Description of 3C7 Message

PIP® 3C7

Validated 11.03.00

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1. Document Management

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1.5 Related Documents

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

- Description of Partner Interface Process for 3C7

- Message Structure

1.6 Document Version History

Version	Date	Description
Validated 11.00.00	19 July 2006	Validated Version
Validated 11.01.00	21 September 2007	Milestone Program: Schema2Market
Validated 11.02.00	28 September 2009	Validated Version - Maintenance 2009
Validated 11.03.00	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 SelfBillingInvoiceNotification

2.1.1 Interchange Diagram

Figure 2-1 Interchange

2.1.2 Dependency Diagram
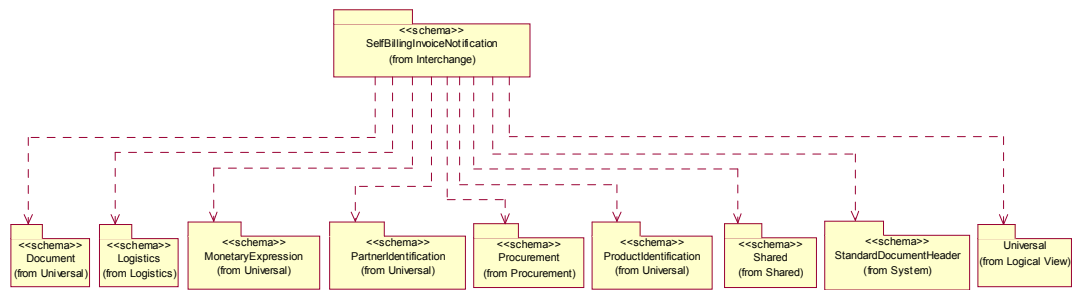
Figure 2-2 Dependency

2.1.3 Invoice

An itemized list of goods or services specifying the price and the terms of sale.

The recommended ProcessRoleIdentifier in PartnerDescription are PUR - Purchased By, SHF - Ship From, SHT - Ship To, SOB - Sold By.
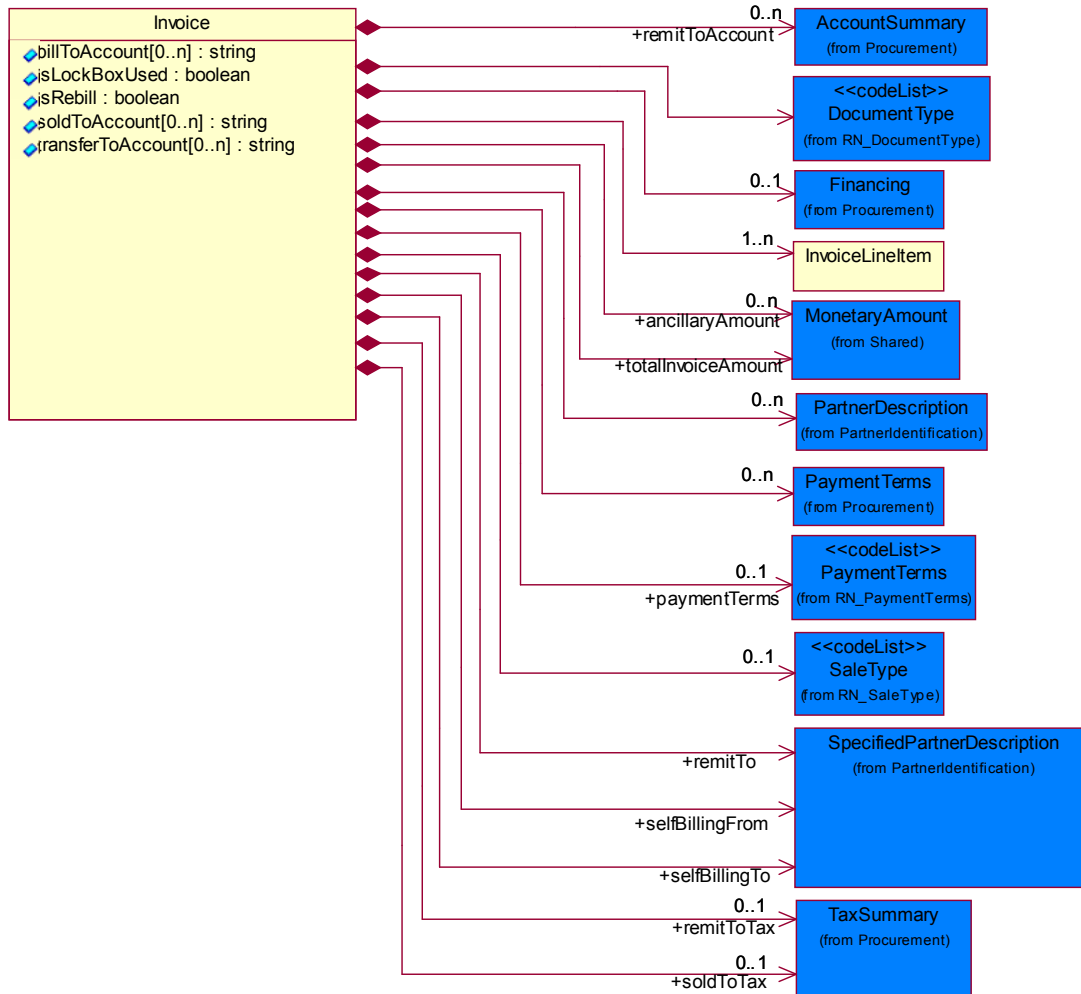
Figure 2-3 Invoice

Attribute	Type	Documentation
billToAccount[0..n]	string	The account number of the party that pays the invoice.
isLockBoxUsed	boolean	Indicates the appearance of a lock box number on an applicable address line and subsequent requirement.
isRebill	boolean	Indicates whether the business document is being resent.
soldToAccount[0..n]	string	The account number of the party that purchases of the product.
transferToAccount[0..n]	string	The account number of the party that transfers the product.

Composition	Cardinality	Type	Documentation
Financing	0..1	Financing	The collection of business properties that describe financial information.
DocumentType	1	DocumentType	A code identifying the business context of a document.
SaleType	0..1	SaleType	Code identifying the type of sale terms the trading partner bought from the seller.
InvoiceLineItem	1..n	InvoiceLineItem	The collection of business properties that describe an invoice entry.
remitToAccount	0..n	AccountSummary	The account number of the party to whom payment is sent.
remitToTax	0..1	TaxSummary	The total tax liability of the party to whom payment is sent.
soldToTax	0..1	TaxSummary	The total tax liability of the party that purchases the product.
remitTo	1	SpecifiedPartnerDescription	The partner to which payment for a business document is sent.
selfBillingFrom	1	SpecifiedPartnerDescription	The party who initiates the billing in self-billing scenario.
selfBillingTo	1	SpecifiedPartnerDescription	The party whom the invoice is addressed to.
ancillaryAmount	0..n	MonetaryAmount	Ancillary costs that are not included in the line items.
totalInvoiceAmount	1	MonetaryAmount	The total amount on an invoice.
PaymentTerms	0..n	PaymentTerms	The collection of business properties that describe payment terms.
paymentTerms	0..1	PaymentTerms	Code identifying the terms that govern the payment for goods and services.
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.

2.1.4 InvoiceLineItem

The collection of business properties that describe an invoice entry.
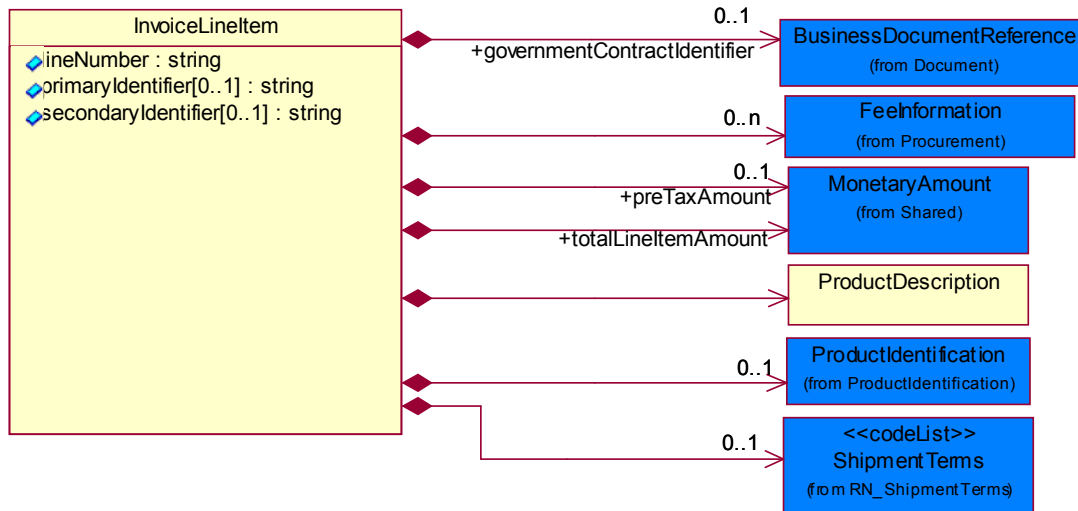
Figure 2-4 InvoiceLineItem

Attribute	Type	Documentation
lineNumber	string	Number of the line in the document.
primaryIdentifier[0..1]	string	A unique tracking number (assigned by the carrier) to a package for the duration of a shipment, through all intermediaries.
secondaryIdentifier[0..1]	string	A tracking number that will generally be carrier specific and will not be bound to a particular format.

