason Description.	X		
	83. An Invoice Line Charge Reason Description MUST match the Invoice Line Charge Reason Code (if any).	X		
A Credit Note shall contain information at Invoice Level that identifies a credit Amount.				
	84. A Credit Note MAY have a Total Amount.		X	
	85. A Credit Note MAY have a Buyer Accounting Reference.		X	
	60. The Credit Note Total Amount MUST be greater than 0.	X		
A Credit Note shall contain information at Credit Note Line level that identifies a debit or credit Amount.				
	87. A Credit Note Line MAY have a Net Amount.		X	

Requirement	Rule(s)	Mandatory	Optional	Extension
	88. The Credit Note Line Net Price MUST NOT be negative.	X		

Table 6: Core Business Requirements for Invoice Payment

Requirement	Rule(s)	Mandatory	Optional	Extension
An Invoice may contain information about the means of Payment.				
	89. A Payment Means Type Code for a Credit MUST have a Financial Institution Account Identifier.	X		
	90. A Payment Means MUST have a valid Payment Means Type Code.	X		
	91. A Payment Means Financial Institution Account Identifier MUST have Financial Institution Identifier.	X		
	92. A Payment Means for a card payment MUST state the last 4 to 6 digits of the Financial Institution Account Identifier.	X		
An Invoice may contain information at Invoice Level that enables the identification of the Payee, if different from the Supplier.				
	93. An Invoice MUST have a Payee Business Name if Payee Business Name is not the same as the Suppliers Business Name.	X		

8.5 Other Procurement Processes

The Procure to Pay processes of Buyers and Suppliers are inextricably linked. Figure 6 shows how Invoicing is one step in this broader process.

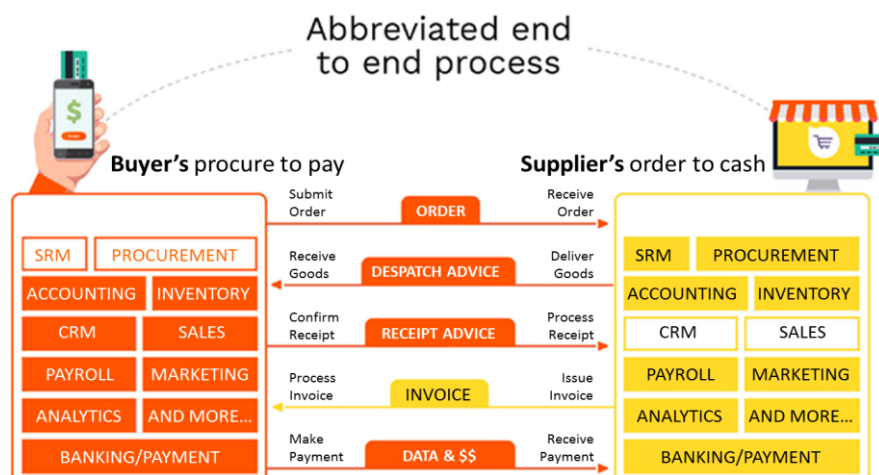


Figure 6: Abbreviated Procure to Pay Process

It is also recognised that Procure to Pay also forms only one part of the overall set of supply chain processes that includes the financial supply chain (dealing with banking/Payment) and the logistical supply chain (dealing with receipt and delivery of goods). Information flows into and out of these processes and so the eInvoice Semantic Model needs to complement these processes.

9 The eInvoicing Semantic Model (Normative)

9.1 Introduction

As noted earlier the eInvoicing Semantic Model uses the principle of a 'Core' set of Information Elements that business applications must be able to recognise if they appear in an eInvoice Document. Not all Core Information Elements will appear in all eInvoices, these are noted as optional. Core Information Elements noted as mandatory must appear in every eInvoice.

In addition, most Invoices will also require additional 'Extension' Information Elements to satisfy their business requirements (see Section 5.2). Figure 1 (p8) describes the relationship of these principles.

In the following sections the eInvoicing Semantic Model has been graphically expressed. The same structures are also described in tabular form in Annex B.

A key to reading the following diagrams is provided in Figure 7 below. (Note - The style used is based on the Class Diagram notation of the Unified Modeling Language Class Diagram notation (Object Management Group, 2015)).

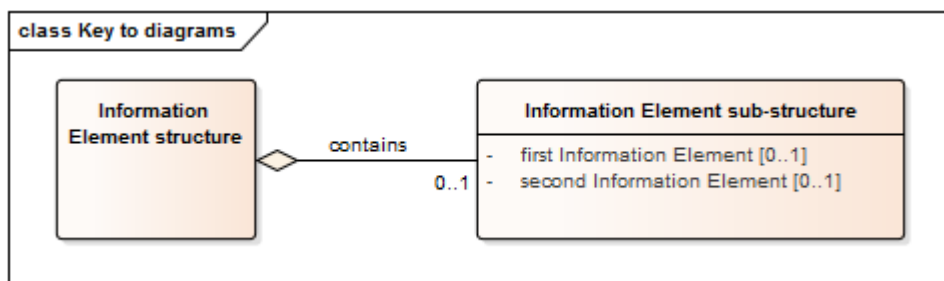


Figure 7: Key to Structural Diagrams

The occurrences of sub-structures and their Information Elements is defined using one of the following notations:

- 1..1 (or no occurrence stated) – means the Information Element is mandatory and must have only one occurrence;
- 1..n – means the Information Element is mandatory and may have more than one occurrence;
- 0..1 – means the Information Element is optional and if used may have only one occurrence; and
- 0..n – means the Information Element is optional and if used may have one or more occurrences.

9.2 Core Invoice Model

At the highest level an Invoice comprises of several substructures. These have been identified as:

- Document References;
 - Such as references to orders, delivery dockets, contracts, etc.
- Supplier details;
 - Such as identifiers, address and contact details for the Supplier.
- Buyer details;
 - Such as identifiers, address and contact details for the Buyer.
- Payment information;
 - Details of how payments may be made.
- Allowance and Charges;
 - Such as discounts, penalties, or additional charges.
- Monetary totals;

- Such as invoice totals and actual amounts payable.
- Tax totals;
 - Such as details of the GST breakdown.
- Invoice Line details; and
 - Details of individual transactions within the Invoice.
- Item details.
 - Such as identifiers, price and descriptions or the Items invoiced.

In a presentational format these can be demonstrated by the simplified example shown in Figure 8 below.

Tax Invoice					
Identifier = INV00001			Order reference = YourOrder0001		
Issue Date = 1 st Jan 2016					
Due Date = 1 st Feb 2016					
Supplier			Buyer		
Business Name = ABC Pty Ltd			Business Name = XYZ Pty Ltd		
Address = 12 Genge Street, Canberra			Address = 12 Hill Street, Sydney		
ABN =123456789					
Invoice Lines					
	Item	Price	Invoiced Quantity	Tax Total	Line Extension Amount
1	Widget	25	100	250	2750
2	Widget screws	1	100	10	110
Invoice Currency = Australian Dollar					
Total Amount = 2860					
Tax Total = 260					
Payment Means = Account 123-365 383837772					

Figure 8: Simplified Presentation of a Sample Core eInvoice Document

As noted above, detailed descriptions of the Information Elements are provided in tabular form in Annex B and as diagrams throughout the remainder of this section.

Figure 9 (below) illustrates the overall structure of the Invoice and its sub-structures as a high level view. By starting at the box on the left hand side, labelled 'Invoice', it is possible to identify the substructures contained in the Core of an Invoice.

