Description of 3A1 Message

PIP® 3A1

Validated V11.12.00

Specification Information	
Name	Description of 3A1 Message
PIP	Request Quote
Cluster	Order Management
Segment	Quote and Order Entry
Publication Date	30 May 2012
Version Identifier	V11.12

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1. Document Management

1.1 Legal Disclaimer

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1.4 Acknowledgments

This document has been prepared by RosettaNet (http://www.rosettanet.org/) from requirements gathered during the Milestone Program and in conformance with the methodology. Listed below are the legal entities that contributed to the design and development of this PIP.

Bellsouth Communication Systems	Cisco Systems
Intel	SBC Business Marketing
Sterling Commerce	World Wide Technology (WWT)

1.5 Related Documents

- Associated PIP Message Schemas (included with PIP Specification only)

- Description of Partner Interface Process for 3A1

- Message Structure

1.6 Document Version History

Version	Date	Description
Validated 11.00.00	07 November 2005	Validated Version
Validated 11.10.00	24 May 2006	Validated Version
Validated 11.11.00	02 November 2007	Milestone Program – Schema2Market
Validated 11.12.00	30 May 2012	Updated Version

1.7 Document Purpose

The purpose of the document is to explain the structure, the association between objects, the content of objects and the definition for single elements to a non-technical audience.

2. Interchange Model

2.1 QuoteRequest

2.1.1 Interchange Diagram

Figure 2-1 Interchange

2.1.2 Dependency Diagram
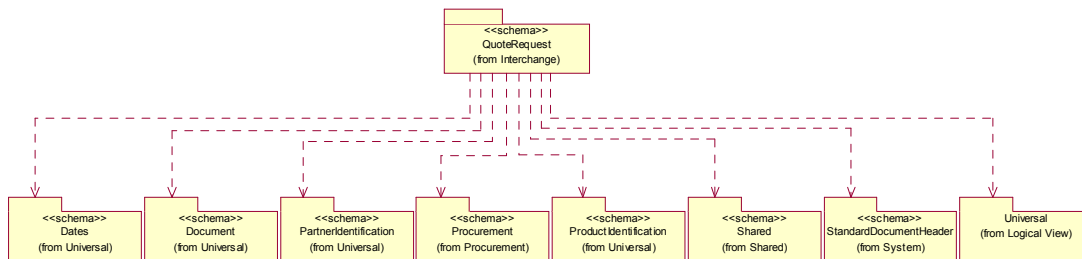
Figure 2-2 Dependency

2.1.3 CompetitorReference

The collection of business properties that describe a competitor's product and pricing for purposes within a quote business document.
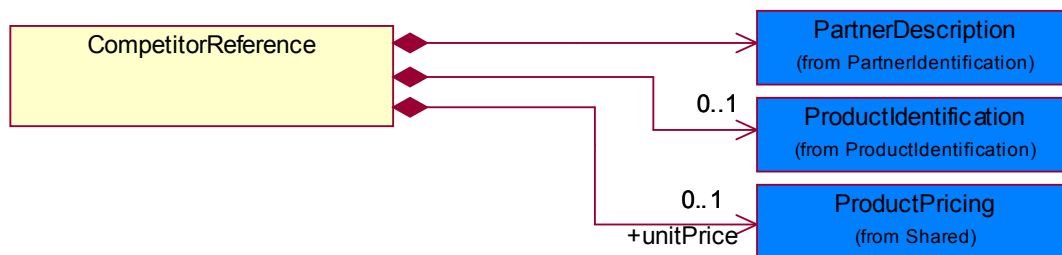
Figure 2-3 CompetitorReference

Composition	Cardinality	Type	Documentation
ProductIdentification	0..1	ProductIdentification	The object provides the identifier(s) of a product.
unitPrice	0..1	ProductPricing	Agreed upon sale price for each unit ordered.
PartnerDescription	1	PartnerDescription	The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain.

2.1.4 ProductLineItem

The collection of business properties that describe a product entry in a quote business documents. The Recommended ProcessRoleIdentifier for PartnerDescription are SHT - Ship To and RSF - Requested Ship From.
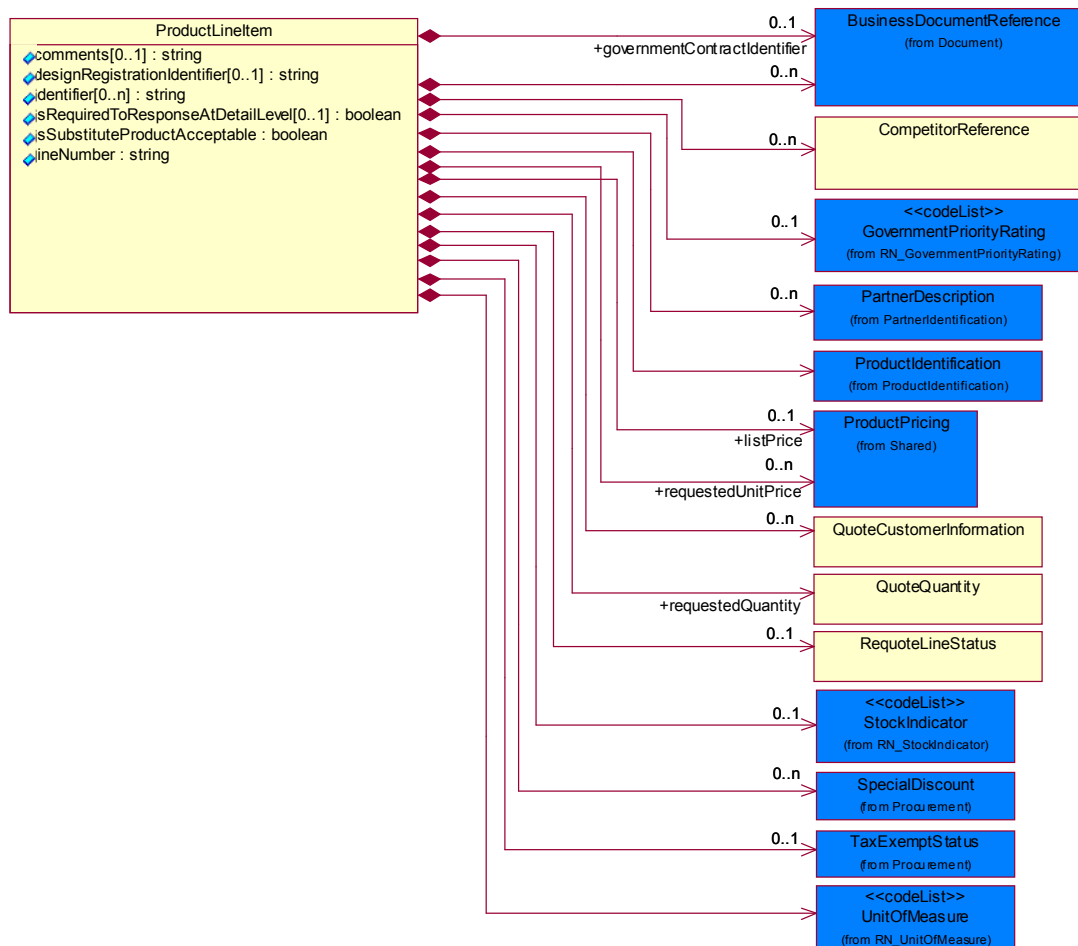
Figure 2-4 ProductLineItem

Attribute	Type	Documentation
comments[0..1]	string	Free form textual description of a general nature.
designRegistrationIdentifier[0..1]	string	A proprietary unique identifier for a design registration.
identifier[0..n]	string	A unique serial identifier assigned to a product.
isRequiredToResponseAtDetailLevel[0..1]	boolean	This object representing the option for the response. If the value equals to true, the receiver is required to response to detail level. If the value equals to false, the receiver is only required to reply at summary level.
isSubstituteProductAcceptable	boolean	Indicates whether the requesting party will accept a substitute product for the product requested.
lineNumber	string	Number of the line in the document.

Composition	Cardinality	Type	Documentation
BusinessDocumentReference	0..n	BusinessDocumentReference	The business document reference object allows for the indirect referencing of a relationship to other business related documents.
GovernmentPriorityRating	0..1	GovernmentPriorityRating	If a contract number exists and PO type is Government, a priority rating code is required.
UnitOfMeasure	1	UnitOfMeasure	Code identifying a product unit of measure.
governmentContractIdentifier	0..1	BusinessDocumentReference	The unique number that identifies a government contract.
ProductIdentification	1	ProductIdentification	The object provides the identifier(s) of a product.
CompetitorReference	0..n	CompetitorReference	The collection of business properties that describe a competitor's product and pricing for purposes within a quote business document.
requestedQuantity	1	QuoteQuantity	The quantity of product requested.
RequoteLineStatus	0..1	RequoteLineStatus	The collection of business properties that describe a previous quote's identification and status for a given entry on the prior quote.
TaxExemptStatus	0..1	TaxExemptStatus	The collection of business properties that describe tax exemption conditions.
QuoteCustomerInformation	0..n	QuoteCustomerInformation	The collection of business properties that describe the customer who uses a quote business document.
StockIndicator	0..1	StockIndicator	Code identifying the amount of stock available at the time of the quote.
SpecialDiscount	0..n	SpecialDiscount	This object represents a special discount based on the special discount identifier.
requestedUnitPrice	0..n	ProductPricing	The price requested for a unit of product.
listPrice	0..1	ProductPricing	This object represents a pre-discounted price.

PartnerDescriptio n	0..n	PartnerDescription	The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain.

2.1.5 Quantity

The collection of business properties that describe product quantity and associated schedules.
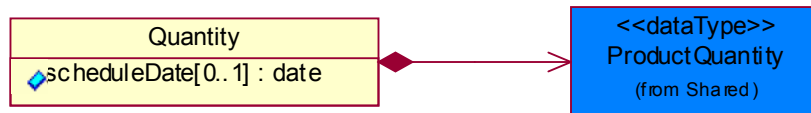
Figure 2-5 Quantity

Attribute	Type	Documentation
scheduleDate[0..1]	date	Specifies a date for the schedule.

Composition	Cardinality	Type	Documentation
ProductQuantity	1	ProductQuantity	A quantity specifying the number of product units.

2.1.6 Quote

The collection of business properties that describe an offer to supply a quantity of products at an agreed price and schedule. The Recommended ProcessRoleIdentifier for
PartnerDescription are FIN - Financed By, DIS - Distributed By, RES - Respond To, CWN - Contract Owner and BIT - Bill To.
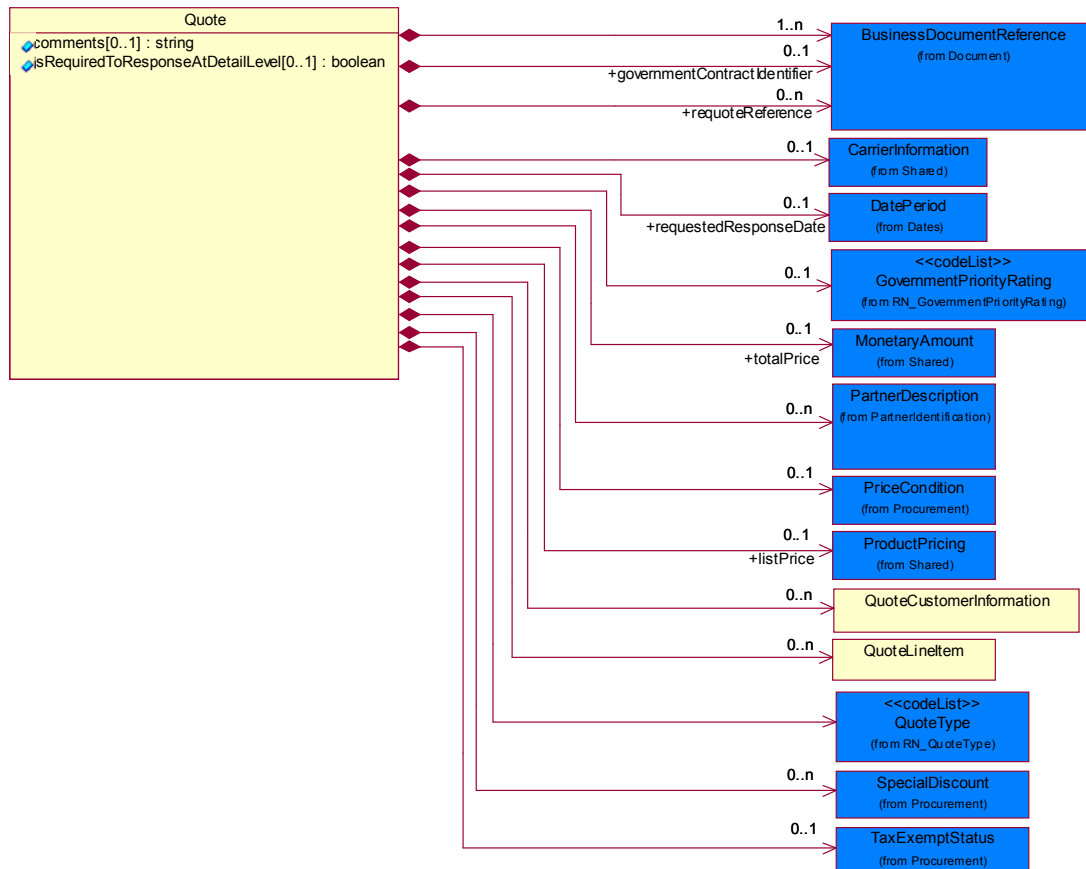
Figure 2-6 Quote

Attribute	Type	Documentation
comments[0..1]	string	Free form textual description of a general nature.
isRequiredToResponseAtDetailLevel[0..1]	boolean	This object representing the option for the response. If the value equals to true, the receiver is required to response to detail level. If the value equals to false, the receiver is only required to reply at summary level.

Composition	Cardinality	Type	Documentation
BusinessDocumentReference	1..n	BusinessDocumentReference	The business document reference object allows for the indirect referencing of a relationship to other business related documents.
GovernmentPriorityRating	0..1	GovernmentPriorityRating	If a contract number exists and PO type is Government, a priority rating code is required.
governmentContractIdentifier	0..1	BusinessDocumentReference	The unique number that identifies a government contract.
PriceCondition	0..1	PriceCondition	The collection of business properties that define information for special pricing conditions.
requestedResponseDate	0..1	DatePeriod	The date for which a response has been requested to be transmitted.
requoteReference	0..n	BusinessDocumentReference	The document reference for a previous quote.
TaxExemptStatus	0..1	TaxExemptStatus	The collection of business properties that describe tax exemption conditions.
QuoteCustomerInformation	0..n	QuoteCustomerInformation	The collection of business properties that describe the customer who uses a quote business document.
QuoteType	1	QuoteType	Code identifying category specification for a quote.
QuoteLineItem	0..n	QuoteLineItem	The collection of business properties that describe a product entry in a quote business documents.
SpecialDiscount	0..n	SpecialDiscount	This object represents a special discount based on the special discount identifier.
CarrierInformation	0..1	CarrierInformation	The collection of business properties that describe a carrier's identification.
totalPrice	0..1	MonetaryAmount	Total price for the entire business document.
listPrice	0..1	ProductPricing	This object represents a pre-discounted price.
PartnerDescription	0..n	PartnerDescription	The collection of business properties that describe a business partners'

			identity, their contact information, where they are physically located and their function in a supply chain.

2.1.7 QuoteCustomerInformation

The collection of business properties that describe the customer who uses a quote business document.
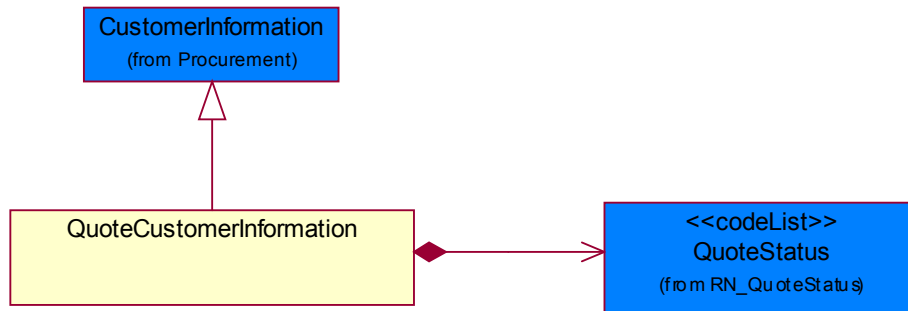
Figure 2-7 QuoteCustomerInformation

Composition	Cardinality	Type	Documentation
QuoteStatus	1	QuoteStatus	Code identifying whether business has been secured by the end customer.

2.1.8 QuoteLineItem

The collection of business properties that describe a product entry in a quote business documents.
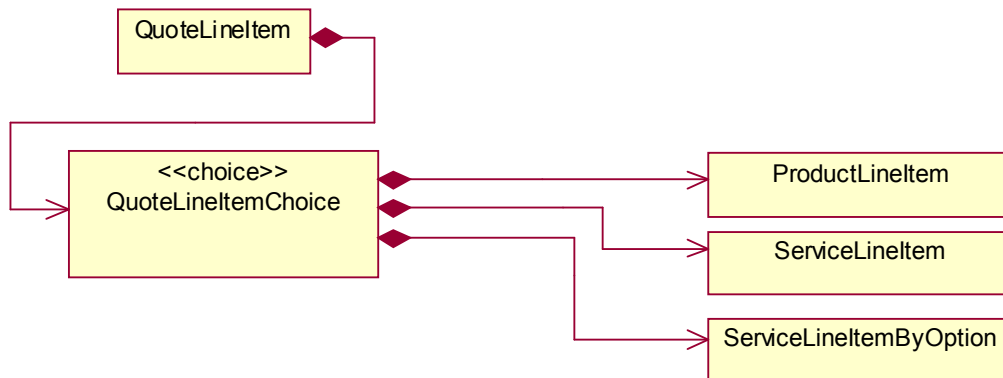
Figure 2-8 QuoteLineItem

Composition	Cardinality	Type	Documentation
QuoteLineItemChoice	1	QuoteLineItemChoice	

2.1.9 QuoteLineItemChoice

| Composition	Cardinality	Type	Documentation
ProductLineItem	1	ProductLineItem	The collection of business properties that describe a product entry in a quote business documents. The Recommended ProcessRoleIdentifier for PartnerDescription are SHT - Ship To and RSF - Requested Ship From.
ServiceLineItem	1	ServiceLineItem	The collection of business properties that describe a service entry in a quote business documents.
ServiceLineItemByOption	1	ServiceLineItemByOption	The collection of business properties that describe a service entry by option (eg. by Contract, by Product or by Site) in a quote business documents. The Recommended ProcessRoleIdentifier for PartnerDescription is ITL - Install At.

2.1.10 QuoteQuantity

The collection of business properties that describe the quantities associated with a product quote.
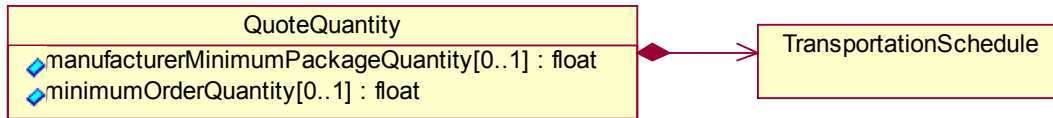
Figure 2-9 QuoteQuantity

Attribute	Type	Documentation
manufacturerMinimumPackageQuantity[0..1]	float	The product quantity in a defined package by a manufacturer.
minimumOrderQuantity[0..1]	float	A numeric expression of the minimum number of product line items that may be ordered.

Composition	Cardinality	Type	Documentation
TransportationSchedule	1	TransportationSchedule	The collection of business properties that describe product quantity and associated schedules, for a given transportation event.

2.1.11 QuoteRequest

A message wrapper or root element for PIP3A1.
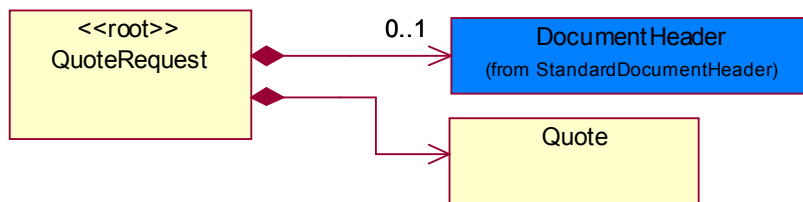
Figure 2-10 QuoteRequest

Composition	Cardinality	Type	Documentation
DocumentHeader	0..1	DocumentHeader	The object allows for the identification of the sender and receiver of the business document.
Quote	1	Quote	The collection of business properties that describe an offer to supply a quantity of products at an agreed price and schedule. The Recommended ProcessRoleIdentifier for PartnerDescription are FIN - Financed By, DIS -

			Distributed By, RES - Respond To, CWN - Contract Owner and BIT - Bill To.

2.1.12 RequoteLineStatus

The collection of business properties that describe a previous quote's identification and status for a given entry on the prior quote.
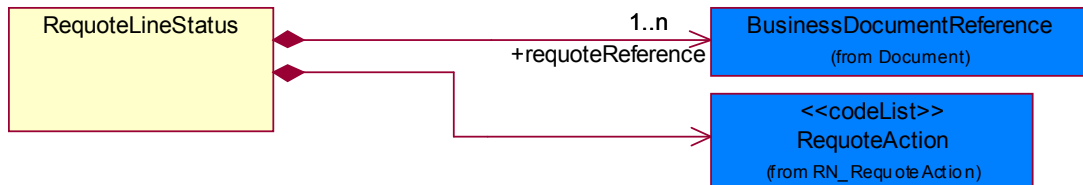
Figure 2-11 RequoteLineStatus

Composition	Cardinality	Type	Documentation
requoteReference	1..n	BusinessDocumentReference	The document reference for a previous quote.
RequoteAction	1	RequoteAction	Code identifying the type of action to be taken for a given line item on a quote.

2.1.13 ServiceLineItem

The collection of business properties that describe a service entry in a quote business documents.
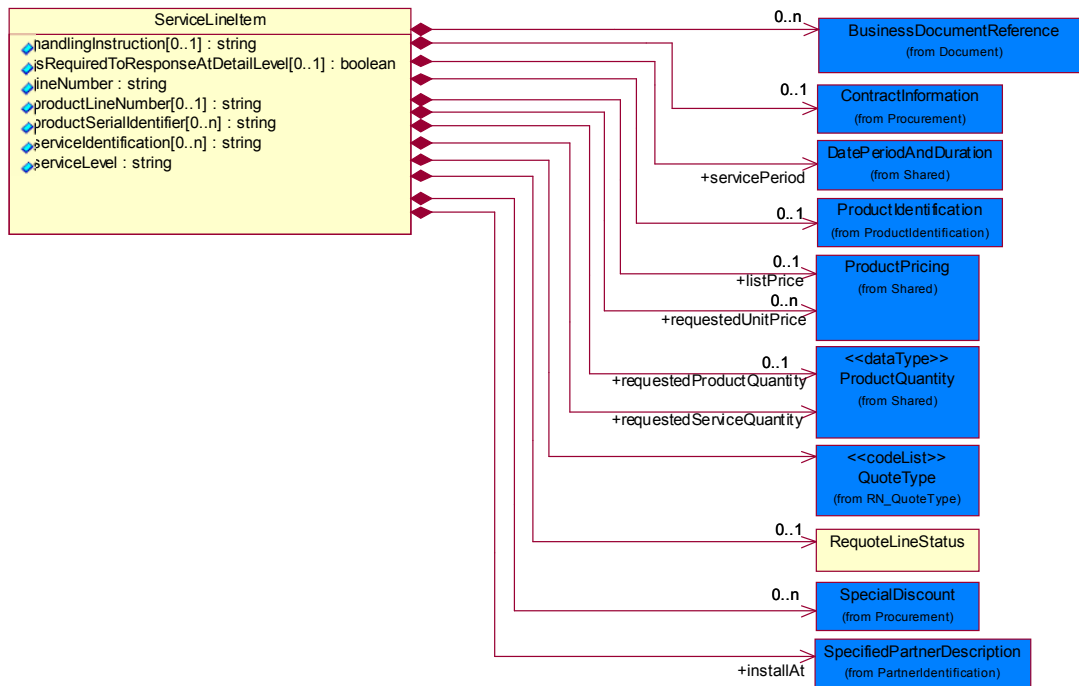
Figure 2-12 ServiceLineItem

Attribute	Type	Documentation
handlingInstruction[0..1]	string	The object that representing the instruction for quote handling.
isRequiredToResponseAtDetailLevel[0..1]	boolean	This object representing the option for the response. If the value equals to true, the receiver is required to response to detail level. If the value equals to false, the receiver is only required to reply at summary level.
lineNumber	string	Number of the line in the document.
productLineNumber[0..1]	string	The object that representing the line number of the referenced product line item.
productSerialIdentifier[0..n]	string	A unique serial identifier assigned to a product.
serviceIdentification[0..n]	string	A unique serial identifier assigned to a service.
serviceLevel	string	The object that representing the type of service.

Composition	Cardinality	Type	Documentation
installAt	1	SpecifiedPartnerDescription	The partner and/or location to which the product must be set up for use or service.
RequoteLineStatus	0..1	RequoteLineStatus	The collection of business properties that describe a previous quote's identification and status for a given entry on the prior quote.
ContractInformation	0..1	ContractInformation	The collection of business properties that represent a business arrangement for the supply of goods or services at an agreed price.
QuoteType	1	QuoteType	Code identifying category specification for a quote.
SpecialDiscount	0..n	SpecialDiscount	This object represents a special discount based on the special discount identifier.
ProductIdentification	0..1	ProductIdentification	The object provides the identifier(s) of a product.
BusinessDocumentReference	0..n	BusinessDocumentReference	The business document reference object allows for the indirect referencing of a relationship to other business related documents.
servicePeriod	1	DatePeriodAndDuration	This object allows representation of a date period by a duration or begin and an end dates for a service period.
requestedServiceQuantity	1	ProductQuantity	The quantity of service requested.
requestedProductQuantity	0..1	ProductQuantity	The quantity of product requested.
requestedUnitPrice	0..n	ProductPricing	The price requested for a unit of service.
listPrice	0..1	ProductPricing	This object represents a pre-discounted price.

2.1.14 ServiceLineItemByOption

The collection of business properties that describe a service entry by option (eg. by Contract, by Product or by Site) in a quote business documents. The Recommended ProcessRoleIdentifier for PartnerDescription is ITL - Install At.
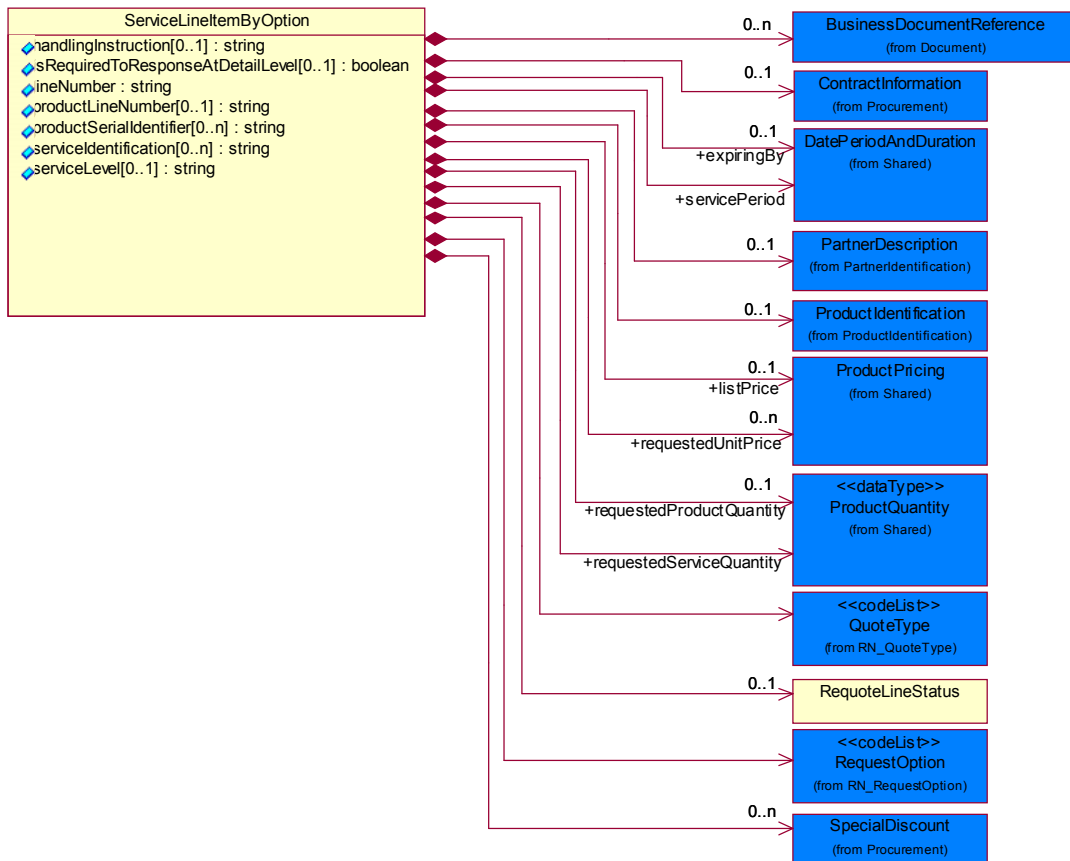
Figure 2-13 ServiceLineItemByOption

Attribute	Type	Documentation
handlingInstruction[0..1]	string	The object that representing the instruction for quote handling.
isRequiredToResponseAtDetailLevel[0..1]	boolean	This object representing the option for the response. If the value equals to true, the receiver is required to response to detail level. If the value equals to false, the receiver is only required to reply at summary level.
lineNumber	string	Number of the line in the document.
productLineNumber[0..1]	string	The object that representing the line number of the referenced product line item.
productSerialIdentifier[0..n]	string	A unique serial identifier assigned to a product.
serviceIdentification[0..n]	string	A unique serial identifier assigned to a service.
serviceLevel[0..1]	string	The object that representing the type of service.