Composition	Cardinality	Type	Documentation
ShipmentTerms	0..1	ShipmentTerms	Code identifying the terms under which a product is shipped.
governmentContractIdentifier	0..1	BusinessDocument Reference	The unique number that identifies a government contract.
ProductDescription	1	ProductDescription	The collection of business properties that describe a shipment receipt notification entry.
ProductIdentification	0..1	ProductIdentification	The object provides the identifier(s) of a product.
preTaxAmount	0..1	MonetaryAmount	The gross amount prior to calculating taxes.
totalLineItemAmount	1	MonetaryAmount	The monetary total associated with a line item.
FeeInformation	0..n	FeeInformation	

2.1.5 ProductDescription

The collection of business properties that describe a shipment receipt notification entry.
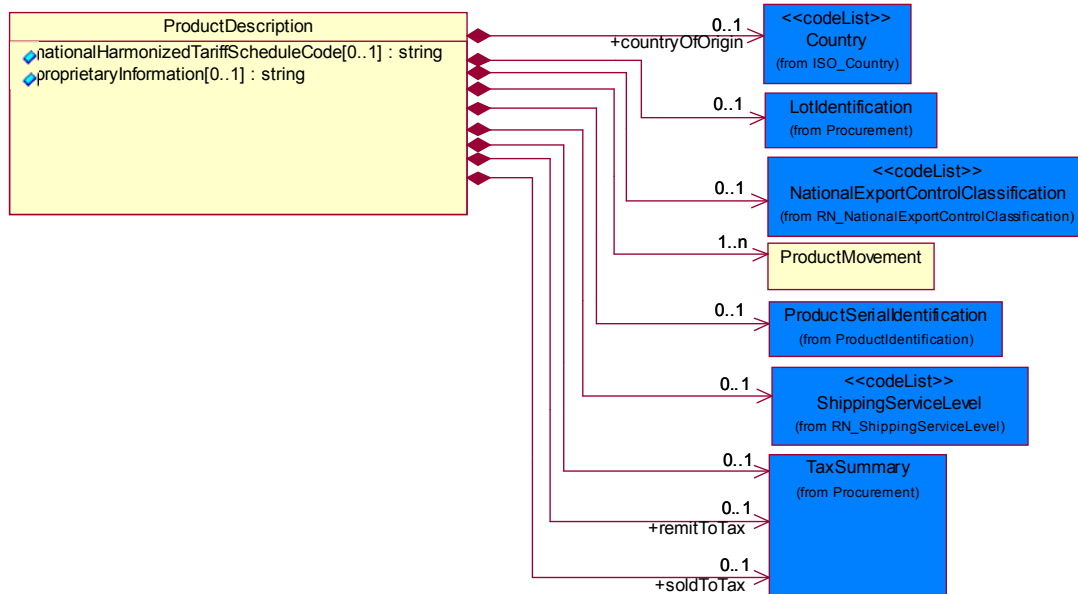
Figure 2-5 ProductDescription

Attribute	Type	Documentation
nationalHarmonizedTariffScheduleCode[0..1]	string	Code identifying product classification or procedure classification for international shipping.
proprietaryInformation[0..1]	string	A free form textual description of information, relating to a product.

Composition	Cardinality	Type	Documentation
countryOfOrigin	0..1	Country	Country where product originates.
LotIdentification	0..1	LotIdentification	This object identifies a lot which associates the product with a specific group of products with some similar attributes.
ProductMovement	1..n	ProductMovement	The collection of business properties that describes the log of usage or consumption or arrival of a product.
NationalExportControlClassification	0..1	NationalExportControlClassification	Code identifying product classification for export regulation.
ProductSerialIdentification	0..1	ProductSerialIdentification	The object provides the serial identifier of a product.

TaxSummary	0..1	TaxSummary	The collection of business properties that describe the total tax information for a local, regional or national taxing authority.
remitToTax	0..1	TaxSummary	The total tax liability of the party to whom payment is sent.
soldToTax	0..1	TaxSummary	The total tax liability of the party that purchases the product.
ShippingServiceLevel	0..1	ShippingServiceLevel	Code identifying the shipping service level, e.g., overnight, same day.

2.1.6 ProductMovement

The collection of business properties that describes the log of usage or consumption or arrival of a product.
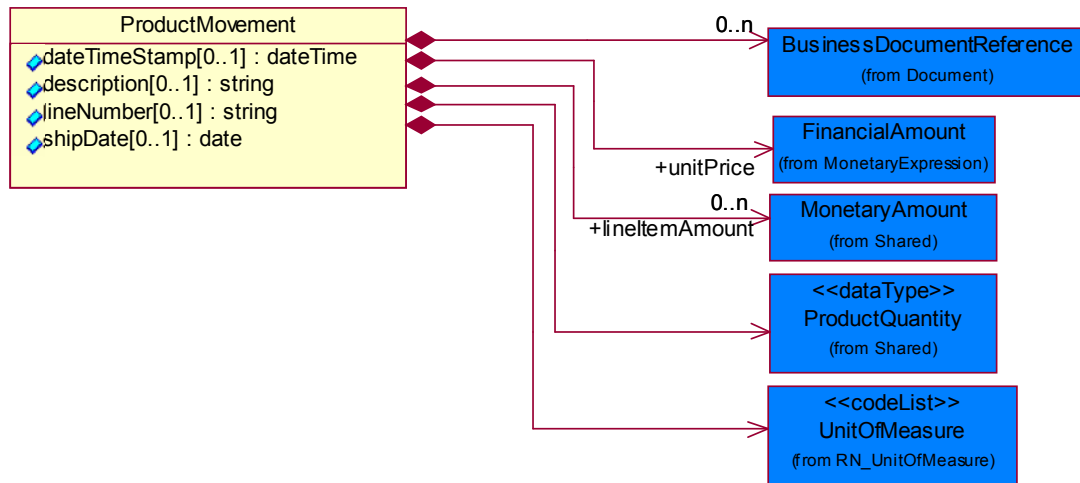
Figure 2-6 ProductMovement

30 May 2012

Attribute	Type	Documentation
dateTimeStamp[0..1]	dateTime	Specifies an instance in time. Based on the ISO 8601 specification where "YYYY" represents the year, "MM" the month and "DD" the day. The letter "T" is the date/time separator and "hh", "mm", "ss.sss" represent hour, minute and second respectively. This representation is immediately followed by a "Z" to indicate Coordinated Universal Time. Informal format: YYYYMMDDThhmmss.
description[0..1]	string	Types of possible goods movements and code value set to be agreed between parties. Material consumption from consignment stock can happen under the following scenarios: · when material is taken into use on the production line, · when material is send to subcontractor, · when material is taken to cost center i.e for sample purposes or · when material is required for delivery.
lineNumber[0..1]	string	Number of the line in the document.
shipDate[0..1]	date	The (GMT) local date the product is shipped.

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.
UnitOfMeasure	1	UnitOfMeasure	Code identifying a product unit of measure.
unitPrice	1	FinancialAmount	Agreed upon sale price for each unit ordered.
lineItemAmount	0..n	MonetaryAmount	The monetary value of line item (unit price * qty) or line item allowance.
ProductQuantity	1	ProductQuantity	A quantity specifying the number of product units.

2.1.7 SelfBillingInvoiceNotification

A message wrapper for 3C7.
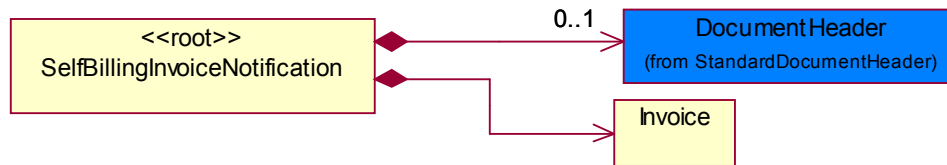
Figure 2-7 SelfBillingInvoiceNotification

Composition	Cardinality	Type	Documentation
DocumentHeader	0..1	DocumentHeader	The object allows for the identification of the sender and receiver of the business document.
Invoice	1	Invoice	An itemized list of goods or services specifying the price and the terms of sale. The recommended ProcessRoleIdentifier in PartnerDescription are PUR - Purchased By, SHF - Ship From, SHT - Ship To, SOB - Sold By.

3. Domain ModelProcurement

3.1.1 Procurement

3.1.1.1 Dependency Diagram
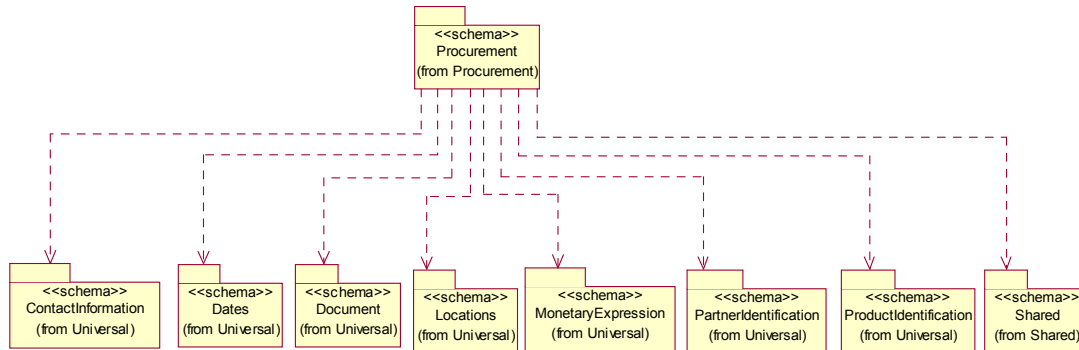
Figure 3-1 Dependency

3.1.1.2 AccountSummary

The collection of business properties that summarizes an account information.
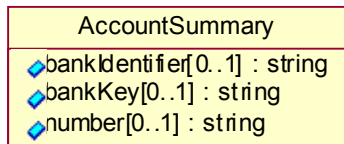
Figure 3-2 AccountSummary

Attribute	Type	Documentation
bankIdentifier[0..1]	string	A unique bank identifier such as an ISO standard Bank Identifier Code (BIC) of which SWIFT (Society for Worldwide Interbank Financial Telecommunication) is the registration authority.
bankKey[0..1]	string	Bank sort code required by some banks to enable transfers of funds.
number[0..1]	string	Identification number of an account.

3.1.1.3 CurrencyConversion

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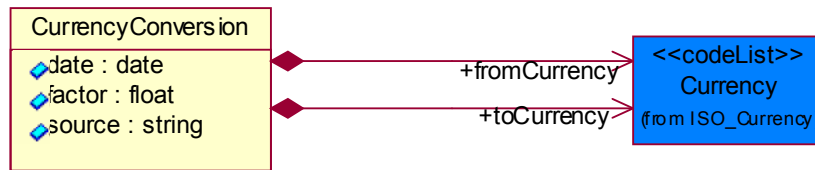
Figure 3-3 CurrencyConversion

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 DayOfMonth

Specifies a specific day within a month. Value range from 1 to 31.
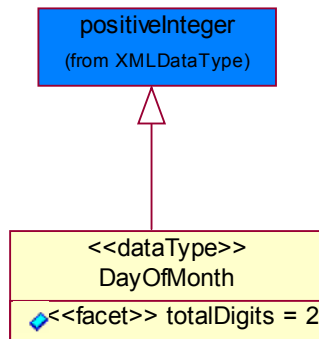
Figure 3-4 DayOfMonth

Attribute	Type	Documentation
totalDigits		Value with specific maximum number of decimal digits. For more information, see the W3C XML Schema Part 2: Datatypes Recommendation at http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/#element-totalDigits .