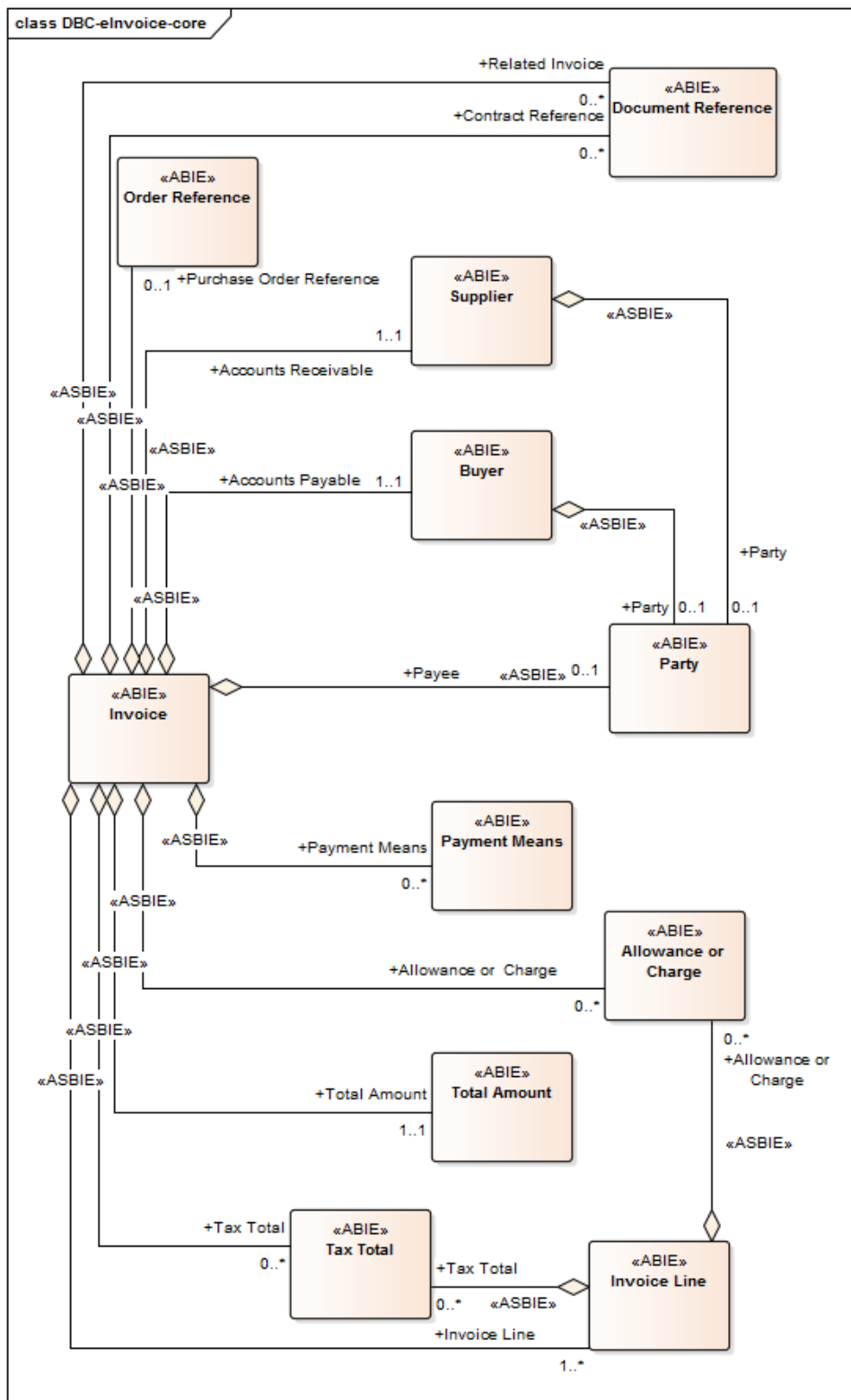


Figure9: Overall Invoice Document Structure

As a guide it can be noted from this diagram that only the Accounts Receivable (Supplier), Accounts Payable (Buyer), Total Amount and Invoice Lines are Mandatory for the Core Invoice. In fact, the complete set of mandatory Information Elements within the Core eInvoice Semantic model are:

- Invoice. Identifier
- Invoice. Issue Date
- Invoice. Type Code
- Accounts Receivable (Accounting. Supplier Party)
- Accounts Payable (Accounting. Buyer Party)
- Total Amount. Payable Amount
- Invoice Line. Identifier
- Invoice Line. Line Extension Amount
- Invoice Line. Item

All other Information Elements within the eInvoice Semantic model are optional.

The remainder of this section breaks down each of the Core Invoice sub-structures into their basic Information Elements together with any associations to other sub-structures.

9.2.1 Invoice Structure

The Invoice structure is the top level (often referred to as the header) of the Invoice. The diagram below describes the Invoice level Information Elements and any associations not covered by subsequent diagrams.

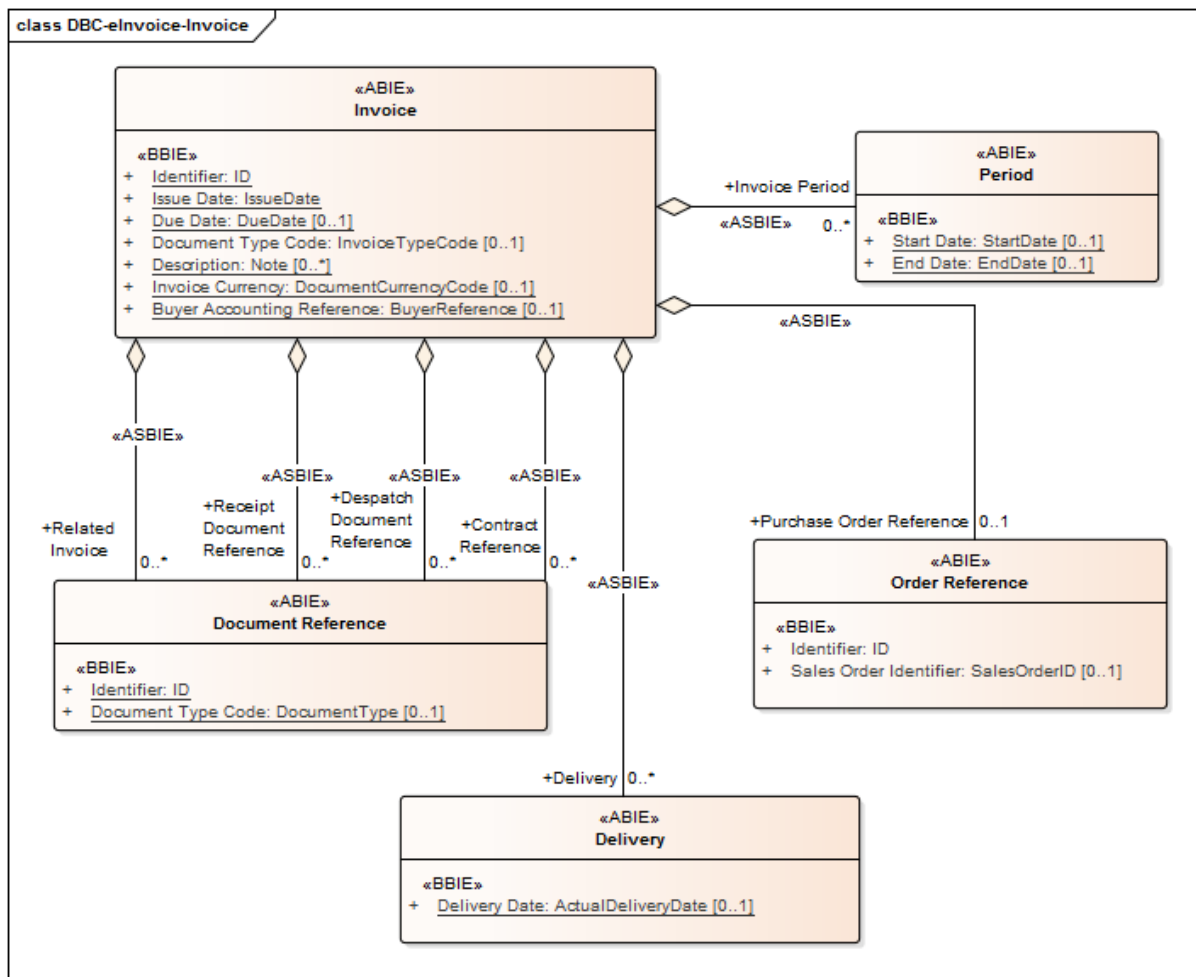


Figure 10: Invoice Level Structures

9.2.2 Document Reference Structure

A Document Reference is a structure used to define a Reference to another Document.

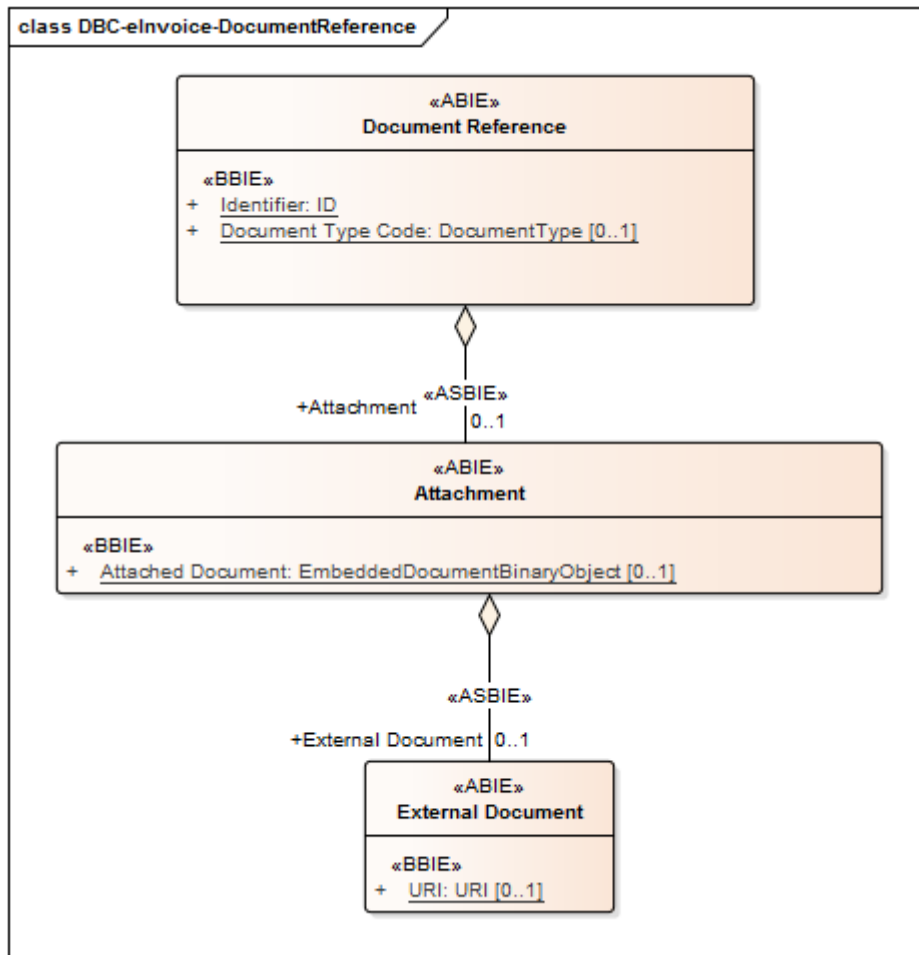


Figure 11: Document Reference Structure

The structure supports both Documents embedded or included with the Invoice and those referred to at an external Location.