Composition	Cardinality	Type	Documentation
BusinessDocumentReference	0..n	BusinessDocumentReference	The business document reference object allows for the indirect referencing of a relationship to other business related documents.
ContractInformation	0..1	ContractInformation	The collection of business properties that represent a business arrangement for the supply of goods or services at an agreed price.
ProductIdentification	0..1	ProductIdentification	The object provides the identifier(s) of a product.
QuoteType	1	QuoteType	Code identifying category specification for a quote.
RequoteLineStatus	0..1	RequoteLineStatus	The collection of business properties that describe a previous quote's identification and status for a given entry on the prior quote.
RequestOption	1	RequestOption	Code identifying an option for a request, eg. quote request or order request.
SpecialDiscount	0..n	SpecialDiscount	This object represents a special discount based on the special discount identifier.
servicePeriod	1	DatePeriodAndDuration	This object allows representation of a date period by a duration or begin and an end dates for a service period.
expiringBy	0..1	DatePeriodAndDuration	Renew all products expiring in this specified period.
requestedServiceQuantity	1	ProductQuantity	The quantity of service requested.
requestedProductQuantity	0..1	ProductQuantity	The quantity of product requested.
requestedUnitPrice	0..n	ProductPricing	The price requested for a unit of service.
listPrice	0..1	ProductPricing	This object represents a pre-discounted price.
PartnerDescription	0..1	PartnerDescription	The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain.

2.1.15 TransportationSchedule

The collection of business properties that describe product quantity and associated schedules, for a given transportation event.
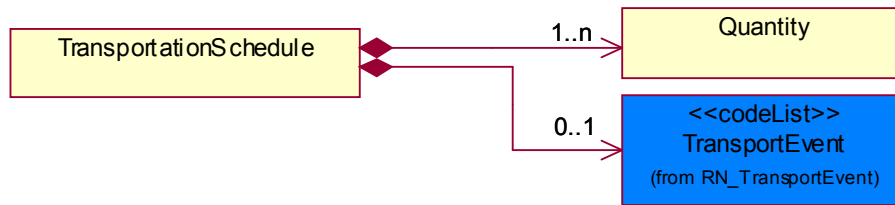
Figure 2-14 TransportationSchedule

Composition	Cardinality	Type	Documentation
Quantity	1..n	Quantity	The collection of business properties that describe product quantity and associated schedules.
TransportEvent	0..1	TransportEvent	Code identifying an event during the transportation of a shipment.

2.2 QuoteConfirmation

2.2.1 Interchange Diagram
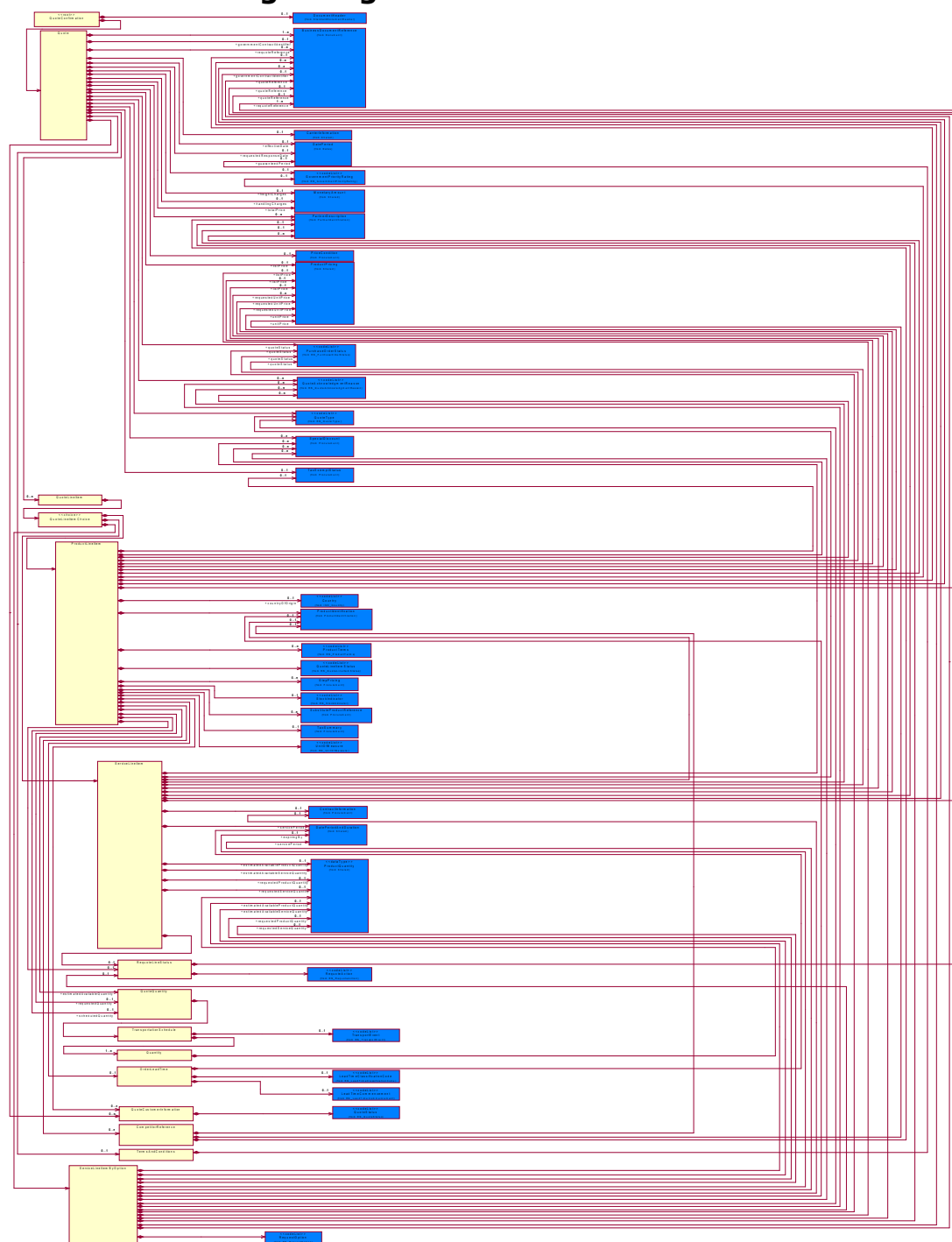
Figure 2-15 Interchange

2.2.2 Dependency Diagram
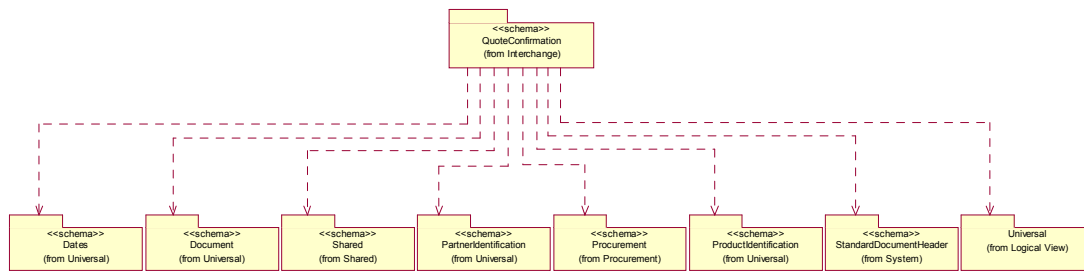
Figure 2-16 Dependency

2.2.3 CompetitorReference

The collection of business properties that describe a competitor's product and pricing for purposes within a quote business document.
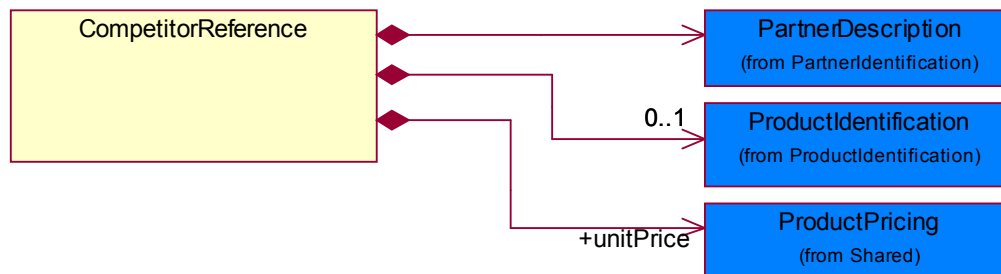
Figure 2-17 CompetitorReference

Composition	Cardinality	Type	Documentation
PartnerDescription	1	PartnerDescription	The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain.
ProductIdentification	0..1	ProductIdentification	The object provides the identifier(s) of a product.
unitPrice	1	ProductPricing	Agreed upon sale price for each unit ordered.

2.2.4 OrderLeadTime

The collection of business properties that describe the lead time parameters for a product order.
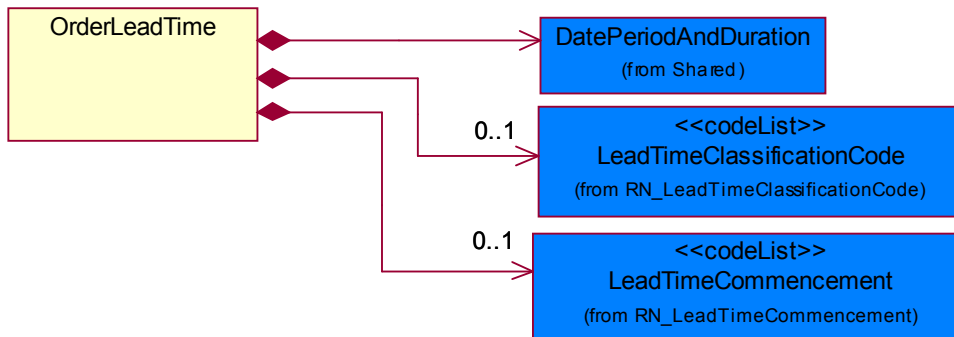
Figure 2-18 OrderLeadTime

Composition	Cardinality	Type	Documentation
LeadTimeClassific ationCode	0..1	LeadTimeClassificati onCode	Code identifying the classification of a product lead time for ordering.
LeadTimeComme ncement	0..1	LeadTimeCommenc ment	Code identifying the conditions required for a product lead time to being.
DatePeriodAndDu ration	1	DatePeriodAndDurati on	The collection of business properties that describe a date period or duration.

2.2.5 ProductLineItem

The collection of business properties that describe a product entry in a quote business document. The Recommended ProcessRoleIdentifier for PartnerDescription are RSF - Requested Ship From, SHT - Ship To and SHF - Ship From.
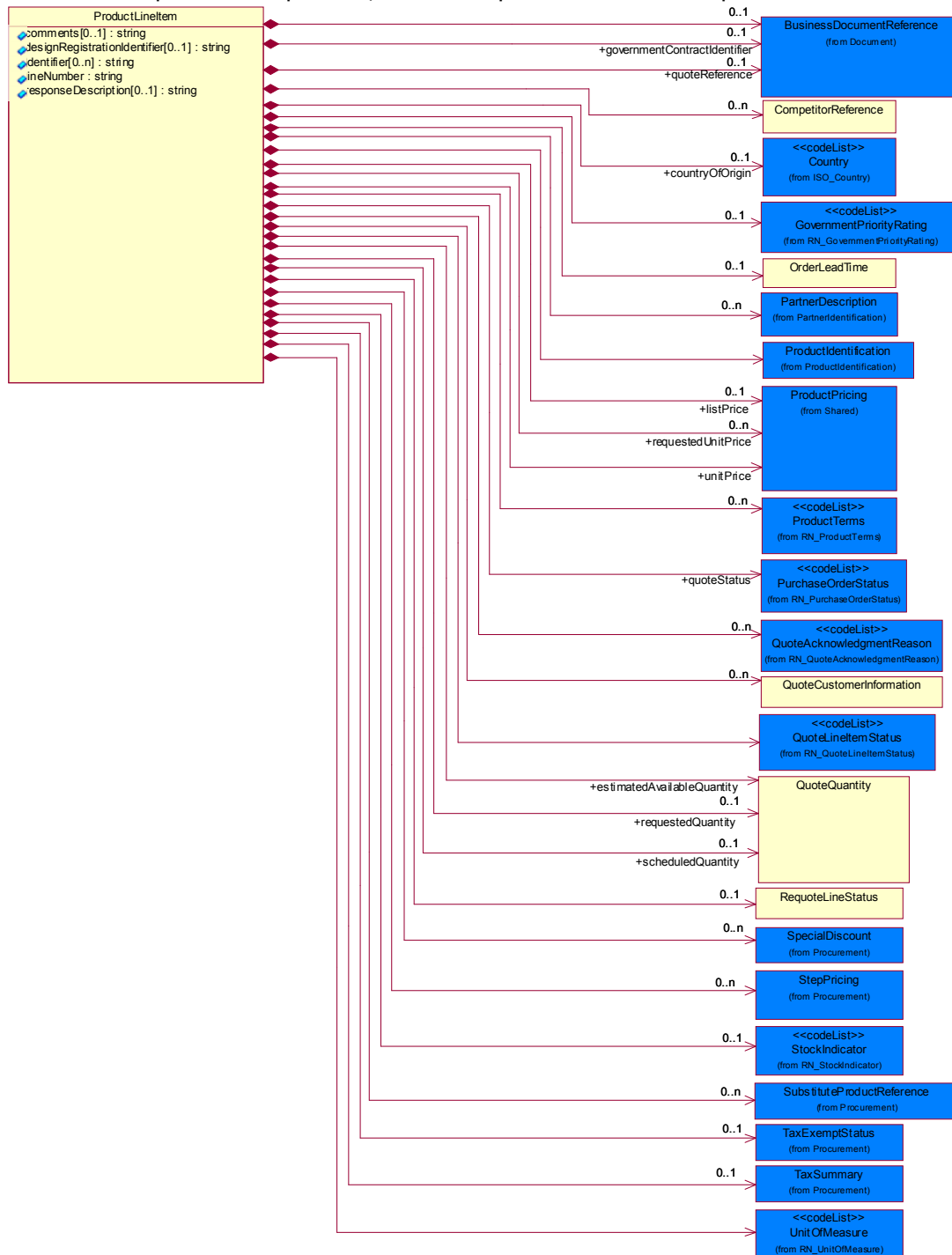
Figure 2-19 ProductLineItem

Attribute	Type	Documentation
comments[0..1]	string	Free form textual description of a general nature.
designRegistrationIdentifier[0..1]	string	A proprietary unique identifier for a design registration.
identifier[0..n]	string	A unique serial identifier assigned to a product.
lineNumber	string	Number of the line in the document.
responseDescription[0..1]	string	This object representing the description of response.

Composition	Cardinality	Type	Documentation
countryOfOrigin	0..1	Country	Country where product originates.
BusinessDocumentReference	0..1	BusinessDocumentReference	The business document reference object allows for the indirect referencing of a relationship to other business related documents.
estimatedAvailableQuantity	1	QuoteQuantity	The estimated available quantity of a product.
GovernmentPriorityRating	0..1	GovernmentPriorityRating	If a contract number exists and PO type is Government, a priority rating code is required.
UnitOfMeasure	1	UnitOfMeasure	Code identifying a product unit of measure.
governmentContractIdentifier	0..1	BusinessDocumentReference	The unique number that identifies a government contract.
OrderLeadTime	0..1	OrderLeadTime	The collection of business properties that describe the lead time parameters for a product order.
ProductIdentification	1	ProductIdentification	The object provides the identifier(s) of a product.
CompetitorReference	0..n	CompetitorReference	The collection of business properties that describe a competitor's product and pricing for purposes within a quote business document.
RequoteLineStatus	0..1	RequoteLineStatus	The collection of business properties that describe a previous quote's identification and status for a given entry on the prior quote.
StepPricing	0..n	StepPricing	The collection of business properties that describe a

			product's variance in pricing in regards to specified date ranges and quantities.
SubstituteProductReference	0..n	SubstituteProductReference	The collection of business properties describing a product that is being substituted for a requested product.
TaxExemptStatus	0..1	TaxExemptStatus	The collection of business properties that describe tax exemption conditions.
QuoteCustomerInformation	0..n	QuoteCustomerInformation	The collection of business properties that describe the customer who uses a quote business document.
requestedQuantity	0..1	QuoteQuantity	The quantity of product requested.
scheduledQuantity	0..1	QuoteQuantity	The planned quantity available for delivery or shipment.
StockIndicator	0..1	StockIndicator	Code identifying the amount of stock available at the time of the quote.
ProductTerms	0..n	ProductTerms	Code identifying the terms and conditions for a product being quoted.
QuoteLineItemStatus	1	QuoteLineItemStatus	A code identifying the bid status of a line item on a quote.
TaxSummary	0..1	TaxSummary	The collection of business properties that describe the total tax information for a local, regional or national taxing authority.
SpecialDiscount	0..n	SpecialDiscount	This object represents a special discount based on the special discount identifier.
QuoteAcknowledgmentReason	0..n	QuoteAcknowledgmentReason	Code identifying the reason for acknowledging a quote.
quoteReference	0..1	BusinessDocumentReference	This object represents the quote reference, ie. quote identifier & reference line number in the quote.
quoteStatus	1	PurchaseOrderStatus	Code identifying the status of a quote.
unitPrice	1	ProductPricing	Agreed upon sale price for each unit ordered.
requestedUnitPrice	0..n	ProductPricing	The price requested for a unit of product.

| listPrice | 0..1 | ProductPricing | This object represents a pre-discounted price. |
| PartnerDescription | 0..n | PartnerDescription | The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain. |

2.2.6 Quantity

The collection of business properties that describe product quantity and associated schedules.
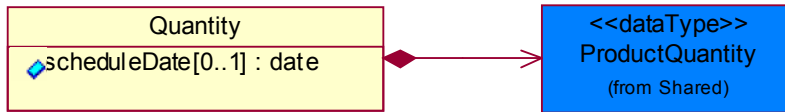
Figure 2-20 Quantity

Attribute	Type	Documentation
scheduleDate[0..1]	date	Specifies a date for the schedule.

Composition	Cardinality	Type	Documentation
ProductQuantity	1	ProductQuantity	A quantity specifying the number of product units.

2.2.7 Quote

The collection of business properties that describe an offer to supply a quantity of products at an agreed price and schedule. The Recommended ProcessRoleIdentifier for PartnerDescription are FIN - Financed By, DIS - Distributed By, RQT - Refer Quote To, RES - Respond To, CWN - Contract Owner and BIT - Bill To.
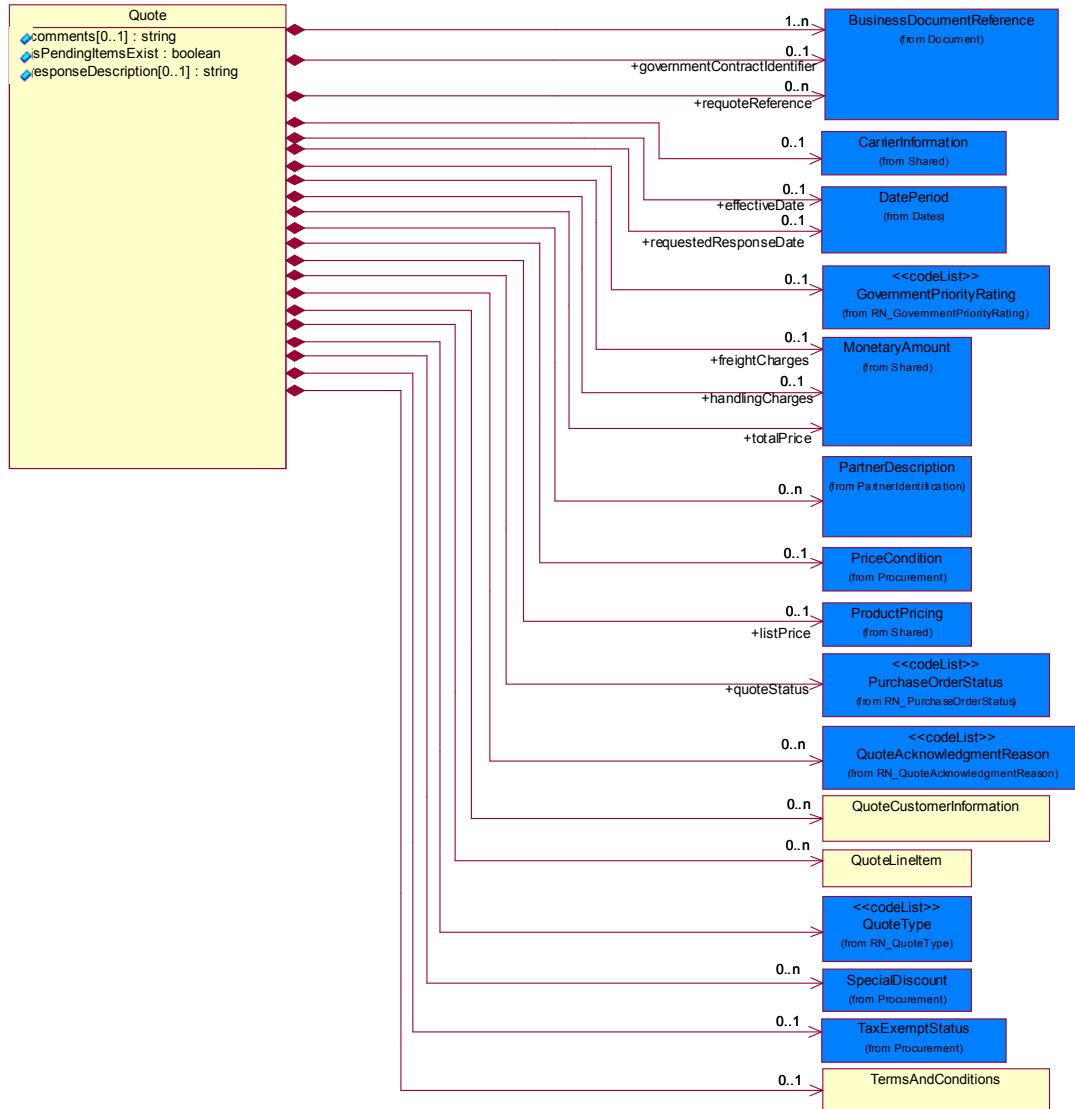
Figure 2-21 Quote

Attribute	Type	Documentation
comments[0..1]	string	Free form textual description of a general nature.
isPendingItemsExist	boolean	Indicates whether any line items in the business document are in a pending status.
responseDescription[0..1]	string	This object representing the description of response.

Composition	Cardinality	Type	Documentation
BusinessDocumentReference	1..n	BusinessDocumentReference	The business document reference object allows for the indirect referencing of a relationship to other business related documents.
effectiveDate	0..1	DatePeriod	The date information or an activity becomes effective.
GovernmentPriorityRating	0..1	GovernmentPriorityRating	If a contract number exists and PO type is Government, a priority rating code is required.
governmentContractIdentifier	0..1	BusinessDocumentReference	The unique number that identifies a government contract.
PriceCondition	0..1	PriceCondition	The collection of business properties that define information for special pricing conditions.
QuoteCustomerInformation	0..n	QuoteCustomerInformation	The collection of business properties that describe the customer who uses a quote business document.
requestedResponseDate	0..1	DatePeriod	The date for which a response has been requested to be transmitted.
requoteReference	0..n	BusinessDocumentReference	The document reference for a previous quote.
TaxExemptStatus	0..1	TaxExemptStatus	The collection of business properties that describe tax exemption conditions.
TermsAndConditions	0..1	TermsAndConditions	The collection of business properties that describe the terms and conditions agreed between two parties under which a product or service is provided.
QuoteType	1	QuoteType	Code identifying category specification for a quote.
QuoteLineItem	0..n	QuoteLineItem	The collection of business properties that describe a entry in a quote business document.
SpecialDiscount	0..n	SpecialDiscount	This object represents a special discount based on the special discount identifier.

QuoteAcknowledgmentReason	0..n	QuoteAcknowledgmentReason	Code identifying the reason for acknowledging a quote.
quoteStatus	1	PurchaseOrderStatus	Code identifying the status of a quote.
CarrierInformation	0..1	CarrierInformation	The collection of business properties that describe a carrier's identification.
freightCharges	0..1	MonetaryAmount	The monetary amount to be paid for freight transportation.
handlingCharges	0..1	MonetaryAmount	The monetary amount to be paid for product handling for pre-, during and post-transportation.
totalPrice	1	MonetaryAmount	Total price for the entire business document, including freight, tax and special handling if applicable.
listPrice	0..1	ProductPricing	This object represents a pre-discounted price.
PartnerDescription	0..n	PartnerDescription	The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain.

2.2.8 QuoteConfirmation

A message wrapper or root element for PIP3A1.
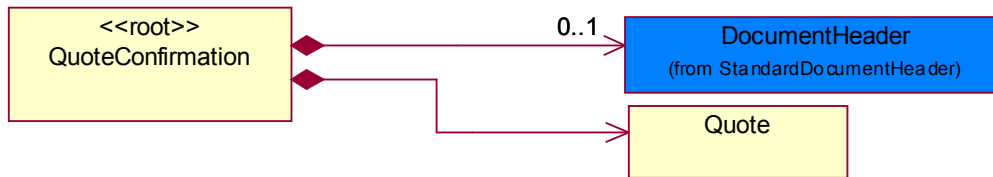
Figure 2-22 QuoteConfirmation

Composition	Cardinality	Type	Documentation
DocumentHeader	0..1	DocumentHeader	The object allows for the identification of the sender and receiver of the business document.
Quote	1	Quote	The collection of business properties that describe an offer to supply a quantity of products at an agreed price and schedule. The Recommended ProcessRoleIdentifier for PartnerDescription are FIN - Financed By, DIS - Distributed By, RQT - Refer Quote To, RES - Respond To, CWN - Contract Owner and BIT - Bill To.

2.2.9 QuoteCustomerInformation

The collection of business properties that describe the customer who uses a quote business document.
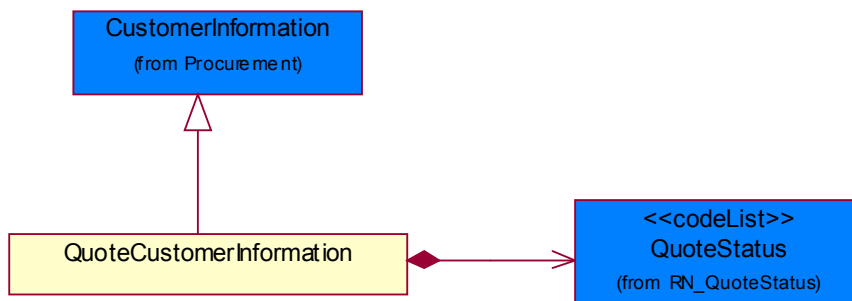
Figure 2-23 QuoteCustomerInformation

Composition	Cardinality	Type	Documentation
QuoteStatus	1	QuoteStatus	Code identifying whether business has been secured by the end customer.

2.2.10 QuoteLineItem

The collection of business properties that describe a entry in a quote business document.
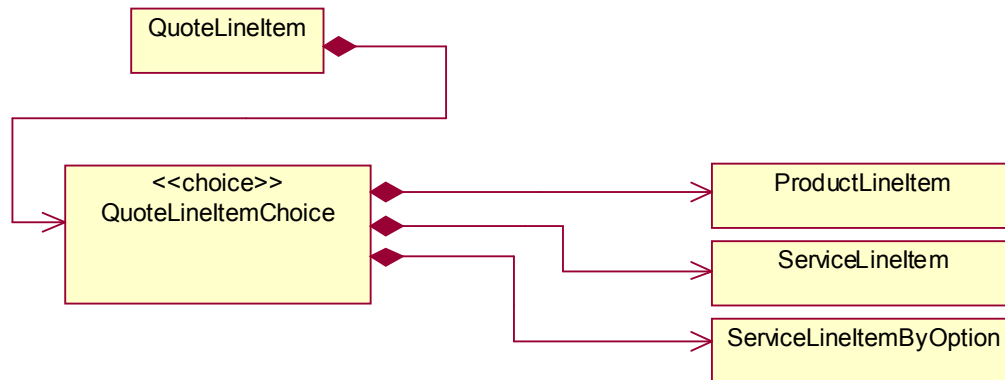
Figure 2-24 QuoteLineItem

Composition	Cardinality	Type	Documentation
QuoteLineItemChoice	1	QuoteLineItemChoice	

2.2.11 QuoteLineItemChoice

Composition	Cardinality	Type	Documentation
ProductLineItem	1	ProductLineItem	The collection of business properties that describe a product entry in a quote business document. The Recommended ProcessRoleIdentifier for PartnerDescription are RSF - Requested Ship From, SHT - Ship To and SHF - Ship From.
ServiceLineItem	1	ServiceLineItem	The collection of business properties that describe a service entry in a quote business documents. The Recommended ProcessRoleIdentifier for PartnerDescription is ITL - Install At.
ServiceLineItemB	1	ServiceLineItemByO	The collection of business

yOption		ption	properties that describe a service entry by option (eg. by Contract, by Product or by Site) in a quote business documents. The Recommended ProcessRoleIdentifier for PartnerDescription is ITL - Install At.