3.1.1.5 Discounts
The collection of business properties that describe payment discounts.

```
Discounts
day[0..1] : DayOfMonth
days[0..1] : DayOfMonth
percent[0..1] : PercentAmount
```
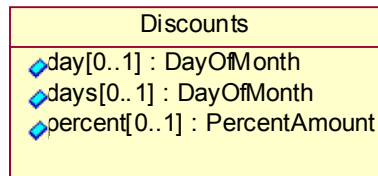
Figure 3-5 Discounts

Attribute	Type	Documentation
day[0..1]	DayOfMonth	The specific day of the month a payment is required in order to receive a discount.
days[0..1]	DayOfMonth	The number of days within which a payment is required in order to receive a discount.
percent[0..1]	PercentAmount	The financial percent representing a reduction to the total amount due.

3.1.1.6 FeeInformation

```
FeeInformation                          0..1        FinancialAmount
dutyNote[0..1] : string     +extendedPrice      (from MonetaryExpression)
feeType[0..1] : string                  0..1
name[0..1] : string            +unitPrice
```
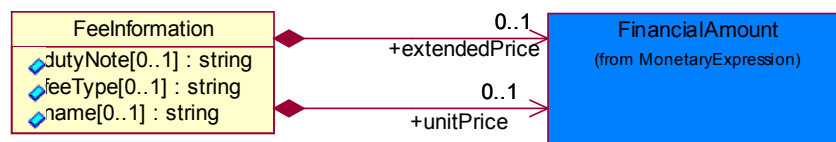
Figure 3-6 FeeInformation

Attribute	Type	Documentation
dutyNote[0..1]	string	Text that contains information on the duty supported.
feeType[0..1]	string	The type of additional fee added to the line item.
name[0..1]	string	The name of the fee.

Composition	Cardinality	Type	Documentation
extendedPrice	0..1	FinancialAmount	Total price for a product quantity.
unitPrice	0..1	FinancialAmount	Agreed upon sale price for each unit ordered.

3.1.1.7 Financing

The collection of business properties that describe financial information.

```
Financing
approvalIdentifier : string
planIdentifier[0..1] : string
```
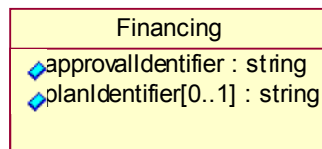
Figure 3-7 Financing

Attribute	Type	Documentation
approvalIdentifier	string	The unique number that identifies the approval of a request.
planIdentifier[0..1]	string	The unique number that identifies the tool by which the payment will be made.

3.1.1.8 LotIdentification

This object identifies a lot which associates the product with a specific group of products with some similar attributes.

```
LotIdentification                    0..n    <<codeList>>
lotType[0..1] : string                       Country
primary[0..1] : string    +countryOfOrigin  (from ISO_Country)
secondary[0..1] : string
```
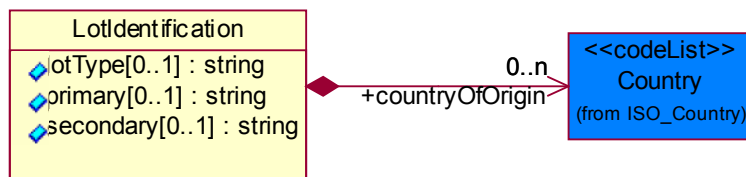
Figure 3-8 LotIdentification

Attribute	Type	Documentation
lotType[0..1]	string	Identify the type of the lot whether it's for Production or Engineering.
primary[0..1]	string	The primary lot identifier.
secondary[0..1]	string	The secondary lot identifier.

Composition	Cardinality	Type	Documentation
countryOfOrigin	0..n	Country	This object represents the country where the product originates.

3.1.1.9 NetTerms

The collection of business properties that describe net payment due terms.

```
NetTerms
◆day[0..1] : gDay
◆days[0..1] : positiveInteger
```
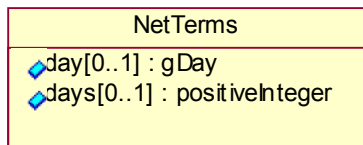
Figure 3-9 NetTerms

Attribute	Type	Documentation
day[0..1]	gDay	The specific day of the month a payment is due without incurring late charges.
days[0..1]	positiveInteger	The number of days within which a payment is due without incurring late charges.

3.1.1.10 OtherTaxes

The collection of business properties that describe other tax information.

```
TaxInformation

      △
      |
OtherTaxes
◆taxDescription : string
```
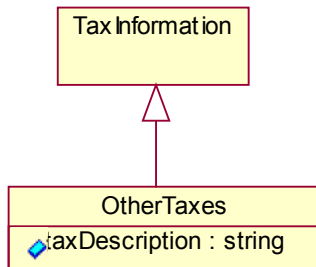
Figure 3-10 OtherTaxes

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

3.1.1.11 PaymentTerms

The collection of business properties that describe payment terms.
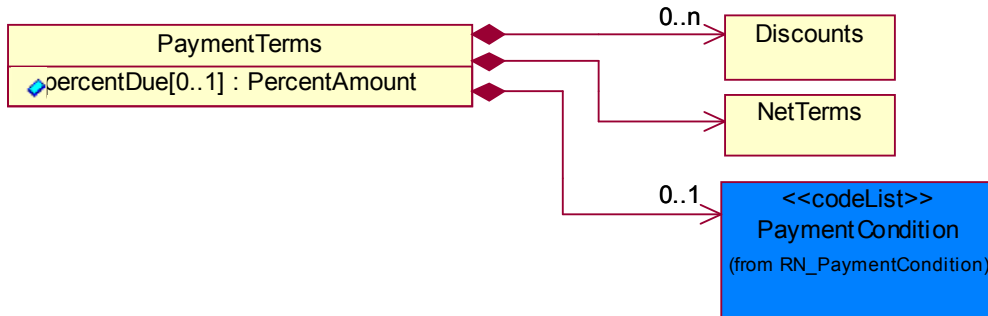
Figure 3-11 PaymentTerms

Attribute	Type	Documentation
percentDue[0..1]	PercentAmount	The amount owed expressed as a percentage.

Composition	Cardinality	Type	Documentation
PaymentCondition	0..1	PaymentCondition	A code identifying the conditions under which payment will be made.
Discounts	0..n	Discounts	The collection of business properties that describe payment discounts.
NetTerms	1	NetTerms	The collection of business properties that describe net payment due terms.

3.1.1.12 TaxInformation

The collection of business properties that describe tax information.
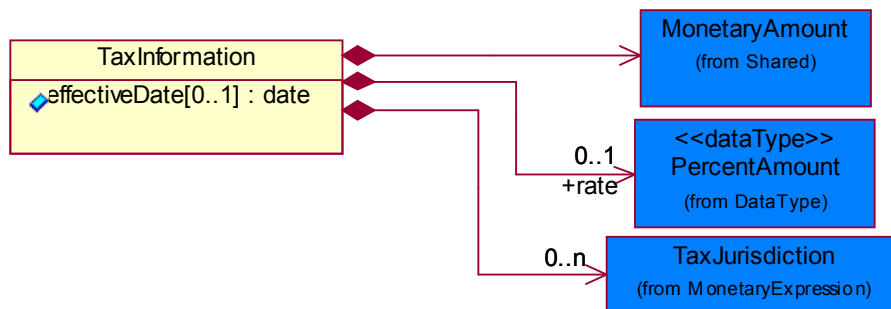
Figure 3-12 TaxInformation

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.

3.1.1.13 TaxPhrase

The collection of business properties that describe VAT specific information.

```
TaxPhrase
◆isTaxTriangulationApplicable : boolean
◆phrase : string
```

Figure 3-13 TaxPhrase

Attribute	Type	Documentation
isTaxTriangulationApplicable	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.

3.1.1.14 TaxSummary

The collection of business properties that describe the total tax information for a local, regional or national taxing authority.
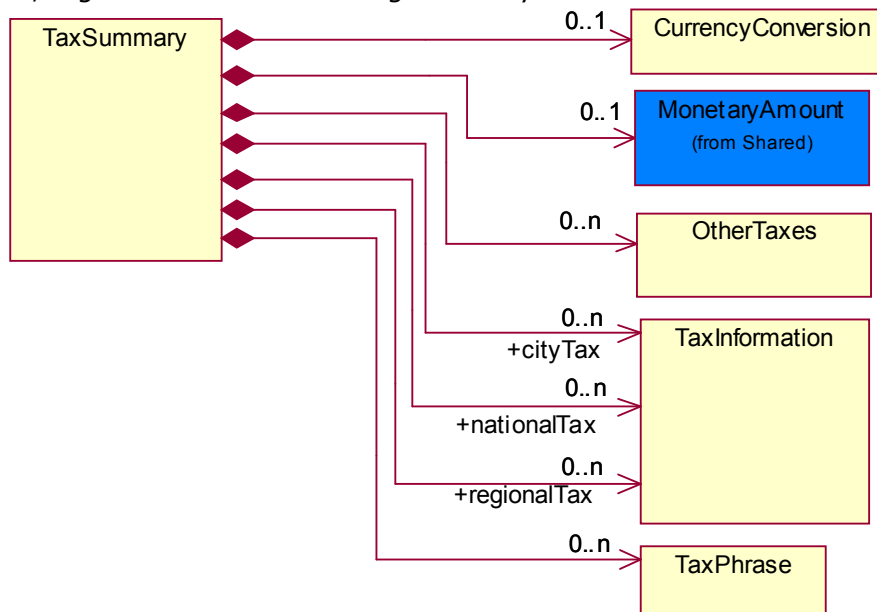
Figure 3-14 TaxSummary

| 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 PaymentCondition
A code identifying the conditions under which payment will be made.

Name	Documentation
ACC	Acceptance - Acceptance by buyer of tool/machine to be in working order per spec/contract.
CON	Consumption.
REG	Receipt of Goods.
REI	Receipt of Invoice.
SHI	Shipment.