9.2.3 Supplier Structure

In the eInvoicing Semantic Model the Supplier is performing the role of Accounts Receivable who claims the Payment and is responsible for resolving billing issues and arranging settlement.

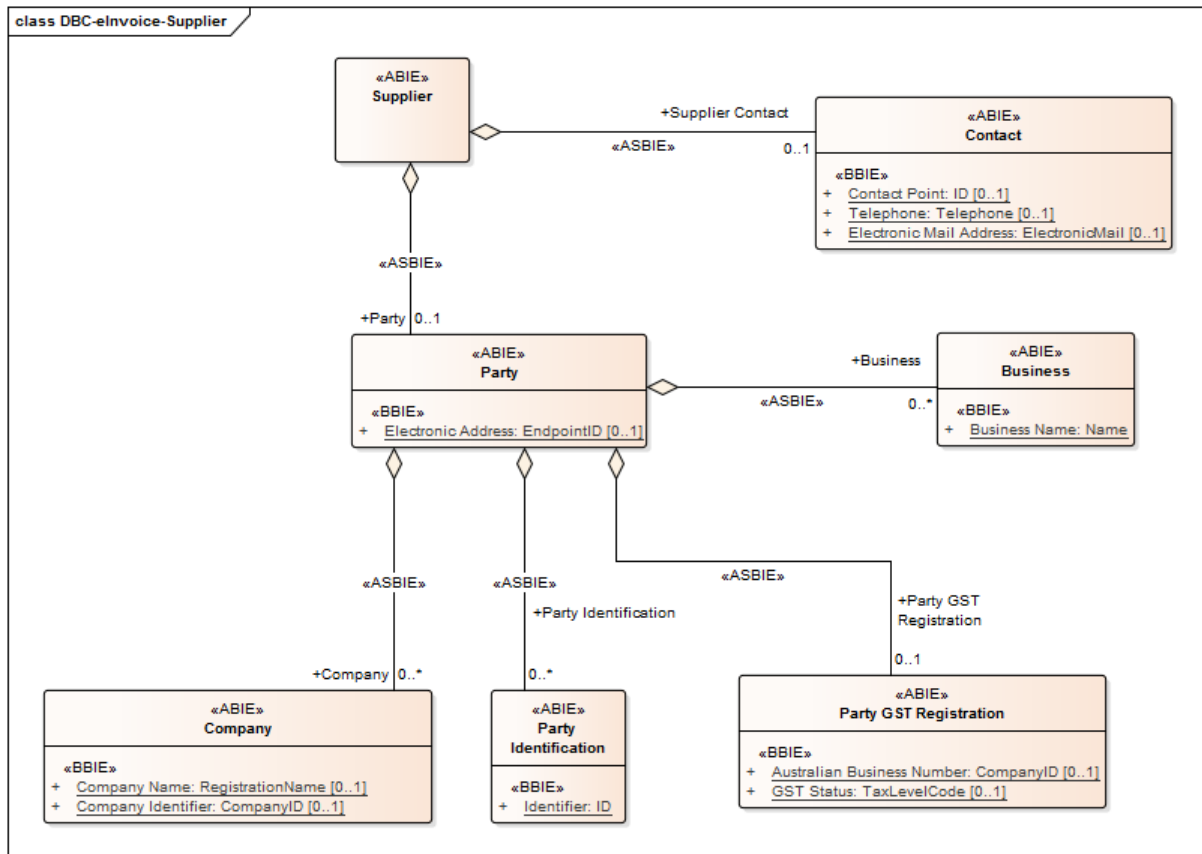


Figure 12: Supplier Structure

9.2.4 Buyer Structure

Accounts Payable is the role performed by a Buyer Party when making settlement relating to a purchase and resolving billing issues.

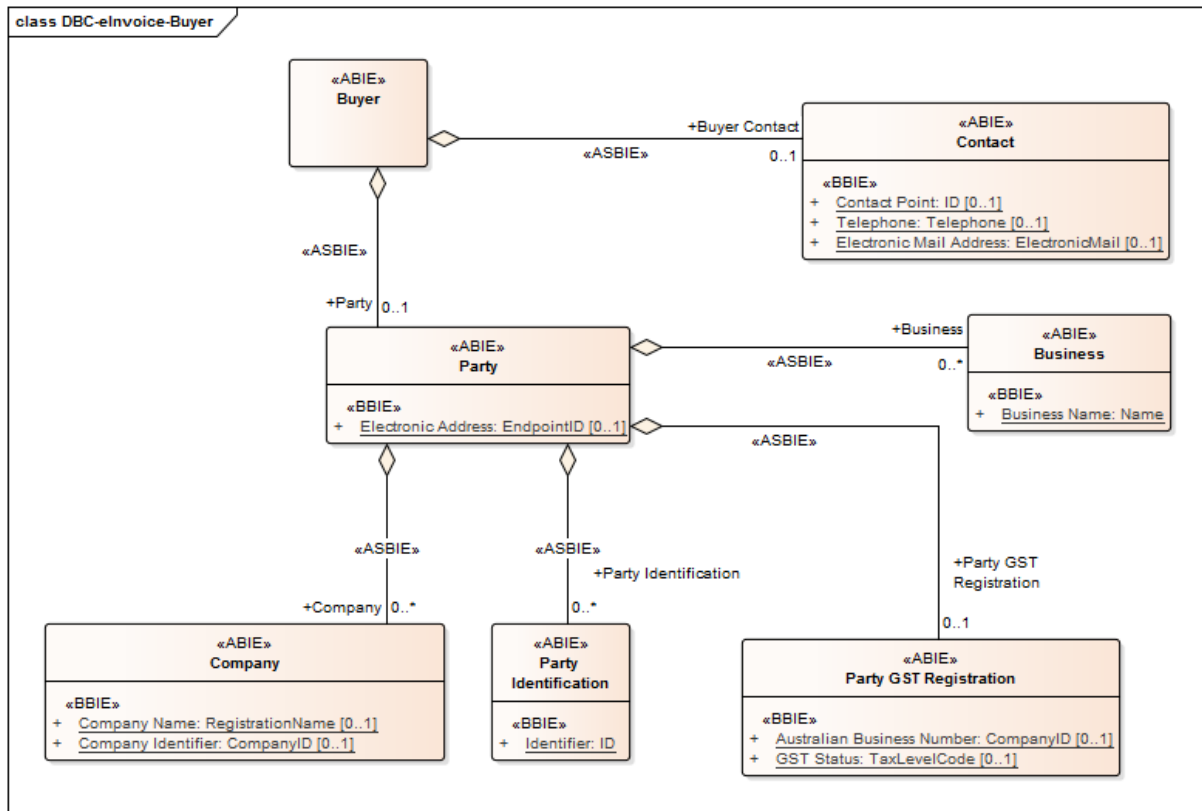


Figure 13: Buyer Structure

9.2.5 Party Structure

A Party is an individual, a group or an organisation, business, company, authority, agency or any trading entity having a role in a Business Process. Both Buyer and Supplier share the same Party structures.