2.2.12 QuoteQuantity

The collection of business properties that describe the quantities associated with a product quote.
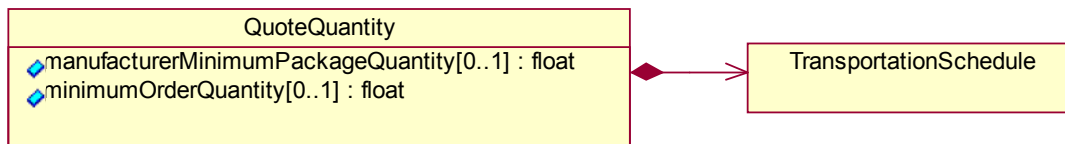
Figure 2-25 QuoteQuantity

Attribute	Type	Documentation
manufacturerMinimumPackageQuantity[0..1]	float	The product quantity in a defined package by a manufacturer.
minimumOrderQuantity[0..1]	float	A numeric expression of the minimum number of product line items that may be ordered.

Composition	Cardinality	Type	Documentation
TransportationSchedule	1	TransportationSchedule	The collection of business properties that describe product quantity and associated schedules, for a given transportation event.

2.2.13 RequoteLineStatus

The collection of business properties that describe a previous quote's identification and status for a given entry on the prior quote.
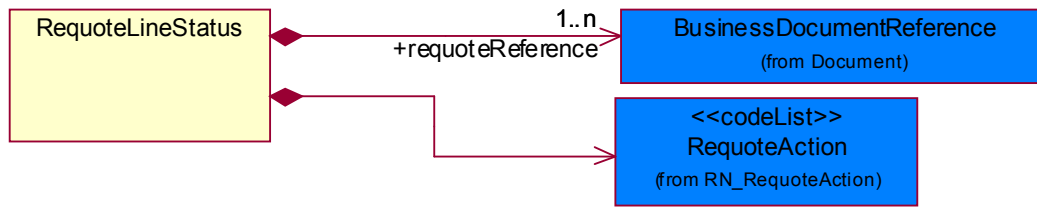
Figure 2-26 RequoteLineStatus

Composition	Cardinality	Type	Documentation
requoteReference	1..n	BusinessDocumentReference	The document reference for a previous quote.
RequoteAction	1	RequoteAction	Code identifying the type of action to be taken for a given line item on a quote.

2.2.14 ServiceLineItem

The collection of business properties that describe a service entry in a quote business documents. The Recommended ProcessRoleIdentifier for PartnerDescription is ITL - Install At.
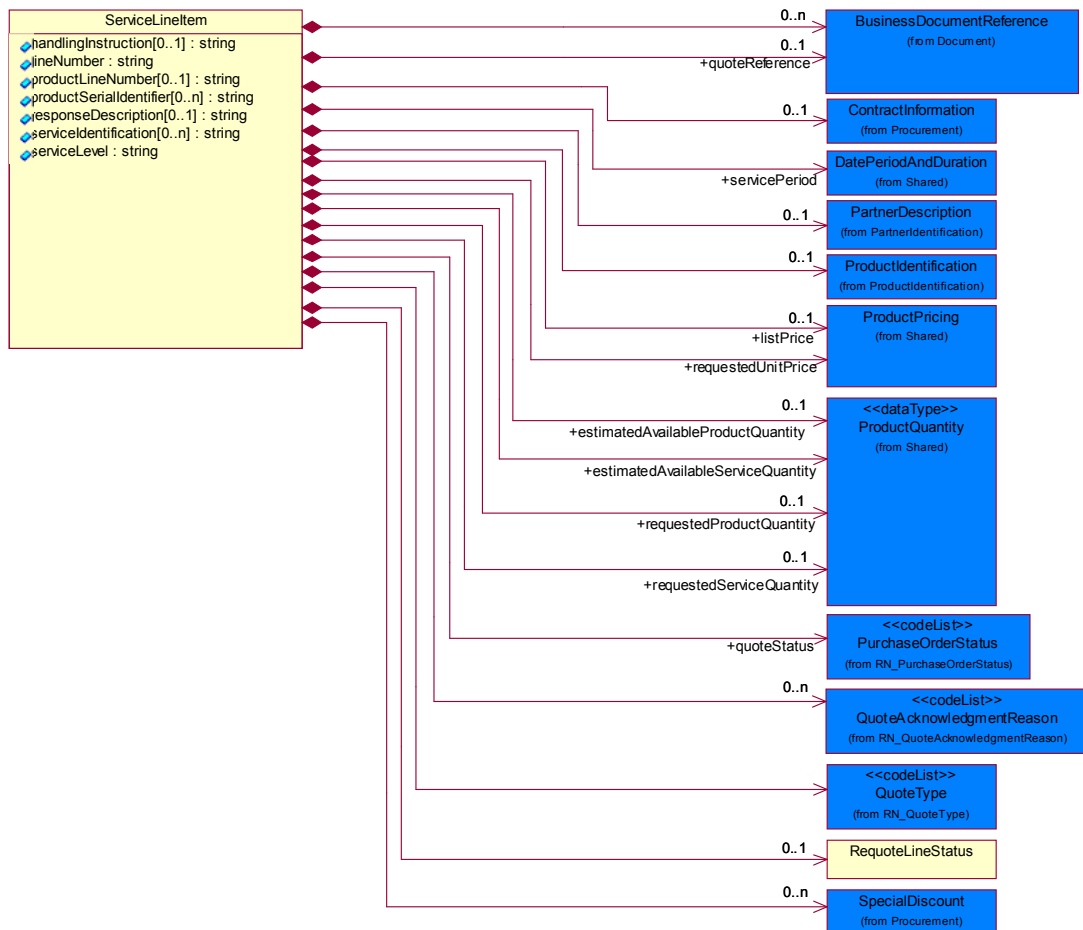
Figure 2-27 ServiceLineItem

Attribute	Type	Documentation
handlingInstruction[0..1]	string	The object that representing the instruction for quote handling.
lineNumber	string	Number of the line in the document.
productLineNumber[0..1]	string	The object that representing the line number of the referenced product line item.
productSerialIdentifier[0..n]	string	A unique serial identifier assigned to a product.
responseDescription[0..1]	string	This object representing the description of response.
serviceIdentification[0..n]	string	A unique serial identifier assigned to a service.
serviceLevel	string	The object that representing the type of service.

Composition	Cardinality	Type	Documentation
ContractInformation	0..1	ContractInformation	The collection of business properties that represent a business arrangement for the supply of goods or services at an agreed price.
QuoteType	1	QuoteType	Code identifying category specification for a quote.
RequoteLineStatus	0..1	RequoteLineStatus	The collection of business properties that describe a previous quote's identification and status for a given entry on the prior quote.
SpecialDiscount	0..n	SpecialDiscount	This object represents a special discount based on the special discount identifier.
ProductIdentification	0..1	ProductIdentification	The object provides the identifier(s) of a product.
QuoteAcknowledgmentReason	0..n	QuoteAcknowledgmentReason	Code identifying the reason for acknowledging a quote.
BusinessDocumentReference	0..n	BusinessDocumentReference	The business document reference object allows for the indirect referencing of a relationship to other business related documents.
quoteReference	0..1	BusinessDocumentReference	This object represents the quote reference, ie. quote identifier & reference line number in the quote.
quoteStatus	1	PurchaseOrderStatus	Code identifying the status of a quote.
servicePeriod	1	DatePeriodAndDuration	This object allows representation of a date period by a duration or begin and an end dates for a service period.
requestedServiceQuantity	0..1	ProductQuantity	The quantity of service requested.
estimatedAvailableServiceQuantity	1	ProductQuantity	The estimated available quantity of a service.
requestedProductQuantity	0..1	ProductQuantity	The quantity of product requested.
estimatedAvailableProductQuantity	0..1	ProductQuantity	The estimated available quantity of a product.
requestedUnitPrice	1	ProductPricing	The price requested for a unit of service.

listPrice	0..1	ProductPricing	This object represents a pre-discounted price.
PartnerDescription	0..1	PartnerDescription	The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain.

2.2.15 ServiceLineItemByOption

The collection of business properties that describe a service entry by option (eg. by Contract, by Product or by Site) in a quote business documents. The Recommended ProcessRoleIdentifier for PartnerDescription is ITL - Install At.
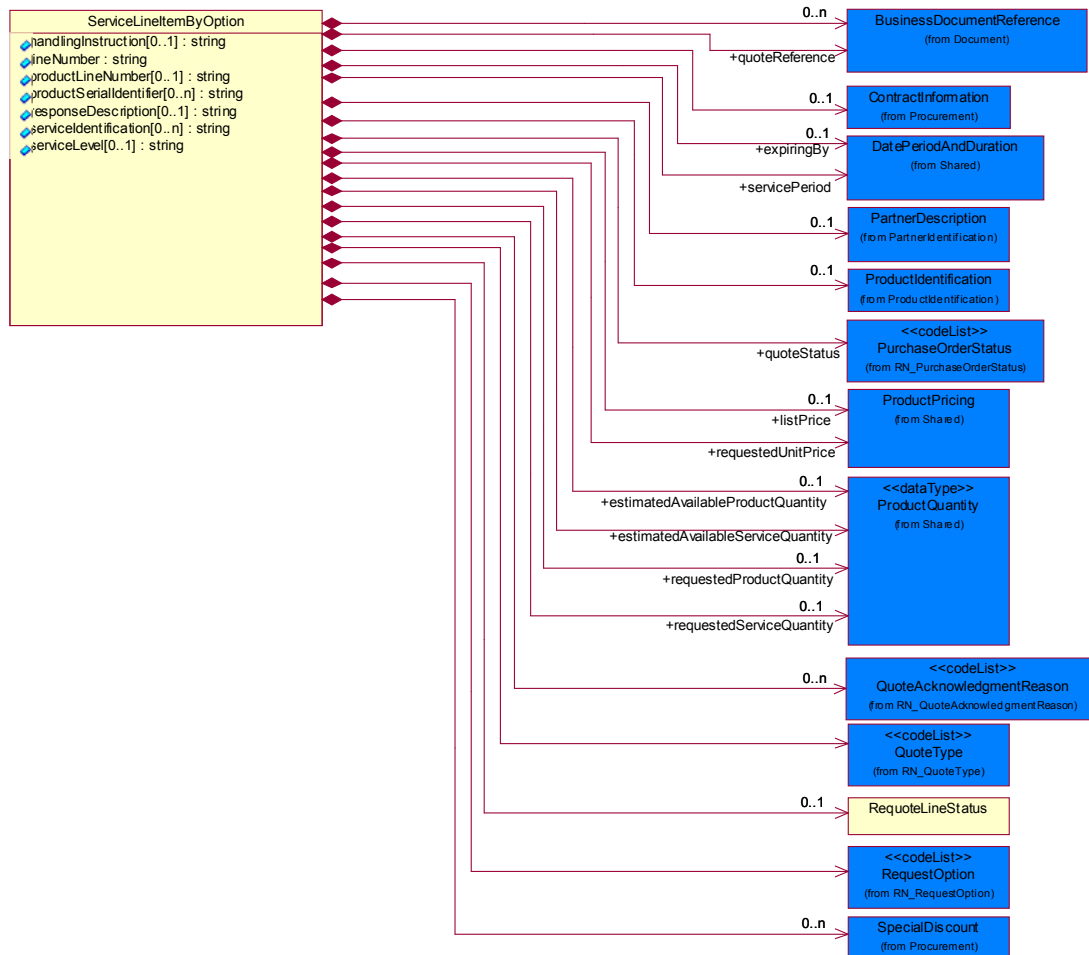
Figure 2-28 ServiceLineItemByOption

Attribute	Type	Documentation
handlingInstruction[0..1]	string	The object that representing the instruction for quote handling.
lineNumber	string	Number of the line in the document.
productLineNumber[0..1]	string	The object that representing the line number of the referenced product line item.
productSerialIdentifier[0..n]	string	A unique serial identifier assigned to a product.
responseDescription[0..1]	string	This object representing the description of response.
serviceIdentification[0..n]	string	A unique serial identifier assigned to a service.
serviceLevel[0..1]	string	The object that representing the type of service.

Composition	Cardinality	Type	Documentation
BusinessDocumentReference	0..n	BusinessDocumentReference	The business document reference object allows for the indirect referencing of a relationship to other business related documents.
quoteReference	1	BusinessDocumentReference	This object represents the quote reference, ie. quote identifier & reference line number in the quote.
ContractInformation	0..1	ContractInformation	The collection of business properties that represent a business arrangement for the supply of goods or services at an agreed price.
QuoteType	1	QuoteType	Code identifying category specification for a quote.
QuoteAcknowledgmentReason	0..n	QuoteAcknowledgmentReason	Code identifying the reason for acknowledging a quote.
quoteStatus	1	PurchaseOrderStatus	Code identifying the status of a quote.
RequoteLineStatus	0..1	RequoteLineStatus	The collection of business properties that describe a previous quote's identification and status for a given entry on the prior quote.
RequestOption	1	RequestOption	Code identifying an option for a request, eg. quote request or order request.
SpecialDiscount	0..n	SpecialDiscount	This object represents a special discount based on the special discount

			identifier.
ProductIdentification	0..1	ProductIdentification	The object provides the identifier(s) of a product.
servicePeriod	1	DatePeriodAndDuration	This object allows representation of a date period by a duration or begin and an end dates for a service period.
expiringBy	0..1	DatePeriodAndDuration	Renew all products expiring in this specified period.
requestedUnitPrice	1	ProductPricing	The price requested for a unit of service.
requestedServiceQuantity	0..1	ProductQuantity	The quantity of service requested.
estimatedAvailableServiceQuantity	1	ProductQuantity	The quantity of estimated available service.
requestedProductQuantity	0..1	ProductQuantity	The quantity of product requested.
estimatedAvailableProductQuantity	0..1	ProductQuantity	The quantity of estimated available product.
listPrice	0..1	ProductPricing	This object represents a pre-discounted price.
PartnerDescription	0..1	PartnerDescription	The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain.

2.2.16 TermsAndConditions

The collection of business properties that describe the terms and conditions agreed between two parties under which a product or service is provided.
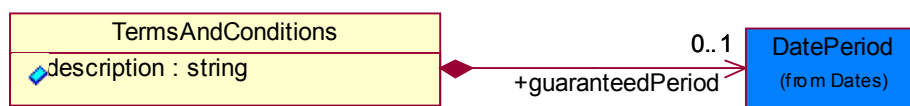
Figure 2-29 TermsAndConditions

Attribute	Type	Documentation
description	string	Free form textual description that contains terms and conditions.

Composition	Cardinality	Type	Documentation
guaranteedPeriod	0..1	DatePeriod	A date period, defined by a start date and end date, where terms and

			conditions are guaranteed.

2.2.17 TransportationSchedule

The collection of business properties that describe product quantity and associated schedules, for a given transportation event.
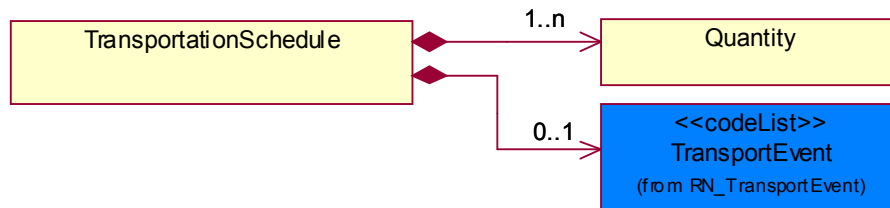
Figure 2-30 TransportationSchedule

Composition	Cardinality	Type	Documentation
Quantity	1..n	Quantity	The collection of business properties that describe product quantity and associated schedules.
TransportEvent	0..1	TransportEvent	Code identifying an event during the transportation of a shipment.

2.3 CodeList

2.3.1 StockIndicator

Code identifying the amount of stock available at the time of the quote.

Name	Documentation
DIS	Distributor - Distributor has stock for all of the requested quantity.
FAC	Factory - Factory/seller has stock.
NON	None - Distributor has no stock.
PAR	Partial - Distributor has stock for part of the requested quantity.

2.3.2 LeadTimeCommencement

Code identifying the conditions required for a product lead time to being.

Name	Documentation
ACO	After completion of first article.
ARO	After receipt of order.

2.3.3 ProductTerms

Code identifying the terms and conditions for a product being quoted.

Name	Documentation
EOL	End of Life.
NOC	Non-Cancelable / non-returnable.
OTB	One Time Buy.
PPR	Price Protection.

2.3.4 QuoteLineItemStatus

A code identifying the bid status of a line item on a quote.

Name	Documentation
BID	Bid - The line item has been bid on.
NBI	No Bid - The line item will not be bid on.
PEN	Pending - The line item is pending a bid.

3. Domain Model

3.1 Procurement

3.1.1 Procurement

3.1.1.1 Dependency Diagram
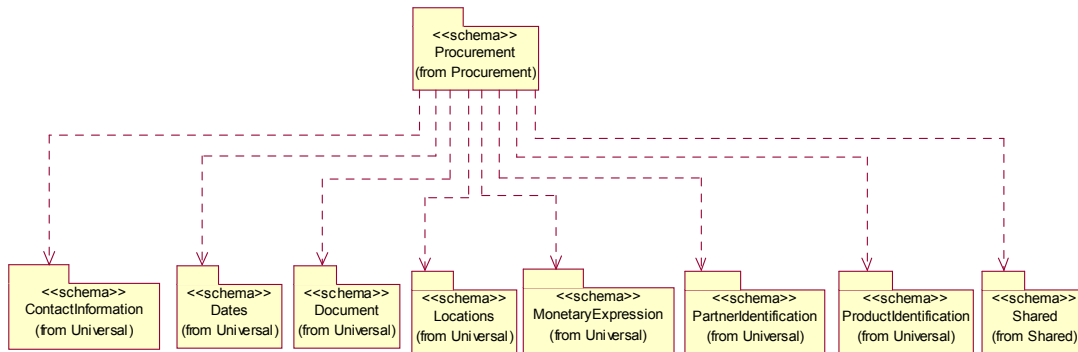
Figure 3-1 Dependency

3.1.1.2 ContractInformation

The collection of business properties that represent a business arrangement for the supply of goods or services at an agreed price.
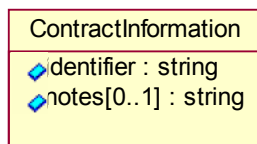
Figure 3-2 ContractInformation

Attribute	Type	Documentation
identifier	string	The unique number than identifies a contract.
notes[0..1]	string	A textual description about contract.

3.1.1.3 CurrencyConversion

The collection of business properties that describe the exchange of money in circulation.
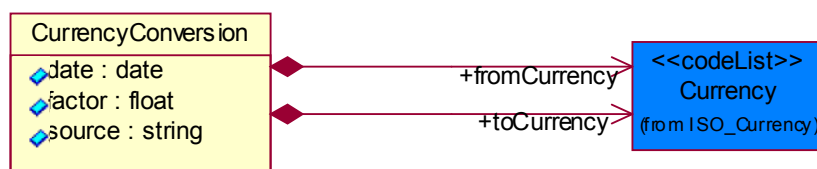
Figure 3-3 CurrencyConversion

Attribute	Type	Documentation
date	date	The date of the exchange rate used to convert between currencies.
factor	float	The conversion factor to apply to convert from the currency of the freight charges to the currency used for payment.
source	string	The source of the exchange rate used to convert between currencies.

Composition	Cardinality	Type	Documentation
toCurrency	1	Currency	The currency of the receiving partner in a business transaction.
fromCurrency	1	Currency	The currency of the initiating partner in a business transaction.

3.1.1.4 CustomerInformation

The collection of business properties that describe an end user.
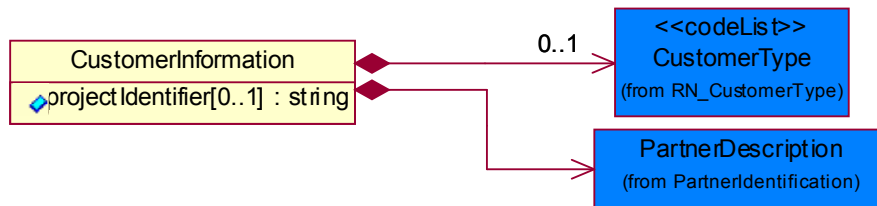
Figure 3-4 CustomerInformation

Attribute	Type	Documentation
projectIdentifier[0..1]	string	The unique identification number that identifies a project for a given customer.

Composition	Cardinality	Type	Documentation
CustomerType	0..1	CustomerType	Code identifying the type of end user.
PartnerDescription	1	PartnerDescription	The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain.

3.1.1.5 OtherTaxes

The collection of business properties that describe other tax information.
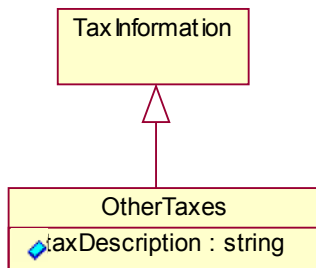
Figure 3-5 OtherTaxes

Attribute	Type	Documentation
taxDescription	string	Describe different kind of taxes, such as goods and services tax, special release tax.

3.1.1.6 PriceCondition

The collection of business properties that define information for special pricing conditions.
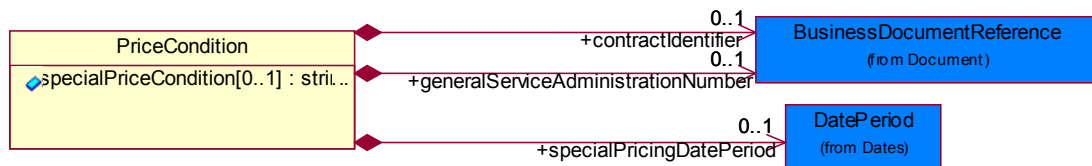
Figure 3-6 PriceCondition

Attribute	Type	Documentation
specialPriceCondition[0..1]	string	Textual description that identifies conditions under which special pricing is applicable.

Composition	Cardinality	Type	Documentation
specialPricingDatePeriod	0..1	DatePeriod	The date range indicating when a product's special pricing is valid.
generalServiceAdministrationNumber	0..1	BusinessDocumentReference	Identifying number relating to a pre-established end-user pricing agreement.
contractIdentifier	0..1	BusinessDocumentReference	The unique number that identifies a contract.

3.1.1.7 ProductQuantityRange

The collection of business properties that describe an upper and lower range of product quantity.
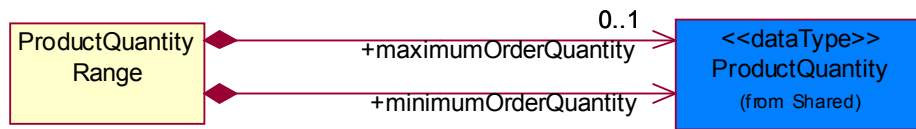
Figure 3-7 ProductQuantityRange

Composition	Cardinality	Type	Documentation
maximumOrderQuantity	0..1	ProductQuantity	A numeric expression of the maximum number of product line items that may be ordered.
minimumOrderQuantity	1	ProductQuantity	A numeric expression of the minimum number of product line items that may be ordered.

3.1.1.8 SpecialDiscount

This object represents a special discount based on the special discount identifier.
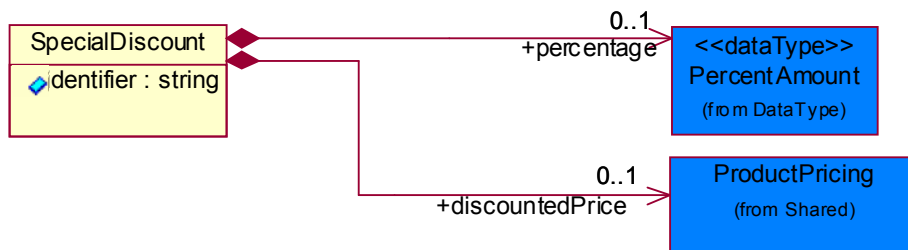
Figure 3-8 SpecialDiscount

Attribute	Type	Documentation
identifier	string	This object representing the special discount identifier.

Composition	Cardinality	Type	Documentation
percentage	0..1	PercentAmount	This object represents a special discount percentage.
discountedPrice	0..1	ProductPricing	This object represents a special discount price.

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3.1.1.9 StepPricing

The collection of business properties that describe a product's variance in pricing in regards to specified date ranges and quantities.
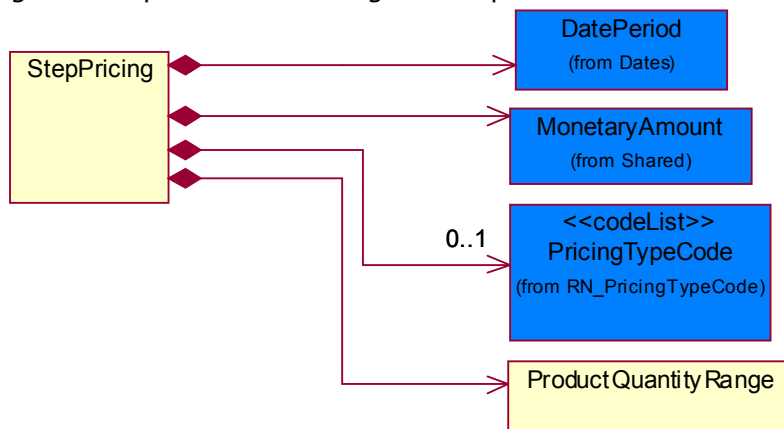
Figure 3-9 StepPricing

Composition	Cardinality	Type	Documentation
ProductQuantityRange	1	ProductQuantityRange	The collection of business properties that describe an upper and lower range of product quantity.
DatePeriod	1	DatePeriod	The business document must allow for the computation or statement of a duration based upon a beginning and an ending date.
MonetaryAmount	1	MonetaryAmount	The collection of business properties that describe the monetary amount defined by a specified currency.
PricingTypeCode	0..1	PricingTypeCode	Code identifying the type of pricing available for a product.

3.1.1.10 SubstituteProductReference

The collection of business properties describing a product that is being substituted for a requested product.
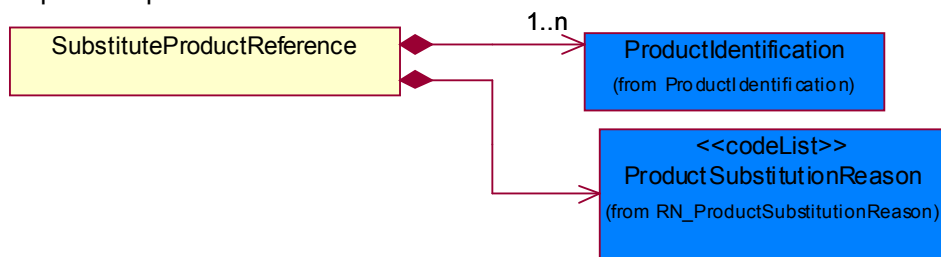
Figure 3-10 SubstituteProductReference

Composition	Cardinality	Type	Documentation
ProductSubstitutionReason	1	ProductSubstitutionReason	A code identifying the reason a product is substituted for the original product requested.
ProductIdentification	1..n	ProductIdentification	The object provides the identifier(s) of a product.

3.1.1.11 TaxExemption

The collection of business properties that describe tax exemption type and identification information.
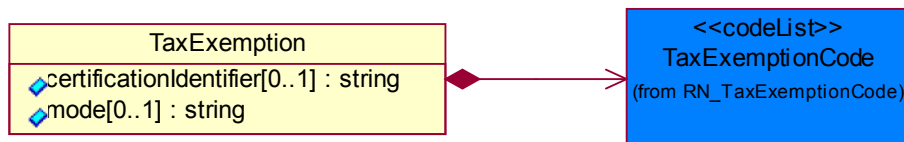
Figure 3-11 TaxExemption

Attribute	Type	Documentation
certificationIdentifier[0..1]	string	The unique identifier that represents the authorization for a product or service's tax exempt status.
mode[0..1]	string	This object refering to the tax exemption mode by Customs against goods declared eg. duty free, partial tax exemption or full tax exemption.

Composition	Cardinality	Type	Documentation
TaxExemptionCode	1	TaxExemptionCode	Code identifying the type of tax exemption for a product or service.

3.1.1.12 TaxExemptStatus

The collection of business properties that describe tax exemption conditions.

Figure 3-12 TaxExemptStatus

Attribute	Type	Documentation
isTaxExempt	boolean	Indicates whether a product is exempt from taxation.

Composition	Cardinality	Type	Documentation
TaxExemption	0..1	TaxExemption	The collection of business properties that describe tax exemption type and identification information.