3.1.2.2 ShipmentTerms
Code identifying the terms under which a product is shipped.

Name	Documentation
ADC	Advance collect.
ADP	Advance prepaid.
CAA	Cash in advance.
CAD	Cash on delivery.
CFC	Collect, freight credited to payment customer.
CFR	Cost and freight.
CIF	Cost, Insurance and Freight.
CIP	Carriage and Insurance Paid to.
COL	Collect.
CPT	Carriage Paid To.
CRC	Credit card.
CUP	Customer pick-up/backhaul.
DAF	Delivered at Frontier.
DDP	Delivered Duty Paid.
DDU	Delivered Duty Unpaid.
DEQ	Delivered Exquay.
DES	Delivered Ex Ship.
EXW	Ex Works.
FAS	Free Alongside Ship.
FCA	Free Carrier.
FOB	Free On Board.
LEC	Letter of Credit.
NOS	Not specified.
PAE	Payable elsewhere.
PCC	Prepaid but charged to customer.
PIU	Pickup.
PRE	Prepaid only.
PRS	Prepaid (by seller).
RFC	Return container freight paid by customer.
RFF	Return container freight free.
RFS	Return container freight paid by supplier.
TPP	Third Party Pay.

3.1.2.3 SaleType

Code identifying the type of sale terms the trading partner bought from the seller.

Name	Documentation
CRD	Credit.
CSG	Product has been re-sold.
CSH	Cash.
INS	Installment.
LSE	Product has been leased.
PUR	Product has been purchased or bought.
RMK	Product has been repackaged, refurbished, etc. and has been sold.

3.1.2.4 PaymentTerms

Code identifying the terms that govern the payment for goods and services.

Name	Documentation
113	1% 10 Days Net 30
180	Net 180 days.
197	Net 197 dsays.
1N3	1% 10 Days Net 30
562	Net 562 days.
ACA	Available Credit Applied.
BDE	Bad Debt.
CAC	COD Cashier's Check.
CCC	COD Company Check.
CCD	COD Cashier's Check Deduction.
COD	COD cash.
CPD	COD Company check Deduction.
DSC	Discover Card.
EFT	EFT.
IMC	International Master Card.
IVC	International Visa Card.
L30	Letter of Credit-30 days after shipment.
L45	Letter of Credit-45 days after shipment.
LOC	Letter of Credit-at site.
MAC	Master Card.
N01	Net 1 day.
N05	Net 5 days.
N10	Net 10 days.
N15	Net 15 days.
N20	Net 20 days.
N2A	Net 20 10.
N2B	Net 20 15.
N30	Net 30 days.
N35	Net 35 days.
N3A	Net 30 10.
N3B	Net 30 15.
N45	Net 45 days.

N4A	Net 45 10.
N4B	Net 45 15.
N60	Net 60 days.
N90	Net 90 days.
NOT	No terms.
P30	Net 30 plus.
PCC	Prepay Credit Card.
PNA	0.4% net 10.
PNB	1% 10 days net 10.
PNC	1% 10 days net 45.
PND	1% 10th/25th net 30.
PNE	1% 15 days net 30.
PNF	1% 30 days net 30.
PNG	1% net 45.
PNH	2% 10 days net 30.
PNI	2% 15 days net 30.
PPC	Prepay check.
PPD	Prepaid.
PPW	Prepay wire.
PWT	1% Wire transfer prepay.
RPO	As per the agreement referenced in the PO.
S60	Net 60 spare parts.
VDT	Vendor Terms.
VIS	Visa.
WTR	Wire transfer.

3.2 Logistics

3.2.1 Logistics

3.2.1.1 Dependency Diagram
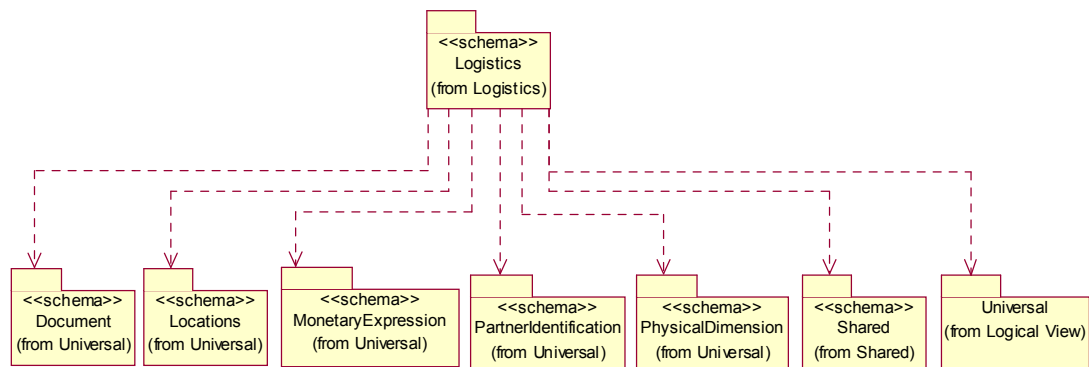
Figure 3-15 Dependency

3.2.2 CodeList

3.2.2.1 NationalExportControlClassification
Code identifying product classification for export regulation.

Name	Documentation
CLE	Clearance - The cargo will be or has been cleared.
CUC	Already customs cleared in the importing country, arrangement for inspection are not necessary because they were cleared before.
DET	Detention - The cargo has been or will be detained.
DOR	Documents Required - Pertinent documents are required.
DRC	Documents Requirements Completed - All requirements for documents have been completed.
FUM	Fumigation - The cargo has been or will be fumigated.
IAC	Inspection Arrangements Completed - Arrangements for inspection of the cargo have been completed.
IAR	Inspection Arrangements Required - Arrangements for inspection of the cargo are required.
INS	Inspection - The cargo has been or will be inspected.
LWI	Lowest Importance.
NCP	No Customs Procedure - Customs clearance not required.
SAC	Safety Arrangements Completed - Arrangements for safeguarding the cargo have been completed.
SAR	Safety Arrangements Required - Arrangements for safeguarding the cargo are required.
SCR	Security - The cargo has been or will be secured.
SEC	Security Arrangements Completed - Arrangements for storing the cargo have been completed.
SER	Security Arrangements Required - Arrangements for the security of the cargo are required.
STR	Storage arrangements required - Arrangements for storing the cargo are required.
TAC	Transport Arrangements Completed - All arrangements for transport have been completed.
TAR	Transport Arrangements Required - Transport has to be arranged.

3.3 Shared

3.3.1 Shared

3.3.1.1 Dependency Diagram
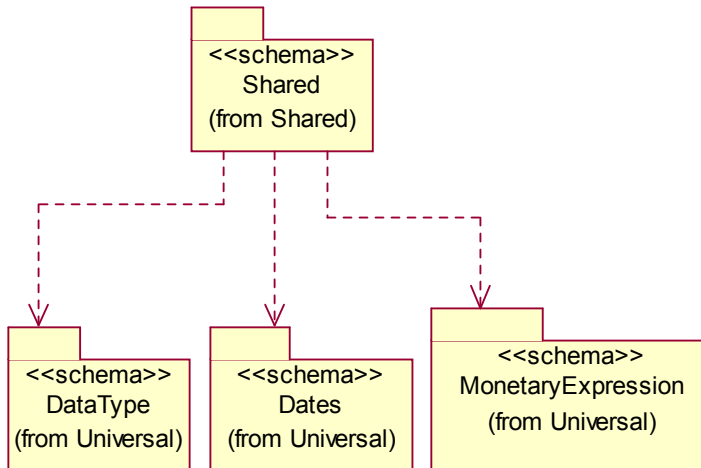
Figure 3-16 Dependency

3.3.1.2 MonetaryAmount

The collection of business properties that describe the monetary amount defined by a specified currency.
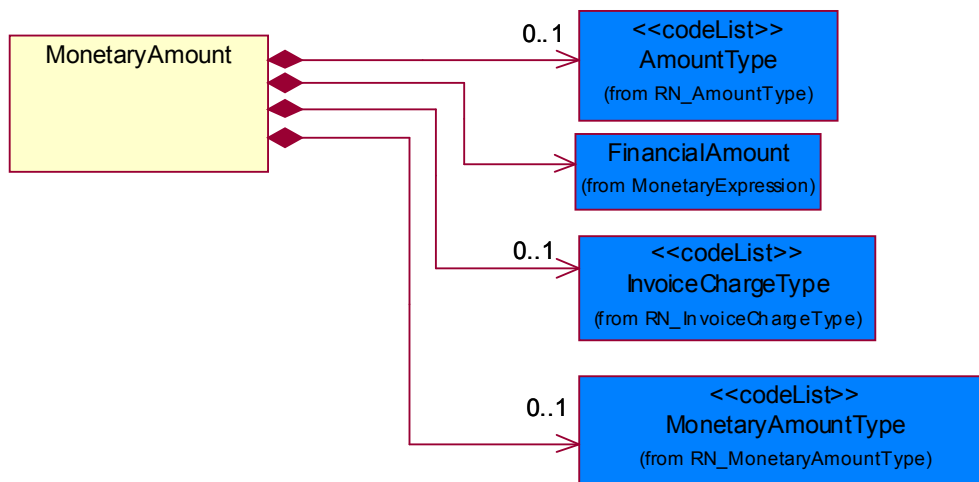
Figure 3-17 MonetaryAmount

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.

3.3.1.3 ProductQuantity

A quantity specifying the number of product units.
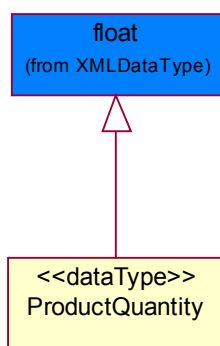
Figure 3-18 ProductQuantity

3.3.2 CodeList

3.3.2.1 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.

3.3.2.2 MonetaryAmountType

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

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

3.3.2.3 ShippingServiceLevel

Code identifying the shipping service level, e.g., overnight, same day.

Name	Documentation
1BD	1BD, Same Business Day - 4 hour Response Time.
5BD	5 Business Days.
9AM	9 A.M.
ACH	Air Charter.
AEC	Air Economy.
AIC	Air Cargo.
AM	A.M.
ARS	Authorized Return Service.
ATA	Airport to Airport.
ATD	Airport to Door.
BCT	Bulk Commodity Train.
BUC	Business Class.
CBS	Consignee Billing Service.
COE	Courier Express.
DCR	Delivery Confirmation Return.
DEC	Delivery Confirmation.
DES	Deferred Service.
DNO	Delivery Notification Only.
DOS	Door Service.
DSN	Delivery scheduled next day by cartage agent.
DSS	Delivery scheduled second day by cartage agent.
DST	Delivery scheduled third day by cartage agent.
DTA	Door to Airport.
DTD	Door to Door.
DTP	Door to Port (Ocean).
ESP	Express Service Plus.
ESV	Expedited Service.
ESW	Expedited Service Worldwide.
EXS	Express Service.
EXW	Express Service - Worldwide.