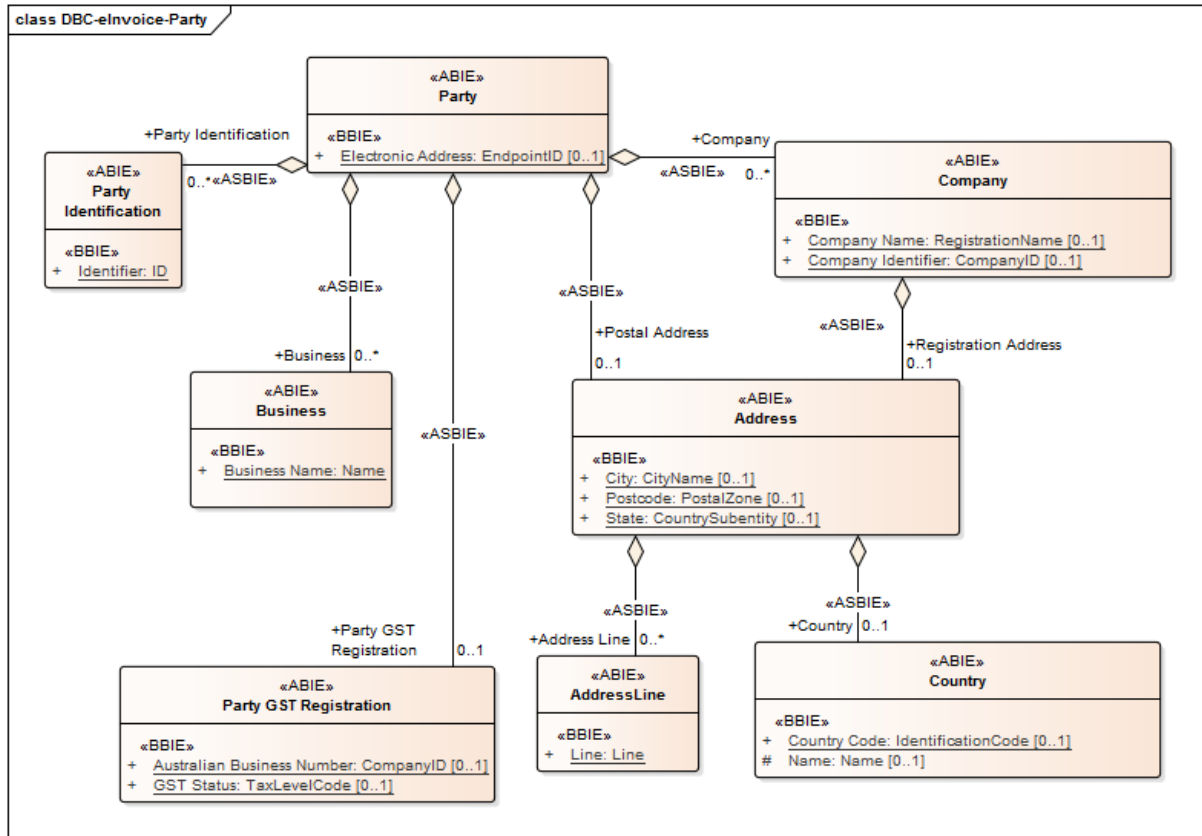


Figure 14: Party Structure

9.2.6 Payment Means Structure

The Payment Means is the structure used to describe how Payments are to be made.

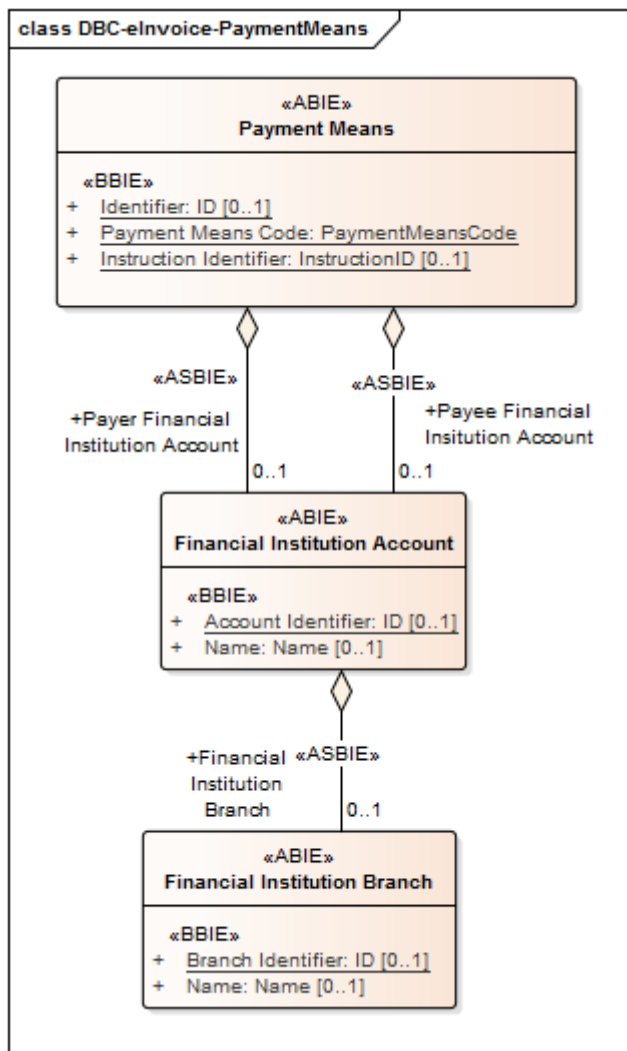


Figure 15: Payment Means Structure

9.2.7 Allowance and Charges Structure

Both Allowances (e.g. discounts) and Charges (e.g. penalties) are described by a common structure with an indicator to say whether this is a Charge or an Allowance.

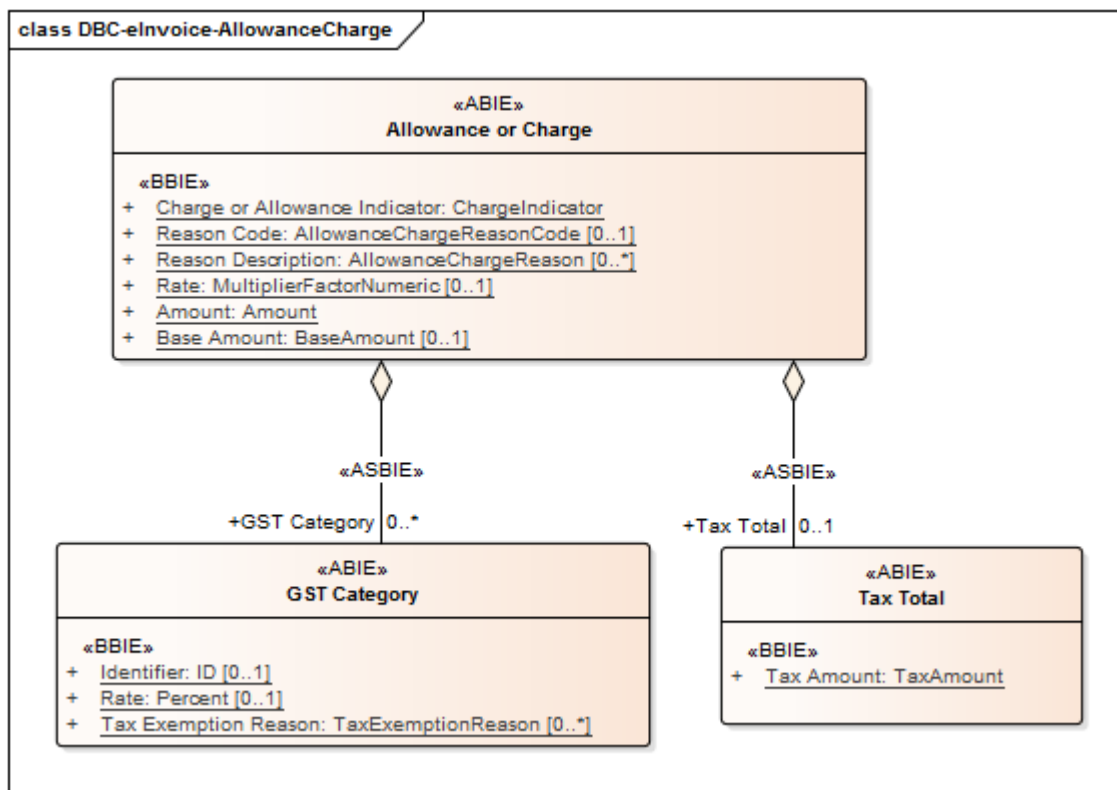


Figure 16: Allowance and Charges Structure

9.2.8 Monetary Total Structure

The overall Amount to be paid is described using a monetary total structure.

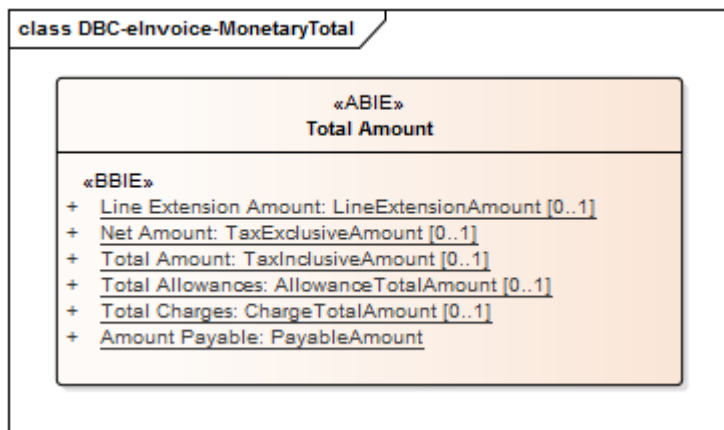


Figure 17: Monetary Total Structure

9.2.9 Tax Total Structure

The overall Taxes involved are described using the Tax Total structure.