3.1.1.13 TaxInformation

The collection of business properties that describe tax information.
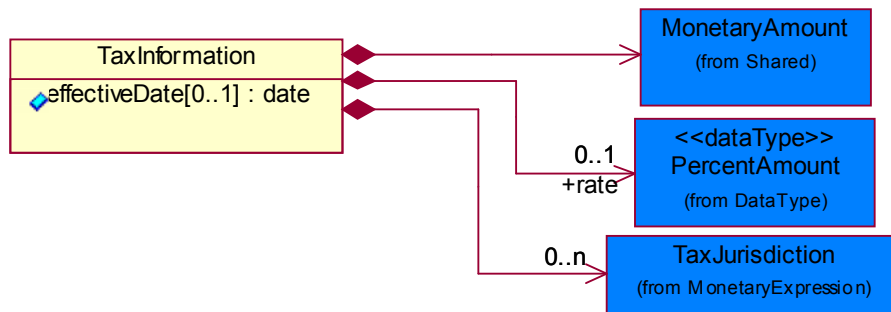
Figure 3-13 TaxInformation

Attribute	Type	Documentation
effectiveDate[0..1]	date	The date tax become effective or applicable.

Composition	Cardinality	Type	Documentation
TaxJurisdiction	0..n	TaxJurisdiction	The business document must identify the specific tax collection authority.
rate	0..1	PercentAmount	The rate used to calculate tax liability.
MonetaryAmount	1	MonetaryAmount	The collection of business properties that describe the monetary amount defined by a specified currency.

3.1.1.14 TaxPhrase

The collection of business properties that describe VAT specific information.

```
┌─────────────────────────────────────────┐
│                TaxPhrase                 │
├─────────────────────────────────────────┤
│ ◆isTaxTriangulationApplicable : boolean  │
│ ◆phrase : string                         │
│                                          │
└─────────────────────────────────────────┘
```

Figure 3-14 TaxPhrase

Attribute	Type	Documentation
isTaxTriangulationApplic able	boolean	Indicates whether intermediate suppliers in a triangulation chain may be able to use a simplified procedure available throughout the EC. Triangulation is a name for a type of transaction that can apply only to EU VAT registered companies dispatching goods to countries within the EU.
phrase	string	Country or territory specific tax qualifier verbiage as and when required for tax audit purposes. Such verbiage should be transmitted and stored with the invoice, and may be required to be in local language. Trading Partners are responsible for ensuring that appropriate verbiage is included as per individual tax authority requirements.

3.1.1.15 TaxSummary

The collection of business properties that describe the total tax information for a local, regional or national taxing authority.
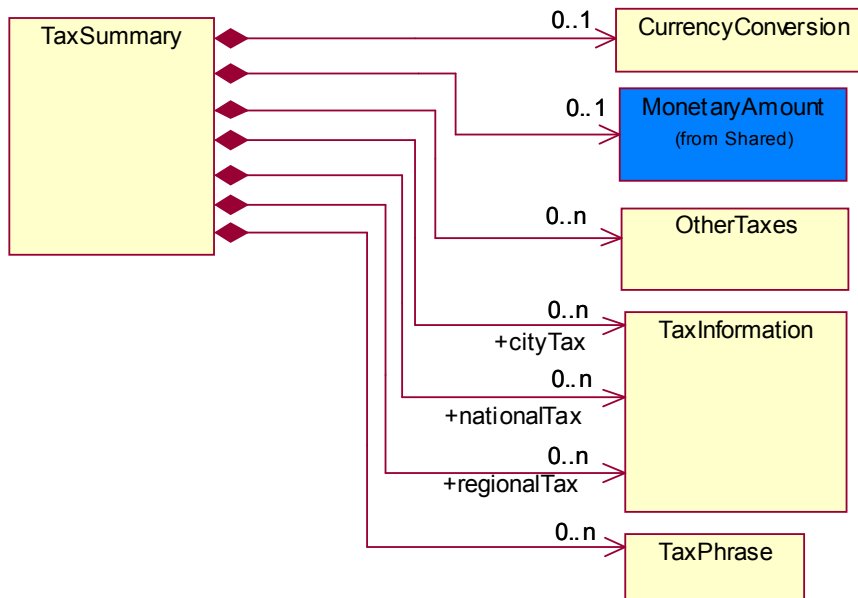
Figure 3-15 TaxSummary

| Composition	Cardinality	Type	Documentation
CurrencyConversion	0..1	CurrencyConversion	The collection of business properties that describe the exchange of money in circulation.
TaxPhrase	0..n	TaxPhrase	The collection of business properties that describe VAT specific information.
cityTax	0..n	TaxInformation	The collection of business properties that describe tax information for the city levying the tax.
nationalTax	0..n	TaxInformation	The collection of business properties that describe tax information for the country levying the tax.
regionalTax	0..n	TaxInformation	The collection of business properties that describe tax information for the region levying the tax.
MonetaryAmount	0..1	MonetaryAmount	The collection of business properties that describe the monetary amount defined by a specified currency.
OtherTaxes	0..n	OtherTaxes	The collection of business properties that describe other tax information.

3.1.2 CodeList

3.1.2.1 TransportEvent

Code identifying an event during the transportation of a shipment.

Name	Documentation
DOC	Dock.
PIC	Pickup.
SHP	Ship.

3.1.2.2 GovernmentPriorityRating

If a contract number exists and PO type is Government, a priority rating code is required.

Name	Documentation
ATE	Atomic energy.
DEF	Defense.
DOE	Domestic energy.
ENP	Energy and related programs.
OTH	Other Defense.

3.1.2.3 PurchaseOrderStatus

Code identifying the status of a purchase order.

Name	Documentation
ACC	Accept.
CAN	Cancel.
COM	Complete.
FCL	Finally Closed - Cannot be opened any further updates.
NEW	New - Initial state or and has not been amended yet.
PAR	Partial.
PEN	Pending.
REJ	Reject.
UPD	Update - Open and amended.

3.1.2.4 CustomerType

Code identifying the type of end user.

Name	Documentation
ENC	End customer.
ULC	Ultimate customer.

3.1.2.5 ProductSubstitutionReason

A code identifying the reason a product is substituted for the original product requested.

Name	Documentation
BEP	Better Product - The requested part number is currently not available offering product upgrade.
CMP	Component of the identified product is a component of this referenced product.
DWN	Downgrade - The identified product is a downgrade for this referenced product.
IPN	Invalid Part Number - The requested part number is invalid.
PRE	Predecessor - The product that existed prior.
QRH	Quality / Reliability Hold.
REP	Retired product - The requested part number is no longer available.
RPL	Replace - The identified product is a replacement for this referenced product.
SCC	Successor - The superseding product that will be replacing the current product.

3.1.2.6 TaxExemptionCode

Code identifying the type of tax exemption for a product or service.

Name	Documentation
AGR	Agriculture.
AQT	Tax exemption for aquatic product for open-sea fishery.
BTL	Tax exemption for border trade with low value - import/export of goods with low value at border.
CPT	Exempt - From County Property Tax.
CRT	Tax exemption for charity - levy free import of commodity for helping the poor charity from beyond the border non-refundable donation to within-border.
CSM	Tax exemption for consignment of assembly and replenishment material and export of finished product.
DIS	Disabled.
DIV	Disabled Veteran.
DPI	Direct Pay ID.
DRD	Tax exemption for disaster relief donation - import goods using disaster relief donation.
EFE	Exempt - For export.
EFR	Exempt - For resale.
EVD	Tax exemption for entire vehicle duty - Levy payment for automobile spare part under the entire vehicle special characterization.
EVI	Tax exemption for entire vehicle special levy - import of automobile spare part under the entire vehicle special characterization.
EXC	Tax exemption for exceptional case - import/export of goods under exceptional levy exemption.
FAD	Tax exemption for free aid - import/export cargo for free aid.
FFE	Tax exemption for import/export of goods by sole foreign capital funded

	enterprise.
FTZ	Tax exemption for free tax zone - tax free zone for import of self consumption commodity.
GND	Tax exemption for general duty or general levy for import/export goods.
GST	Exempt - Goods and Services Tax.
HOM	Homestead.
ICT	Tax exemption for incentive program - import of equipment under national/foreign capital national development incentive program.
IET	Tax exemption for internally set rule - import/export of goods enjoying temporarily set levy rate.
IFS	Tax exemption for public infrastructure eg. Import of equipment for correspondence, harbor, railroad, road, airport construction.
IGC	Tax exemption for integrated circuit - import of goods for integrated circuit manufacturing companies.
IMM	Tax exemption for import for manufacturing - import of manufacturing material and export of finished product.
ITA	Tax exemption for ITA products - IT product without full levy number.
ITS	Tax exemption for internal sale equipment - equipment and key components of open-sea ships for internal sales.
LAE	Material taxable - labor exempt.
LFC	Tax exemption for local-foreign cooperation - import/export of goods of local-foreign cooperation company.
LFV	Tax exemption for local-foreign joint venture - import/export of goods of local-foreign joint venture company.
LOF	Exempt - Letter on File.
LON	Tax exemption for loan project - import of goods using loan.
LOS	Exempt - Local service.
LOS	Tax exemption for international financial institution loan and foreign government loan, specified electromechanical device spare parts.
LPT	Tax exemption for land petroleum - import of equipment for exploration, extraction of land petroleum.
LPT	Exempt - From Local Property Tax.
MAE	Labor taxable - Material exempt.
MFE	Tax exemption for manufacturing equipment - import of un-priced equipment by foreign company conducting manufacturing trade.
MNE	Tax exemption for import cargo for major national event.
MPT	Tax exemption for marine petroleum - import of equipment for exploration, extraction of marine petroleum.
NDF	Tax exemption for nationally approved duty free - import/export goods which have been approved duty-free by state council.
NE1	Not exempt - For resale.
NE2	Not exempt - Not for resale.
NFR	Exempt - Not For Resale.
NOH	Non-homestead.
NOT	Not taxable.
NTL	Tax exemption for nationalization - Import of parts for nationally specified small vehicle and video camera production.
O65	Over 65.
OLR	Tax exemption because of other legal regulation - Other legal regulation which reduce/eliminate import and export cargo levy.
OPA	Tax exemption for Hong Kong/Macau OPA - HongKong/Macao textile that

	went through manufacturing in China that has obtaining export permit.
OPS	Open space.
OPT	Other Property Tax exemption.
OSV	Tax exemption for open sea vessels - Open sea ships and equipment component.
OTZ	Tax exemption for other zone that uses special policy to export cargo.
PSL	Exempt - Per State Law.
PST	Exempt - Provincial Sales Tax.
REE	Recurring exempt.
SEG	Tax exemption for scientific education goods - universities and scientific research institution importing scientific educational goods.
SFD	Tax exemption for self funding - import of equipment, spare parts, and fittings, using own funding on top of foreign company investment amount.
SPD	Tax exemption for spare part duty - Levy payment for automobile spare part under the non-entire vehicle special characterization.
SPT	Exempt - From School Property Tax.
SRG	Tax exemption for specific zone for import of self consumption commodity or export cargo.
TNT	Tax exemption for enterprises who import cargo for technological transformations.
TOE	Totally exempt.
TOS	Exempt - Toll service.
TPT	Exempt - From state property tax.
USE	Usage exempt.
USG	Exempt - Sale to U.S. government.
WOF	Working farm.

3.1.2.7 LeadTimeClassificationCode

Code identifying the classification of a product lead time for ordering.

Name	Documentation
ASA	As Available - A product marked as "As Available" orders for this product but supply is quite uncertain-normally this has been used when a product is being WDFM (withdraw from marketing) or has reached end of life (EOL).
ASS	Assembly - Time period required by a company production line to manufacture a component or module from sub components. This lead-time may include actual manufacturing cycle time, testing time, and queuing time.
CLF	Call Factory - Contact the factory for the most current information.
DTS	Dock to Stock - Time period required to move product from a product seller's or product receiver's dock through a warehousing process until the product is documented as available for buyer's use. If the seller's dock is identified, this lead-time also includes carrier transit time between seller's dock to buyer's dock.
EOL	End of Life.
INS	Individual Scheduled-a product marked as "Individual Scheduled" by the manufacturing facility. When doing this they will take into consideration the current supply situation / extended leadtime as well as capacity situation for the current product.
MAR	Market - Time period quoted by a seller for the availability of product. This lead time includes actual manufacturing cycle time and existing.

NOS	No Supply - A product marked "No Supply" and will not be able to fulfill orders for this product.
ODP	Order Processing - Time period required by a seller to receive a purchase order and respond with a confirmation to the buyer.
PLA	Planned Availability - A product marked as "Planned Availability" yet available on the market but has been announced with a certain date. Once this date has been passed the product will get a "normal" leadtime.
PRC	Procurement - Time period required by a buyer to process a quote or internal demand signal to issue a purchase order.
PRD	Production.
SUP	Start Up.
TRN	Transit - Time period required to move a product from one location to another.

3.1.2.8 QuoteStatus

Code identifying whether business has been secured by the end customer.

Name	Documentation
CLO	Closed Lost.
CWO	Closed Won.
UND	Undetermined.

3.1.2.9 QuoteType

Code identifying category specification for a quote.

Name	Documentation
ADD	Quote for adding additional product/service to existing contract.
BFB	Bid for Bid - Quote for project not ready for purchase, budgetary pricing.
BFC	Bid for buy - Customer ready to purchase, looking for best price.
BQU	Blanket Quote - Secures pricing for complete parts lists.
BQV	BOM Quote - Complete list of parts provided for a specified project, total package pricing provided.
BQW	Budgetary Quote - Quote to determine if project is economically feasible.
CHG	Quote for changing existing contract.
CQU	Competitive Quote - Competitor pricing has been provided.
CQV	Contract Quote - Based on previously negotiated contract pricing.
DWG	Quote for downgrading contract.
NCO	Quote for new service contract.
QWR	Quote with Reservations - Quote to hold product for specified delivery.
REN	Quote for contract renewal.
REP	Repair.
REW	Rework.
RFB	Rebid for Buy - Customer requesting requote, possibly looking for better pricing/delivery.
SER	Service.
SFS	Ship from stock and debit. Partner has potential to book business if provided authorization to deviate from standard cost.
UPG	Quote for upgrading contract.

3.1.2.10 RequoteAction

Code identifying the type of action to be taken for a given line item on a quote.

Name	Documentation
ADD	Added.
CHA	Change.
DEL	Deleted.
NAC	No action.
REI	Re-issue.

3.1.2.11 RequestOption

Code identifying an option for a request, eg. quote request or order request.

Name	Documentation
CON	Request By Contract - The requested action will impacts all of the products on the contract. For example, a) during the quoting process, all the products in the identified contract will be quoted. b) during the ordering process, all the products in the identified contract will be ordered.
PRO	Request By Product - The requested action will impacts the specific identified product. For example, a) during the quoting process, all the identified products in the existing contract will be quoted. b) during the ordering process, all the identified products in the existing contract will be ordered.
SIT	Request By Site - The requested action will impacts all of the products within a specified site. For example, a) during the quoting process, all the products within an identified site in the contract will be quoted. a) during the ordering process, all the products within an identified site in the contract will be ordered.
WQO	Request with quote.

3.1.2.12 QuoteAcknowledgmentReason

Code identifying the reason for acknowledging a quote.

Name	Documentation
DSN	Duplicate serial number.
IBL	Invalid/Missing Billing.
ICN	Invalid/Missing contract number.
ICO	Invalid/Missing configuration.
ICW	Invalid/Missing contract owner.
IDT	Invalid/Missing date.
IPC	Invalid/Missing price.
IPL	Invalid/Missing price list.
IPO	Invalid/Missing purchase order number.
IPR	Invalid/Missing product.
IQN	Invalid/Missing quote number.
IQT	Invalid/Missing quantity.
ISA	Invalid/Missing shipping address.
ISL	Invalid/Missing service level.
ISN	Invalid/Missing serial number.
ISV	Invalid/Missing service location.
OTR	Others.

3.2 Shared

3.2.1 Shared

3.2.1.1 Dependency Diagram
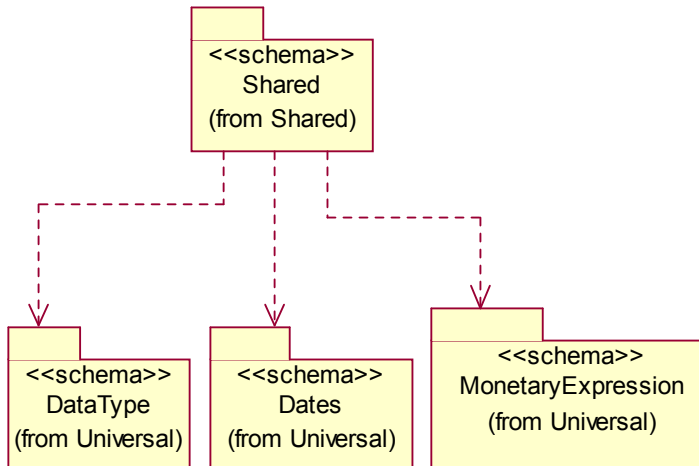
Figure 3-16 Dependency

3.2.1.2 CarrierInformation

The collection of business properties that describe a carrier's identification.

Figure 3-17 CarrierInformation

Attribute	Type	Documentation
identifier[0..1]	string	The unique identifier that identifies an account.

Composition	Cardinality	Type	Documentation
SCAC	1	SCAC	The Standard Carrier Alpha Code (SCAC) is a unique two-to-four-letter code used to identify transportation companies. NMFTA developed the SCAC identification codes in the mid 1960's to facilitate computerization in the transportation industry. Refer http://www.nmfta.org for more detail.

3.2.1.3 DatePeriodAndDuration

The collection of business properties that describe a date period or duration.
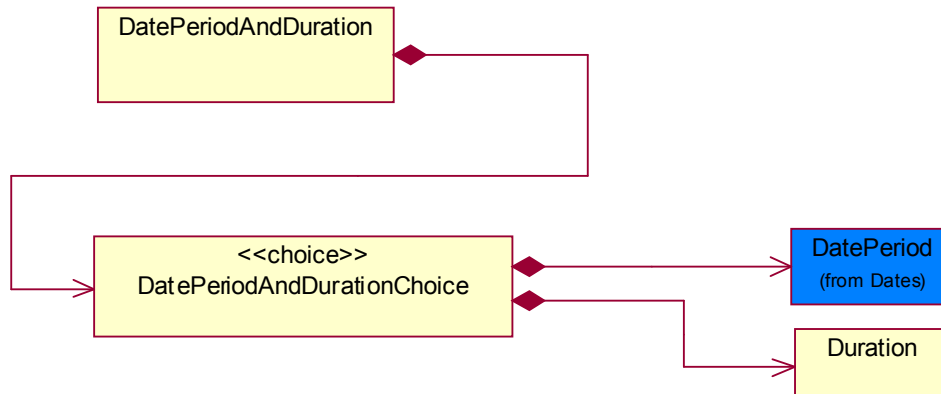
Figure 3-18 DatePeriodAndDuration

Composition	Cardinality	Type	Documentation
DatePeriodAndDurationChoice	1	DatePeriodAndDurationChoice	The choice structure for DatePeriodAndDuration.

3.2.1.4 DatePeriodAndDurationChoice

The choice structure for DatePeriodAndDuration.

Composition	Cardinality	Type	Documentation
DatePeriod	1	DatePeriod	The business document must allow for the computation or statement of a duration based upon a beginning and an ending date.
Duration	1	Duration	This object allows representation of a duration of time.

3.2.1.5 Duration

This object allows representation of a duration of time.
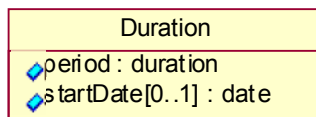
Figure 3-19 Duration

Attribute	Type	Documentation
period	duration	Represents a duration of time.
startDate[0..1]	date	The date indicating the beginning of the duration.

3.2.1.6 MonetaryAmount

The collection of business properties that describe the monetary amount defined by a specified currency.
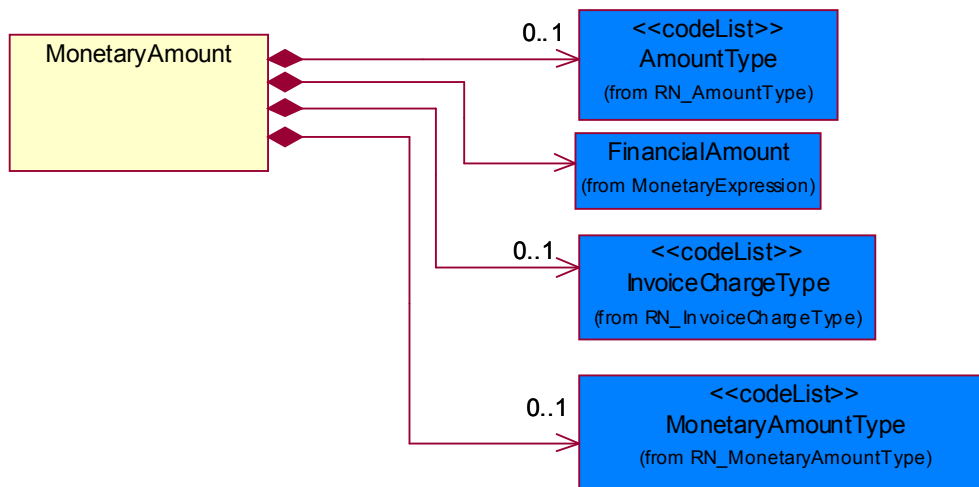
Figure 3-20 MonetaryAmount

Composition	Cardinality	Type	Documentation
FinancialAmount	1	FinancialAmount	The business document must express financial amounts.
InvoiceChargeType	0..1	InvoiceChargeType	Code identifying the values for the types of charges contained in an invoice.
MonetaryAmount Type	0..1	MonetaryAmountType	Code identifying whether the monetary amount is a debit or credit.
AmountType	0..1	AmountType	Code identifying the type of monetary amount.

3.2.1.7 ProductPricing

The collection of business properties that describe the type of pricing and financial amount for a product.
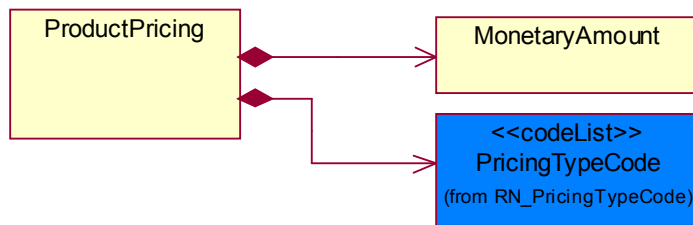
Figure 3-21 ProductPricing

Composition	Cardinality	Type	Documentation
MonetaryAmount	1	MonetaryAmount	The collection of business properties that describe the monetary amount defined by a specified currency.
PricingTypeCode	1	PricingTypeCode	Code identifying the type of pricing available for a product.

3.2.1.8 ProductQuantity

A quantity specifying the number of product units.
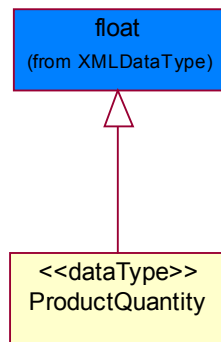
Figure 3-22 ProductQuantity

3.2.1.9 SCAC

The Standard Carrier Alpha Code (SCAC) is a unique two-to-four-letter code used to identify transportation companies. NMFTA developed the SCAC identification codes in the mid 1960's to facilitate computerization in the transportation industry.

Refer http://www.nmfta.org for more detail.
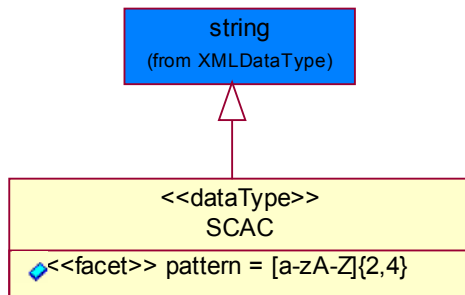
Figure 3-23 SCAC

Attribute	Type	Documentation
pattern		[a-zA-Z]{2,4}

3.2.2 CodeList

3.2.2.1 InvoiceChargeType

Code identifying the values for the types of charges contained in an invoice.

Name	Documentation
ALC	Allowances and Charges.
CUC	Custom Charges.
DEA	Deposit Amount.
ESC	Expedited Shipping Charge - Charge for accelerating the delivery of a product.
FRC	Freight Charges.
HAC	Handling Charges.
LEC	Lease Charge - Charge for the use of a product in which the purchaser assumes certain responsibilities of ownership.
LIC	License Charge - Charge for the use of a product (usually software) in which the manufacturer maintains ownership of the product.
MAC	Maintenance Charge - Charge (usually periodic) for providing maintenance support for a product.
PUC	Purchase Charge - Charge for a product in which the buyer takes all responsibilities of ownership.
QUD	Quantity Discount.
REC	Rental Charge - Charge for the use of a product (usually hardware) in which the manufacturer maintains ownership of the product.

3.2.2.2 MonetaryAmountType

Code identifying whether the monetary amount is a debit or credit.

Name	Documentation
CRE	Credit.
DEB	Debit.
ZER	Zero remit.

3.2.2.3 PricingTypeCode

Code identifying the type of pricing available for a product.

Name	Documentation
ACR	Authorized Cost and Resale.
ACS	Authorized Cost - The negotiated cost agreed upon between the supplier and distributor at the time the "debit?is authorized.
ACT	Authorized cost.
ANY	Any available.
ARS	Authorized resale.
ASP	Average Selling Price - Manufacturer's published price.
BPA	Budgetary Price Amount.
BPP	Broken Purchase Price.
BSH	Book-Ship.
CAT	Catalog price - Book (the supplier's published cost at the time of transaction) or Published Price.
CLM	Claim Amount.
CMC	Commercial.
CMD	Commodity.
CMF	Contract Manufacturing.
CON	Contract.
COS	Cost - Price for which the distributor purchased the parts.
CPL	Country Price List.
DBC	Disti Book Cost.
DFR	Duty free.
DIS	Distribution.
DPD	Duty paid.
DTP	Distribution price.
EDU	Education.
ERT	E-Rate.
EXC	Exception.
FGM	Federal government.
GEN	General.
HIE	Higher Education.
LCL	Local.
LGM	Local government.
LIS	List.
MPR	Market price.
MRP	Manufacturer's recommendation for unit pricing.
MSR	Manufacturer Suggested Retail Price (MSRP).
MUS	Minimum Unit Sale (MUS) - Manufacturer requirement of total dollar value for design opportunity.
NPF	Nonprofit.

OEM	Original Equipment Manufacturing (OEM).
OVP	OEM Volume Pricing - Original equipment manufacturing price per volume ordered.
PED	Primary Education.
QUO	Quote Price
RCS	Requested Cost (RCS) - Reseller requested cost to the manufacturer.
REX	Reseller Expects.
RFB	Refurbished.
RIN	Religious Institution.
RSP	Resale - Price the distributor is authorized to use for sale to their customer (RSP).
SCE	Special Education.
SEC	Security and management reseller.
SED	Secondary Education.
SEV	Service provider.
SGM	State Government.
SPD	Special Discount Price.
SPE	Special Education.
SPL	Samples.
SRP	Suggested Resale Price.
STR	Standard Rebate.
THP	Threshold Price.
TOC	Total Other Charges - Suggested resale price - The sum total of all distributor added charges to the customer for value added services, including but not limited to programming, tape and reel, labeling, date coding, kitting and in-house assembly.

3.2.2.4 AmountType

Code identifying the type of monetary amount.

Name	Documentation
DIP	Discount Percentage.
DIS	Discount Value - The monetary amount of the discount on the price applied to a customer order.
FRE	Freight Charges - The monetary amount to be paid for freight transportation.
INS	InsuranceCharges - The monetary amount to be paid for freight insurance.
MAT	Material Cost - This object represents the material cost for the product.
MIS	Miscellaneous Charges - The monetary amount to be paid for miscellaneous charges.
NET	Net Amount.
PRC	Processing Charges - The monetary amount to be paid by consignee for consignment manufacturer.
TOD	Total Amount Due - Total amount due upon receipt of statement.
TOT	Total Amount - Total price for an entire business document.
TOV	Total Value Added Amount - The total amount of the shipment including any value added tax.
UNI	Unit Price - Agreed upon sale price for each unit ordered.
VAD	Value Added Unit Price - The price of a unit including any value added tax.

4. Universal Structure

4.1 ContactInformation

4.1.1 ContactInformation

The business document must allow for the identification of the name of the department, service or individual to be contacted regarding the context of the business document.
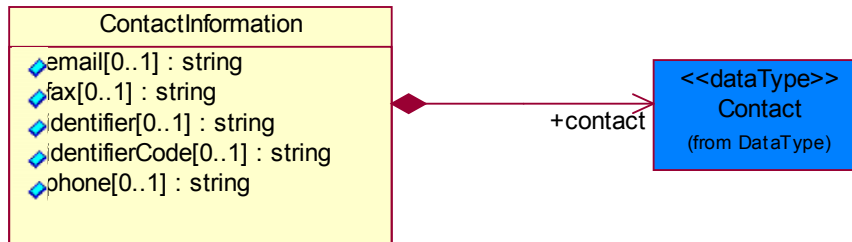
Figure 4-1 ContactInformation

Attribute	Type	Documentation
email[0..1]	string	The electronic mail for the specified contact.
fax[0..1]	string	The fax number for the specified contact.
identifier[0..1]	string	Identifies the role of the contact (i.e. Service Technician, Account Manager) in the Business Process.
identifierCode[0..1]	string	IdentifierCode is a unique security authorization code to identify the contact- ie. badge ID.
phone[0..1]	string	The telephone number for the specified contact.

Composition	Cardinality	Type	Documentation
contact	1	Contact	The name of the department, service or individual to be contacted within the organization.