FIC	First Class.
GEN	General.
GRO	Ground.
ISS	Other intermodal and stack service.
MAF	Manifest freight.
MET	Metro.
MUW	Multiweight.
NBD	Next Business Day.
NDA	Next Day Air.
NEM	Next Morning.
NFO	Next Flight Out.
NHW	Next day Hundred Weight.
NOR	NORMAL - Normal delivery.
NOS	Not served.
OIS	Other Intermodal and Stack service
OTH	Other.
OVN	Overnight.
PAS	Passenger service.
PIU	Pickup.
PM	PM.
PMI	Priority Mail Insured.
POB	P.O. Box/Zip code.
POD	Proof of Delivery (POD) with Signature.
PRM	Priority Mail.
PRS	Premium Surface.
PS1	Primary Service Area - Next Day by 10:30 A.M.
PS2	Primary Service Area - Next Day by 5:00 P.M.
PS3	Primary Service Area - Next Day By 9:30 A.M.
PS4	Primary Service Area - Next Day by Noon.
PS5	Primary Service Area - Second Day by Noon.
PTD	Port to Door (Ocean).
PTP	Port to Port (Ocean).
REG	Regular.
SAD	Same day.
SAP	Saturday Pickup.
SAT	Saturday.
SBD	SBD, Second Business Day.
SCH	Scheduled.
SDA	Second Day Air.
SDW	Second Day Hundred Weight.
SED	Second Day.
SEM	Second Morning.
SGW	Standard Ground Hundred Weight.
STC	Standard Class.
STG	Standard Ground.
STO	Standard Ocean.
STS	Standard Service.
SUH	Sunday and Holidays.
TDS	Three Day Service.
TIC	Time Critical.

TRG	Tracking - Ground.

3.3.2.4 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.
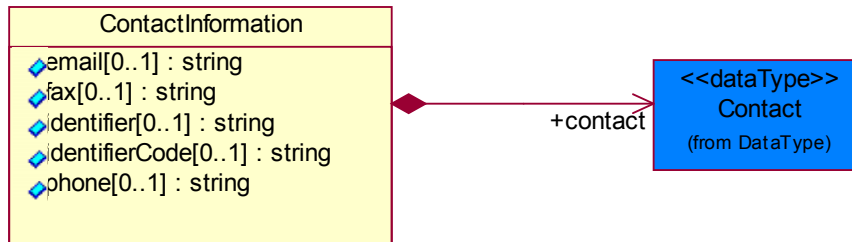
Figure 4-1 ContactInformation

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.
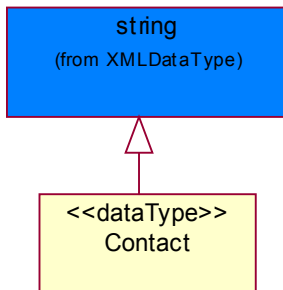
Figure 4-2 Contact

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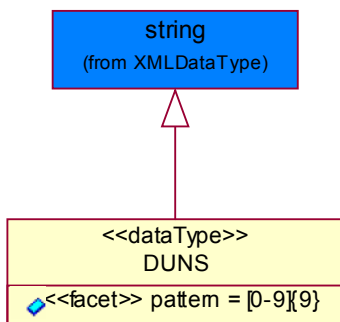
Figure 4-3 DUNS

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

4.2.3 DUNSPlus4

A identifier to specify a specific location within a business location.

```
                    string
              (from XMLDataType)


                 <<dataType>>
                  DUNSPlus4
     <<facet>> pattern = [0-9]{9}[0-9a-zA-Z]{1,4}
```
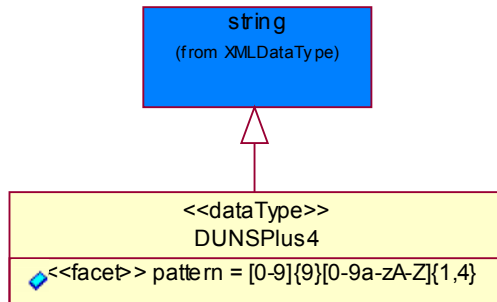
Figure 4-4 DUNSPlus4

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.

```
                    string
              (from XMLDataType)


                 <<dataType>>
                     GLN
        <<facet>> pattern = [0-9]{13}
```
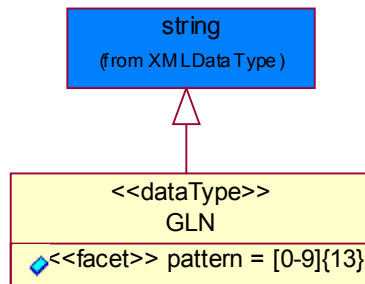
Figure 4-5 GLN

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}│
        └─────────────────────────┘
```
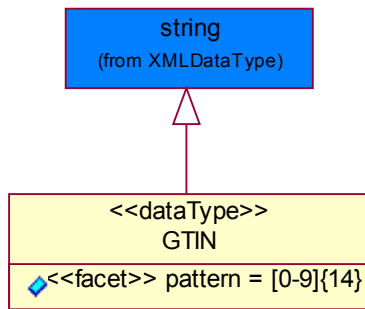
Figure 4-6 GTIN

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│
        └─────────────────────────┘
```
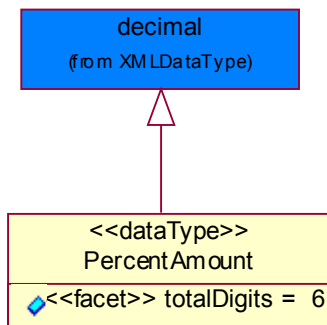
Figure 4-7 PercentAmount

Attribute	Type	Documentation
totalDigits		6

4.3 Document

4.3.1 BusinessDocumentReference

The business document reference object allows for the indirect referencing of a relationship to other business related documents.
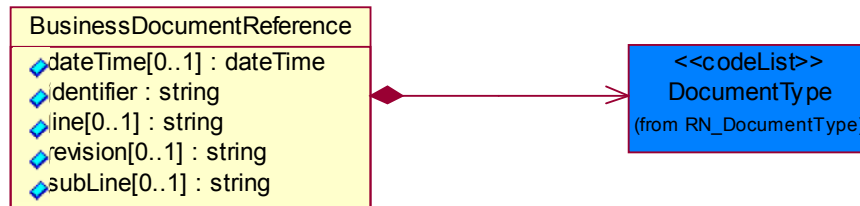
Figure 4-8 BusinessDocumentReference

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.

4.4 Locations

4.4.1 AlternativeIdentifier

Identifies the specified code and the name of the organization that a code is utilized from.
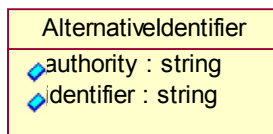
Figure 4-9 AlternativeIdentifier

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.).

4.4.2 Location

The business document must specify a location.
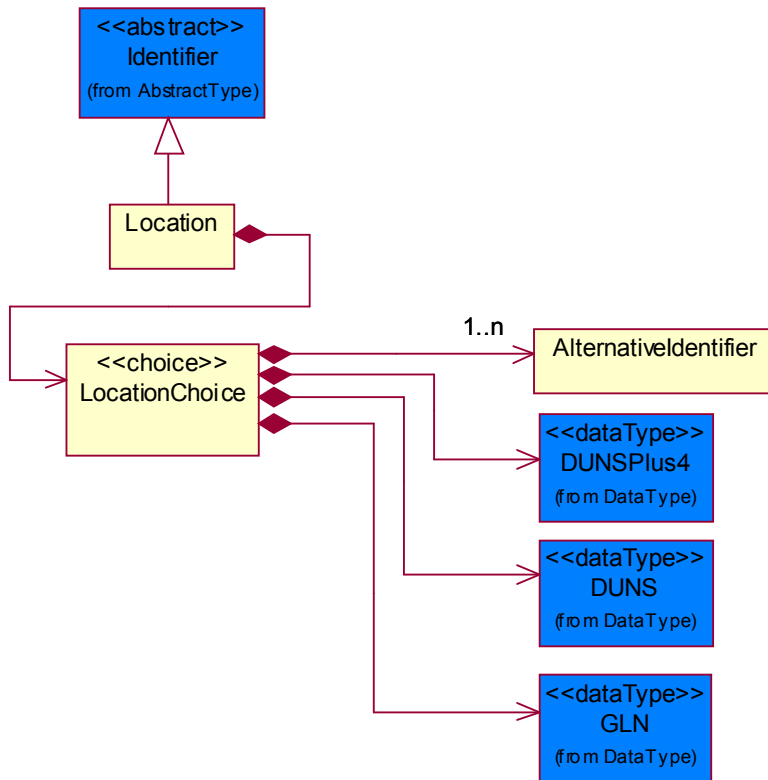
Figure 4-10 Location

Composition	Cardinality	Type	Documentation
LocationChoice	1	LocationChoice	

4.4.3 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.

4.4.4 PhysicalAddress

The business document must provide a physical address for a party to the business transaction.
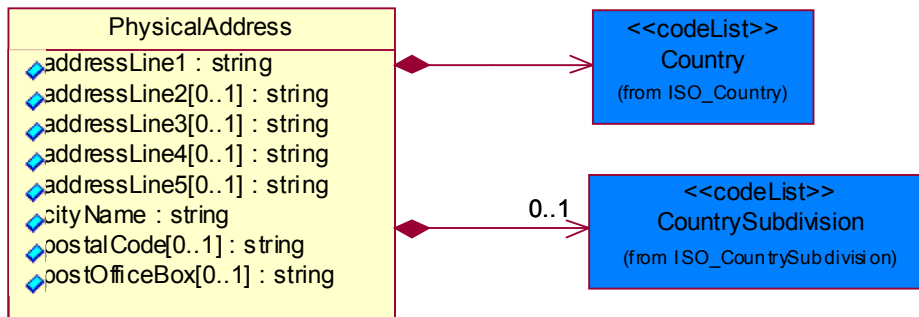
Figure 4-11 PhysicalAddress

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.

4.5 MonetaryExpression

4.5.1 FinancialAmount

The business document must express financial amounts.
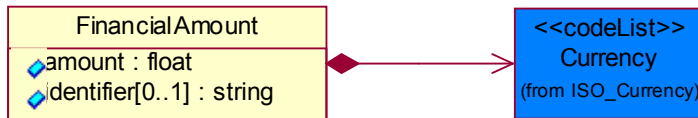
Figure 4-12 FinancialAmount

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.