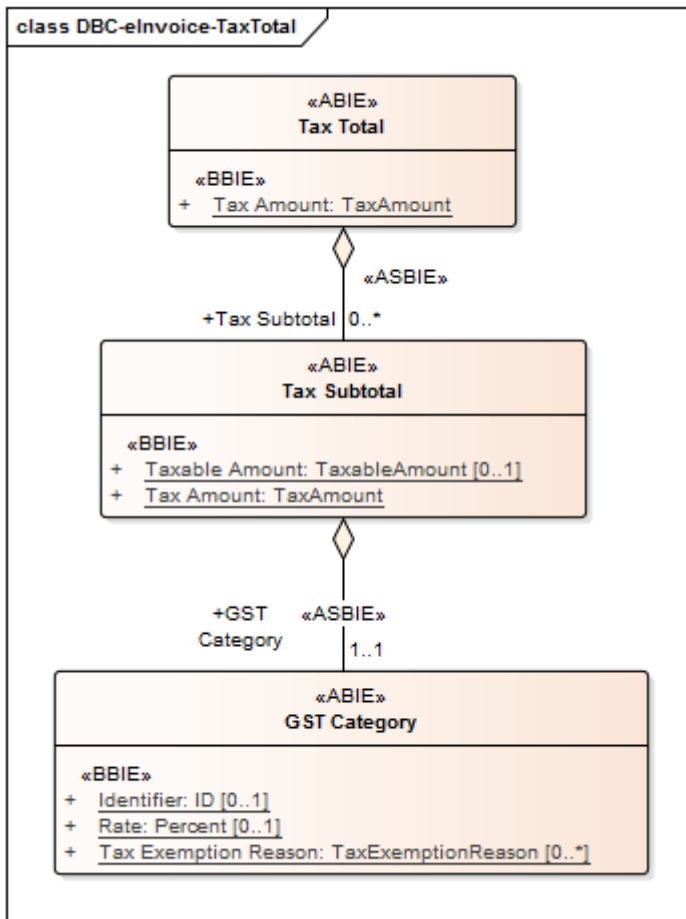


Figure 18: Tax Total Structure

Multiple Taxes (for example, additional GST Categories) and their subtotals are supported.

9.2.10 Invoice Line Structure

Charges for individual Items or transactions are often described as 'lines' on an Invoice. The Invoice Line structure describes the attributes of an individual invoiced Item.

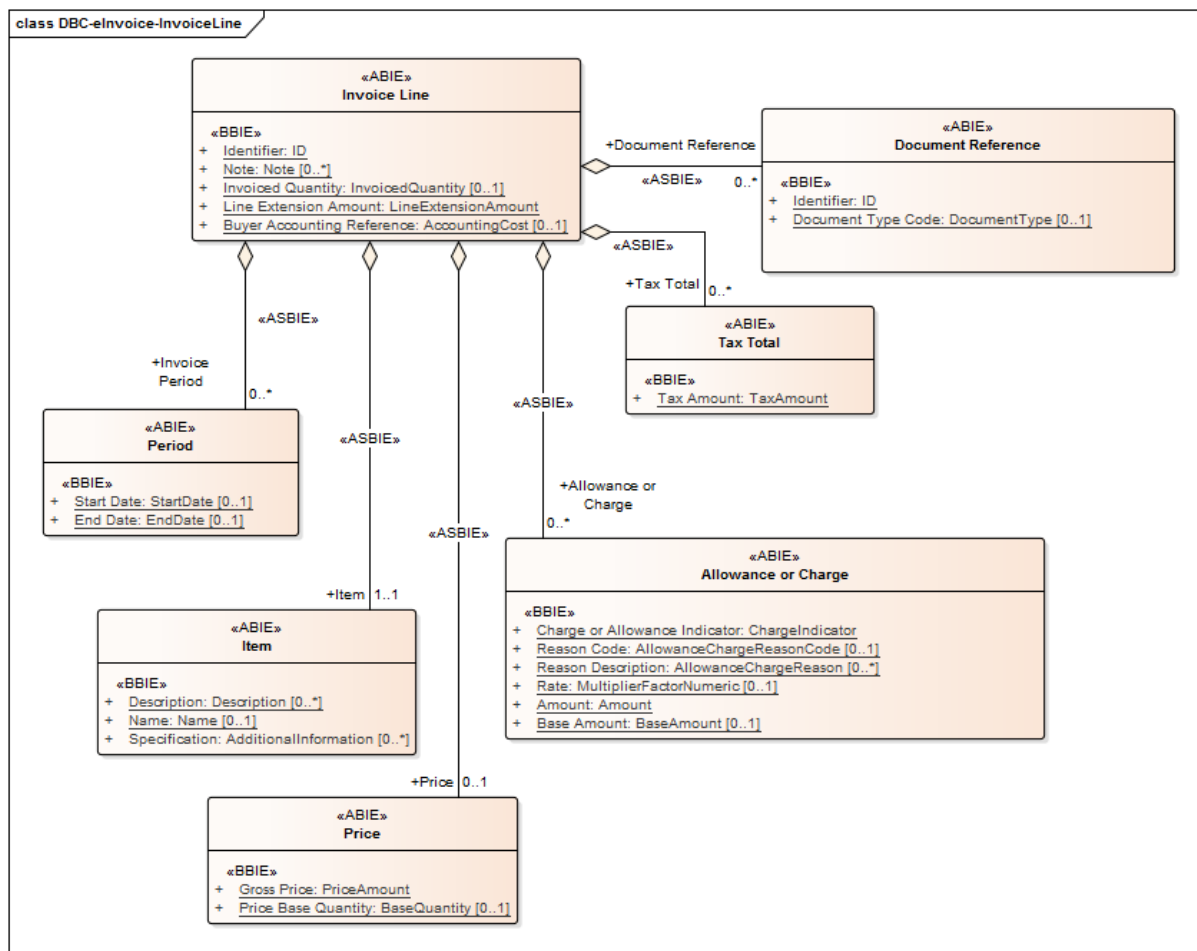


Figure 19: Invoice Line Structure

9.2.11 Item Structure

The Item structure describes an Item of trade. It includes a generic Name and Description applicable to all examples of the Item together with various methods of uniquely identifying the Item.

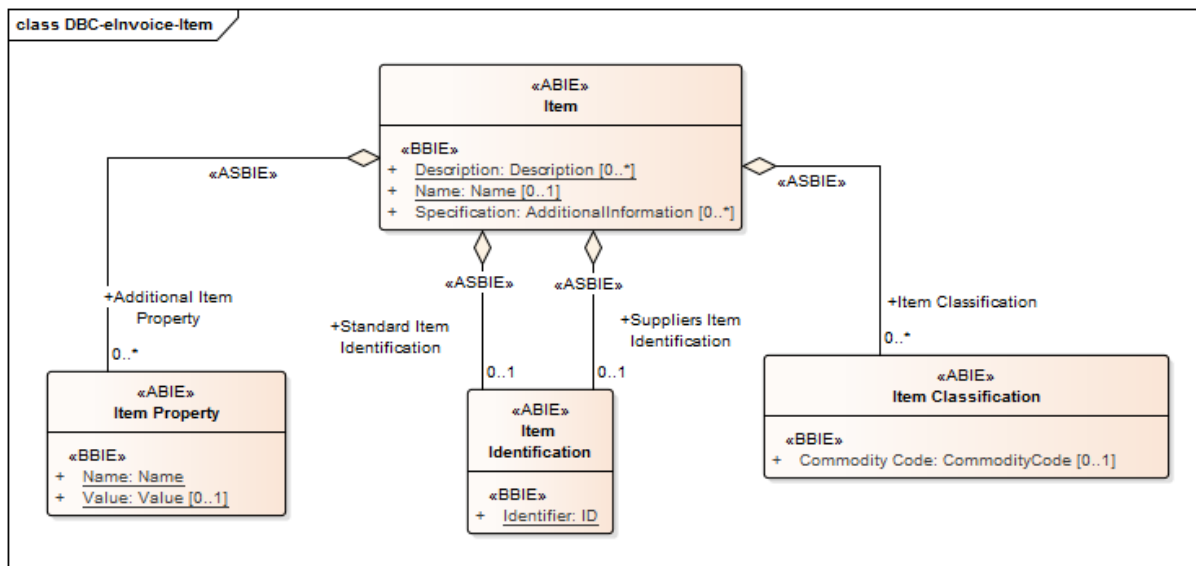


Figure 20: Item Structure

Items can be identified and described by various (optional) Item Identification schemes and Properties, and classified using various (optional) Item Classification schemes.

9.3 Credit Note Model

The Credit Note model has the same structure as the Invoice model with the Document Type Code used to indicate its function.

9.4 Response Model

If the Business Process requires a response to acknowledge the receipt of an eInvoice then a Response Document with the following structure is returned to the sending Party by the recipient. Recipients will typically be the Buyer (for Invoices and Credit Notes) or the Supplier (for Recipient Created Tax Invoices).