4.2 DataType

4.2.1 Contact

The name of the department, service or individual to be contacted within the organization.
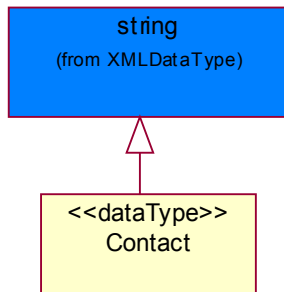
Figure 4-2 Contact

4.2.2 DUNS

A number assigned by Dun and Bradstreet to identify a business location.
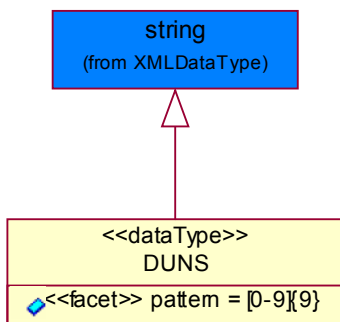
Figure 4-3 DUNS

Attribute	Type	Documentation
pattern		[0-9]{9}

4.2.3 DUNSPlus4

A identifier to specify a specific location within a business location.
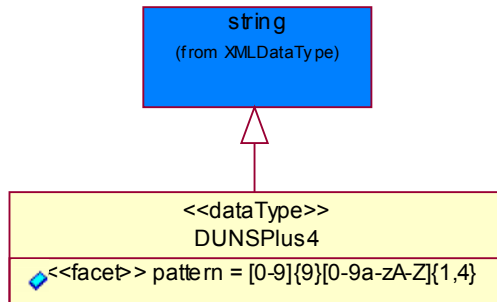
Figure 4-4 DUNSPlus4

Attribute	Type	Documentation
pattern		Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by Dun and Bradstreet, Inc. (D&B) plus an alphanumeric of length 4 suffix that may be assigned by a business concern.

4.2.4 GLN

Global Location Number (GLN) - A identifier to identify legal entities, trading parties and location.
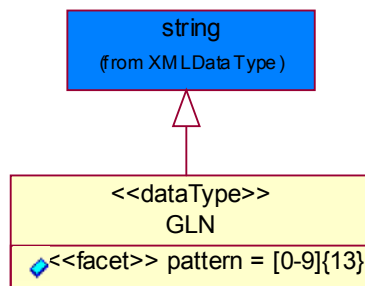
Figure 4-5 GLN

Attribute	Type	Documentation
pattern		[0-9]{13}

4.2.5 GTIN

Global Trade Identification Number (GTIN).

```
string
(from XMLDataType)
```

```
<<dataType>>
GTIN
<<facet>> pattern = [0-9]{14}
```
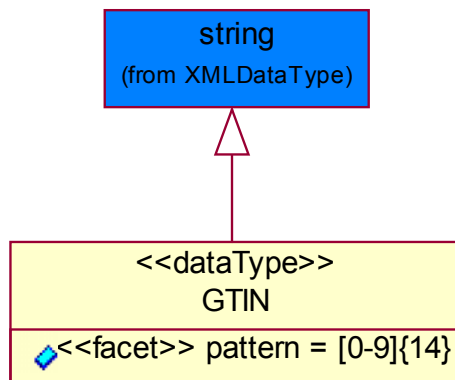
Figure 4-6 GTIN

Attribute	Type	Documentation
pattern		[0-9]{14}

4.2.6 PercentAmount

A number representing a percentage value, e.g. 75.125 represents 75 1/8 percent.

```
decimal
(from XMLDataType)
```

```
<<dataType>>
PercentAmount
<<facet>> totalDigits = 6
```
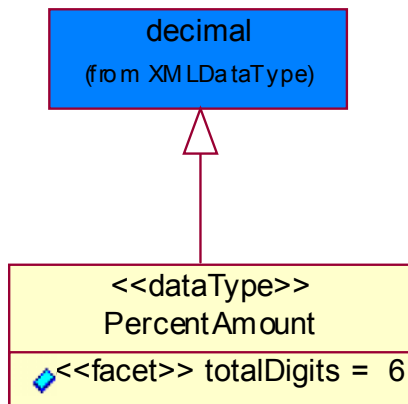
Figure 4-7 PercentAmount

Attribute	Type	Documentation
totalDigits		6

4.3 Dates

4.3.1 DatePeriod

The business document must allow for the computation or statement of a duration based upon a beginning and an ending date.
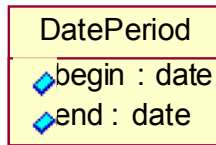
Figure 4-8 DatePeriod

Attribute	Type	Documentation
begin	date	The date indicating the beginning of the date period.
end	date	The date indicating the ending of the date period.

4.4 Document

4.4.1 BusinessDocumentReference

The business document reference object allows for the indirect referencing of a relationship to other business related documents.
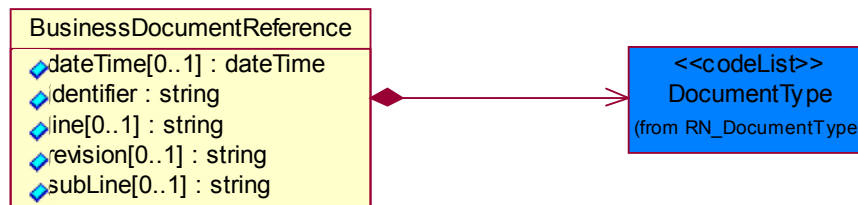
Figure 4-9 BusinessDocumentReference

Attribute	Type	Documentation
dateTime[0..1]	dateTime	The date-time stamp indicating on the referenced business document.
identifier	string	Unique identification of the referenced business document.
line[0..1]	string	References the specific line number of the specified business document.
revision[0..1]	string	Referenced the revision of the specified business document.
subLine[0..1]	string	References the specific subline number of the specified business document.

Composition	Cardinality	Type	Documentation
DocumentType	1	DocumentType	A code identifying the business context of a document.

4.5 Locations

4.5.1 AlternativeIdentifier

Identifies the specified code and the name of the organization that a code is utilized from.

```
AlternativeIdentifier
◆authority : string
◆identifier : string
```

Figure 4-10 AlternativeIdentifier

Attribute	Type	Documentation
authority	string	The name of the organization that a code is utilized from.
identifier	string	The specified code to represent an entity (e.g. product, location, partner, etc.).

4.5.2 Location

The business document must specify a location.
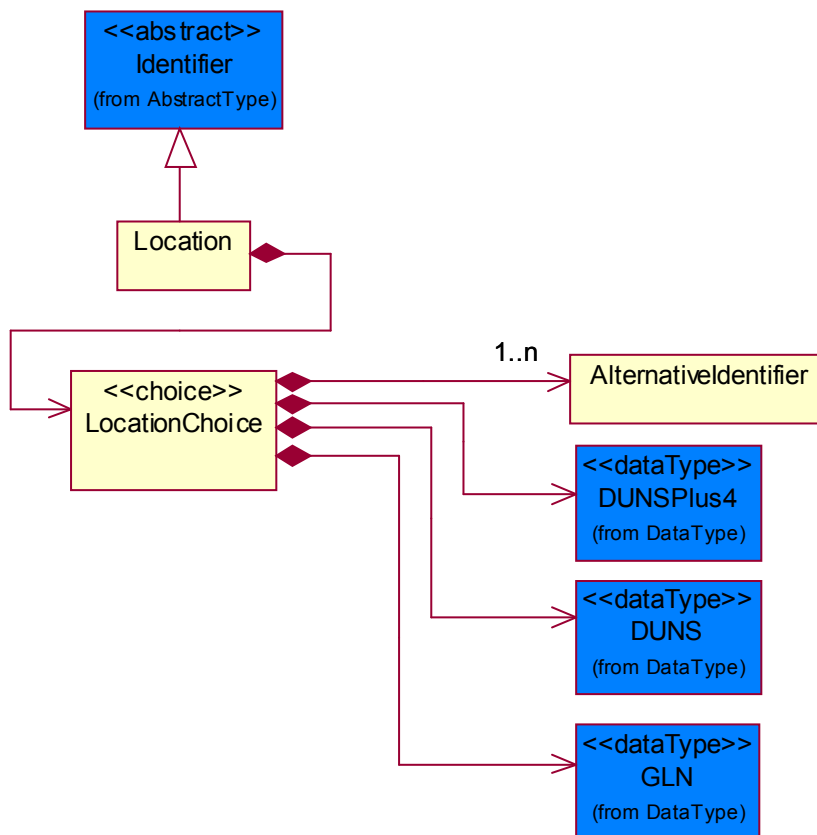
Figure 4-11 Location

Composition	Cardinality	Type	Documentation

LocationChoice	1	LocationChoice	

4.5.3 LocationChoice

Composition	Cardinality	Type	Documentation
DUNSPlus4	1	DUNSPlus4	A identifier to specify a specific location within a business location.
DUNS	1	DUNS	A number assigned by Dun and Bradstreet to identify a business location.
AlternativeIdentifier	1..n	AlternativeIdentifier	Identifies the specified code and the name of the organization that a code is utilized from.
GLN	1	GLN	Global Location Number (GLN) - A identifier to identify legal entities, trading parties and location.

4.5.4 PhysicalAddress

The business document must provide a physical address for a party to the business transaction.
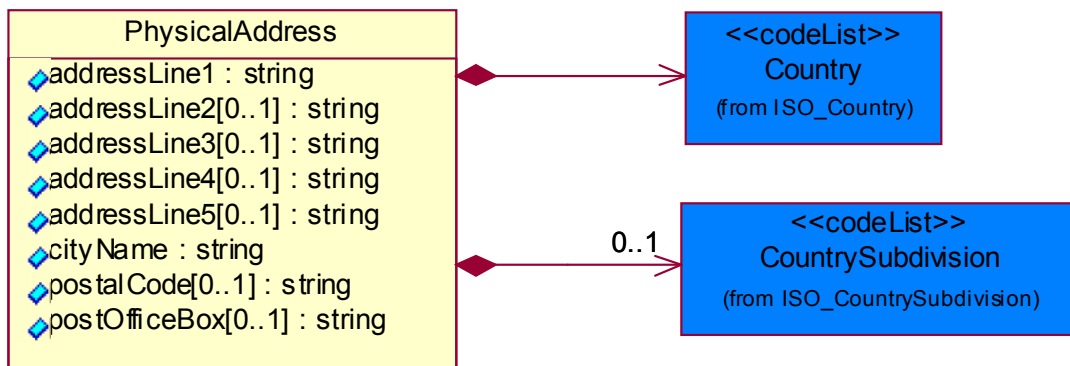
Figure 4-12 PhysicalAddress

Attribute	Type	Documentation
addressLine1	string	The first line of a physical address.
addressLine2[0..1]	string	The second line of a physical address.
addressLine3[0..1]	string	The third line of a physical address.
addressLine4[0..1]	string	The fourth line of a physical address.
addressLine5[0..1]	string	The fifth line of a physical address.
cityName	string	The name of a city.
postalCode[0..1]	string	Identifying geographic location as specified by a national postal code.
postOfficeBox[0..1]	string	The Post Office Box identifier used to identify a party's post office box.

Composition	Cardinality	Type	Documentation
Country	1	Country	For representation of Country name RosettaNet has adopted ISO 3166-3; 1999. Refer to the following web page to get the latest version of the standard: http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/index.html If you need more information about the ISO standard please contact ISO for more details.
CountrySubdivision	0..1	CountrySubdivision	For representation of a Countries subdivisions RosettaNet has adopted ISO 3166-3; 1999. Refer to the following web page to get the latest version of the standard: http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/index.html If you need more information about the ISO standard please contact ISO for more details.

4.6 MonetaryExpression

4.6.1 FinancialAmount

The business document must express financial amounts.
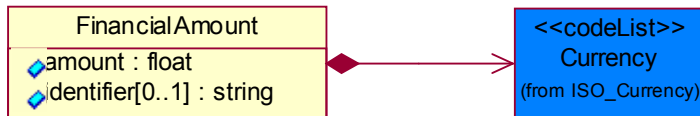
Figure 4-13 FinancialAmount

Attribute	Type	Documentation
amount	float	Specifies the monetary amount.
identifier[0..1]	string	Identifier is a unique identifier to which the specific price is tied - ie. promotion name/ program.

Composition	Cardinality	Type	Documentation
Currency	1	Currency	For representation of Currency codes RosettaNet has adopted ISO 4217; 1995. The British Standards Institution (BSI) is the ISO 4217 Maintenance Agency. Refer to the following web page to get the latest version of the standard: http://www.bsi-global.com/Technical+Information/Publications/_Publications/tig90.xalter If you need more information about the ISO standard please contact ISO for more details.

4.6.2 TaxJurisdiction

The business document must identify the specific tax collection authority.
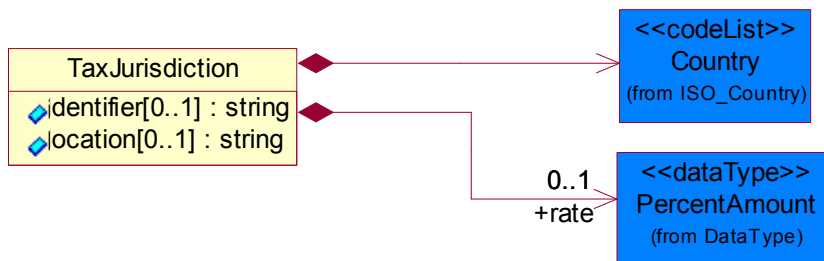
Figure 4-14 TaxJurisdiction

Attribute	Type	Documentation
identifier[0..1]	string	Unique identification for a taxing authority.
location[0..1]	string	Identification of the tax collection authority location.

Composition	Cardinality	Type	Documentation
rate	0..1	PercentAmount	This object represents the tax

			rate.
Country	1	Country	For representation of Country name RosettaNet has adopted ISO 3166-3; 1999. Refer to the following web page to get the latest version of the standard: http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/index.html If you need more information about the ISO standard please contact ISO for more details.

4.7 PartnerIdentification

4.7.1 FullPartner

The business document must describe the trading partners in the business transaction. This data structure provide the flexibility to describe a partner in all possible methods as for new, existing or known partner.
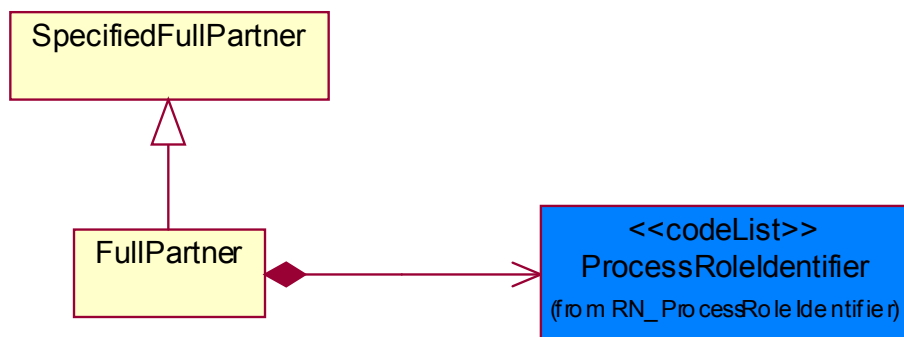
Figure 4-15 FullPartner

Composition	Cardinality	Type	Documentation
ProcessRoleIdentifier	1	ProcessRoleIdentifier	Describes the role of the partner in the business process. A partner will fulfill at least one or more roles during the business process.

4.7.2 IntermittentPartner

The business document must describe a physical address for a delivery.
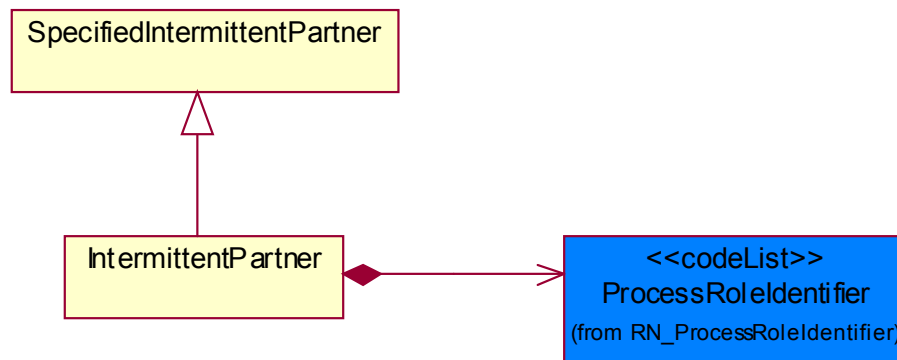
Figure 4-16 IntermittentPartner

Composition	Cardinality	Type	Documentation
ProcessRoleIdenti fier	1	ProcessRoleIdentifier	Describes the role of the partner in the business process. A partner will fulfill at least one or more roles during the business process.

4.7.3 KnownPartner

The business document must describe the trading partners in the business transaction.
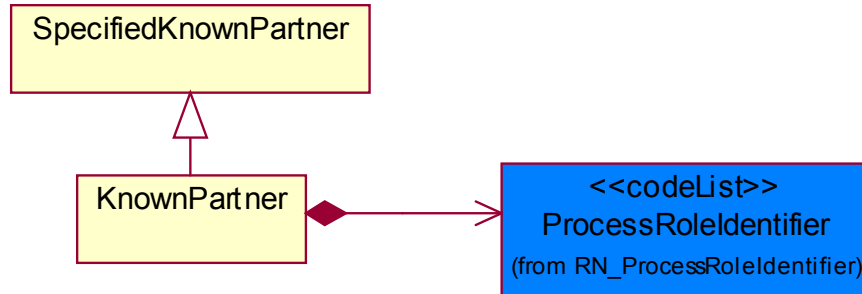
Figure 4-17 KnownPartner

Composition	Cardinality	Type	Documentation
ProcessRoleIdenti fier	1	ProcessRoleIdentifier	Describes the role of the partner in the business process. A partner will fulfill at least one or more roles during the business process.

4.7.4 KnownPartnerContact

The business document must describe the trading partners in the business transaction.

Figure 4-18 KnownPartnerContact

4.7.5 NewPartner

The business document must describe a new, existing (but known to only one of the parties to the transaction) or an unknown party to the business transaction.

Figure 4-19 NewPartner

Composition	Cardinality	Type	Documentation
ProcessRoleIdenti fier	1	ProcessRoleIdentifier	Describes the role of the partner in the business process. A partner will fulfill at least one or more roles during the business process.

4.7.6 PartnerDescription

The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain.
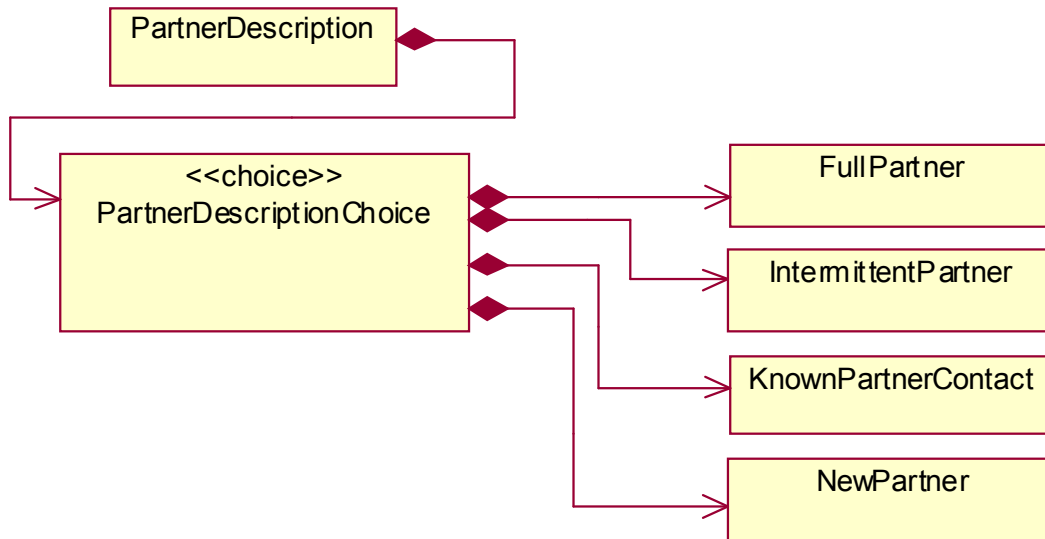
Figure 4-20 PartnerDescription

Composition	Cardinality	Type	Documentation
PartnerDescriptionChoice	1	PartnerDescriptionChoice	

4.7.7 PartnerDescriptionChoice

Composition	Cardinality	Type	Documentation
KnownPartnerContact	1	KnownPartnerContact	The business document must describe the trading partners in the business transaction.
IntermittentPartner	1	IntermittentPartner	The business document must describe a physical address for a delivery.
NewPartner	1	NewPartner	The business document must describe a new, existing (but known to only one of the parties to the transaction) or an unknown party to the business transaction.
FullPartner	1	FullPartner	The business document must describe the trading partners in the business transaction. This data

			structure provide the flexibility to describe a partner in all possible methods as for new, existing or known partner.

4.7.8 PartnerIdentification

The business document must allow for the identity of one or more parties to the transaction.
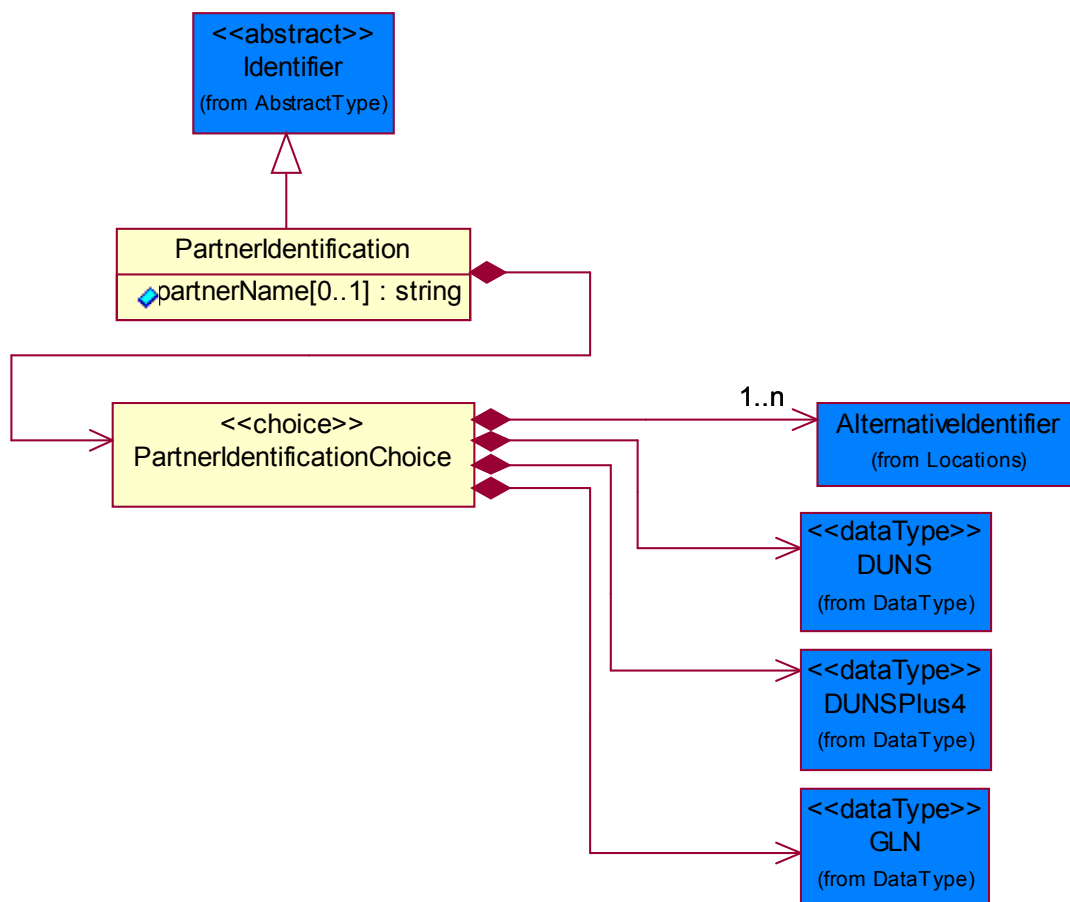
Figure 4-21 PartnerIdentification

Attribute	Type	Documentation
partnerName[0..1]	string	The name of the partner's company/business.

Composition	Cardinality	Type	Documentation
PartnerIdentificationChoice	1	PartnerIdentificationChoice	

4.7.9 PartnerIdentificationChoice

Composition	Cardinality	Type	Documentation
DUNS	1	DUNS	A number assigned by Dun and Bradstreet to identify a business location.
DUNSPlus4	1	DUNSPlus4	A identifier to specify a specific location within a business location.
AlternativeIdentifier	1..n	AlternativeIdentifier	Identifies the specified code and the name of the organization that a code is utilized from.
GLN	1	GLN	Global Location Number (GLN) - A identifier to identify legal entities, trading parties and location.

4.7.10 SpecifiedFullPartner

The business document must describe the trading partners in the business transaction. This data structure provide the flexibility to describe a partner in all possible methods as for new, existing or known partner. This is specifically for partner who role has been specified.
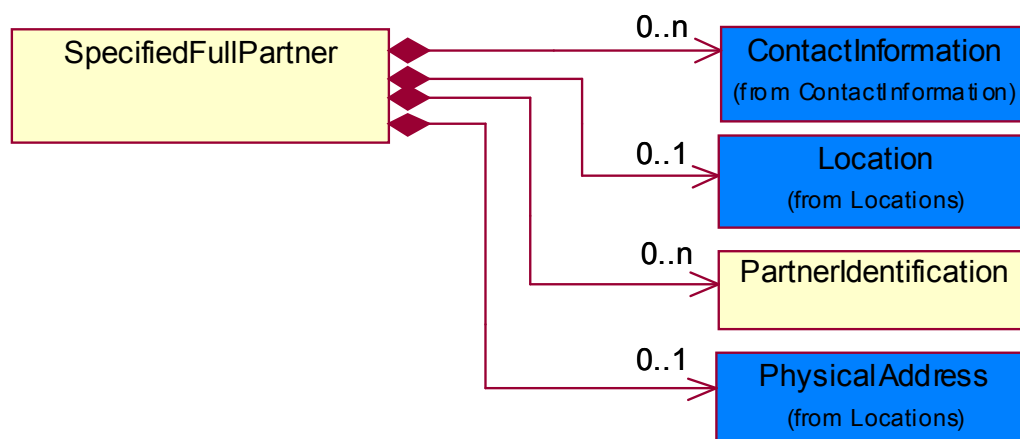
Figure 4-22 SpecifiedFullPartner

Composition	Cardinality	Type	Documentation
ContactInformation	0..n	ContactInformation	The business document must allow for the identification of the name of the department, service or individual to be contacted regarding the context of the business document.
Location	0..1	Location	The business document

			must specify a location.
PartnerIdentification	0..n	PartnerIdentification	The business document must allow for the identity of one or more parties to the transaction.
PhysicalAddress	0..1	PhysicalAddress	The business document must provide a physical address for a party to the business transaction.

## 4.7.11 SpecifiedIntermittentPartner

The business document must describe a physical address for a delivery.
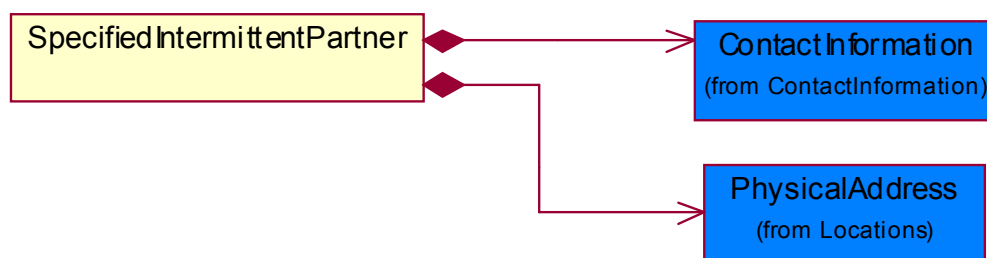
Figure 4-23 SpecifiedIntermittentPartner

Composition	Cardinality	Type	Documentation
ContactInformation	1	ContactInformation	The business document must allow for the identification of the name of the department, service or individual to be contacted regarding the context of the business document.
PhysicalAddress	1	PhysicalAddress	The business document must provide a physical address for a party to the business transaction.

4.7.12 SpecifiedKnownPartner

The business document must describe the trading partners in the business transaction.

Figure 4-24 SpecifiedKnownPartner

Composition	Cardinality	Type	Documentation

PartnerIdentificati on	1	PartnerIdentification	The business document must allow for the identity of one or more parties to the transaction.

4.7.13 SpecifiedKnownPartnerContact

The business document must describe the trading partners in the business transaction and allow for a identification of an individual of the trading partner.
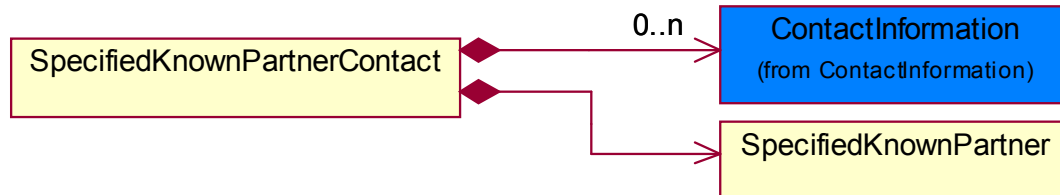
Figure 4-25 SpecifiedKnownPartnerContact

Composition	Cardinality	Type	Documentation
SpecifiedKnownPa rtner	1	SpecifiedKnownPartn er	The business document must describe the trading partners in the business transaction.
ContactInformatio n	0..n	ContactInformation	The business document must allow for the identification of the name of the department, service or individual to be contacted regarding the context of the business document.

