

Description of 2A1 Message

PIP® 2A1

Validated 11.01.00

Specification Information	
Name	Description Of 2A1 Message
PIP	Distribute Product Catalog Information
Cluster	Product Information
Segment	Preparation for Distribution
Publication Date	30 May 2012
Version Identifier	V11.01

Table of Content

1.	Document Management	7
1.1	Legal Disclaimer.....	7
1.2	Copyright	7
1.3	Trademarks	7
1.4	Acknowledgments.....	7
1.5	Related Documents.....	8
1.6	Document Version History	8
1.7	Document Purpose.....	8
2.	Interchange Model.....	9
2.1	ProductCatalogInformationDistribution	9
2.1.1	Interchange Diagram.....	9
2.1.2	Dependency Diagram	10
2.1.3	ProductCatalog	10
2.1.4	ProductCatalogInformationDistribution	12
2.1.5	ProductIdentificationInformation	12
2.1.6	ProductInformation	13
2.1.7	ProductLifeCycle	14
2.1.8	ProductLineItem	15
2.1.9	ProductPriceAndAvailability	16
2.1.10	ProductProcurement	17
3.	Domain Model.....	19
3.1	Design	19
3.1.1	Design.....	19
3.1.1.1	Dependency Diagram.....	19
3.1.1.2	LifeCycleStatus	19
3.1.2	CodeList	20
3.1.2.1	ActionCode	20
3.1.2.2	ABCCode.....	20
3.1.2.3	ProductLifeCycleStatusCode.....	20
3.1.2.4	CatalogType	21
3.2	Procurement	22
3.2.1	Procurement	22
3.2.1.1	Dependency Diagram.....	22
3.2.1.2	IsCallFactory.....	22
3.2.1.3	IsCostChange	22
3.2.1.4	IsPriceProtect.....	23
3.2.1.5	IsSoleSource	23
3.2.1.6	IsSuggestedResaleChange.....	24
3.2.1.7	LeadTimeQuantity	24
3.2.1.8	OrderProvision	25
3.2.1.9	PriceList.....	26
3.2.1.10	PricingDetail	27
3.2.1.11	ProductAvailability	28
3.2.1.12	ProductClassification.....	28
3.2.1.13	ProductClassificationChoice	29
3.2.1.14	ProductLeadTime	29
3.2.1.15	ProductPricing	30
3.2.1.16	ProductQuantityRange	31
3.2.1.17	SubstituteProductReference.....	32
3.2.1.18	UNSPSC.....	32

3.2.2	CodeList	33
3.2.2.1	ProductSubstitutionReason	33
3.2.2.2	LeadTimeClassificationCode	33
3.2.2.3	ProductProcurementType.....	34
3.3	Logistics.....	36
3.3.1	Logistics	36
3.3.1.1	Dependency Diagram.....	36
3.3.1.2	ExportLicense	36
3.3.1.3	GeographicRegion	37
3.3.1.4	IsHazardousMaterial	38
3.3.1.5	ManufacturerProfile	38
3.3.1.6	MassPhysicalDimension	39
3.3.1.7	ProductAttribute.....	39
3.3.1.8	ProductLicenseRequired	40
3.3.1.9	ProductPackaging	41
3.3.2	CodeList	42
3.3.2.1	NationalExportControlClassification	42
3.4	Marketing	43
3.4.1	Marketing	43
3.4.1.1	Dependency Diagram.....	43
3.4.1.2	ChangeNotification	43
3.4.1.3	IsDesignWin	44
3.4.1.4	MarketingInstruction.....	44
3.5	Shared	45
3.5.1	Shared	45
3.5.1.1	Dependency Diagram.....	45
3.5.1.2	DatePeriodAndDuration	45
3.5.1.3	DatePeriodAndDurationChoice.....	46
3.5.1.4	Duration.....	46
3.5.1.5	MonetaryAmount.....	47
3.5.1.6	ProductQuantity	48
3.5.1.7	Warranty.....	48
3.5.2	CodeList	49
3.5.2.1	InvoiceChargeType	49
3.5.2.2	MonetaryAmountType	50
3.5.2.3	PackageTypeCode.....	50
3.5.2.4	PricingTypeCode.....	51
3.5.2.5	ProductStatusCode	53
3.5.2.6	Interval.....	53
3.5.2.7	WarrantyType	54
3.5.2.8	AmountType	54
4.	Universal Structure.....	56
4.1	ContactInformation.....	56
4.1.1	ContactInformation	56
4.2	Data Type	57
4.2.1	Contact.....	57
4.2.2	DUNS	57
4.2.3	DUNSPlus4.....	58
4.2.4	GLN	58
4.2.5	GTIN	59
4.3	Dates.....	59
4.3.1	DatePeriod	59
4.4	Document.....	60
4.4.1	BusinessDocumentReference	60

4.5	Locations.....	60
4.5.1	AlternativeIdentifier	60
4.5.2	Location.....	61
4.5.3	LocationChoice	62
4.6	MonetaryExpression.....	62
4.6.1	FinancialAmount	62
4.7	PartnerIdentification	63
4.7.1	PartnerIdentification.....	63
4.7.2	PartnerIdentificationChoice	64
4.8	PhysicalDimension	64
4.8.1	Linear.....	64
4.8.2	Measure.....	65
4.8.3	Volume.....	65
4.8.4	Weight	66
4.9	ProductIdentification	66
4.9.1	ProductDescription	66
4.9.2	ProductIdentification	67
4.9.3	ProductIdentificationChoice	67
4.9.4	TextualDescription	68
4.10	CodeList	68
4.10.1	Country	68
4.10.2	Currency	68
4.10.3	Language.....	69
4.10.4	DocumentType.....	69
4.10.5	MimeTypeQualifier	71
4.10.6	UnitOfMeasure	82
4.10.7	WeightType	89
5.	System Structure	90
5.1	BusinessProcessIdentifier	90
5.2	BusinessServiceInformation	90
5.3	ContractInformation.....	91
5.4	CorrelationInformation	91
5.5	DocumentHeader.....	92
5.6	DocumentIdentification	93
5.7	DocumentIdentificationChoice	93
5.8	DocumentInformation	94
5.9	DocumentManifest.....	94
5.10	DocumentSecurity	95
5.11	ManifestItem.....	96
5.12	PipIdentifier	97
5.13	PipVersion	97
5.14	Receiver	98
5.15	RequestingDocumentInformation	99
5.16	Sender	99
5.17	StandardDocumentIdentification.....	100
5.18	TpirPipIdentification	100
5.19	VersionIdentifier.....	101
5.20	CodeList	102
5.20.1	TPIRFileType	102
6.	XML Data Type.....	103
6.1	anyURI.....	103
6.2	boolean.....	103
6.3	date.....	103
6.4	dateTime.....	103