4.5.2 TaxJurisdiction

The business document must identify the specific tax collection authority.
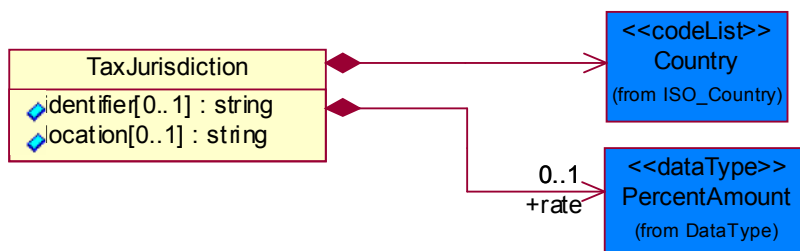
Figure 4-13 TaxJurisdiction

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.

4.6 PartnerIdentification

4.6.1 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.
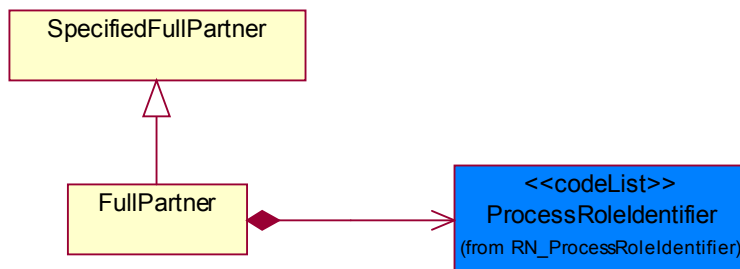
Figure 4-14 FullPartner

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.

4.6.2 IntermittentPartner

The business document must describe a physical address for a delivery.
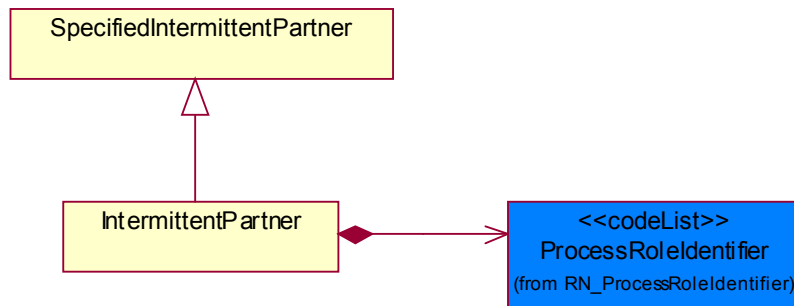
Figure 4-15 IntermittentPartner

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.

4.6.3 KnownPartner

The business document must describe the trading partners in the business transaction.
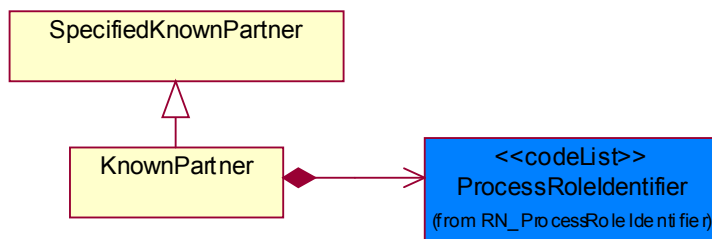
Figure 4-16 KnownPartner

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.

4.6.4 KnownPartnerContact

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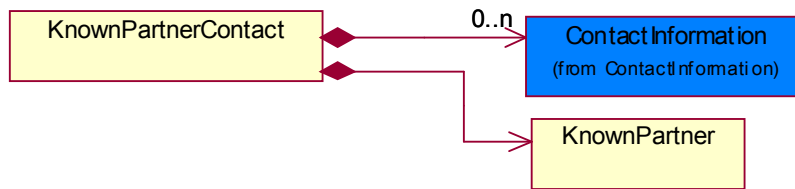
Figure 4-17 KnownPartnerContact

Composition	Cardinality	Type	Documentation
KnownPartner	1	KnownPartner	The business document must describe the trading partners in the business 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.

4.6.5 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.
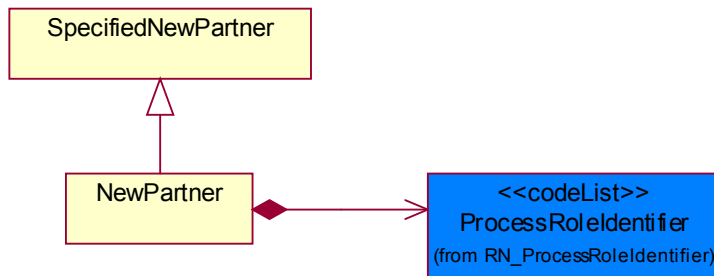
Figure 4-18 NewPartner

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.

4.6.6 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 4-19 PartnerDescription

Composition	Cardinality	Type	Documentation
PartnerDescriptionChoice	1	PartnerDescriptionChoice	

4.6.7 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.

4.6.8 PartnerIdentification

The business document must allow for the identity of one or more parties to the transaction.
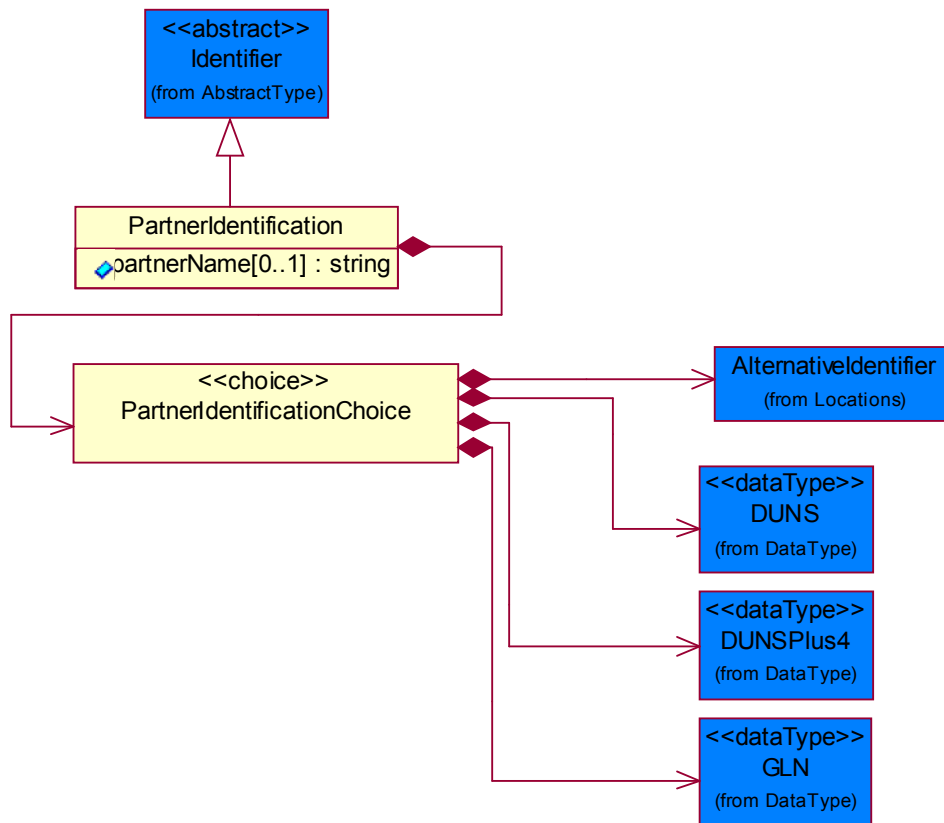
Figure 4-20 PartnerIdentification

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

Composition	Cardinality	Type	Documentation
PartnerIdentificationChoice	1	PartnerIdentificationChoice	

4.6.9 PartnerIdentificationChoice

Composition	Cardinality	Type	Documentation
AlternativeIdentifier	1	AlternativeIdentifier	Identifies the specified code and the name of the organization that a code is utilized from.
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.
GLN	1	GLN	Global Location Number (GLN) - A identifier to identify legal entities, trading parties and location.

4.6.10 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.
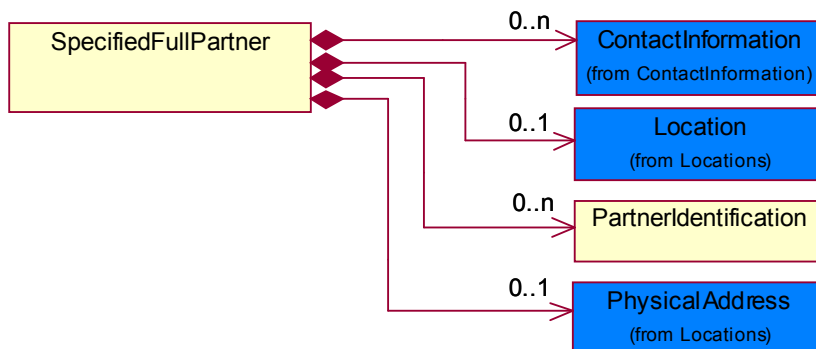

Figure 4-21 SpecifiedFullPartner

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.

4.6.11 SpecifiedIntermittentPartner

The business document must describe a physical address for a delivery.
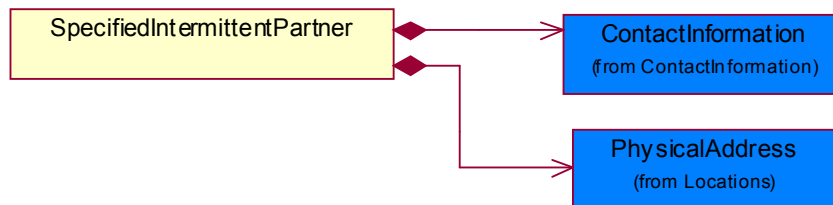
Figure 4-22 SpecifiedIntermittentPartner

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.

4.6.12 SpecifiedKnownPartner

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

Figure 4-23 SpecifiedKnownPartner

Composition	Cardinality	Type	Documentation
PartnerIdentificati on	1	PartnerIdentificatio n	The business document must allow for the identity of one or more parties to the transaction.

4.6.13 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.
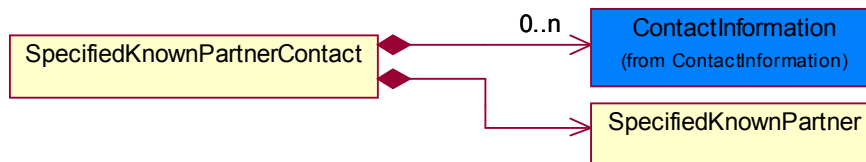
Figure 4-24 SpecifiedKnownPartnerContact

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.