4.7.14 SpecifiedNewPartner

The business document must describe a new, existing (but known to only one of the parties to the transaction) or an unknown party to the business transaction.
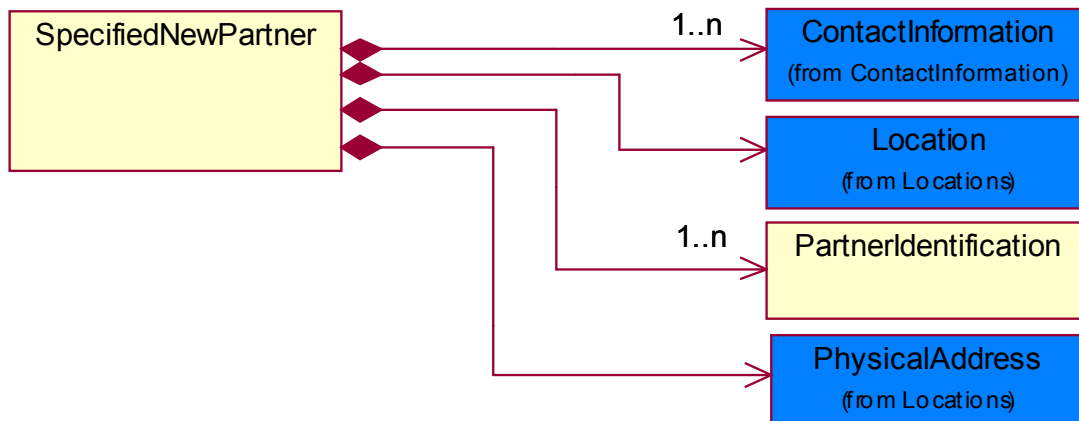
Figure 4-26 SpecifiedNewPartner

Composition	Cardinality	Type	Documentation
ContactInformation	1..n	ContactInformation	The business document must allow for the identification of the name of the department, service or individual to be contacted regarding the context of the business document.
Location	1	Location	The business document must specify a location.
PhysicalAddress	1	PhysicalAddress	The business document must provide a physical address for a party to the business transaction.
PartnerIdentification	1..n	PartnerIdentification	The business document must allow for the identity of one or more parties to the transaction.

4.7.15 SpecifiedPartnerDescription

The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain.
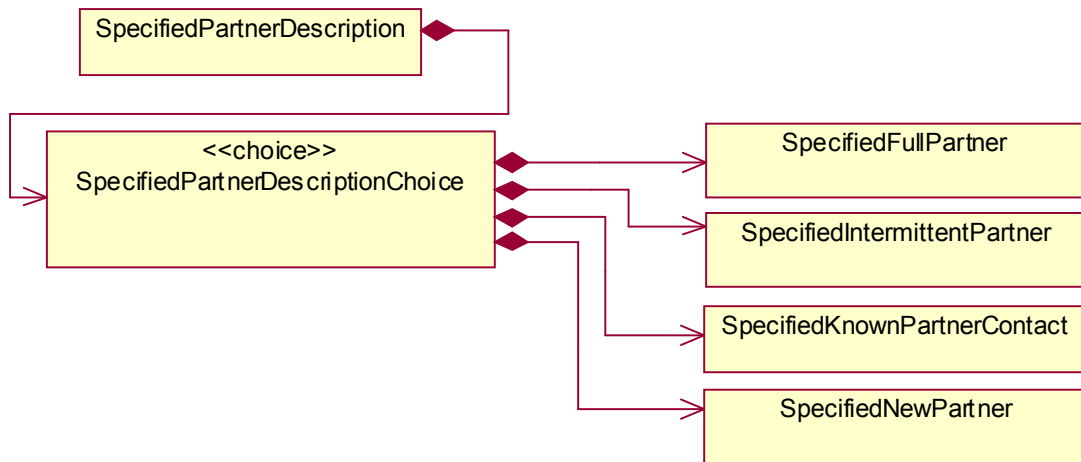
Figure 4-27 SpecifiedPartnerDescription

Composition	Cardinality	Type	Documentation
SpecifiedPartnerDescriptionChoice	1	SpecifiedPartnerDescriptionChoice	

4.7.16 SpecifiedPartnerDescriptionChoice

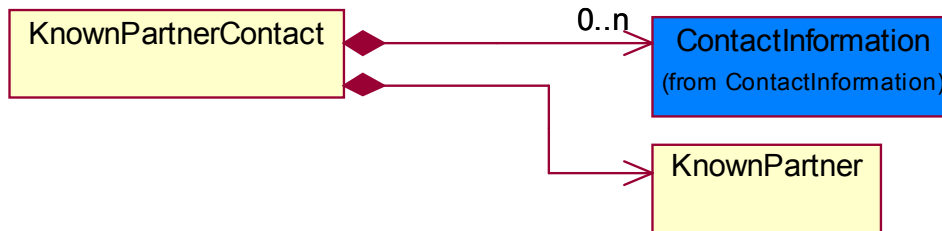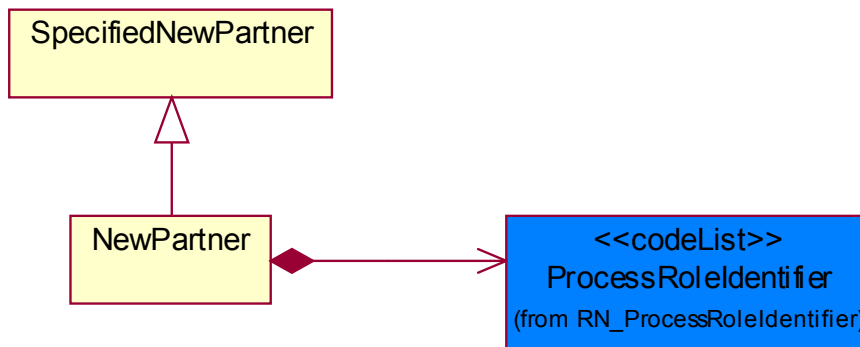| Composition	Cardinality	Type	Documentation
SpecifiedKnownPartnerContact	1	SpecifiedKnownPartnerContact	The business document must describe the trading partners in the business transaction and allow for a identification of an individual of the trading partner.
SpecifiedIntermittentPartner	1	SpecifiedIntermittentPartner	The business document must describe a physical address for a delivery.
SpecifiedNewPartner	1	SpecifiedNewPartner	The business document must describe a new, existing (but known to only one of the parties to the transaction) or an unknown party to the business transaction.
SpecifiedFullPartner	1	SpecifiedFullPartner	The business document must describe the trading partners in the business

			transaction. This data structure provide the flexibility to describe a partner in all possible methods as for new, existing or known partner. This is specifically for partner who role has been specified.

4.8 ProductIdentification

4.8.1 ProductIdentification

The object provides the identifier(s) of a product.
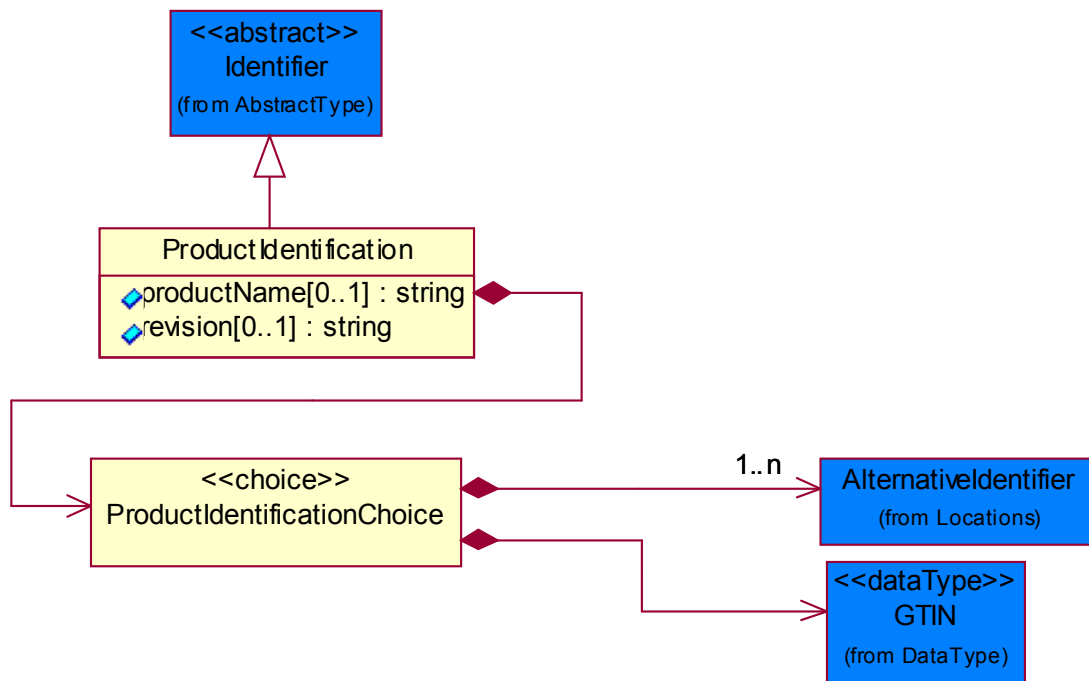
Figure 4-28 ProductIdentification

Attribute	Type	Documentation
productName[0..1]	string	The name of the product.
revision[0..1]	string	Referenced the specified product revision.

Composition	Cardinality	Type	Documentation
ProductIdentificationChoice	1	ProductIdentificationChoice	

4.8.2 ProductIdentificationChoice

Composition	Cardinality	Type	Documentation
AlternativeIdentifier	1..n	AlternativeIdentifier	Identifies the specified code and the name of the organization that a code is utilized from.
GTIN	1	GTIN	Global Trade Identification Number (GTIN).

4.9 CodeList

4.9.1 Country

For representation of Country name RosettaNet has adopted ISO 3166-3; 1999. Refer to the following web page to get the latest version of the standard: http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/index.html. If you need more information about the ISO standard please contact ISO for more details.

4.9.2 CountrySubdivision

For representation of a Countries subdivisions RosettaNet has adopted ISO 3166-3; 1999. Refer to the following web page to get the latest version of the standard: http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/index.html. If you need more information about the ISO standard please contact ISO for more details.

4.9.3 Currency

For representation of Currency codes RosettaNet has adopted ISO 4217; 1995. The British Standards Institution (BSI) is the ISO 4217 Maintenance Agency. Refer to the following web page to get the latest version of the standard: http://www.bsi-global.com/Technical+Information/Publications/_Publications/tig90.xalter .
If you need more information about the ISO standard please contact ISO for more details.

4.9.4 Language

For representation of Language name RosettaNet has adopted ISO 639-2; 1998. Refer to the following web page to get the latest version of the standard:

http://www.loc.gov/standards/iso639-2/iso639jac.html

If you need more information about the ISO standard please contact ISO for more details.

4.9.5 DocumentType

A code identifying the business context of a document.

Instance	Documentation
APM	Applied Promotions.
ARA	Authorization Request Approval.
CAR	Certificate of Analysis Response.
CBN	Product batch number of customer.
CCN	Customs clearance number.
CFA	Failure Analysis - Request document that will accompany the product providing characteristics of the component failure.
CIN	Commercial Invoice.
CNM	Traditional credit note or memo.
COA	Certificate of Analysis.
CON	In a virtual sourcing relationship, a third party trading partner is supplying a part to a customer on behalf of another company that has taken the order for the customer. In this case a Customer Order Number is associated to the request for material that is sent to the virtual trading partners.
COS	Consumption Notice.
COT	Contract.
CRN	Unique consumption reference number identifying the product consumption issue i.e. one-to-one relationship with physical flow.
DEM	Traditional debit note or memo.
DEN	Delivery Note.
DIN	Discontinuation Notice.
DOR	Delivery Order.
DRN	Drawing Number.
DRR	Design Registration Request.
ECO	Engineering Change Order - The proprietary unique identification number that represents an engineering change order.
EDD	Export Declaration Document.
EIR	Engineering Information Request.
EOL	End of Life.
FUO	Sales order or transfer order fulfilling demand out of a facility (outbound shipment).
IDD	Import Declaration Document.
INV	Invoice.
LID	Location Identifier. Data for on-site work that have to be done on the machine (associated with preventive maintenance order).
MEN	Master Event Number.
MID	Machine Identifier. Data for on-site work that have to be done on the machine (associated with preventive maintenance order).
MON	Model Number.
NTS	Notes.
OCL	The unique identifier assigned by the OEM for a warranty claim.
OGA	Other governmental agency issued document.
OPO	The unique identifier assigned by the OEM for a part order.
OPR	The unique identifier assigned by the OEM for a part return.
PCN	Product/Process Change.
PFA	Failure Analysis - Request document that will accompany the product

	providing characteristics of the product failure.
PII	Refers to previously issued invoice.
PLS	Unique number that identifies packing form prior to shipment.
POI	Purchase Order IN.
PON	Production order number for material release.
POO	Purchase Order OUT.
PRC	Product Catalog.
PSI	Refers to previously issued self-billing invoice.
PUO	Purchase Order.
QUO	Quote.
REC	Document identifying the receipt of materials or products into a facility against a purchase order or transfer order (inbound shipment).
REN	Release Number.
REO	Purchase order or transfer order replenishing inventory into a facility (inbound shipment).
REQ	Requisition.
RMA	Returned Material Authorization.
RPO	Purchase order for materials or product returned to and reworked by a supplier.
RTA	Remittance Advice - Remittance details.
SAO	Sales Order.
SBC	Credit Memo used in self-billing scenario.
SBD	Debit Memo used in self-billing scenario.
SBI	Invoice in self billing scenario.
SBN	Product batch number of supplier.
SCA	Similar to contracts - Contains the quantity of an article that is to be ordered from a vendor and the price for article or service that is to be procured.
SEN	Serial Number.
SEO	A document that gives a repair provider the necessary authorization to repair or upgrade a product either at the customer site or at the repair provider's site.
SHD	Shipping Document.
SNC	Shipset Number on Code List.
SPC	The unique identifier assigned by the ASP for a warranty claim.
SPN	Spec Number.
SPO	The unique identifier assigned by the ASP for a part order.
SPR	The unique identifier assigned by the ASP for a part return.
SPW	The unique identifier assigned by the ASP to reference a work order.
SRI	A document that contains the shipping reference number which allows the product to be tracked within the outsourced logistic providers network.
SWT	Switch Authorization.
TCS	Terms and Conditions.
TRO	Order which results in materials or products being moved from one facility to another (outbound shipment and inbound shipment).
WAB	Waybill.
WAC	Denotes a warranty claim.
WOO	Work Order.

4.9.6 MimeTypeQualifier

The MIME type as defined by IANA.

Please refer to http://www.iana.org/assignments/media-types/ for a list of types.

Instance	Documentation
application/activemessage	[Shapiro]
application/andrew-inset	[Borenstein]
application/applefile	[Faltstrom]
application/atomicmail	[Borenstein]
application/batch-SMTP	[RFC2442]
application/beep+xml	[RFC3080]
application/cals-1840	[RFC1895]
application/cnrp+xml	[RFCCNRP]
application/commonground	[Glazer]
application/cpl+xml	
application/cybercash	[Eastlake]
application/dca-rft	[Campbell]
application/dec-dx	[Campbell]
application/dicom	[RFC3240]
application/dvcs	[RFC3029]
application/EDI-Consent	[RFC1767]
application/EDIFACT	[RFC1767]
application/EDI-X12	[RFC1767]
application/eshop	[Katz]
application/font-tdpfr	[RFC3073]
application/http	[RFC2616]
application/hyperstudio	[Domino]
application/iges	[Parks]
application/index	[RFC2652]
application/index.cmd	[RFC2652]
application/index.obj	[RFC2652]
application/index.response	[RFC2652]
application/index.vnd	[RFC2652]
application/iotp	[RFC2935]
application/ipp	[RFC2910]
application/isup	[RFC3204]
application/mac-binhex40	[Faltstrom]
application/macwriteii	[Lindner]
application/marc	[RFC2220]
application/mathematica	[Van Nostern]
application/msword	[Lindner]
application/news-message-id	[RFC1036,Spencer]
application/news-transmission	[RFC1036, Spencer]
application/ocsp-request	[RFC2560]
application/ocsp-response	[RFC2560]
application/octet-stream	[RFC2045,RFC2046]
application/oda	[RFC2045,RFC2046]
application/ogg	[RFC-walleij-ogg-mediatype-08.txt]
application/parityfec	[RFC3009]

application/pdf	[Lindner]
application/pgp-encrypted	[RFC3156]
application/pgp-keys	[RFC3156]
application/pgp-signature	[RFC3156]
application/pkcs10	[RFC2311]
application/pkcs7-mime	[RFC2311]
application/pkcs7-signature	[RFC2311]
application/pkix-cert	[RFC2585]
application/pkixcmp	[RFC2510]
application/pkix-crl	[RFC2585]
application/postscript	[RFC2045,RFC2046]
application/prs.alvestrand.titrax-sheet	[Alvestrand]
application/prs.cww	[Rungchavalnont]
application/prs.nprend	[Doggett]
application/prs.plucker	[Janssen]
application/qsig	[RFC3204]
application/reginfo+xml	[RFC-ietf-sipping-reg-event-00.txt]
application/remote-printing	[RFC1486,Rose]
application/riscos	[Smith]
application/rtf	[Lindner]
application/sdp	[RFC2327]
application/set-payment	[Korver]
application/set-payment-initiation	[Korver]
application/set-registration	[Korver]
application/set-registration-initiation	[Korver]
application/sgml	[RFC1874]
application/sgml-open-catalog	[Grosso]
application/sieve	[RFC3028]
application/slate	[Crowley]
application/timestamp-query	[RFC3161]
application/timestamp-reply	[RFC3161]
application/tve-trigger	[Welsh]
application/vemmi	[RFC2122]
application/vnd.3gpp.pic-bw-large	[Meredith]
application/vnd.3gpp.pic-bw-small	[Meredith]
application/vnd.3gpp.pic-bw-var	[Meredith]
application/vnd.3gpp.sms	[Meredith]
application/vnd.3M.Post-it-Notes	[O'Brien]
application/vnd.accpac.simply.aso	[Leow]
application/vnd.accpac.simply.imp	[Leow]
application/vnd.acucobol	[Lubin]
application/vnd.acucorp	[Lubin]
application/vnd.adobe.xfdf	[Perelman]
application/vnd.aether.imp	[Moskowitz]
application/vnd.amiga.ami	[Blumberg]
application/vnd.anser-web-certificate-issue-initiation	[Mori]
application/vnd.anser-web-funds-transfer-initiation	[Mori]
application/vnd.audiograph	[Slusanschi]

application/vnd.blueice.multipass	[Holmstrom]
application/vnd.bmi	[Gotoh]
application/vnd.businessobjects	[Imoucha]
application/vnd.canon-cpdl	[Muto]
application/vnd.canon-lips	[Muto]
application/vnd.cinderella	[Kortenkamp]
application/vnd.claymore	[Simpson]
application/vnd.commerce-battelle	[Applebaum]
application/vnd.commonspace	[Chandhok]
application/vnd.contact.cmsg	[Patz]
application/vnd.cosmocaller	[Dellutri]
application/vnd.ctc-posml	[Kohlhepp]
application/vnd.cups-postscript	[Sweet]
application/vnd.cups-raster	[Sweet]
application/vnd.cups-raw	[Sweet]
application/vnd.curl	[Byrnes]
application/vnd.cybank	[Helmee]
application/vnd.data-vision.rdz	[Fields]
application/vnd.dna	[Searcy]
application/vnd.dpgraph	[Parker]
application/vnd.dreamfactory	[Appleton]
application/vnd.dxr	[Duffy]
application/vnd.ecdis-update	[Buettgenbach]
application/vnd.ecowin.chart	[Olsson]
application/vnd.ecowin.filerequest	[Olsson]
application/vnd.ecowin.fileupdate	[Olsson]
application/vnd.ecowin.series	[Olsson]
application/vnd.ecowin.seriesrequest	[Olsson]
application/vnd.ecowin.seriesupdate	[Olsson]
application/vnd.enliven	[Santinelli]
application/vnd.epson.esf	[Hoshina]
application/vnd.epson.msf	[Hoshina]
application/vnd.epson.quickanime	[Gu]
application/vnd.epson.salt	[Nagatomo]
application/vnd.epson.ssf	[Hoshina]
application/vnd.ericsson.quickcall	[Tidwell]
application/vnd.eudora.data	[Resnick]
application/vnd.fdf	[Zilles]
application/vnd.ffsns	[Holstage]
application/vnd.FloGraphIt	[Floersch]
application/vnd.framemaker	[Wexler]
application/vnd.fsc.weblaunch	[D.Smith]
application/vnd.fujitsu.oasys	[Togashi]
application/vnd.fujitsu.oasys2	[Togashi]
application/vnd.fujitsu.oasys3	[Okudaira]
application/vnd.fujitsu.oasysgp	[Sugimoto]
application/vnd.fujitsu.oasysprs	[Ogita]
application/vnd.fujixerox.ddd	[Onda]
application/vnd.fujixerox.docuworks	[Taguchi]
application/vnd.fujixerox.docuworks.binder	[Matsumoto]

application/vnd.fut-misnet	[Pruulmann]
application/vnd.grafeq	[Tupper]
application/vnd.groove-account	[Joseph]
application/vnd.groove-help	[Joseph]
application/vnd.groove-identity-message	[Joseph]
application/vnd.groove-injector	[Joseph]
application/vnd.groove-tool-message	[Joseph]
application/vnd.groove-tool-template	[Joseph]
application/vnd.groove-vcard	[Joseph]
application/vnd.hbci	[Hammann]
application/vnd.hhe.lesson-player	[Jones]
application/vnd.hp-HPGL	[Pentecost]
application/vnd.hp-hpid	[Gupta]
application/vnd.hp-hps	[Aubrey]
application/vnd.hp-PCL	[Pentecost]
application/vnd.hp-PCLXL	[Pentecost]
application/vnd.httphone	[Lefevre]
application/vnd.hzn-3d-crossword	[Minnis]
application/vnd.ibm.afplinedata	[Buis]
application/vnd.ibm.electronic-media	[Tantlinger]
application/vnd.ibm.MiniPay	[Herzberg]
application/vnd.ibm.modcap	[Hohensee]
application/vnd.ibm.secure-container	[Tantlinger]
application/vnd.informix-visionary	[Gales]
application/vnd.intercon.formnet	[Gurak]
application/vnd.intertrust.digibox	[Tomasello]
application/vnd.intertrust.nncp	[Tomasello]
application/vnd.intu.qbo	[Scratchley]
application/vnd.intu.qfx	[Scratchley]
application/vnd.irepository.package+xml	[Knowles]
application/vnd.is-xpr	[Natarajan]
application/vnd.japannet-directory-service	[Fujii]
application/vnd.japannet-jpnstore-wakeup	[Yoshitake]
application/vnd.japannet-payment-wakeup	[Fujii]
application/vnd.japannet-registration	[Yoshitake]
application/vnd.japannet-registration-wakeup	[Fujii]
application/vnd.japannet-setstore-wakeup	[Yoshitake]
application/vnd.japannet-verification	[Yoshitake]
application/vnd.japannet-verification-wakeup	[Fujii]
application/vnd.jisp	[Deckers]
application/vnd.kde.karbon	[Faure]
application/vnd.kde.kchart	[Faure]
application/vnd.kde.kformula	[Faure]
application/vnd.kde.kivio	[Faure]
application/vnd.kde.kontour	[Faure]
application/vnd.kde.kpresenter	[Faure]
application/vnd.kde.kspread	[Faure]
application/vnd.kde.kword	[Faure]
application/vnd.kenameaapp	[DiGiorgio-Haag]
application/vnd.koan	[Cole]

application/vnd.liberty-request+xml	[McDowell]
application/vnd.llamagraphics.life-balance.desktop	[White]
application/vnd.lotus-1-2-3	[Wattenberger]
application/vnd.lotus-approach	[Wattenberger]
application/vnd.lotus-freelance	[Wattenberger]
application/vnd.lotus-notes	[Laramie]
application/vnd.lotus-organizer	[Wattenberger]
application/vnd.lotus-screencam	[Wattenberger]
application/vnd.lotus-wordpro	[Wattenberger]
application/vnd.mcd	[Gotoh]
application/vnd.mediastation.cdkey	[Flurry]
application/vnd.meridian-slingshot	[Wedel]
application/vnd.micrografx.flo	[Prevo]
application/vnd.micrografx.igx	[Prevo]
application/vnd.mif	[Wexler]
application/vnd.minisoft-hp3000-save	[Bartram]
application/vnd.mitsubishi.misty-guard.trustweb	[Tanaka]
application/vnd.Mobius.DAF	[Kabayama]
application/vnd.Mobius.DIS	[Kabayama]
application/vnd.Mobius.MBK	[Devasia]
application/vnd.Mobius.MQY	[Devasia]
application/vnd.Mobius.MSL	[Kabayama]
application/vnd.Mobius.PLC	[Kabayama]
application/vnd.Mobius.TXF	[Kabayama]
application/vnd.mophun.application	[Wennerstrom]
application/vnd.mophun.certificate	[Wennerstrom]
application/vnd.motorola.flexsuite	[Patton]
application/vnd.motorola.flexsuite.adsi	[Patton]
application/vnd.motorola.flexsuite.fis	[Patton]
application/vnd.motorola.flexsuite.gotap	[Patton]
application/vnd.motorola.flexsuite.kmr	[Patton]
application/vnd.motorola.flexsuite.ttc	[Patton]
application/vnd.motorola.flexsuite.wem	[Patton]
application/vnd.mozilla.xul+xml	[McDaniel]
application/vnd.ms-artgalry	[Slawson]
application/vnd.ms-asf	[Fleischman]
application/vnd.mseq	[Le Bodic]
application/vnd.ms-excel	[Gill]
application/vnd.msign	[Borcherding]
application/vnd.ms-lrm	[Ledoux]
application/vnd.ms-powerpoint	[Gill]
application/vnd.ms-project	[Gill]
application/vnd.ms-tnef	[Gill]
application/vnd.ms-works	[Gill]
application/vnd.ms-wpl	[Plastina]
application/vnd.musician	[Adams]
application/vnd.music-niff	[Butler]
application/vnd.netfpx	[Mutz]

application/vnd.noblenet-directory	[Solomon]
application/vnd.noblenet-sealer	[Solomon]
application/vnd.noblenet-web	[Solomon]
application/vnd.novadigm.EDM	[Swenson]
application/vnd.novadigm.EDX	[Swenson]
application/vnd.novadigm.EXT	[Swenson]
application/vnd.obn	[Hessling]
application/vnd.osa.netdeploy	[Klos]
application/vnd.palm	[Peacock]
application/vnd.pg.format	[Gandert]
application/vnd.pg.osasli	[Gandert]
application/vnd.powerbuilder6	[Guy]
application/vnd.powerbuilder6-s	[Guy]
application/vnd.powerbuilder7	[Shilts]
application/vnd.powerbuilder75	[Shilts]
application/vnd.powerbuilder75-s	[Shilts]
application/vnd.powerbuilder7-s	[Shilts]
application/vnd.previewsystems.box	[Smolgovsky]
application/vnd.publishare-delta-tree	[Ben-Kiki]
application/vnd.pvi.ptid1	[Lamb]
application/vnd.pwg-multiplexed	[RFC3391]
application/vnd.pwg-xhtml-print+xml	[Wright]
application/vnd.Quark.QuarkXPress	[Scheidler]
application/vnd.rapid	[Szekely]
application/vnd.s3sms	[Tarkkala]
application/vnd.sealed.net	[Lambert]
application/vnd.seemail	[Webb]
application/vnd.shana.informed.formdata	[Selzler]
application/vnd.shana.informed.formtemplate	[Selzler]
application/vnd.shana.informed.interchange	[Selzler]
application/vnd.shana.informed.package	[Selzler]
application/vnd.smaf	[Takahashi]
application/vnd.sss-cod	[Dani]
application/vnd.sss-dtf	[Bruno]
application/vnd.sss-ntf	[Bruno]
application/vnd.street-stream	[Levitt]
application/vnd.svd	[Becker]
application/vnd.swiftview-ics	[Widener]
application/vnd.triscape.mxs	[Simonoff]
application/vnd.trueapp	[Hepler]
application/vnd.truedoc	[Chase]
application/vnd.ufdl	[Manning]
application/vnd.uplanet.alert	[Martin]
application/vnd.uplanet.alert-wbxml	[Martin]
application/vnd.uplanet.bearer-choice	[Martin]
application/vnd.uplanet.bearer-choice-wbxml	[Martin]
application/vnd.uplanet.cacheop	[Martin]
application/vnd.uplanet.cacheop-wbxml	[Martin]
application/vnd.uplanet.channel	[Martin]
application/vnd.uplanet.channel-wbxml	[Martin]