6.5	duration	103
6.6	float.....	103
6.7	positiveInteger.....	103
6.8	string.....	104

Table of Figures

Figure 2-1	Interchange.....	9
Figure 2-2	Dependency	10
Figure 2-3	ProductCatalog	10
Figure 2-4	ProductIdentificationInformation	12
Figure 2-5	ProductInformation	13
Figure 2-6	ProductLifeCycle.....	14
Figure 2-7	ProductLineItem.....	15
Figure 2-8	ProductPriceAndAvailability	16
Figure 2-9	ProductProcurement	17
Figure 3-1	Dependency	19
Figure 3-2	LifeCycleStatus	19
Figure 3-3	Dependency	22
Figure 3-4	IsCallFactory	22
Figure 3-5	IsCostChange	22
Figure 3-6	IsPriceProtect	23
Figure 3-7	IsSoleSource	23
Figure 3-8	IsSuggestedResaleChange.....	24
Figure 3-9	LeadTimeQuantity	24
Figure 3-10	OrderProvision	25
Figure 3-11	PriceList	26
Figure 3-12	PricingDetail	27
Figure 3-13	ProductAvailability	28
Figure 3-14	ProductClassification	28
Figure 3-15	ProductLeadTime.....	29
Figure 3-16	ProductPricing.....	30
Figure 3-17	ProductQuantityRange	31
Figure 3-18	SubstituteProductReference	32
Figure 3-19	UNSPSC	32
Figure 3-20	Dependency.....	36
Figure 3-21	ExportLicense	36
Figure 3-22	GeographicRegion	37
Figure 3-23	IsHazardousMaterial	38
Figure 3-24	ManufacturerProfile.....	38
Figure 3-25	MassPhysicalDimension	39
Figure 3-26	ProductAttribute.....	39
Figure 3-27	ProductLicenseRequired	40
Figure 3-28	ProductPackaging	41
Figure 3-29	Dependency.....	43
Figure 3-30	ChangeNotification	43
Figure 3-31	IsDesignWin	44
Figure 3-32	MarketingInstruction.....	44
Figure 3-33	Dependency.....	45
Figure 3-34	DatePeriodAndDuration	45
Figure 3-35	Duration.....	46

Figure 3-36 MonetaryAmount	47
Figure 3-37 ProductQuantity	48
Figure 3-38 Warranty	48
Figure 4-1 ContactInformation	56
Figure 4-2 Contact	57
Figure 4-3 DUNS	57
Figure 4-4 DUNSPlus4	58
Figure 4-5 GLN	58
Figure 4-6 GTIN	59
Figure 4-7 DatePeriod	59
Figure 4-8 BusinessDocumentReference	60
Figure 4-9 AlternativeIdentifier	60
Figure 4-10 Location	61
Figure 4-11 FinancialAmount	62
Figure 4-12 PartnerIdentification	63
Figure 4-13 Linear	64
Figure 4-14 Measure	65
Figure 4-15 Volume	65
Figure 4-16 Weight	66
Figure 4-17 ProductDescription	66
Figure 4-18 ProductIdentification	67
Figure 4-19 TextualDescription	68
Figure 5-1 BusinessProcessIdentifier	90
Figure 5-2 BusinessServiceInformation	90
Figure 5-3 ContractInformation	91
Figure 5-4 CorrelationInformation	91
Figure 5-5 DocumentHeader	92
Figure 5-6 DocumentIdentification	93
Figure 5-7 DocumentInformation	94
Figure 5-8 DocumentManifest	94
Figure 5-9 DocumentSecurity	95
Figure 5-10 ManifestItem	96
Figure 5-11 PipIdentifier	97
Figure 5-12 PipVersion	97
Figure 5-13 Receiver	98
Figure 5-14 RequestingDocumentInformation	99
Figure 5-15 Sender	99
Figure 5-16 StandardDocumentIdentification	100
Figure 5-17 TpirPipIdentification	100
Figure 5-18 VersionIdentifier	101

1. Document Management

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1.4 Acknowledgments

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

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SAP America	SAP Labs
Sterling Commerce	Sun Microsystems
Viacore	Viacore Inc.

1.5 Related Documents

- Associated PIP Message Schemas (included with PIP Specification only)
- Description of Partner Interface Process for 2A1
- Message Structure

1.6 Document Version History

<u>Version</u>	<u>Date</u>	<u>Description</u>
Validated 11.00.00	23 June 2008	RosettaNet Schema to Market to Validation 2008
Validated 11.01.00	18 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.

2.1.2 Dependency Diagram

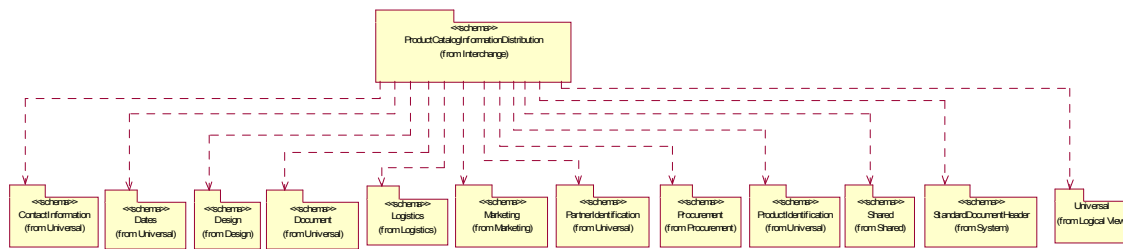


Figure 2-2 Dependency

2.1.3 ProductCatalog

The collection of business properties that describe one or more products with attributes complete and sufficient to allow the procurement process of the trading partner to take action.