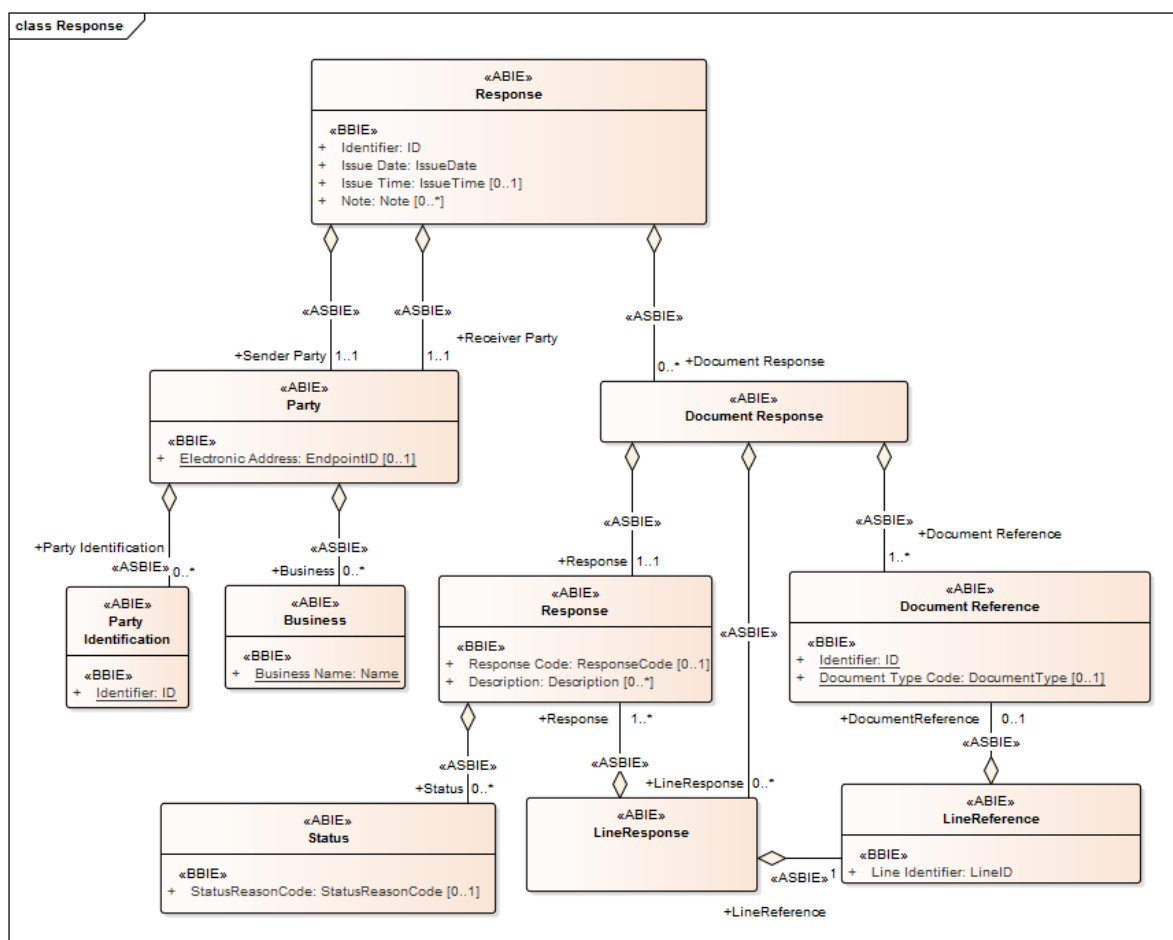


Figure 21: Response Document Structure

ANNEX A: Common Business Scenarios

The following section identifies some common scenarios that are supported by the eInvoicing Semantic Model.

Invoicing

1. Supplier issues Tax Invoice – Amount less than \$1,000.
2. Supplier issues Tax Invoice – Amount greater than \$1,000.
3. Supplier issues Tax Invoice – mix of Taxable and non-Taxable supplies.
4. Supplier issues Tax Invoice – all for non-Taxable supply.

Recipient Created Tax Invoicing

1. Buyer issues Recipient Created Tax Invoice (RCTI – Taxable supply).
2. Buyer issues RCTI – including partial Taxable supply.
3. Buyer issues zero dollar amount RCTI (as delivery docket for pooling of commodity).

Adjustment Invoicing

1. Supplier issues Credit Note for Tax Invoice – Buyer has not yet made Payment.
2. Buyer issues Credit Note for Recipient Created Tax Invoice – debit.
3. Supplier issues Credit Note for Tax Invoice – part payment received.
4. Supplier issues Credit Note allocated to several different Tax Invoices.
5. Supplier issues Adjustment Note for Tax Invoice – credit, awaiting payment.
6. Supplier issues Adjustment Note allocated to several different Tax Invoices.

ANNEX B: eInvoicing Semantic Model in a Tabular Format

The following pages describe the elements within the eInvoicing Semantic Model in tabular form. These have been mapped to the UBL 2.1 Data Model and the equivalent terms mapped. (Note – The methodology and terminology used is taken from CCTS (UN/CEFACT, 2003)).

The rows with a pink background denote aggregations of Information Elements (ABIEs).

The rows with a white background denote basic Information Elements (BBIEs).

The rows with a green background denote associations between aggregations of Information Elements (ASBIEs).

The occurrence (cardinality) of these Information Elements is given as one of the following:

- 1 – means the Information Element is mandatory and must have only one occurrence;
- 1..n – means the Information Element is mandatory and may have more than one occurrence.
- 0..1 – means the Information Element is optional and if used may have only one occurrence; or
- 0..n – means the Information Element is optional and if used may have one or more occurrences;

Legend:

	Individual Items
	Aggregate / Classes
	Associations
	Headings

Information Element	UBL Name	Card	Component Type	Definition	Examples
Core Invoice	Invoice		ABIE	A document used to request payment.	
Identifier	ID	1	BBIE	An identifier for this document, assigned by the sender. An invoice identifier enables positive referencing the document instance for various purposes including referencing between documents that are part of the same process.	
Copy Indicator	CopyIndicator	0..1	BBIE	Indicates whether this document is a copy (true) or not (false). A copy indicator is used as part of duplicate detection detailing that this is a copy of a document previously and not a duplicate.	FALSE
Issue Date	IssueDate	1	BBIE	The date, assigned by the sender, on which this document was issued. The date on which the Invoice was created.	2016-11-31
Due Date	DueDate	0..1	BBIE	The date on which Invoice is due.	2016-12-31
Document Type Code	InvoiceTypeCode	1	BBIE	A code signifying the type of the Invoice. The code used must be easily accessible and converted to English in accordance with terminology required by GST legislation.	388 = Tax Invoice

Information Element	UBL Name	Card	Component Type	Definition	Examples
Description	Note	0..n	BBIE	Free-form text pertinent to this document, conveying information that is not contained explicitly in other structures. This can be notes or other similar information for which the invoice specification does not contain suitable qualified elements such as the terms of agreement for an RCTI.	
Invoice Currency	DocumentCurrency Code	0..1	BBIE	A code signifying the default currency for this document. For domestic Invoicing this will be Australian Dollars in the majority of cases, but it is possible to use other currencies.	AUD
Buyer Accounting Reference	BuyerReference	0..1	BBIE	A reference provided by the buyer used for internal routing of the document. Identifies where the Buyer may allocate the relevant transaction in their financial reports.	
Invoice Period	InvoicePeriod	0..n	ASBIE	A period to which the Invoice applies.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Purchase Order Reference	OrderReference	0..1	ASBIE	A reference to the Order with which this Invoice is associated. An Order is a Document used to order Items issued by the Buyer. To facilitate Invoice matching an Invoice may contain a reference to the Order that the invoice relates to. An invoice may only reference one Order.	
Despatch Document Reference	DespatchDocumentReference	0..n	ASBIE	A reference to a Despatch Advice associated with this document. A Document used to describe the sending of a delivery of Items.	
Receipt Document Reference	ReceiptDocumentReference	0..n	ASBIE	A reference to a Receipt Advice associated with this document. A Document used to describe the acceptance of delivery of Items.	
Contract Reference	ContractDocumentReference	0..n	ASBIE	A reference to a contract associated with this document. A business or trading agreement.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Related Invoice	AdditionalDocumentReference	0..n	ASBIE	A reference to an additional document associated with this document. A previously issued Invoice.	
Accounts Receivable	AccountingSupplierParty	1	ASBIE	The accounting supplier party. The Party responsible for providing goods or services to the Buyer.	
Accounts Payable	AccountingCustomerParty	1	ASBIE	The accounting customer party. The Party that procures goods or services.	
Payee	PayeeParty	0..1	ASBIE	The payee. The Party that receives the Payment.	
Delivery	Delivery	0..n	ASBIE	A delivery associated with this document.	
Payment Means	PaymentMeans	0..n	ASBIE	Expected means of payment.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Allowance or Charge	AllowanceCharge	0..n	ASBIE	A discount or charge that applies to a price component.	
Tax Total	TaxTotal	0..n	ASBIE	The total amount of a specific type of tax.	
Total Amount	LegalMonetaryTotal	1	ASBIE	The total amount payable on the Invoice, including Allowances, Charges, and Taxes.	
Invoice Line	InvoiceLine	1..n	ASBIE	A line describing an invoice item.	
Response	ApplicationResponse		ABIE	A document to indicate the application's response to a transaction. This may be a business response initiated by a user or a technical response sent automatically by an application.	
Identifier	ID	1	BBIE	An identifier for this document, assigned by the sender.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Issue Date	IssueDate	1	BBIE	The date, assigned by the sender, on which this document was issued.	2016-12-31
Issue Time	IssueTime	0..1	BBIE	The time, assigned by the sender, at which this document was issued.	09:30:47+05:00
Note	Note	0..n	BBIE	Free-form text pertinent to this document, conveying information that is not contained explicitly in other structures.	
Sender Party	SenderParty	1	ASBIE	The party sending this document.	
Receiver Party	ReceiverParty	1	ASBIE	The party receiving this document.	
Document Response	DocumentResponse	0..n	ASBIE	A response to a document.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Address	Address		ABIE	A class to define common information related to an address.	
City	CityName	0..1	BBIE	The name of a city, town, or village.	Adelaide
Postcode	PostalZone	0..1	BBIE	The postal identifier for this address according to the relevant national postal service, such as a ZIP code or Post Code.	5367
State	CountrySubentity	0..1	BBIE	The political or administrative division of a country in which this address is located, such as the name of its county, province, or state, expressed as text.	South Australia
Address Line	AddressLine	0..n	ASBIE	An unstructured address line.	
Country	Country	0..1	ASBIE	The country in which this address is situated.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Address Line	AddressLine		ABIE	A class to define an unstructured address line.	
Line	Line	1	BBIE	An address line expressed as unstructured text.	123 Standard Chartered Tower
Allowance or Charge	AllowanceCharge		ABIE	A class to describe information about a charge or discount as applied to a price component.	
Allowance or Charge Indicator	ChargeIndicator	1	BBIE	An indicator that this AllowanceCharge describes a charge (true) or a discount (false).	
Reason Code	AllowanceChargeReasonCode	0..1	BBIE	A mutually agreed code signifying the reason for this allowance or charge.	
Reason Description	AllowanceChargeReason	0..n	BBIE	The reason for this allowance or charge.	
Rate	MultiplierFactorNumeric	0..1	BBIE	A number by which the base amount is multiplied to calculate the actual amount of this allowance or charge.	0.20