application/vnd.uplanet.list	[Martin]
application/vnd.uplanet.listcmd	[Martin]
application/vnd.uplanet.listcmd-wbxml	[Martin]
application/vnd.uplanet.list-wbxml	[Martin]
application/vnd.uplanet.signal	[Martin]
application/vnd.vcx	[T.Sugimoto]
application/vnd.vectorworks	[Pharr]
application/vnd.vidsoft.vidconference	[Hess]
application/vnd.visio	[Sandal]
application/vnd.visionary	[Aravindakumar]
application/vnd.vividence.scriptfile	[Risher]
application/vnd.vsf	[Rowe]
application/vnd.wap.sic	[WAP-Forum]
application/vnd.wap.slc	[WAP-Forum]
application/vnd.wap.wbxml	[Stark]
application/vnd.wap.wmlc	[Stark]
application/vnd.wap.wmlscriptc	[Stark]
application/vnd.webturbo	[Rehem]
application/vnd.wrq-hp3000-labelled	[Bartram]
application/vnd.wt.stf	[Wohler]
application/vnd.wv.csp+wbxml	[Salmi]
application/vnd.xara	[Matthewman]
application/vnd.xfdl	[Manning]
application/vnd.yellowriver-custom-menu	[Yellow]
application/whoispp-query	[RFC2957]
application/whoispp-response	[RFC2958]
application/wita	[Campbell]
application/wordperfect5.1	[Lindner]
application/x400-bp	[RFC1494]
application/xhtml+xml	[RFC3236]
application/xml	[RFC3023]
application/xml-dtd	[RFC3023]
application/xml-external-parsed-entity	[RFC3023]
application/zip	[Lindner]
audio/32kadpcm	[RFC2421,RFC2422]
audio/AMR	[RFC3267]
audio/AMR-WB	[RFC3267]
audio/basic	[RFC2045,RFC2046]
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audio/DAT12	[RFC3190]
audio/DVI4	
audio/EVRC	[RFC-ietf-avt-evrc-smv-03.txt]
audio/EVRC0	[RFC-ietf-avt-evrc-smv-03.txt]
audio/G.722.1	[RFC3047]
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audio/G726-16	
audio/G726-24	
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audio/G728	
audio/G729	
audio/G729D	
audio/G729E	
audio/GSM	
audio/GSM-EFR	
audio/L16	[RFC2586]
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audio/LPC	
audio/MP4A-LATM	[RFC3016]
audio/MPA	
audio/mpa-robust	[RFC3119]
audio/mpeg	[RFC3003]
audio/parityfec	[RFC3009]
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audio/PCMU	
audio/prs.sid	[Walleij]
audio/QCELP	
audio/RED	
audio/SMV	[RFC-ietf-avt-evrc-smv-03.txt]
audio/SMV0	[RFC-ietf-avt-evrc-smv-03.txt]
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audio/tone	[RFC2833]
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audio/vnd.cns.anp1	[McLaughlin]
audio/vnd.cns.inf1	[McLaughlin]
audio/vnd.digital-winds	[Strazds]
audio/vnd.everad.plj	[Cicelsky]
audio/vnd.lucent.voice	[Vaudreuil]
audio/vnd.nortel.vbk	[Parsons]
audio/vnd.nuera.ecelp4800	[Fox]
audio/vnd.nuera.ecelp7470	[Fox]
audio/vnd.nuera.ecelp9600	[Fox]
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audio/vnd.qcelp	[Lundblade]
audio/vnd.rhetorex.32kadpcm	[Vaudreuil]
audio/vnd.vmx.cvsd	[Vaudreuil]
image/cgm	Computer Graphics Metafile
image/g3fax	[RFC1494]
image/gif	[RFC2045,RFC2046]
image/ief	[RFC1314] Image Exchange Format
image/jpeg	[RFC2045,RFC2046]
image/naplps	[Ferber]
image/png	[Randers-Pehrson]
image/prs.btif	[Simon]
image/prs.pti	[Laun]

image/t38	[RFC3362]
image/tiff	[RFC3302] Tag Image File Format
image/tiff-fx	[RFC3250] Tag Image File Format Fax eXtended
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image/vnd.djvu	[Bottou]
image/vnd.dwg	[Moline]
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image/vnd.fpx	[Spencer]
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image/vnd.ms-modi	[Vaughan]
image/vnd.net-fpx	[Spencer]
image/vnd.svf	[Moline]
image/vnd.wap.wbmp	[Stark]
image/vnd.xiff	[S.Martin]
message/delivery-status	[RFC1894]
message/disposition-notification	[RFC2298]
message/external-body	[RFC2045,RFC2046]
message/http	[RFC2616]
message/news	[RFC 1036, H.Spencer]
message/partial	[RFC2045,RFC2046]
message/rfc822	[RFC2045,RFC2046]
message/s-http	[RFC2660]
message/sip	[RFC3261]
message/sipfrag	[RFC3420]
model/iges	[Parks]
model/mesh	[RFC2077]
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model/vnd.gdl	[Babits]
model/vnd.gs-gdl	[Babits]
model/vnd.gtw	[Ozaki]
model/vnd.mts	[Rabinovitch]
model/vnd.parasolid.transmit.binary	[Parasolid]
model/vnd.parasolid.transmit.text	[Parasolid]
model/vnd.vtu	[Rabinovitch]
model/vrml	[RFC2077]
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multipart/appledouble	[Faltstrom]
multipart/byteranges	[RFC2068]
multipart/digest	[RFC2045,RFC2046]
multipart/encrypted	[RFC1847]
multipart/form-data	[RFC2388]
multipart/header-set	[Crocker]
multipart/mixed	[RFC2045,RFC2046]

multipart/parallel	[RFC2045,RFC2046]
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multipart/report	[RFC1892]
multipart/signed	[RFC1847]
multipart/voice-message	[RFC2421,RFC2423]
text/calendar	[RFC2445]
text/css	[RFC2318]
text/directory	[RFC2425]
text/enriched	[RFC1896]
text/html	[RFC2854]
text/parityfec	[RFC3009]
text/plain	[RFC2646,RFC2046]
text/prs.lines.tag	[Lines]
text/rfc822-headers	[RFC1892]
text/richtext	[RFC2045,RFC2046]
text/rtf	[Lindner]
text/sgml	[RFC1874]
text/t140	[RFC2793]
text/tab-separated-values	[Lindner]
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text/vnd.DMClientScript	[Bradley]
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text/vnd.in3d.spot	[Powers]
text/vnd.IPTC.NewsML	[IPTC]
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text/vnd.wap.sl	[WAP-Forum]
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text/vnd.wap.wmlscript	[Stark]
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text/xml-external-parsed-entity	[RFC3023]
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video/BT656	
video/CelB	
video/DV	[RFC3189]
video/H261	
video/H263	
video/H263-1998	
video/H263-2000	
video/JPEG	
video/MP1S	

video/MP2P	
video/MP2T	
video/MP4V-ES	[RFC3016]
video/mpeg	[RFC2045,RFC2046]
video/MPV	
video/nv	
video/parityfec	[RFC3009]
video/pointer	[RFC2862]
video/quicktime	[Lindner]
video/SMPTE292M	[RFC-avt-smpte292-video-08.txt]
video/vnd.fvt	[Fuldseth]
video/vnd.motorola.video	[McGinty]
video/vnd.motorola.videop	[McGinty]
video/vnd.mpegurl	[Recktenwald]
video/vnd.nokia.interleaved-multimedia	[Kangaslampi]
video/vnd.objectvideo	[Clark]
video/vnd.vivo	[Wolfe]

4.9.7 UnitOfMeasure

Code identifying a product unit of measure.

Instance	Documentation
10P	10-pack.
1BF	100 Board Feet.
1FC	20 Foot Container.
1GR	Gram/Cubic Centimeter.
1GT	10,000 Gallon Tankcar.
1KB	25 Kilogram Bulk Bag.
1KD	10 Kilogram Drum.
1KP	1000-pack.
1M2	1/Square Meter (1/M2).
1PA	20-Pack.
1PB	50 Pound Bag.
1PD	100 Pound Drum.
1PM	1/minute (1/min).
22S	Square Millimeter/Second (mm2/s).
2FC	40 Foot Container.
2GR	Gram/square meter.
2GT	20,000 Gallon Tankcar.
2KB	300 Kilogram Bulk Bag.
2KD	15 Kilogram Drum.
2PA	100-Pack.
3GR	Grams Per 100 Centimeters.
3KB	500 Kilogram Bulk Bag.
3KD	55 Gallon Drum.
3MH	Cubic Millimeters/Hour (mm3/hour).
4GR	Grams Per 100 Grams.
4KD	115 Kilogram Drum.
50P	50-pack.
5GR	Grams Per Cubic Centimeter.

6GR	Grams Per Square Centimeter.
7GR	Grams Per Square Meter.
ABC	Absorbance per centimeter (Absorbance per cm).
ABU	Absorbance per Unit (absorbance per unit).
ACC	Atoms per Cubic Centimeters (atoms per cu cm).
ACR	Acre.
ACS	Acidic strength/concentration.
ACT	Actual Pounds.
ACU	Activity unit (Activ.unit).
ALU	Aluminum Pounds Only.
AM1	Ampoule.
AMN	Ångstroms/Minute (Ångst/min).
AMP	Ampere.
ANG	Angstrom (A).
APB	Atomic Parts per Billion (atomic ppb).
APG	API Specific Gravity (API Grav).
APM	Atomic Parts per Million (atomic ppm).
APT	Atomic Parts per Trillion (atomic ppt).
APU	APHA Units (apha).
ASC	Atoms per Square Centimeters (atoms per sq cm).
ASM	Angstrom.
ASY	Assembly (ASY).
ATG	Atmospheric gauge.
ATM	Atmosphere absolute.
ATP	Atomic %.
ATY	Activity.
BAB	Base Box.
BAC	Batch.
BAE	Bale.
BAG	Bag.
BAL	Ball.
BAN	Band.
BAP	Batting Pound.
BAR	Bar.
BAS	Basket.
BAT	Batt.
BAW	Base Weight.
BEA	Beam.
BEC	Becquerel/kilogram.
BEL	Belt.
BHP	Brake HP.
BIL	Billet.
BIN	Bin.
BIT	Bit.
BKC	Bulk Car Load.
BLN	Balance.
BLO	Block.
BOA	Board.
BOF	Board Feet.
BOL	Bolt.

BOT	Bottle.
BOX	Box.
BRB	Bar absolute.
BRD	Barrels Per Day.
BRE	Barrel.
BRI	Barrel (Imperial).
BRM	Barrels Per Minute.
BTF	British Thermal Units (BTUs) Per Cubic Foot.
BTP	British Thermal Units (BTUs) Per Pound.
BTU	British Thermal Unit (BTU).
BUB	Bubbler.
BUC	Bucket.
BUD	Bushel, Dry Imperial.
BUK	Bunks.
BUL	Bulk.
BUN	Bundle.
BUP	Bulk Pack.
BUS	Bushel.
BYT	Bytes.
C0W	Counts per Wafer (Counts/wf).
C3M	Cubic centimeter per minute (cm3/minute).
CAA	Carat.
CAB	Carboy.
CAC	Card.
CAD	Candela.
CAG	Cartridge.
CAK	Cask.
CAL	Calorie.
CAN	Can.
CAO	Carload.
CAR	Car.
CAS	Case.
CAT	Canister.
CAW	Catchweight.
CC2	Centipoises per hour per square centimeters (cps per hr per sq cm).
CCC	Counts per Square Centimeters (Counts/cm2).
CD3	Cubic decimeter (Cubic dec).
CEL	Cell.
CEM	Centimeter.
CEP	Centipoises (CPS).
CET	Centiliter.
CGM	Centigram.
CHA	Chains (Land Survey).
CHE	Chest.
CM2	Square centimeter (cm2).
CMH	Centimeter/hour (cm/h).
CML	Colony/Milliliter (col/ml).
CMS	Centimeter/Second (cm/s).
CNN	Connector.
COG	Coil Group.

COI	Coil.
COL	Coulomb.
COM	Composite Product Pounds (Total Weight).
CON	Cone.
COT	Container.
COV	Cover.
CRA	Crate.
CRT	Carton.
CSE	Cassette.
CST	Centistokes.
CUB	Cubic centimeter.
CUC	Cubic centimeter/second.
CUF	Cubic Foot.
CUI	Cubic inch.
CUM	Cubic meter.
CUP	Cup.
CUY	Cubic yard.
CYC	Cycles.
CYL	Cylinder.
DAL	Dalton units (dalton).
DAY	Day.
DCB	Decibels.
DCG	Decagram.
DCL	Deciliter.
DCM	Defects per Square Centimeters (Defects/cm2).
DE1	Defects.
DE2	Degrees in Angles.
DE3	Degree.
DEA	Deal.
DEC	Decimeter.
DEF	Degree Fahrenheit.
DEG	Degree Celsius.
DEP	Dep. Factor.
DFW	Defects per Wafer (Defects/Wafer).
DGM	Decigram.
DIE	Die.
DIL	Display.
DIP	Dispenser.
DNC	Dynes per centimeter (Dynes per cm).
DOZ	Dozen.
DPM	Parts per Million per Day (ppm per day).
DRA	Dram.
DRU	Drum.
DRY	Dry Pounds.
EAC	Each.
ELE	Electrical Capacitance.
EML	Enzyme Units/Milliliter (Enzyme/ml).
ENU	Enzyme Units (Enzy.Units).
EQ2	Milliequivalent per 30 Kg (mequ/30Kg).
EQG	Milliequivalent per gram (milliequivalent per g).

EQK	Milliequivalent per Kilogram (mequ/Kg).
EQM	Milliequivalent per Millimeter (milliequivalent per mm).
FAR	Farads.
FFA	Femtofarad.
FIN	1/32 inch.
FLO	Fluid Ounce.
FOI	Fluid Ounce (Imperial).
FOO	Foot.
FOU	Fluid Ounce US.
FPS	Feet per second (Feet/s).
FRH	Sales FT3 at 60°F per hour (FTR/hour).
FRM	Sales FT3 at 60°F per minute (FTR/min).
FTR	Sales FT3 at 60°F, 14.7 psia (SFT3_60F_S).
FTS	Sales FT3 at 70°F, 14.7 psia (SFT3_70F_S).
FTT	1000 FT3 at 60°F, 14.7 psia (KFT3_60F_S).
FTU	1000 FT3 at 70°F, 14.7 psia (KFT3_70F_S).
FUU	Fuel Usage (Gallons).
G2S	Gram square per second (g²/s).
GAI	Gram act. ingrd. (g act.ing).
GAL	Gallon.
GAS	Gage Systems.
GAU	Gram Gold.
GCL	Gardner Color.
GEG	Keim/Gramm (keim/g).
GEQ	Gram per Equivalent (g/Eq).
GGM	Gram per gram mole (g/gmole).
GHG	Gram per Hectogram (g/hg).
GIH	Gigahertz.
GIJ	Gigajoules.
GIL	Gill (Imperial).
GM4	Gram per 100 Milliliters (g/100ml).
GME	Gram per Mole Equivalent (g/mole Eq).
GMO	Gram per Mol (g/mol).
GNL	Gram act.Ingrd per Liter (gai/liter).
GOB	Gross Barrels.
GOG	Gross Gallons.
GOH	Gigaohm (GOhm).
GOK	Gross Kilogram.
GOT	Gross Ton.
GOY	Gross Yard.
GPN	US Gallon per minute (gpm US).
GRA	Gram.
GRG	Great Gross (Dozen Gross).
GRK	Grams Per Kilogram.
GRL	Grams Per Liter.
GRM	Grams Per Milliliter.
GRN	Grain.
GRO	Gross.
GRP	Group.
HAG	Half Gallon.

HAH	Half Hour.
HAL	Half Liter.
HAN	Hank.
HEA	Heat lots.
HEC	Hectare.
HEL	Hectoliter.
HEP	Hectopascal.
HER	Hertz.
HGM	Hegman.
HNY	Henry.
HOS	Hours.
HOU	Hour.
HUA	Hundredth of a Carat.
HUB	Hundred Boxes.
HUC	Hundred Count.
HUS	Hundred Sheets.
HZM	Hertz per Minute (Hertz per min).
IH2	Inches of Water Gauge (inH2O-g).
IHG	Inches of Mercury Gauge (inHg-g).
ILB	Inch pounds (in.lb).
IMG	Imperial Gallons.
INC	Inch.
IPS	Inch per second (inch / sec).
JAR	Jar.
JKG	Joule/Kilogram (J/kg).
JMO	Joule/Mol (J/mol).
JOI	Joint.
JOU	Joule.
KAI	Kilogram act. Ingrd. (kg ac.ing.).
KAK	kg act.ingrd. / kg (kai/kg).
KBY	Kilobyte.
KCM	Kilogram per cm2 gauge (kg/cm2-g).
KD3	Kilogram per Cubic Decimeter (kg/dm3).
KEG	Keg.
KEL	Kelvin.
KGE	Container Fill Weight in Kg/Ea.
KGH	Kilogram per Hour (kg/h).
KGL	Kilograms per Liter (kg/L).
KGM	Kilogram/Mol (kg/mol).
KGS	Kilogram per Second (kg/s).
KHO	Kilometer/hour.
KIC	Kilogram per cubic meter.
KIE	Kilometer.
KIG	Kilogram.
KIH	Kilohertz.
KIK	Kilobecquerel/Kilogram.
KIL	Kiloampere.
KIM	Kilogram/square meter.
KIO	Kiloohm.
KIS	Kilogramm pro Sekunde.

KIT	Kit.
KIV	Kilovolt.
KIW	Kilowatt.
KJK	Kilojoule per kilogram (KJ/kg).
KJL	Kilojoule.
KJM	Kilojoule/Mol (KJ/mol).
KKG	Kilogram/Kilogram.
KMK	Cubic meter/Cubic meter (m3/m3).
KMN	Kelvin per Minute (K/min).
KMS	Kelvin per Second (K/s).
KNM	Kilonewton per square meter (kN/m2).
KNT	Kilonewton (ND).
KPA	Kilopascal (kPa).
KRU	Kreb Unit.
KTN	Kilotonne (kt).
KUD	Kubikdezimeter.
KUM	Kubikmeter pro Sekunde.
KVA	Kilovoltampere (kVA).
KWH	Kilowatt-hour.
KWR	Kilovolt ampere reactive hours (KVAH reac.).
LBH	US Pound per Hour (lb/hour).
LBM	US Pound per minute (lb/min).
LG2	Liter per Gram per Centimeter (l/g/cm).
LGC	Liters per Gram-Centimeters (l/g-cm).
LHK	Liter per 100 km (l/100 km).
LIF	Lifts.
LIM	Link.
LIQ	Liquid Pounds.
LIT	Liter.
LMI	Liter per Minute (l/min).
LMS	Liter per Molsecond (l/mol.s).
LOA	Load.
LOT	Lot.
LPD	Light Point Defects per Wafer (LPD/Wafer).
LPH	Liter per hour (l/hr).
LUG	Lug.
M15	Micron per 15 Square Millimeters (mu per 15 sq mm).
M20	Micron per 20 Square Millimeters (mu per 20 sq mm).
M25	Micron per 25 Square Millimeters (mu per 25 sq mm).
M26	Micron per 26 by 8 Millimeters (mu per 26 by 8 mm).
M2G	Meters square per gram (m sq per gram).
M3A	Sales m3 at 15 °C, 1 atmos (Sm3_15C_S).
M3B	Sales m3 at 21 °C, 1 atmos (Sm3_21C_S).
M3C	Sales m3 at 10 °C, 1 atmos (Sm3_10C_S).
M3D	Sales m3 at 43 °C, 1 bar (Sm3_43C_D).
M3E	Sales m3 at 9 °C, 1 bar (Sm3_9C_D).
M3F	Sales m3 at 15 °C, 1 bar (Sm3_15C_D).
M3G	Sales m3 at 27 °C, 1 atmos (Sm3_27C_S).
M3H	Cubic Meter per Hour (m3/h).
M3J	Sales m3 at 35 °C, 1 atmos (Sm3_35C_S).

M3K	Cubic Meter/Kilogram (m3/Kg).
M3M	Milliliter per Cubic Meter (ml/m3).
M3N	Mol per Cubic Meter (Mol/m3).
MAM	Milliamps/mm.
MAT	Mat.
MBY	Megabyte.
MBZ	Meterbar per Second (m.bar/s).
MC2	Millisecond per Centimeter (mS/cm).
MCA	Microampere (µA).
MCG	Microgram.
MCH	Micromhos (µmhos).
MCK	Microcuries per Kilogram (µci/kg).
MCL	Microcuries per Gaseous Liter (µc/l).
MCM	Milligrams Per Cubic Meter.
MCN	Metal Can.
MCP	Manifolded Cylinder Pack.
MCR	Micron.
MEG	Megagram.
MEH	Megahertz.
MEJ	Megajoule (MJ).
MEP	Megapascal.
MET	Meter.
MEW	Megawatt.
MFD	Microfarad (µF).
MGA	Milligram per Amp (mg per amp).
MGF	Milligram per Square Centimeter (mg/cm2).
MGG	Milligram per Gram (mg/g).
MGL	Microgram per Liter (µg/l).
MGM	Milligram.
MGO	Megohm (MOhm).
MGR	Micrograms per Gram (µg/g).
MGS	Milligram per Second (mg per sec).
MH1	Millimeter per Hour (mm/h).
MHC	Micromhos per Centimeter (µmhos/cm).
MHR	Meter per Hour (m/h).
MHV	Megavolt.
MIB	Million BTU's.
MIC	Mikrogram/cubic meter.
MIG	Micrograms Per Cubic Meter.
MIL	Mile.
MIM	Micrometer.
MIN	Minute.
MIP	Millipascal seconds.
MIS	Microsecond.
MIT	Miter.
MIV	Millivolt.
MIW	Milliwatt.
MJM	Wobbe Number (MJ/m3).
MJO	Millijoule.
MKG	Milligrams of KOH per Gram (mg KOH per g).

MKL	Millimol per Gram (mmol/g).
ML1	Milliliter per Liter (ml/l).
ML2	Milliliter per Liter (ml/l).
ML3	Mol per Liter (Mol/Liter).
ML4	Millimol per Liter (Millimol/l).
MLA	Milliampere.
MLB	Millibar.
MLC	Milligram/cubic meter.
MLG	Milliliter per Gallon (ml per gal).
MLI	Milliliter.
MLK	Milligram/kilogram.
MLL	Milligram/Liter.
MLM	Mole per Mole (mole/mole).
MLP	Mole Percent (% mole).
MLR	Microliter (µl).
MLS	Miles.
MLW	Milliliter act. Ingr. (ml act.in.).
MM3	Cubic Millimeter (mm3).
MMA	Millimeter per Year (mm/a).
MME	Millimeter.
MMG	Millimol/gram (mmol/g).
MMH	Millimeter H20.
MMK	Millimol/kilogram.
MMM	0.000001 meter (1 millionth of a meter). (Micrometer/Micron).
MMN	Meter per Minute (m/min).
MMO	Millimol.
MMS	Millimeter per Second (mm/s).
MNM	Millinewton per meter (mN/m).
MNT	Meganewton (MN).
MOK	Mol/kilogram.
MOL	Mol.
MON	Month.
MPB	Mass parts per billion (ppb(m)).
MPG	Miles per Gallon (US) (Mi/Gal(US)).
MPH	Megagrams Per Hour.
MPM	Mass Parts per Million (ppm(m)).
MPT	Mass Parts per Trillion (ppt(m)).
MPZ	Meterpascal per Second (m.Pa/s).
MQG	Mircoequivalent per Gram (microeq/g).
MRF	Millifarad (mF).
MS1	MilliSiemen per Centimeter (mS/cm).
MS2	Meter per Second Squared (m/s2).
MS3	Microsiemens per Centimeter (µS/cm).
MSC	Millisecond.
MSM	Milligrams Per Square Meter.
MTA	Millitesla.
MTQ	Meter pro Quadratsekunde.
MTR	Meter (m).
MTS	Meters per second.
MUL	Multichip - When 2 or more dies (chips) are merged into one package.

MVA	Megavoltampere (MVA).
MVS	Millivolts.
MVT	Millivolt.
MWH	Megawatt Hours (mwh).
MWR	Megavolt Ampere Reactive Hours (MVAH reac.).
MWT	Molecular Weight (mW).
MYS	Micro Siemens (mic. Siem.).
N2M	Newton/Square millimeter (N/mm2).
NAA	Nanoamps.
NAM	Nanometer.
NAS	Nanosecond.
NEB	Net Barrels.
NEG	Net Gallons.
NEI	Net Imperial Gallons.
NEL	Net Liters.
NEW	Newton.
NM2	Newton per Square Meter (N/m²).
NM3	Normal m3 at 0°C, 1 atmos (Normal m3).
NMH	Newton per Hour (N/h).
NMM	Newton per Millimeter (N/mm).
NMR	Normal m3 per Hour (Nm3/h).
NOL	Normality.
NPK	Nowpac Container (Nowpac).
NRG	Bar Gauge.
NRU	Nanofarad (nF).
NTU	Nephelometric Turbidity Units (NTU).
NTY	Equivalents per Liter (equ/l).
NUM	Numbers.
NWM	Newton per Meter (N/m).
NXM	Newton per 25 mm (N/25mm).
O2P	Percent Oxygen (% Oxygen).
OCT	Ohm/ct.
OHC	Ohm-Centimeter (ohm cm).
OHM	Ohm.
OMM	Ohm/mm.
ONE	One.
OPH	Operating hour (Oper. Hour).
OSQ	Ohm/sq.
OTP	One Thousand Pieces.
OUN	Ounce.
OVI	Ohm/via.
OZG	Ounce per Gallon (oz per gal).
PAC	Parcel.
PAD	Pad.
PAG	Package.
PAI	Pail.
PAK	Pack (PAK).
PAL	Pallet.
PAN	Panel.
PAR	Pair.

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PAS	Pascal.
PAT	Packet.
PBA	PPBA Silicon (ppba Si).
PBW	Parts Per Billion by Weight (ppbw).
PC2	Parts per Square Centimeters (part per sq cm).
PCA	Percent Active (% Active).
PCL	Picocuries per Liter (pCi/l).
PEC	Percent.
PEG	Percentage.
PEH	Percent Per 1000 Hours.
PEN	Pennyweight.
PER	Per Hundred Pieces.
PEW	Percent Weight.
PF3	Per Cubic Foot (per cu ft).
PF4	Particles per Cubic Feet (particles per cu ft).
PFA	Percent Failed Area (Failed Area %).
PFR	Picofarad.
PH	PH Factor (pH).
PI2	Parts per Square Inch (part per sq in).
PID	Pint U.S. Dry.
PIE	Piece.
PIL	Pint - US liquid.
PL1	Parts per Liter (parts per l).
PL2	Parts per Milliliter (parts per ml).
PL3	Part per Millilitre (Part/ml).
PLA	Plate.
PLI	Pounds per Linear Inch (lb/Lin. In).
PLL	Pallet (Lift).
PLR	Per Liter.
PLT	Palette.
PLU	Pallet/Unit Load.
PMA	Percent Mass (%(m)).
PMI	Per Mille (%0).
PML	Particles per Milliliter (particles/mL).
PMO	Per Mille mass (%0(mass)).
PMP	Parts Per Million Platinum (ppm Pt).
PMV	Parts Per Million (weight/Vol) (ppm (w/v)).
PMW	Parts Per Million by Weight (ppmw).
PNJ	Particles per Injection (particles per inj).
PNT	Points.
POF	Pounds Per Foot.
POG	Pounds Per Gallon.
PON	Pound.
POP	Pounds Per Piece of Product.
POR	Pores.
POS	Pounds Per 1000 Square Feet.
POT	Pounds Per Thousand.
PP3	Parts per Million mole (ppm mole).
PP4	Parts per Billion Mole (ppb mole).
PPB	Parts per billion (US).

PPF	Parts per Ft3 (Parts/Ft3).
PPH	Parts Per Hundred (pph).
PPM	Parts per million.
PPP	Pounds Per Pound of Product.
PPT	Parts per Trillion (ppt).
PRS	Number of Persons.
PSA	Pounds per Square Inch Absolute.
PSC	Picosecond.
PSG	Pound per Square Inch Gauge (psi gauge).
PSI	PSI Unit (PSI).
PSS	Pascal second.
PSV	Poise.
PTL	Particles per Liter (Part/Liter).
PWF	Particles per Wafer (particles/wf).
QML	Kilomol (kmol).
QUA	Quart - US liquid.
RAC	Rack.
REA	Ream of 500 Sheets.
REE	Reel.
RIN	Ring.
RLU	Relative Light Unit (RLU).
ROD	Rod.
ROL	Roll.
RPM	Revolutions per Minute (Revs/min).
SAC	Sack.
SBB	Super Bulk Bag.
SCL	Scales.
SEC	Second.
SET	Set.
SHE	Sheet.
SHI	Shipment.
SHM	Sheet - Metric measure.
SHO	Shot.
SID	Disk (Disc).
SIE	Siemens per Meter (Siemens/m).
SKE	Skein.
SKI	Skid.
SLE	Sleeve.
SLI	Slip Sheet.
SMI	Square mile.
SMM	Square millimeter.
SPO	Spool.
SQF	Square foot.
SQI	Square inch.
SQK	Square kilometer.
SQM	Square meter.
SQS	Square meter/second.
SQU	Square.
SQY	Square Yard.
STI	Stick.