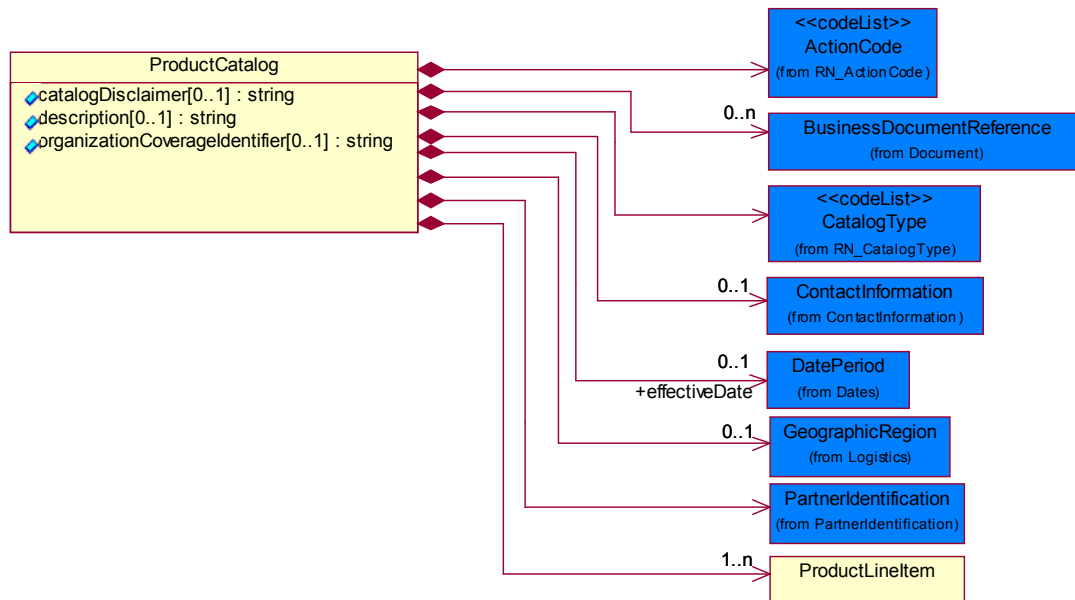


Figure 2-3 ProductCatalog

Attribute	Type	Documentation
catalogDisclaimer[0..1]	string	A textual description of the disclaimers about the catalog information.
description[0..1]	string	A textual description of the contents about the catalog information.
organizationCoverageIdentifier[0..1]	string	The unique identifier assigned for an organization coverage.

Composition	Cardinality	Type	Documentation
CatalogType	1	CatalogType	Code identifying the type of product catalog information distributed to a partner.

BusinessDocumentReference	0..n	BusinessDocumentReference	The business document reference object allows for the indirect referencing of a relationship to other business related documents.
effectiveDate	0..1	DatePeriod	The date information or an activity becomes effective.
ActionCode	1	ActionCode	Code identifying the business action that must be performed on or with data. These codes will result in a subsequent action to the Material Composition data.
ProductLineItem	1..n	ProductLineItem	The collection of business properties that describe a business document entry for a product.
ContactInformation	0..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.
PartnerIdentification	1	PartnerIdentification	The business document must allow for the identity of one or more parties to the transaction.
GeographicRegion	0..1	GeographicRegion	The collection of business properties that reflects multiple countries of choice or a specified region.

2.1.4 ProductCatalogInformationDistribution

A wrapper or a root message for PIP2A1.

Composition	Cardinality	Type	Documentation
DocumentHeader	0..1	DocumentHeader	The object allows for the identification of the sender and receiver of the business document.
ProductCatalog	1	ProductCatalog	The collection of business properties that describe one or more products with attributes complete and sufficient to allow the procurement process of the trading partner to take action.

2.1.5 ProductIdentificationInformation

The collection of business properties that describes product identification.

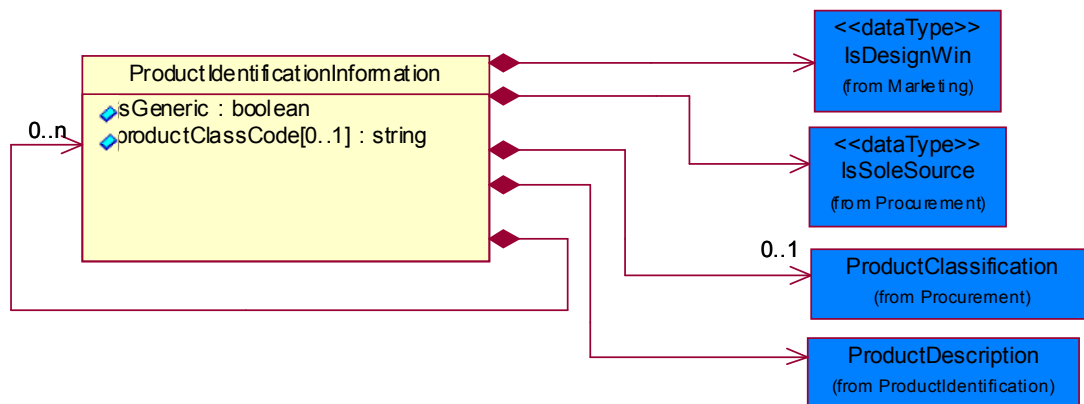


Figure 2-4 ProductIdentificationInformation

Attribute	Type	Documentation
isGeneric	boolean	To identify the subsequent product reporting as a product family (generic) reporting.
productClassCode[0..1]	string	A code for a class of products whose values are the values of the attribute ec.dictionary:class:id in the RosettaNet Technical Dictionary and are defined by the ec.dictionary:class:names:preferred.name and the ec.dictionary:class:definition.short element values in the RosettaNet Technical Dictionary.