Information Element	UBL Name	Card	Component Type	Definition	Examples
Amount	Amount	1	BBIE	The monetary amount of this allowance or charge to be applied.	35.23
Base Amount	BaseAmount	0..1	BBIE	The monetary amount to which the multiplier factor is applied in calculating the amount of this allowance or charge.	
GST Category	TaxCategory	0..n	ASBIE	A tax category applicable to this allowance or charge.	
Tax Total	TaxTotal	0..1	ASBIE	The total of all the taxes applicable to this allowance or charge.	
Attachment	Attachment		ABIE	A class to describe an attached document. An attachment can refer to an external document or be included with the document being exchanged.	
Attached Document	EmbeddedDocumentBinaryObject	0..1	BBIE	A binary large object containing an attached document.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
External Document	ExternalReference	0..1	ASBIE	A reference to an attached document that is external to the document(s) being exchanged.	
Financial Institution Identifier	Branch		ABIE	A class to describe a branch or a division of an organization.	
Identifier	ID	0..1	BBIE	An identifier for this branch or division of an organization (BSB).	123-899
Name	Name	0..1	BBIE	The name of this branch or division of an organization.	
Item Classification	CommodityClassification		ABIE	A class to describe the classification of a commodity.	
Item Classification Code	ItemClassificationCode	0..1	BBIE	A code signifying the trade classification of the commodity.	3440234
Contact	Contact		ABIE	A class to describe a contactable person or department in an organization.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Contact Point	ID	0..1	BBIE	An identifier for this contact.	Receivals Clerk
Telephone	Telephone	0..1	BBIE	The primary telephone number of this contact.	
Electronic Mail Address	ElectronicMail	0..1	BBIE	The primary email address of this contact.	
Country	Country		ABIE	A class to describe a country.	
Country Code	IdentificationCode	0..1	BBIE	A code signifying this country.	AU
Buyer	CustomerParty		ABIE	A class to describe a customer party.	
Party	Party	0..1	ASBIE	The customer party itself.	
Buyer Contact	BuyerContact	0..1	ASBIE	A customer contact for purchasing.	
Delivery Address	Delivery		ABIE	A class to describe a delivery.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Delivery Date	ActualDeliveryDate	0..1	BBIE	The actual date of delivery.	
Delivery Address	DeliveryAddress	0..1	ASBIE	The delivery address.	
Delivery Party	DeliveryParty	0..1	ASBIE	The party to whom the goods are delivered.	
Reference	DocumentReference		ABIE	A class to define a reference to a document.	
Identifier	ID	1	BBIE	An identifier for the referenced document.	PO-001 3333-44-123
Document Type Code	DocumentType	0..1	BBIE	The type of document being referenced, expressed as text.	
Attachment	Attachment	0..1	ASBIE	The referenced document as an attachment to the document from which it is referenced.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Document Response	DocumentResponse		ABIE	A class to describe an application-level response to a document.	
Response	Response	1	ASBIE	A response to the document as a whole.	
Document Reference	DocumentReference	1..n	ASBIE	A referenced document.	
Line Response	LineResponse	0..n	ASBIE	A response to a particular line in the document.	
External Document	ExternalReference		ABIE	A class to describe an external object, such as a document stored at a remote location.	
URI	URI	0..1	BBIE	The Uniform Resource Identifier (URI) that identifies the external object as an Internet resource.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Financial Institution Account	FinancialAccount		ABIE	A class to describe a financial account.	
Account Identifier	ID	0..1	BBIE	The identifier for this financial account; the bank account number.	1221876674
Financial Institution Identifier	FinancialInstitution Branch	0..1	ASBIE	The branch of the financial institution associated with this financial account.	
Invoice Line	InvoiceLine		ABIE	A class to define a line in an Invoice.	
Identifier	ID	1	BBIE	An identifier for this invoice line.	1
Note	Note	0..n	BBIE	Free-form text conveying information that is not contained explicitly in other structures.	
Invoiced Quantity	InvoicedQuantity	0..1	BBIE	The quantity (of items) on this invoice line.	100
Line Extension Amount	LineExtensionAmount	1	BBIE	The total amount for this invoice line, including allowance charges but net of taxes.	1000.00

Information Element	UBL Name	Card	Component Type	Definition	Examples
Buyer Accounting Reference	AccountingCost	0..1	BBIE	The buyer's accounting cost centre for this invoice line, expressed as text.	
Invoice Period	InvoicePeriod	0..n	ASBIE	An invoice period to which this invoice line applies.	
Document Reference	DocumentReference	0..n	ASBIE	A reference to a document associated with this invoice line.	
Allowance or Charge	AllowanceCharge	0..n	ASBIE	An allowance or charge associated with this invoice line.	
Tax Total	TaxTotal	0..n	ASBIE	A total amount of taxes of a particular kind applicable to this invoice line.	
Item	Item	1	ASBIE	The item associated with this invoice line.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Price	Price	0..1	ASBIE	The price of the item associated with this invoice line.	
Item	Item		ABIE	A class to describe an item of trade. It includes a generic description applicable to all examples of the item together with optional subsidiary descriptions of any number of actual instances of the type.	
Description	Description	0..n	BBIE	Text describing this item.	
Name	Name	0..1	BBIE	A short name optionally given to this item, such as a name from a catalogue, as distinct from a description.	WIDGET
Specification	AdditionalInformation	0..n	BBIE	Further details regarding this item (e.g., the URL of a relevant web page).	
Suppliers Item Identification	SellersItemIdentification	0..1	ASBIE	Identifying information for this item, assigned by the seller.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Standard Item Identification	StandardItemIdentification	0..1	ASBIE	Identifying information for this item, assigned according to a standard system.	
Item Classification	CommodityClassification	0..n	ASBIE	A classification of this item according to a specific system for classifying commodities.	
Additional Item Property	AdditionalItemProperty	0..n	ASBIE	An additional property of this item.	
Item Identification	ItemIdentification		ABIE	A class for assigning identifying information to an item.	
Identifier	ID	1	BBIE	An identifier for the item.	CUST001 3333-44-123
Item Property	ItemProperty		ABIE	A class to describe a specific property of an item.	
Name	Name	1	BBIE	The name of this item property.	Energy Rating , Collar Size , Fat Content
Value	Value	0..1	BBIE	The value of this item property, expressed as text.	100 watts , 15 European , 20% +/- 5%

Information Element	UBL Name	Card	Component Type	Definition	Examples
Line Reference	LineReference		ABIE	A class to define a reference to a line in a document.	
Line Identifier	LineID	1	BBIE	Identifies the referenced line in the document.	1
Document Reference	DocumentReference	0..1	ASBIE	A reference to the document containing the referenced line.	
Line Response	LineResponse		ABIE	A class to describe responses to a line in a document.	
Line Reference	LineReference	1	ASBIE	A reference to the line being responded to.	
Response	Response	1..n	ASBIE	A response to the referenced line.	
Total Amount	MonetaryTotal		ABIE	A class to define a monetary total.	
Line Extension Amount	LineExtensionAmount	0..1	BBIE	The monetary amount of an extended transaction line, net of tax and settlement discounts, but inclusive of any applicable rounding amount.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Net Amount	TaxExclusiveAmount	0..1	BBIE	The monetary amount of an extended transaction line, exclusive of taxes.	
Total Amount	TaxInclusiveAmount	0..1	BBIE	The monetary amount including taxes; the sum of payable amount and prepaid amount.	
Total Allowances	AllowanceTotalAmount	0..1	BBIE	The total monetary amount of all allowances.	
Total Charges	ChargeTotalAmount	0..1	BBIE	The total monetary amount of all charges.	
Payable Amount	PayableAmount	1	BBIE	The amount of the monetary total to be paid.	
Purchase Order Reference	OrderReference		ABIE	A class to define a reference to an Order.	
Identifier	ID	1	BBIE	An identifier for this order reference, assigned by the buyer.	PO-001 3333-44-123