STM	Statute Mile.
STP	Steps.
STR	Strip.
STU	Stabilizer Units (SU).
SVU	Say Bolt Viscosity Units (SVU).
TAB	Tablet.
TAN	Tank.
TAR	Target pieces (target).
TAT	Tank Truck.
TES	Tesla.
THO	Thousand.
TM3	1/Cubic Meter (1/m3).
TNN	Tonne.
TOM	Ton per Cubic Meter (t/m3).
TON	Ton.
TOR	Torr.
TOT	Tote.
TPT	Pass Test (Pass).
TRA	Train.
TRF	Track Foot.
TRL	Trailer.
TRO	Troy.
TRU	Truckload.
TRY	Tray.
TRZ	Troy OZ.
TUB	Tube.
ULU	Unitless Unit of Measure.
UNT	Unit.
USG	US gallon.
USP	US pound.
UST	US ton.
VAL	VO mat. (Value).
VAP	Voltampere (VA).
VHN	Vickers Micro-Hardness (VHN10).
VIA	Vial.
VMP	Molar %.
VOL	Volt.
VPB	Volume Parts per Billion (ppb(V)).
VPC	Percent Volume (%(V)).
VPM	Volume Parts per Million (ppm(V)).
VPR	Per Mille Volume (%O(V)).
VPT	Volume parts per Trillion (ppt(V)).
VTA	Volts (Alternating Current).
VTD	Volts (Direct Current).
VTM	Volts Per Meter.
WAF	Wafer.
WAR	Watt.
WEE	Week.
WPT	Parts Per Trillion by Weight (pptw).
WRA	Wrap.

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| YAR | Yard. |
| YEA | Year. |

4.9.8 ProcessRoleIdentifier

Describes the role of the partner in the business process. A partner will fulfill at least one or more roles during the business process.

Instance	Documentation
ADM	Administered by - The party who is the administrative authority of an account.
ALT	Alternate approval by - The party who has approved a request in the event the approver is not able to respond.
APP	Approval by - The party who has approved a request.
AUT	Authorized By - The party who has authorized a request.
BIF	Bill from - The party that will issue the invoice.
BIT	Bill to - The party that will pay the invoice.
CBK	Customs Broker - CustomsBroker This object represents the party that declare the shipment on behalf of declarant.
CLF	Collect From - To enable the buyer to specify the location of where products not supplied directly by the seller/installer may be collected.
CLM	Claimed By - This object represents the claimant.
CNC	Cancellation party - The party who is cancelling the shipping order.
COR	Change originated by - The party who originates a proposed change.
COW	Change owned by - The party who owns or who is assigned responsibility for a proposed change.
CRA	Credit applicant - The party who is applying for credit.
CRE	Created by - The party responsible for creating a process or task.
CSP	Contract Service Provider.
CWN	contractOwner - The party who is the owner of the contract. For example, in the direct business, the buyer is the contract owner. In the distribution business, the buyer is the distributor and the contract owner is the reseller.
DCE	DesignCustomerApplicationEngineer. The demand customer's Field Application Engineer.
DCT	Declared To - This object represents the party that the declaration goes to.
DCU	DesignCustomer. The owner of the product for which the design has been created.
DIS	Distributed by - The party who supplies products to retailers.
DLR	Declared By - This object represents the party that declare the shipment.
DST	Distributed To - This object represents the party to send information to.
FCP	Forecast Partner - The collection of business properties that describes the partner types for a forecast.
FIA	From Install At - The collection of sender business properties that describes a business partners' identity, their contact information, where they are physically located and their function in a supply chain.
FIN	Financed by - The party who is the financier.
FNB	Founded by - The party who performs the act, process, or art of casting metals.

FOR	Forwarded to - The party to whom a business document has been forwarded.
IMB	Imported By - The party responsible for importing the product.
INL	Inventory location - The party where the inventory product entry is located.
INO	Inventory owner - The party that owns the inventory product entry.
ITF	In transit from - The party sending the product quantity in a product location transfer.
ITL	installAt - The partner and/or location to which the product must be set up for use or service.
ITT	In transit to - The party receiving the product quantity in a product location transfer.
LGP	Logistics Provided By - The party who handles the details of an operation.
MFG	Manufactured by - The party who creates, processes or produces goods especially in large quantities and by means of industrial machines.
OWN	Owned by - The party who owns a process.
PAE	ProductProviderFieldApplicationEngineer. The product provider Field Application Engineer.
PCW	Primary Contract With - The primary party with whom a contract is formed.
PNB	Planning By - The party who establishes goals, policies or procedures.
PSR	ProductProviderSalesRepresentative. The product provider sales representative.
PUR	Purchased by - The party who is a purchaser of a product.
REA	Requested approval by - The party who has been selected to approve a request.
REC	Received by - The party who has received a product shipment.
REQ	Requested by - The party who has initiated a request.
RES	Respond to - The party to whom a responding business document must be sent when it is not equal to the partner specified in the document header.
RET	Return by - The party responsible for either carrying or forwarding the returned product.
REV	Reviewed by - The party responsible for reviewing a business document.
RFR	receivedFrom - The partner and/or location from where the product was shipped.
RLS	Released By - This object represents the party that releases the goods.
RMT	remitTo - The partner to which payment for a business document is sent.
RPB	Repaired By - The collection of business properties used to identify the business partner responsible for the repair or rework of a product.
RQT	Refer Quote To - The partner to whom a quote request is being referred.
RSF	Requested Ship From - The party where the product is requested to be shipped from.
RTT	ReturnTo - The partner and/or location to which the returned product must be delivered.
SBF	Self-billing from - The party who initiates the billing in self-billing scenario.
SBT	Self-billing to - The party whom the invoice is addressed to.

SCB	Subcontracted By - The party who is contracted to perform part or all of another party's contract.
SCP	Shipping charges paid by - The party responsible for administering payment of the shipping charges.
SCW	Secondary Contract With - The subsequent party(ies) with whom a contract is formed.
SHF	Ship From - The collection of business properties used to identify the business partner initiating a shipment or transaction.
SHT	Ship To - The partner and/or location to which the product must be delivered.
SLD	Sold to - The party to whom a product has been sold.
SOB	Sold By - The seller involved in a business transaction.
SPL	Supplied by - The party who supplies an item, part or assembly.
SPS	Service Provider Site - Identification for the location of the ASP site that is ordering the replacement parts and/or performing the repair.
SRT	Submit returns to - The party to whom product returns are to be submitted.
STR	Stored By - This object represents the party that stores the goods.
SVA	ShipVia - The partner and/or location through which the product must be shipped, such as the "cross dock" at a shipping hub. It must not be specified for the last leg, since this would be the same as the final destination specified in the ShipmentInformation/shipTo.
TFR	Transfer From - The party responsible for making the payment (Payer).
TIA	To Install At - The collection of receiver business properties that describes business partners' identity, their contact information, where they are physically located and their function in a supply chain.
TMT	Transfer Manufacturing To - The movement of the manufacturing process to another site.
TRA	Transported by - The party responsible for either carrying or forwarding the product.
TSB	Tested By - The collection of business properties used to identify the specific location and resources used to conduct a defined cycle or steps or measurements required to confirm a result or event.
TTR	Transfer To - The party who is receiving the payment (payee).
ULR	Ultimate recipient - The party who ultimately receives the shipment, when an intermediate party takes responsibility for payment and final delivery.
USE	Used by - The party who is the end user of the product.
UST	Unstuffed By - This object represents the party that unstuffs the goods.
WHB	Warehoused By - The party who stocks or stores products.

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5. System Structure

5.1 BusinessProcessIdentifier

A Business Process Identifier to uniquely define the TPIR-PIP 'role' within a Business Scenario at a company or MNC level. The identifier MUST be composed of alphanumeric characters only and its length MUST be between one and twelve characters.
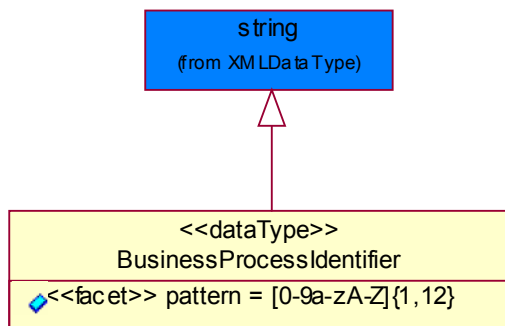

Figure 5-1 BusinessProcessIdentifier

Attribute	Type	Documentation
pattern		[0-9a-zA-Z]{1,12}

5.2 BusinessServiceInformation

The object allows the specification of the business service utilized within the partner company.   This may or may not be the same as the information sent by the RNIF.
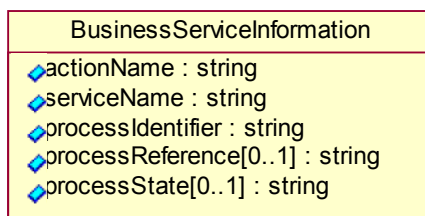
Figure 5-2 BusinessServiceInformation

Attribute	Type	Documentation
actionName	string	The name of Action. For RosettaNet usually any of Request/Confirm/Notify/Query/Response.
serviceName	string	The name of the Business Activity with the "Request/Confirm" part removed. E.g., for the Activity "Request Purchase Order"==> "Purchase Order".
processIdentifier	string	The name of the PIP e.g. Notify of Forecast Reply.
processReference[0..1]	string	The URN for the PIP that includes Cluster/Segment/Process pattern used to identify

		the interface process (such as PIP3A4)
processState[0..1]	string	The business process (or service) state of the sender of a document. When a service receives this document, the receiver may use the state as a precondition.

5.3 ContractInformation

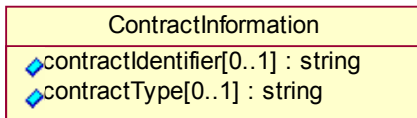A block of information used to correlate a contract in an executing choreography.

Figure 5-3 ContractInformation

Attribute	Type	Documentation
contractIdentifier[0..1]	string	Unique identification of a contract between the Sender and the Receiver
contractType[0..1]	string	The type of the contract: an attribute describing the type of the ContractIndentification. Valid values are URI, URN,ebXMLCPA, or other values defined by partners.

5.4 CorrelationInformation

A block of information used to correlate a requesting document to a responding document and to the contract in an executing choreography.
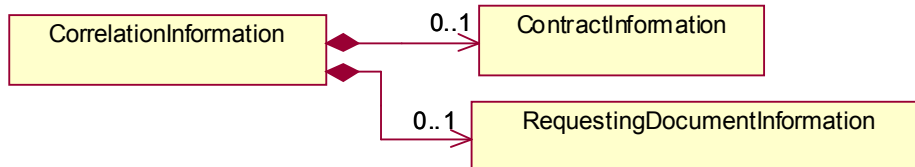

Figure 5-4 CorrelationInformation

Composition	Cardinality	Type	Documentation
ContractInformation	0..1	ContractInformation	A block of information used to correlate a contract in an executing choreography.
RequestingDocumentInformation	0..1	RequestingDocumentInformation	A block of information used to correlate a requesting document to a responding document in an executing choreography.

5.5 DocumentHeader

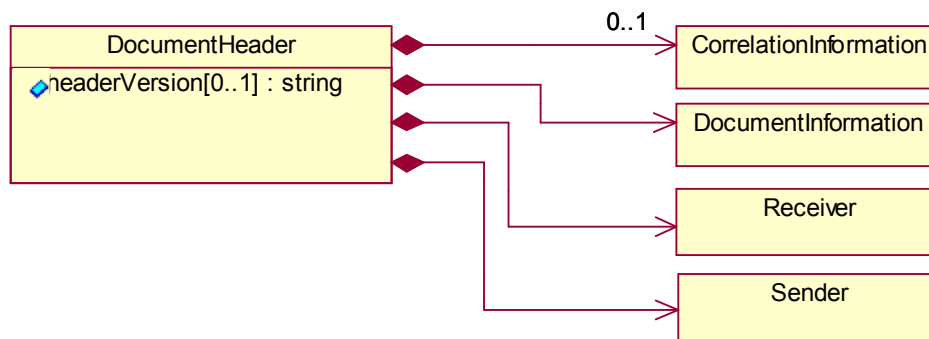The object allows for the identification of the sender and receiver of the business document.

Figure 5-5 DocumentHeader

Attribute	Type	Documentation
headerVersion[0..1]	string	The UN/CEFACT version of the document header.

Composition	Cardinality	Type	Documentation
Sender	1	Sender	The object allows the identification of the initiating party of the business message.
CorrelationInformation	0..1	CorrelationInformation	A block of information used to correlate a requesting document to a responding document and to the contract in an executing choreography.
DocumentInformation	1	DocumentInformation	The object specifies information to identify the business document, a summary of attachments, and information about the business document security.
Receiver	1	Receiver	The object allows the identification of the receiving party of the business message.

5.6 DocumentIdentification

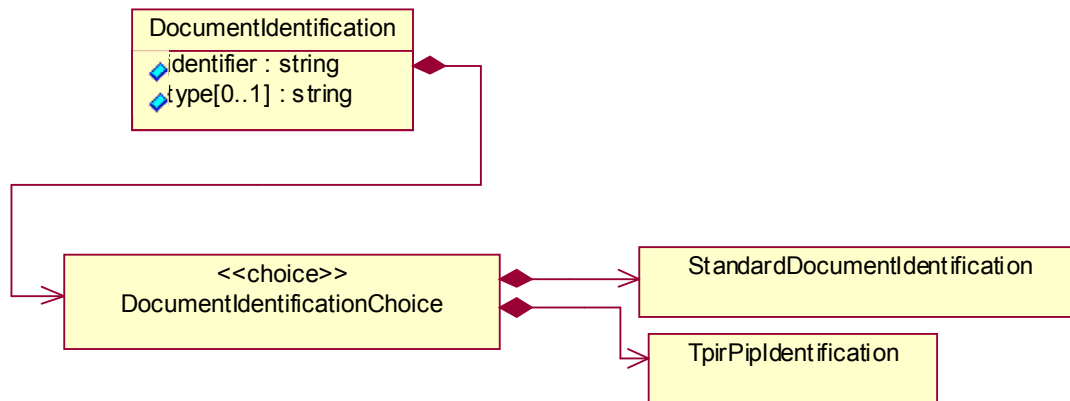The object specifies all information necessary to identify the business document.

Figure 5-6 DocumentIdentification

Attribute	Type	Documentation
identifier	string	The unique identifier for the document being sent.
type[0..1]	string	Name of the Action Message

Composition	Cardinality	Type	Documentation
DocumentIdentificationChoice	1	DocumentIdentificationChoice	

5.7 DocumentIdentificationChoice

Composition	Cardinality	Type	Documentation
StandardDocumentIdentification	1	StandardDocumentIdentification	The object specifies additional information necessary to identify the standard business document.
TpirPipIdentification	1	TpirPipIdentification	The object specifies all information necessary to uniquely identify a TPIR-PIP within a Registry or trading partner repository.

5.8 DocumentInformation

The object specifies information to identify the business document, a summary of attachments, and information about the business document security.
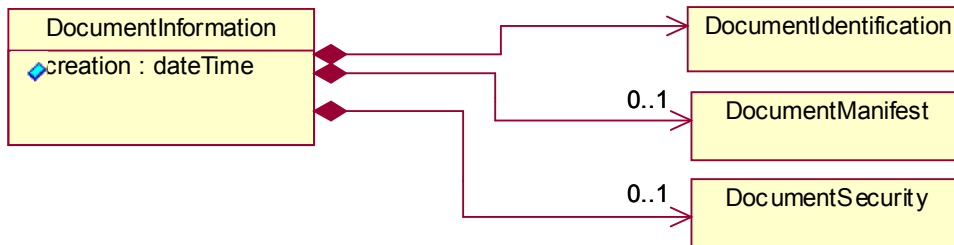

Figure 5-7 DocumentInformation

Attribute	Type	Documentation
creation	dateTime	The creation date and time of the specified Business Document (i.e. the Purchase Order date).

Composition	Cardinality	Type	Documentation
DocumentIdentification	1	DocumentIdentification	The object specifies all information necessary to identify the business document.
DocumentSecurity	0..1	DocumentSecurity	The object provides additional granularity in specifying business document security (this is in addition to the specified PIP security).
DocumentManifest	0..1	DocumentManifest	The block provides a brief summary of attachments and Service Content.

5.9 DocumentManifest

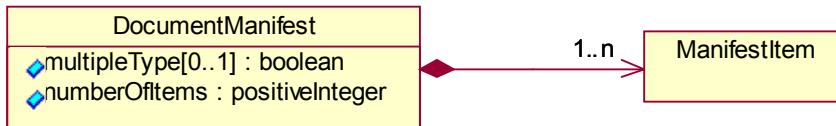The block provides a brief summary of attachments and Service Content.

Figure 5-8 DocumentManifest

Attribute	Type	Documentation
multipleType[0..1]	boolean	Indicates whether the manifest contains documents of multiple types. True if yes, and False if no.
numberOfItems	positiveInteger	Total number of documents in the message. The physical count of the attachments in the payload plus the RosettaNet Business Message (for Service Content). The value of this field will be at least 1.

Composition	Cardinality	Type	Documentation
ManifestItem	1..n	ManifestItem	The object provides details about the specific attachment(s).

5.10 DocumentSecurity

The object provides additional granularity in specifying business document security (this is in addition to the specified PIP security).
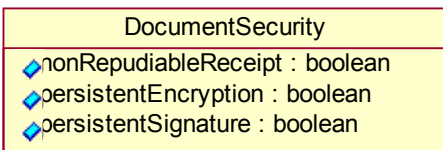

Figure 5-9 DocumentSecurity

Attribute	Type	Documentation
nonRepudiableReceipt	boolean	The value "true" will indicate that a signed acknowledgement for the business document is necessary.
persistentEncryption	boolean	The value "true" will indicate that the Business Document (including the header) needs to be encrypted when stored or transported.
persistentSignature	boolean	The value "true" will indicate that a signature is required to be stored with the document while stored or transported.

5.11 ManifestItem

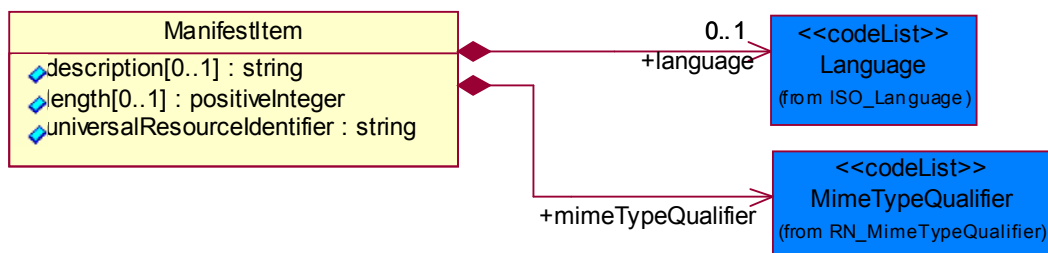The object provides details about the specific attachment(s).

Figure 5-10 ManifestItem

Attribute	Type	Documentation
description[0..1]	string	A description of the attachment.
length[0..1]	positiveInteger	The size of the attachment in bytes (i.e. 1 000 000 bytes)
universalResourceIdentifier	string	The generic set of all names/addresses that are short strings that refer to resources.

Composition	Cardinality	Type	Documentation
mimeTypeQualifier	1	MimeTypeQualifier	The MIME type as defined by IANA. Please refer to http://www.iana.org/assignments/media-types/ for a list of types.
language	0..1	Language	For representation of Language name RosettaNet has adopted ISO 639-2; 1998. Refer to the following web page to get the latest version of the standard: http://www.loc.gov/standards/iso639-2/iso639jac.html

If you need more information about the ISO standard please contact ISO for more details. |

5.12 PipIdentifier
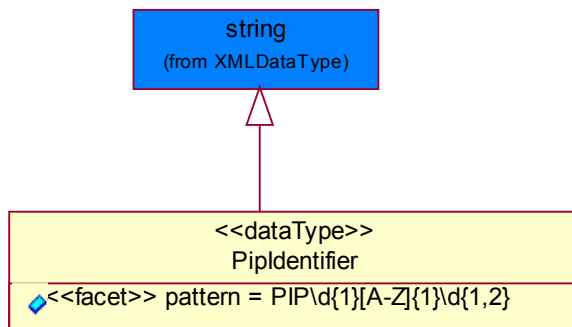
PIP Identification.[i.e. PIP3A4]

Figure 5-11 PipIdentifier

Attribute	Type	Documentation
pattern		PIP\d{1}[A-Z]{1}\d{1,2}

5.13 PipVersion

PIP version number (i.e. 02.02.00).
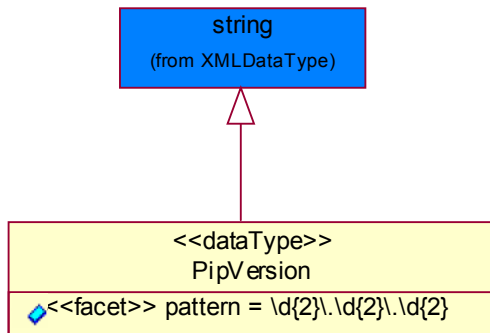
Figure 5-12 PipVersion

Attribute	Type	Documentation
pattern		\d{2}\.\d{2}\.\d{2}

5.14 Receiver

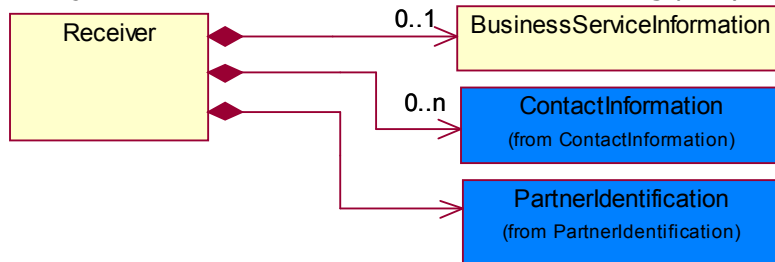The object allows the identification of the receiving party of the business message.

Figure 5-13 Receiver

Composition	Cardinality	Type	Documentation
BusinessServiceInformation	0..1	BusinessServiceInformation	The object allows the specification of the business service utilized within the partner company. This may or may not be the same as the information sent by the RNIF.
PartnerIdentification	1	PartnerIdentification	The business document must allow for the identity of one or more parties to the transaction.
ContactInformation	0..n	ContactInformation	The business document must allow for the identification of the name of the department, service or individual to be contacted regarding the context of the business document.

5.15 RequestingDocumentInformation

A block of information used to correlate a requesting document to a responding document in an executing choreography.
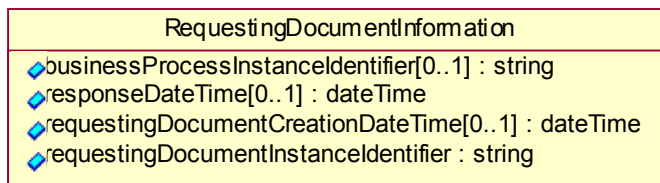

Figure 5-14 RequestingDocumentInformation

Attribute	Type	Documentation
businessProcessInstance Identifier[0..1]	string	The identifier for the public business process instance being sent that both the sender and receiver can identify.
responseDateTime[0..1]	dateTime	The expected time to receive the response. This can not be greater than the PIP TimeToPerform.
requestingDocumentCre ationDateTime[0..1]	dateTime	The date-time of the requesting business document.
requestingDocumentInst anceIdentifier	string	The Business Document identification number that identifies the requesting Business Document.

5.16 Sender

The object allows the identification of the initiating party of the business message.
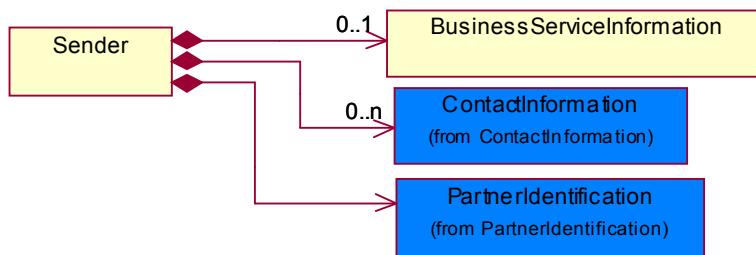

Figure 5-15 Sender

Composition	Cardinality	Type	Documentation
PartnerIdentificati on	1	PartnerIdentificati on	The business document must allow for the identity of one or more parties to the transaction.
BusinessServiceIn formation	0..1	BusinessServiceIn formation	The object allows the specification of the business service utilized within the partner company. This may or may not be the same as the information sent by the RNIF.
ContactInformatio n	0..n	ContactInformatio n	The business document must allow for the identification of the name of the department, service or individual to be contacted regarding the context of the business document.

5.17 StandardDocumentIdentification

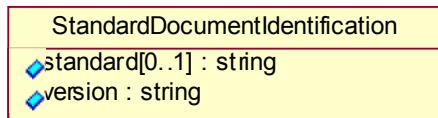The object specifies additional information necessary to identify the standard business document.

Figure 5-16 StandardDocumentIdentification

Attribute	Type	Documentation
standard[0..1]	string	Identifies the standard used to submit the business document. (e.g. RosettaNet).
version	string	PIP3A4v01.00

5.18 TpirPipIdentification

The object specifies all information necessary to uniquely identify a TPIR-PIP within a Registry or trading partner repository.
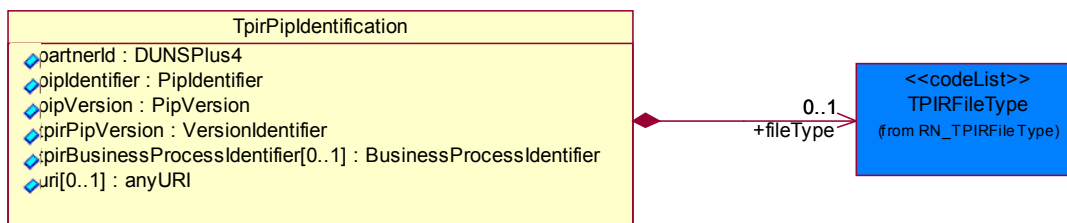

Figure 5-17 TpirPipIdentification

Attribute	Type	Documentation
partnerId	DUNSPlus4	The Trading Partner Identification of MNC that is creating this TPIR PIP.
pipIdentifier	PipIdentifier	A TPIR PIP Identification [i.e., 3A4).
pipVersion	PipVersion	A TPIR PIP version number (i.e., 02.02.00)
tpirPipVersion	VersionIdentifier	A TPIR-PIP Version Number (i.e., major and minor version number as XX.XX).
tpirBusinessProcessIdentifier[0..1]	BusinessProcessIdentifier	A Business Process Identifier to uniquely define the TPIR-PIP 'role' within a Business Scenario at a company or MNC level. The identifier MUST be composed of alphanumeric characters only and its length MUST be between one and twelve characters.
uri[0..1]	anyURI	Describes the destination uri for the TPIR form.

Composition	Cardinality	Type	Documentation
fileType	0..1	TPIRFileType	Describes the file type of the TPIR form (PDF, XDP or XML).

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5.19 VersionIdentifier
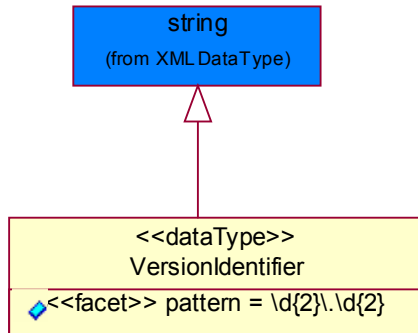
Version Number (i.e., major and minor version number as XX.XX).

Figure 5-18 VersionIdentifier

Attribute	Type	Documentation
pattern		\d{2}\.\d{2}

5.20 CodeList

5.20.1 TPIRFileType

A code identifying the file type of TPIR form.

Name	Documentation
PDF	Portable Document Format.
XDP	XML Data Package.
XML	eXtensible Markup Language.

6. XML Data Type

6.1 anyURI

Represents a URI as defined by RFC 2396. An anyURI value can be absolute or relative, and may have an optional fragment identifier.

6.2 boolean

Represents Boolean values, which are either "true" or "false".

6.3 date

For the represents a calendar date.
The pattern for a date is CCYY-MM-DD   where CC represents the century, YY the year, MM the month, and DD the day, with an optional time zone indicator as allowed for dateTime.

6.4 dateTime

Represents a specific instance of time.
The pattern for dateTime is CCYY-MM-DDThh:mm:ss where CC represents the century, YY the year, MM the month, and DD the day, preceded by an optional leading negative (-) character to indicate a negative number. If the negative character is omitted, positive (+) is assumed. The T is the date/time separator and hh, mm, and ss represent hour, minute, and second respectively. Additional digits can be used to increase the precision of fractional seconds if desired. For example, the format ss.ss... with any number of digits after the decimal point is supported. The fractional seconds part is optional.
This representation may be immediately followed by a "Z" to indicate Coordinated Universal Time (UTC) or to indicate the time zone. For example, the difference between the local time and Coordinated Universal Time, immediately followed by a sign, + or -, followed by the difference from UTC represented as hh:mm (minutes is required). If the time zone is included, both hours and minutes must be present.

6.5 decimal

A data type that contains decimal numbers scaled by a power of 10.

6.6 duration

Represents a duration of time.
The pattern for duration is PnYnMnDTnHnMnS, where nY represents the number of years, nM the number of months, nD the number of days, T the date/time separator, nH the number of hours, nM the number of minutes, and nS the number of seconds.

6.7 float

Represents single-precision 32-bit floating-point numbers.

6.8 positiveInteger

Represents an integer that is greater than zero. This data type is derived from nonNegativeInteger.

6.9 string

Represents character string.