Composition	Cardinality	Type	Documentation
ProductDescription	1	ProductDescription	The business document must allow for the identification of the product and multiple textual descriptions of a product.
IsDesignWin	1	IsDesignWin	Indicates whether a product has design win process.
IsSoleSource	1	IsSoleSource	Indicates whether the product is intended to be purchased by one manufacturer or multi-sourcing is allowed.
ProductClassification	0..1	ProductClassification	Identifier to identify product classification.

2.1.6 ProductInformation

The collection of business properties that describes attributes of the product.

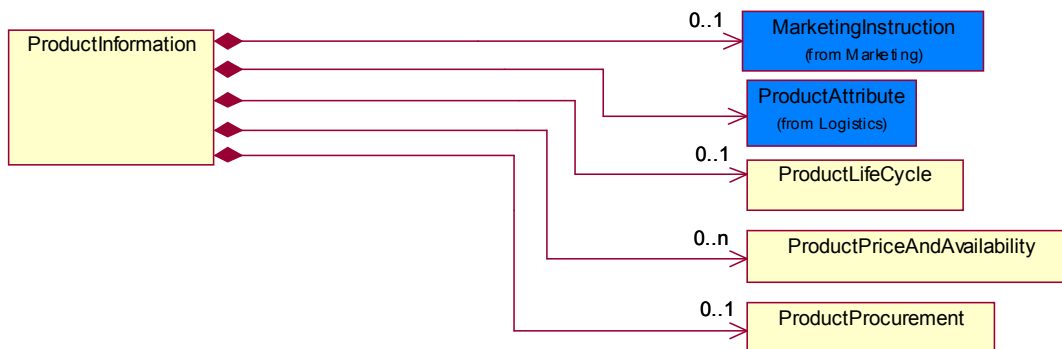


Figure 2-5 ProductInformation

Composition	Cardinality	Type	Documentation
ProductLifeCycle	0..1	ProductLifeCycle	The collection of business properties that describes lifecycle information about the product.
MarketingInstruction	0..1	MarketingInstruction	The collection of business properties that describe the product marketing instruction information.
ProductPriceAndAvailability	0..n	ProductPriceAndAvailability	The collection of business properties that describe a product's price and availability.
ProductProcurement	0..1	ProductProcurement	The collection of business properties that describe

			the product procurement.
ProductAttribute	1	ProductAttribute	The collection of business properties that describes attributes of the product.

2.1.7 ProductLifeCycle

The collection of business properties that describes lifecycle information about the product.

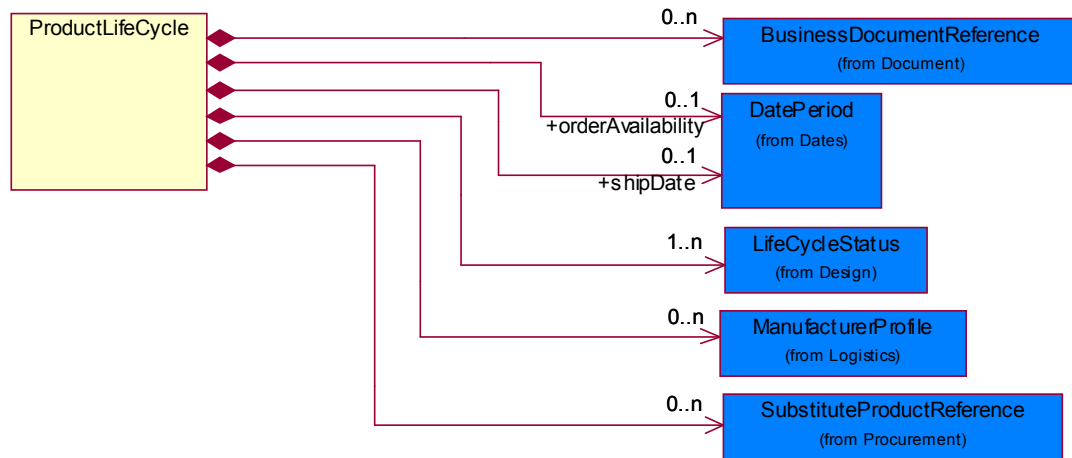


Figure 2-6 ProductLifeCycle

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.
ManufacturerProfile	0..n	ManufacturerProfile	The collection of business properties that describe a manufacturer's product.
orderAvailability	0..1	DatePeriod	The date the product is available for ordering by a partner role.
SubstituteProductReference	0..n	SubstituteProductReference	The collection of business properties describing a product that is being substituted for a requested product.
shipDate	0..1	DatePeriod	The (GMT) local date the product is shipped.
LifeCycleStatus	1..n	LifeCycleStatus	An indication of a product's state at a point in time in the entire existence of a product from concept to the point

			where the product no longer exists for any business purposes.
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2.1.8 ProductLineItem

The collection of business properties that describe a business document entry for a product.

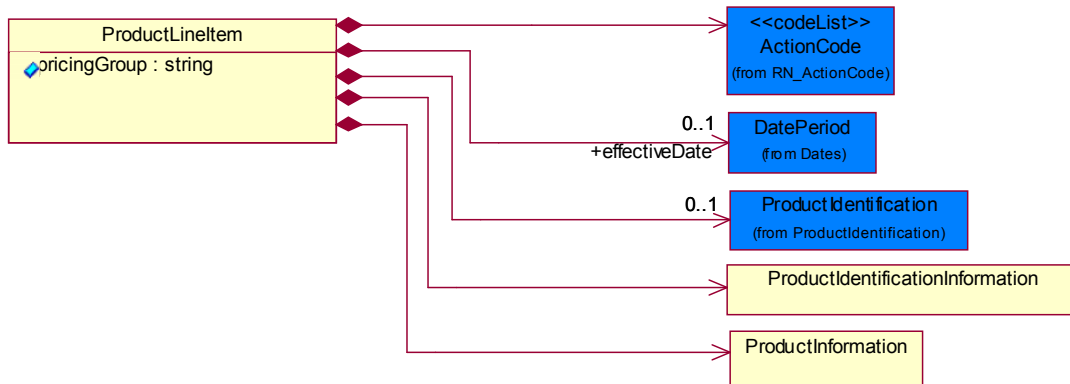


Figure 2-7 ProductLineItem

Attribute	Type	Documentation
pricingGroup	string	Clustering of products with similar pricing and/or marketing characteristics so that discounts and promotions can be applied to a group rather than to each individual product. A product might be a member of multiple pricing groups.