4.6.14 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.
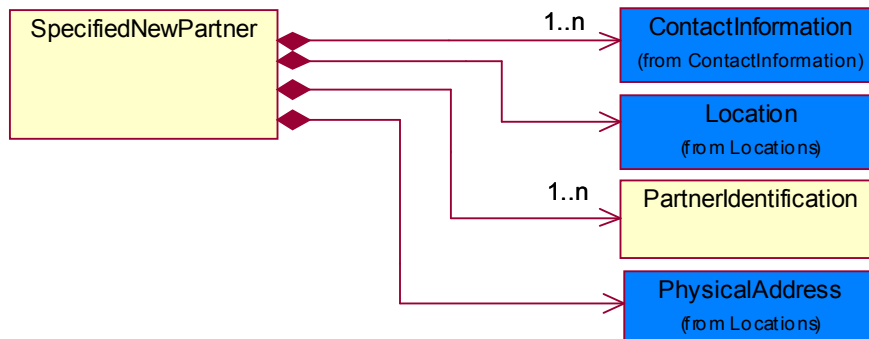

Figure 4-25 SpecifiedNewPartner

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.

4.6.15 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.
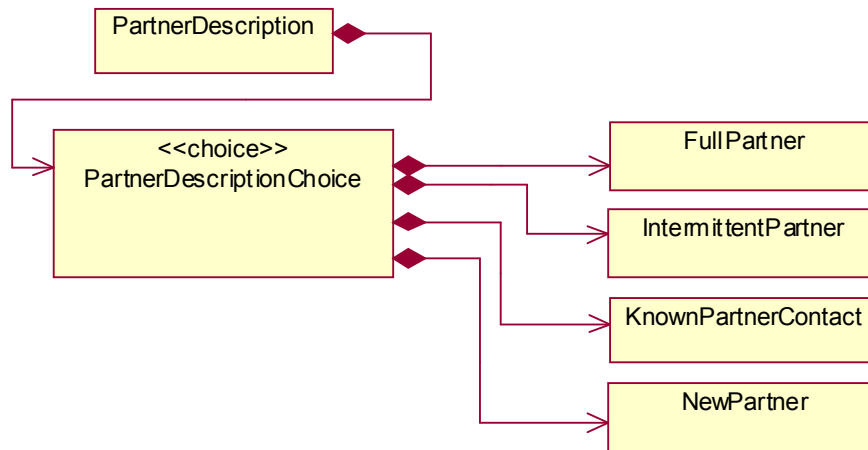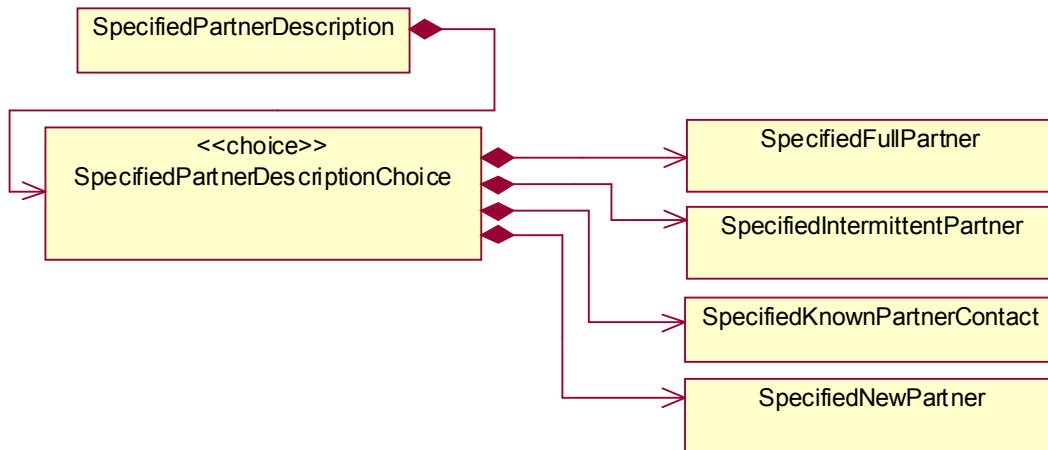

Figure 4-26 SpecifiedPartnerDescription

Composition	Cardinality	Type	Documentation
SpecifiedPartnerDescriptionChoice	1	SpecifiedPartnerDescriptionChoice	

4.6.16 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.

4.7 ProductIdentification

4.7.1 ProductIdentification

The object provides the identifier(s) of a product.
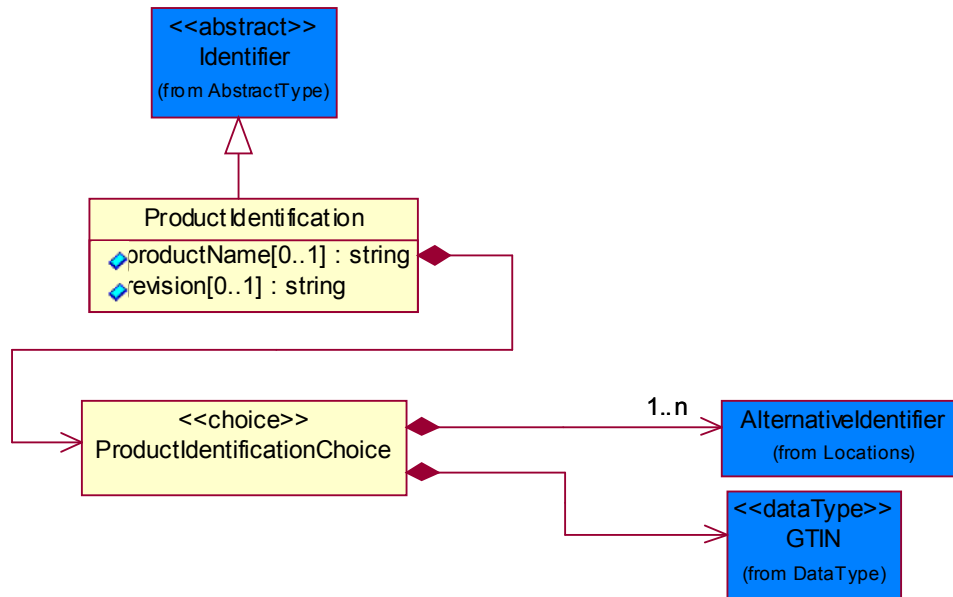
Figure 4-27 ProductIdentification

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	

4.7.2 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).

4.7.3 ProductSerialIdentification

The object provides the serial identifier of a product.
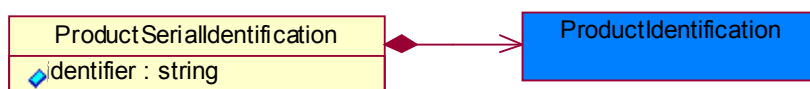
Figure 4-28 ProductSerialIdentification

Attribute	Type	Documentation
identifier	string	A unique serial identifier assigned to a product.

Composition	Cardinality	Type	Documentation
ProductIdentification	1	ProductIdentification	The object provides the identifier(s) of a product.

4.8 CodeList

4.8.1 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**

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.

4.8.3 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.

4.8.4 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.

4.8.5 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.

4.8.6 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.kenameapp	[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]
audio/CN	[RFC3389]
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]
audio/G722	
audio/G723	
audio/G726-16	
audio/G726-24	
audio/G726-32	
audio/G726-40	
audio/G728	
audio/G729	
audio/G729D	
audio/G729E	
audio/GSM	
audio/GSM-EFR	
audio/L16	[RFC2586]
audio/L20	[RFC3190]
audio/L24	[RFC3190]
audio/L8	
audio/LPC	
audio/MP4A-LATM	[RFC3016]
audio/MPA	
audio/mpa-robust	[RFC3119]
audio/mpeg	[RFC3003]
audio/parityfec	[RFC3009]
audio/PCMA	
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]
audio/telephone-event	[RFC2833]
audio/tone	[RFC2833]
audio/VDVI	
audio/vnd.3gpp.iufp	[Belling]
audio/vnd.cisco.nse	[Kumar]
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]
audio/vnd.octel.sbc	[Vaudreuil]
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
image/vnd.cns.inf2	[McLaughlin]
image/vnd.djvu	[Bottou]
image/vnd.dwg	[Moline]
image/vnd.dxf	[Moline]
image/vnd.fastbidsheet	[Becker]
image/vnd.fpx	[Spencer]
image/vnd.fst	[Fuldseth]
image/vnd.fujixerox.edmics-mmr	[Onda]
image/vnd.fujixerox.edmics-rlc	[Onda]
image/vnd.globalgraphics.pgb	[Bailey]
image/vnd.mix	[Reddy]
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]
model/vnd.dwf	[Pratt]
model/vnd.flatland.3dml	[Powers]
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]
multipart/alternative	[RFC2045,RFC2046]
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]
multipart/related	[RFC2387]
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]
text/uri-list	[RFC2483]
text/vnd.abc	[Allen]
text/vnd.curl	[Byrnes]
text/vnd.DMClientScript	[Bradley]
text/vnd.fly	[Gurney]
text/vnd.fmi.flexstor	[Hurtta]
text/vnd.in3d.3dml	[Powers]
text/vnd.in3d.spot	[Powers]
text/vnd.IPTC.NewsML	[IPTC]
text/vnd.IPTC.NITF	[IPTC]
text/vnd.latex-z	[Lubos]
text/vnd.motorola.reflex	[Patton]
text/vnd.ms-mediapackage	[Nelson]
text/vnd.net2phone.commcenter.command	[Xie]
text/vnd.sun.j2me.app-descriptor	[G.Adams]
text/vnd.wap.si	[WAP-Forum]
text/vnd.wap.sl	[WAP-Forum]

text/vnd.wap.wml	[Stark]
text/vnd.wap.wmlscript	[Stark]
text/xml	[RFC3023]
text/xml-external-parsed-entity	[RFC3023]
video/BMPEG	
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]

4.8.7 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.
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.
YAR	Yard.
YEA	Year.

4.8.8 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.