Information Element	UBL Name	Card	Component Type	Definition	Examples
Sales Order Identifier	SalesOrderID	0..1	BBIE	An identifier for this order reference, assigned by the seller.	
Party	Party		ABIE	A class to describe an organization, sub-organization, or individual fulfilling a role in a business process.	
Electronic Address	EndpointID	0..1	BBIE	An identifier for the end point of the routing service (e.g., EAN Location Number, GLN).	5790002221134
Party Identification	PartyIdentification	0..n	ASBIE	An identifier for this party.	
Business Name	PartyName	0..n	ASBIE	A name for this party.	
Address	PostalAddress	0..1	ASBIE	The party's postal address.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Party GST Registration	PartyTaxScheme	0..n	ASBIE	A tax scheme applying to this party.	
Party Legal Entity	PartyLegalEntity	0..n	ASBIE	A description of this party as a legal entity.	
Party Identification	PartyIdentification		ABIE	A class to define an identifier for a party.	
Identifier	ID	1	BBIE	An identifier for the party.	123567899
Company	PartyLegalEntity		ABIE	A class to describe a party as a legal entity.	
Company Name	RegistrationName	0..1	BBIE	The name of the party as registered with the relevant legal authority.	Microsoft Corporation
Company Identifier	CompanyID	0..1	BBIE	An identifier for the party as registered within a company registration scheme.	3556625
Business Name	PartyName		ABIE	A class for defining the name of a party.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Name	Name	1	BBIE	The name of the party.	Microsoft
Party GST Registration	PartyTaxScheme		ABIE	A class to describe a taxation scheme applying to a party.	
Australian Business Number	CompanyID	0..1	BBIE	An identifier for the party assigned for tax purposes by the taxation authority.	355662445
GST Status	TaxLevelCode	0..1	BBIE	A code signifying the tax level applicable to the party within this taxation scheme.	
Tax Scheme	TaxScheme	1	ASBIE	The taxation scheme applicable to the party.	
Payment Means	PaymentMeans		ABIE	A class to describe a means of payment.	
Identifier	ID	0..1	BBIE	An identifier for this means of payment.	
Payment Means Code	PaymentMeansCode	1	BBIE	A code signifying the type of this means of payment.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Instruction Identifier	InstructionID	0..1	BBIE	An identifier for the payment instruction.	
Payer Financial Institution Account	PayerFinancialAccount	0..1	ASBIE	The payer's financial account.	
Payee Financial Institution Account	PayeeFinancialAccount	0..1	ASBIE	The payee's financial account.	
Period	Period		ABIE	A class to describe a period of time.	
Start Date	StartDate	0..1	BBIE	The date on which this period begins.	
End Date	EndDate	0..1	BBIE	The date on which this period ends.	
Price	Price		ABIE	A class to describe a price, expressed in a data structure containing multiple properties.	
Gross Price	PriceAmount	1	BBIE	The amount of the price.	23.45
Price Base Quantity	BaseQuantity	0..1	BBIE	The quantity at which this price applies.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Response	Response		ABIE	A class to describe an application-level response to a document.	
Response Code	ResponseCode	0..1	BBIE	A code signifying the type of response.	
Description	Description	0..n	BBIE	Text describing this response.	
Status	Status	0..n	ASBIE	A status report associated with this response.	
Status	Status		ABIE	A class to describe the condition or position of an object.	
Reason Code	StatusReasonCode	0..1	BBIE	The reason for this status condition or position, expressed as a code.	
Supplier	SupplierParty		ABIE	A class to describe a supplier party.	
Party	Party	0..1	ASBIE	The supplier party itself.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Supplier Contact	SellerContact	0..1	ASBIE	The primary contact for this supplier party.	
GST Category	TaxCategory		ABIE	A class to describe one of the tax categories within a taxation scheme (e.g., High Rate VAT, Low Rate VAT).	
Identifier	ID	0..1	BBIE	An identifier for this tax category.	GST
Percent	Percent	0..1	BBIE	The tax rate for this category, expressed as a percentage.	
Tax Exemption Reason	TaxExemptionReason	0..n	BBIE	The reason for tax being exempted, expressed as text.	
Tax Scheme	TaxScheme	1	ASBIE	The taxation scheme within which this tax category is defined.	
Tax Scheme	TaxScheme		ABIE	A class to describe a taxation scheme (e.g., VAT, State tax, County tax).	
Identifier	ID	0..1	BBIE	An identifier for this taxation scheme.	GST

Information Element	UBL Name	Card	Component Type	Definition	Examples
Tax Subtotal	TaxSubtotal		ABIE	A class to define the subtotal for a particular tax category within a particular taxation scheme, such as standard rate within VAT.	
Taxable Amount	TaxableAmount	0..1	BBIE	The net amount to which the tax percent (rate) is applied to calculate the tax amount.	
Tax Amount	TaxAmount	1	BBIE	The amount of this tax subtotal.	
GST Category	TaxCategory	1	ASBIE	The tax category applicable to this subtotal.	
Tax Total	TaxTotal		ABIE	A class to describe the total tax for a particular taxation scheme.	
Tax Total Amount	TaxAmount	1	BBIE	The total tax amount for a particular taxation scheme, e.g., VAT; the sum of the tax subtotals for each tax category within the taxation scheme.	

Information Element	UBL Name	Card	Component Type	Definition	Examples
Tax Subtotal	TaxSubtotal	0..n	ASBIE	One of the subtotals the sum of which equals the total tax amount for a particular taxation scheme.	

References

1. Australian Government, 1999. *A New Tax System (Goods and Services Tax Administration) Act 1999*. [Online]
Available at: http://www.austlii.edu.au/au/legis/cth/consol_act/antsasta1999402/s195.1.html
2. Australian Government, 2013. *Goods and Services Tax Ruling 2013/1: Tax Invoices*. [Online]
Available at:
<https://www.ato.gov.au/law/view/pdf?DocID=GST%2FGSTR20131%2FNAT%2FATO%2F00001&filename=law/view/pdf/pbr/gstr2013-001.pdf&PiT=99991231235958>
3. Australian Securities and Investment Commission, 2016. *The difference between a trading name, business name and company name*. [Online]
Available at: <http://asic.gov.au/for-business/registering-a-business-name/before-you-start/trading-names/the-difference-between-a-trading-name-business-name-and-company-name/>
4. Bradner, S., 1997. *Key words for use in RFCs to Indicate Requirement Levels*. [Online]
Available at: <https://www.ietf.org/rfc/rfc2119.txt>
5. CEN Technical Committee 434, 2016. *Electronic invoicing - Semantic Data Model of the Core Elements of an Electronic Invoice*. [Online]
Available at:
http://standards.cen.eu/dyn/www/f?p=204:110:0::::FSP_PROJECT,FSP_LANG_ID:60602,25&cs=1EDAF8ACA5277C7EF32DC6EFAEF077D41
6. Dierks, T. & Rescorla, E., 2008. *The Transport Layer Security (TLS) Protocol Version 1.2*. [Online]
Available at: <https://tools.ietf.org/html/rfc5246>
7. Digital Business Council, 2016a. *Digital Capability Locator Implementation Guide*. Canberra: Digital Business Council.
8. Digital Business Council, 2016b. *Digital Capability Publisher Implementation Guide*. Canberra: Digital Business Council.
9. Leach, P., Mealling, M. & Salz, R., 2005. *A Universally Unique Identifier (UUID) URN Namespace*. [Online]
Available at: <https://www.ietf.org/rfc/rfc4122.txt>
10. OASIS UBL Technical Committee, 2013. *Universal Business Language Version 2.1. Data Model*. [Online]
Available at: <http://docs.oasis-open.org/ubl/os-UBL-2.1/UBL-2.1.html#A-THE-UBL-2.1-DATA-MODEL>
11. OASIS, 2007. *ebXML Messaging Services Version 3.0: Part 1, Core Features*. [Online]
Available at: http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/core/os/ebms_core-3.0-spec-os.html

12. OASIS, 2009. *UBL 2 Guidelines for Customization, First Edition, Committee Specification 01*. [Online]
Available at: http://docs.oasis-open.org/ubl/guidelines/UBL2-Customization1.0cs01.html#_Toc243466457
13. OASIS, 2010. *OASIS ebCore Party Id Type Technical Specification Version 1.0*. [Online]
Available at: <https://docs.oasis-open.org/ebcore/PartyIdType/v1.0/CD03/PartyIdType-1.0.html>
14. OASIS, 2011. *ebXML Messaging V3, Part 2: Advanced Features*. [Online]
Available at: <http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/part2/201004/csd03/rddl-ebms3-part2.html>
15. OASIS, 2011. *ebXML Messaging V3, Part 2: Advanced Features*. [Online]
Available at: <http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/part2/201004/csd03/rddl-ebms3-part2.html>
16. OASIS, 2013. *AS4 Profile of ebMS 3.0 Version 1.0*. [Online]
Available at: <http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/profiles/AS4-profile/v1.0/os/AS4-profile-v1.0-os.html>
17. Object Management Group, 2015. *Unified Modeling Language™ (UML®)*. [Online]
Available at: <http://www.omg.org/spec/UML/>
18. UN/CEFACT, 2003. *Core Component Technical Specification - Part 8 of the ebXML Framework version 2.01*. [Online]
Available at: http://www.unece.org/fileadmin/DAM/cefact/codesfortrade/CCTS/CCTS_V2-01_Final.pdf
19. W3C, 2012. *W3C XML Schema Definition Language (XSD) 1.1 Part 2: Datatypes*. [Online]
Available at: <http://www.w3.org/TR/xmlschema11-2/>