Composition	Cardinality	Type	Documentation
effectiveDate	0..1	DatePeriod	The date information or an activity becomes effective.
ActionCode	1	ActionCode	Code identifying the business action that must be performed on or with data. These codes will result in a subsequent action to the Material Composition data.
ProductIdentificationInformation	1	ProductIdentification Information	The collection of business properties that describes product identification.
ProductIdentification	0..1	ProductIdentification	The object provides the identifier(s) of a product.
ProductInformation	1	ProductInformation	The collection of business properties that describes attributes of the product.

2.1.9 ProductPriceAndAvailability

The collection of business properties that describe a product's price and availability.

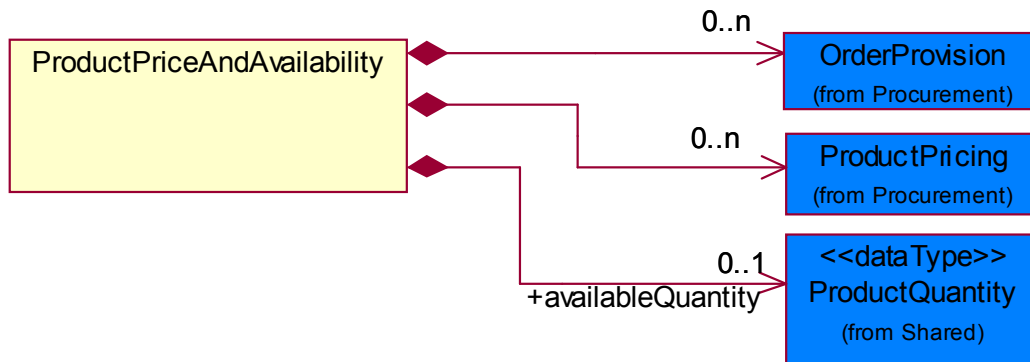


Figure 2-8 ProductPriceAndAvailability

Composition	Cardinality	Type	Documentation
OrderProvision	0..n	OrderProvision	Extended ordering and product lead time instructions.
ProductPricing	0..n	ProductPricing	The collection of business properties that describe the type of pricing and financial amount for a product.
availableQuantity	0..1	ProductQuantity	The product quantity available for sale.

2.1.10 ProductProcurement

The collection of business properties that describe the product procurement.

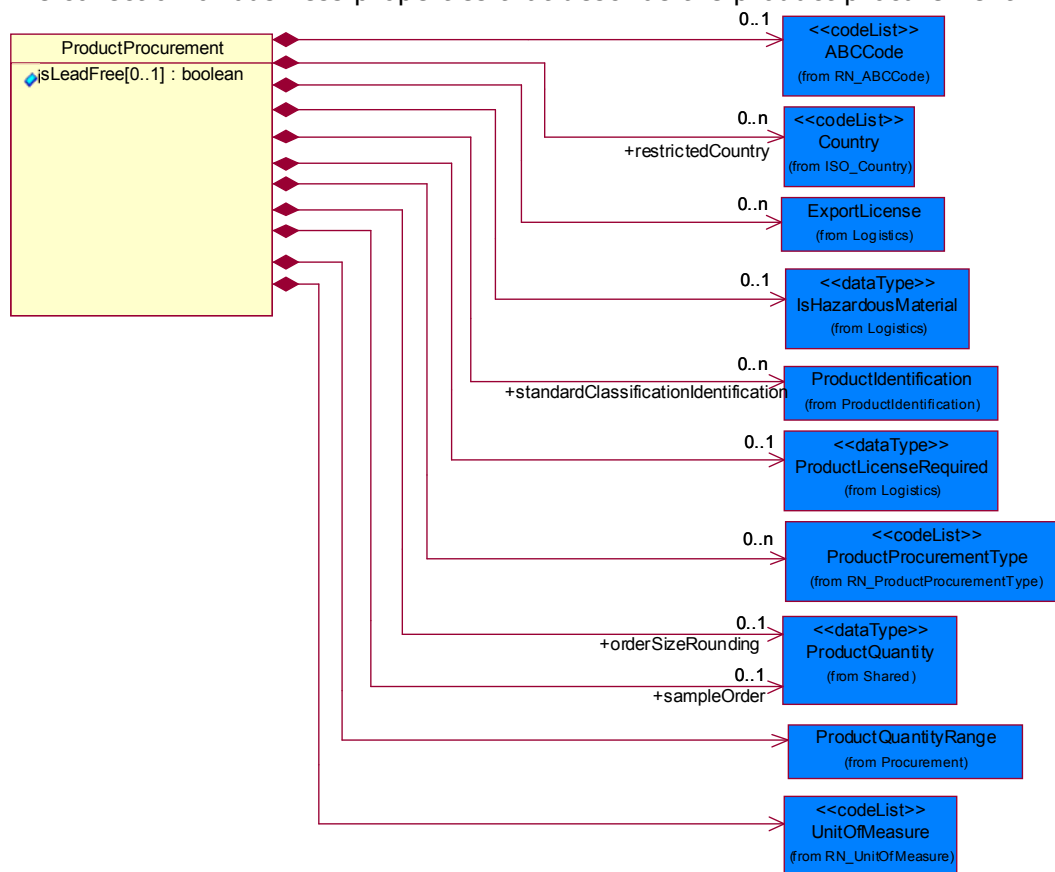


Figure 2-9 ProductProcurement

Attribute	Type	Documentation
isLeadFree[0..1]	boolean	Indicates whether the product is free of lead.