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.
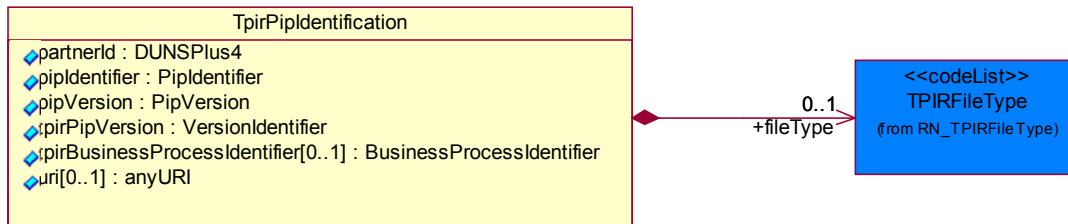
Figure 5-1 BusinessProcessIdentifier

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.
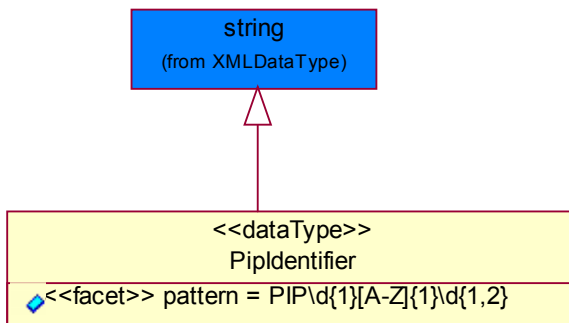
Figure 5-2 BusinessServiceInformation

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.
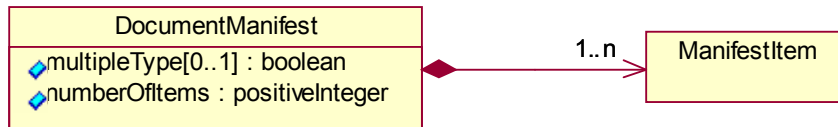
Figure 5-3 ContractInformation

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.
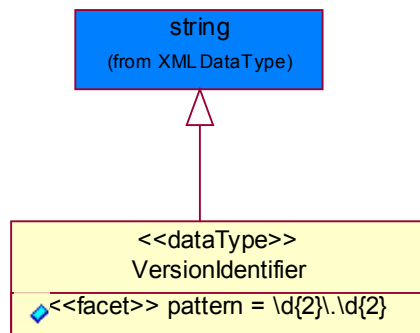
Figure 5-4 CorrelationInformation

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.

```
StandardDocumentIdentification
standard[0..1] : string
version : string
```

Figure 5-5 DocumentHeader

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

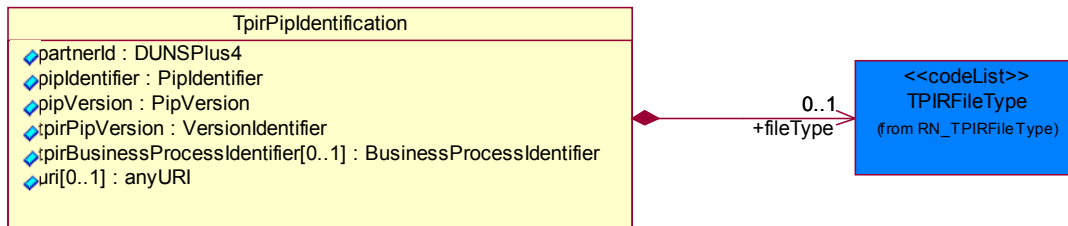| Composition	Cardinality	Type	Documentation
Sender	1	Sender	The object allows the identification of the initiating party of the business message.
CorrelationInformation	0..1	CorrelationInformation	A block of information used to correlate a requesting document to a responding document and to the contract 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.

```
            string
       (from XMLDataType)
```

```
        <<dataType>>
         PipIdentifier
<<facet>> pattern = PIP\d{1}[A-Z]{1}\d{1,2}
```
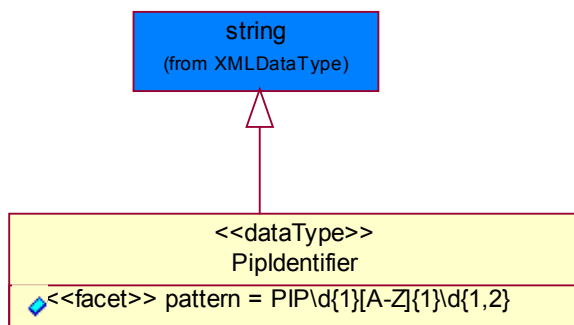
Figure 5-6 DocumentIdentification

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.
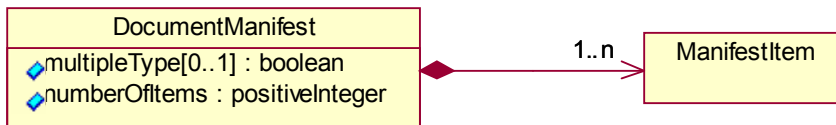
Figure 5-8 DocumentManifest

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
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]
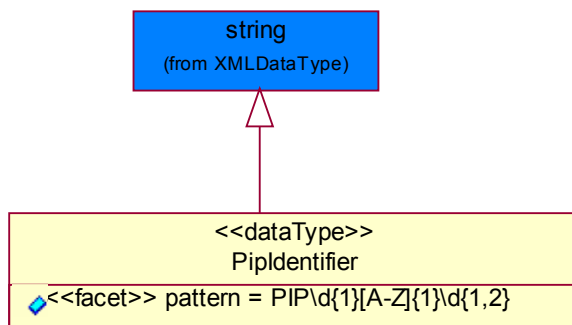
Figure 5-11 PipIdentifier

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

5.13 PipVersion

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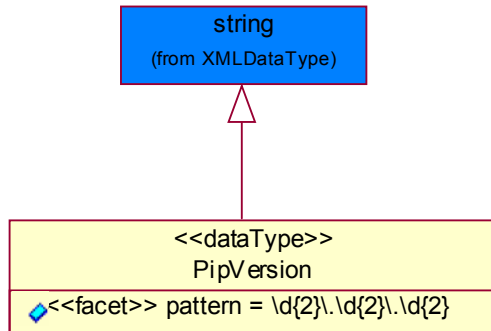
Figure 5-12 PipVersion

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.

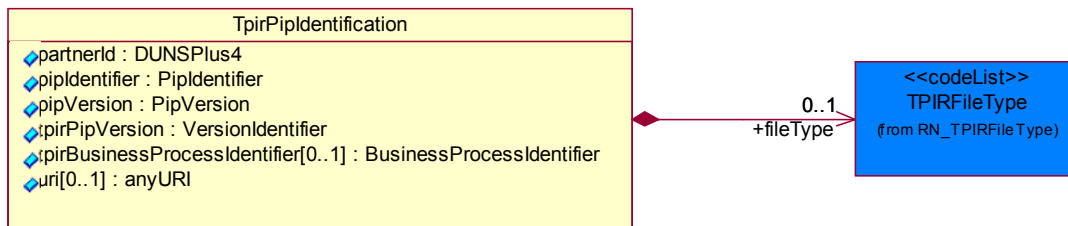**Figure 5-13 Receiver**

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.
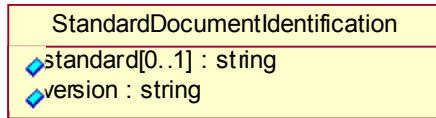
```
StandardDocumentIdentification
standard[0..1] : string
version : string
```

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

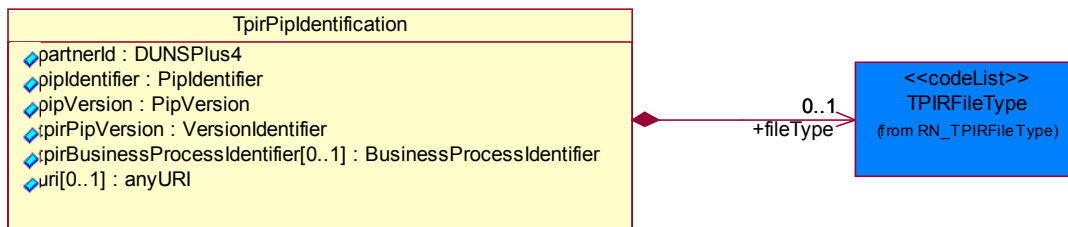The object allows the identification of the initiating party of the business message.

```
TpirPipIdentification
partnerId : DUNSPlus4
pipIdentifier : PipIdentifier
pipVersion : PipVersion
tpirPipVersion : VersionIdentifier
tpirBusinessProcessIdentifier[0..1] : BusinessProcessIdentifier
uri[0..1] : anyURI
```

```
<<codeList>>
TPIRFileType
(from RN_TPIRFileType)
```

0..1
+fileType

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	0..n	ContactInformatio	The business document must

n		n	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

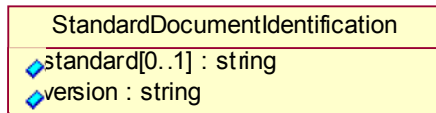The object specifies additional information necessary to identify the standard business document.

```
StandardDocumentIdentification
standard[0..1] : string
version : string
```

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.
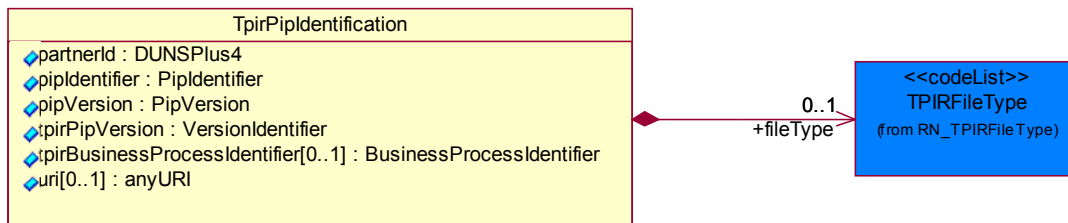
```
TpirPipIdentification
partnerId : DUNSPlus4
pipIdentifier : PipIdentifier
pipVersion : PipVersion
tpirPipVersion : VersionIdentifier
tpirBusinessProcessIdentifier[0..1] : BusinessProcessIdentifier
uri[0..1] : anyURI
```
```
                                        0..1      <<codeList>>
                                                  TPIRFileType
                                     +fileType    (from RN_TPIRFileType)
```

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).

5.19 VersionIdentifier

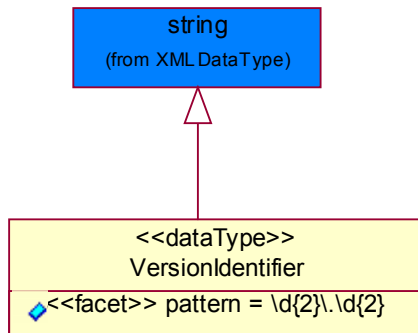Version Number (i.e., major and minor version number as XX.XX).

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".**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.**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.**decimal**

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

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

Represents a Gregorian day that recurs, specifically a day of the month such as the fifth day of the month. A gDay is the space of a set of calendar dates. Specifically, it is a set of one-day long, monthly periodic instances.
The pattern for gDay is ---DD with optional time zone indicator as allowed for date.**positiveInteger**

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

Represents character string.