Composition	Cardinality	Type	Documentation
ExportLicense	0..n	ExportLicense	The collection of business properties that describe an export license number.
UnitOfMeasure	1	UnitOfMeasure	Code identifying a product unit of measure.
IsHazardousMaterial	0..1	IsHazardousMaterial	Indicates whether the product contains hazardous material.
ProductLicenseRequired	0..1	ProductLicenseRequired	Indicates that a special permit is required in order to purchase or use the product.
ProductQuantityRange	1	ProductQuantityRange	The collection of business properties that describe an upper and lower range

			of product quantity.
restrictedCountry	0..n	Country	Country where product is not destined for shipment.
standardClassificationIdentification	0..n	ProductIdentification	The use of a commonly used classification scheme to classify one or more aspects of a product. While these classifications schemes may be widely used, the values for these schemes may change frequently to reflect new information and thus are not suitable to be listed as RosettaNet entity instances.
ProductProcurementType	0..n	ProductProcurement Type	States that describe product procurement conditions.
ABCCode	0..1	ABCCode	Code identifying manufacturing process classifications for inventory used to communicate inventory importance to a company based upon cost and usage.
orderSizeRounding	0..1	ProductQuantity	The quantity of products which is a standard ordering unit. Actual order quantities must be multiples of this quantity and is equal to or smaller than the minimum order quantity.
sampleOrder	0..1	ProductQuantity	The maximum ordering quantity for samples of this part.

3. Domain Model

3.1 Design

3.1.1 Design

3.1.1.1 Dependency Diagram

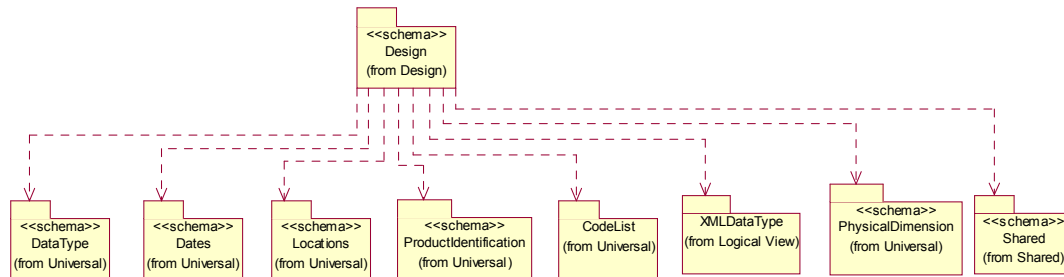


Figure 3-1 Dependency

3.1.1.2 LifeCycleStatus

An indication of a product's state at a point in time in the entire existence of a product from concept to the point where the product no longer exists for any business purposes.

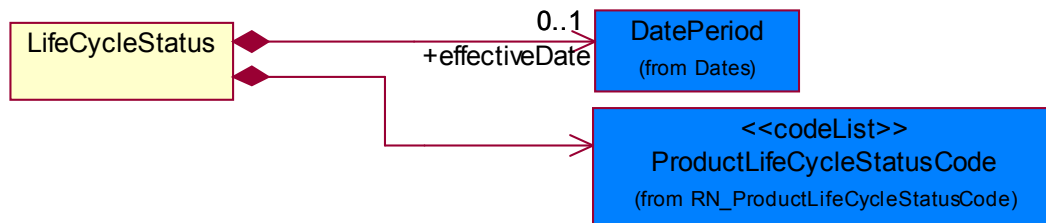


Figure 3-2 LifeCycleStatus

Composition	Cardinality	Type	Documentation
effectiveDate	0..1	DatePeriod	The date information or an activity becomes effective, i.e. product design release date after design approval and prototyping.
ProductLifeCycleS tatusCode	1	ProductLifeCycleStatu sCode	States that describe the product lifecycle.

3.1.2 CodeList

3.1.2.1 ActionCode

Code identifying the business action that must be performed on or with data. These codes will result in a subsequent action to the Material Composition data.

Name	Documentation
ADD	Add the business information to an information system.
CHG	The change request made accepted.
DEL	Delete the business information from an information system.
REQ	The business information accepted with change.
REV	Revise the business information from an information system.
UCH	Unchanged.

3.1.2.2 ABCCode

Code identifying manufacturing process classifications for inventory used to communicate inventory importance to a company based upon cost and usage.

Name	Documentation
CDA	Highest importance.
CDB	Medium importance.
CDC	Lowest importance.

3.1.2.3 ProductLifeCycleStatusCode

States that describe the product lifecycle.

Name	Documentation
ACT	Active.
ALO	The quantity available to buyer.
BOR	Back Ordered.
DCN	Discontinued. No longer available.
DCN	Discontinued - No longer available.
EOL	End of Life - period or date where the product obsolescence begins, ship or order still active.
LOD	Product Phase Out/See Last Order Date. Limitations on shipments can occur, but orders are pressed toward final and last buy. Product should not be considered for new designs. Capacity declining rapidly. Formal discontinuance notice may be issued.
NPR	New Product.
NPR	New product.
NRC	Not Recommended/Declining. Orders and shipments permitted. Product not recommended for new designs. Capacity beginning to decline.
OBS	Obsolete no longer orderable or shippable.
OHL	On Hold - Orderable, but not shippable.
PEN	Product Introduction Pending No orders or product shipments permitted. Product is in planning or early design stage. Samples may or may not exist. Specification changes

	can occur and planned introduction dates may be delayed.
PLS	Product Last Shipments. Shipments made to existing orders. Manufacturing capacity limitations may exist. New orders are limited to existing or residual inventory. Product in final stage of shipments after a formal Life Time Buy notice or product cancellation.
PMA	Product Maturity/Saturation. Orders and shipments permitted. Sales and capacity have leveled out.
POS	Purchase order with supplier.
POS	Purchase Order with Supplier.
REP	Replaced.
REP	Replaced.
RGW	Product Rapid Growth. Orders and shipments permitted. Product in rapid growth phase. Manufacturing capacity is being added.
RMP	Product Newly Introduced/Ramp-Up. Orders and shipments permitted. Beginning to ramp up production. Can supply limited quantities.
RPO	Removed From Active Portfolio. No new orders, no shipments, and no inventory exist. Product is considered no longer available. Inventory is removed. All supporting hardware, software, and documentation for the product are removed.
SGM	Product Stable Growth/Maturity. Orders and shipments permitted. Product is highly recommended for use in new designs. Product growth stabilizes and peaks. Product quality is very high.
UAV	Unavailable through program - May not use.
UNR	Unreleased - Upcoming product, not orderable.

3.1.2.4 CatalogType

Code identifying the type of product catalog information distributed to a partner.

Name	Documentation
PAR	Partial - Subset of catalog or products.
WHO	Whole - Complete set of products with same catalog ID and version.

3.2 Procurement

3.2.1 Procurement

3.2.1.1 Dependency Diagram

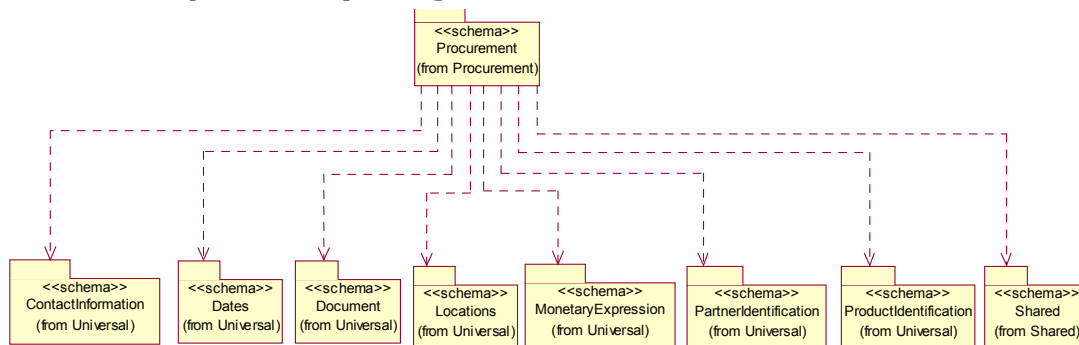


Figure 3-3 Dependency

3.2.1.2 IsCallFactory

An indicator for the receiver to call the manufacturer to obtain current information.

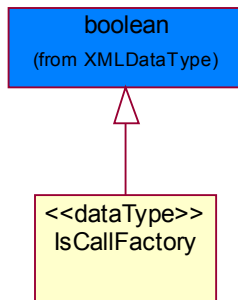


Figure 3-4 IsCallFactory

3.2.1.3 IsCostChange

An indicator for the receiver to take note that the cost has changed.

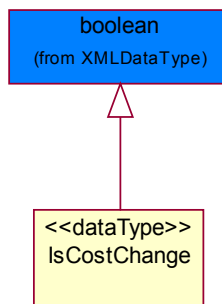


Figure 3-5 IsCostChange

3.2.1.4 IsPriceProtect

Indicates whether the product pricing is protected.

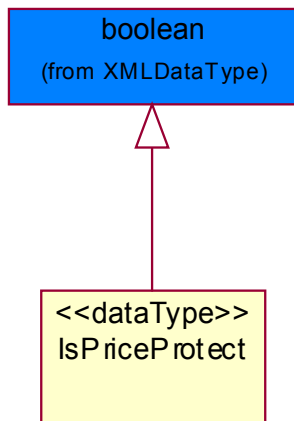


Figure 3-6 IsPriceProtect

3.2.1.5 IsSoleSource

Indicates whether the product is intended to be purchased by one manufacturer or multi-sourcing is allowed.

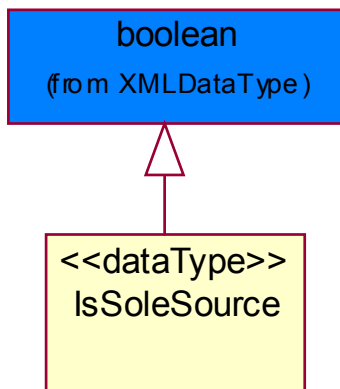


Figure 3-7 IsSoleSource

3.2.1.6 IsSuggestedResaleChange

An indicator for the receiver to take note that the Suggested Resale Price has changed.

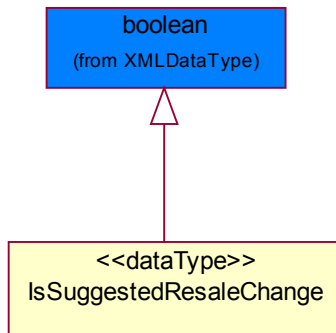


Figure 3-8 IsSuggestedResaleChange

3.2.1.7 LeadTimeQuantity

The collection of business properties that describe manufacturing lead time quantity from the time of order placement to the time the product ships.

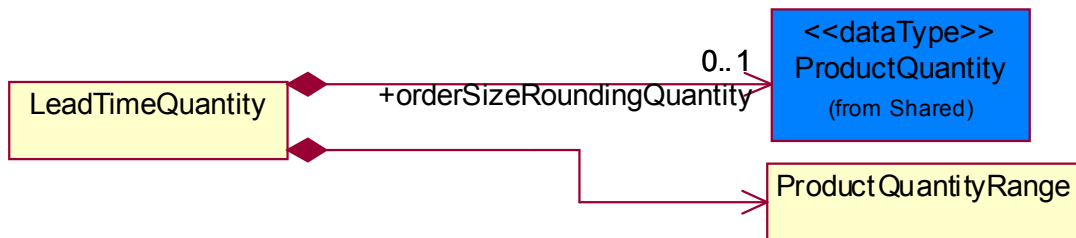


Figure 3-9 LeadTimeQuantity

Composition	Cardinality	Type	Documentation
ProductQuantityRange	1	ProductQuantityRange	The collection of business properties that describe an upper and lower range of product quantity.
orderSizeRoundingQuantity	0..1	ProductQuantity	The quantity of products which is a standard ordering unit. Actual order quantities must be multiples of this quantity and is equal to or smaller than the minimum.

3.2.1.8 OrderProvision

Extended ordering and product lead time instructions.

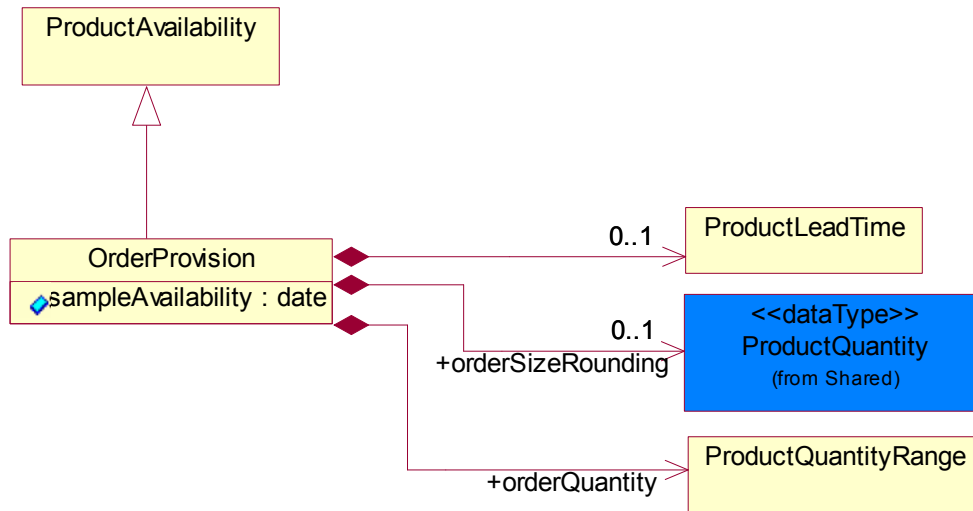


Figure 3-10 OrderProvision

Attribute	Type	Documentation
sampleAvailability	date	The sample of a product was made available.

Composition	Cardinality	Type	Documentation
ProductLeadTime	0..1	ProductLeadTime	The collection of business properties that describe lead time information about the product.
orderSizeRounding	0..1	ProductQuantity	The quantity of products which is a standard ordering unit. Actual order quantities must be multiples of this quantity and is equal to or smaller than the minimum order quantity.
orderQuantity	1	ProductQuantityRange	The collection of business properties that describe various types of product quantity used in an ordering process.

3.2.1.9 PriceList

The collection of business properties that describe product pricing in a proprietary price list document.

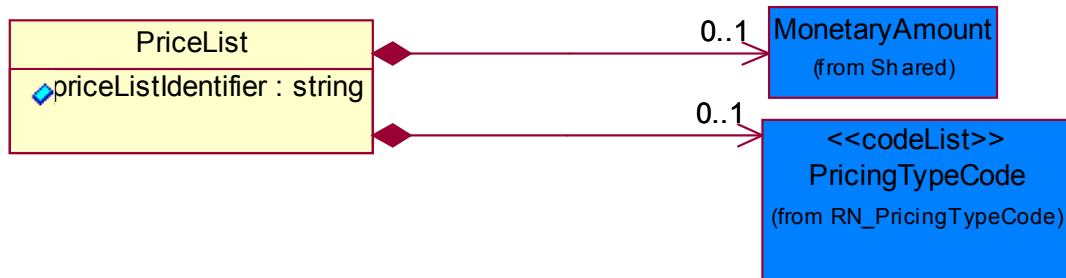


Figure 3-11 PriceList

Attribute	Type	Documentation
priceListIdentifier	string	The unique identifier that references a specific price list used for product pricing.

Composition	Cardinality	Type	Documentation
MonetaryAmount	0..1	MonetaryAmount	The collection of business properties that describe the monetary amount defined by a specified currency.
PricingTypeCode	0..1	PricingTypeCode	Code identifying the type of pricing available for a product.

3.2.1.10 PricingDetail

The collection of business properties that describe pricing for a product or service.

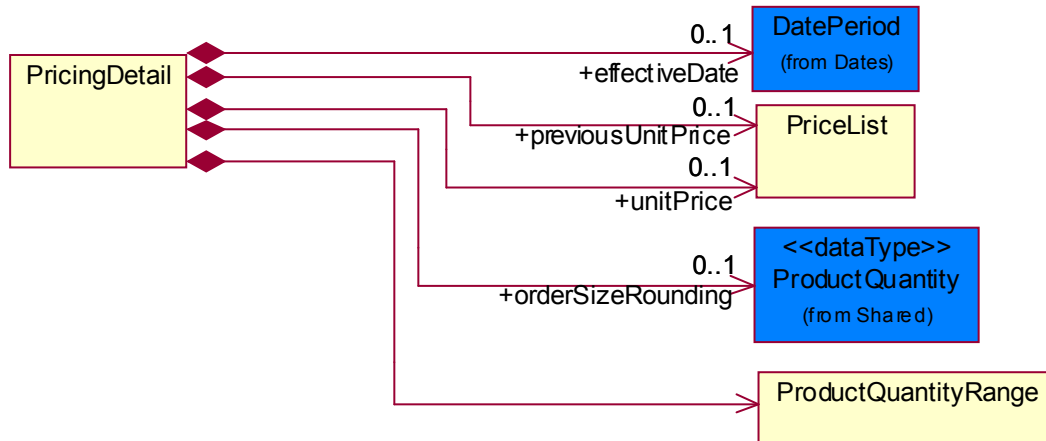


Figure 3-12 PricingDetail

Composition	Cardinality	Type	Documentation
effectiveDate	0..1	DatePeriod	The date information or an activity becomes effective.
previousUnitPrice	0..1	PriceList	The partner's cost to purchase the product prior to the effective date of the price drop.
unitPrice	0..1	PriceList	Agreed upon sale price for each unit ordered.
orderSizeRounding	0..1	ProductQuantity	The quantity of products which is a standard ordering unit. Actual order quantities must be multiples of this quantity and is equal to or smaller than the minimum order quantity.
ProductQuantityRange	1	ProductQuantityRange	The collection of business properties that describe an upper and lower range of product quantity.

3.2.1.11 ProductAvailability

The collection of business properties that describe a product's time frame for being available to a customer.

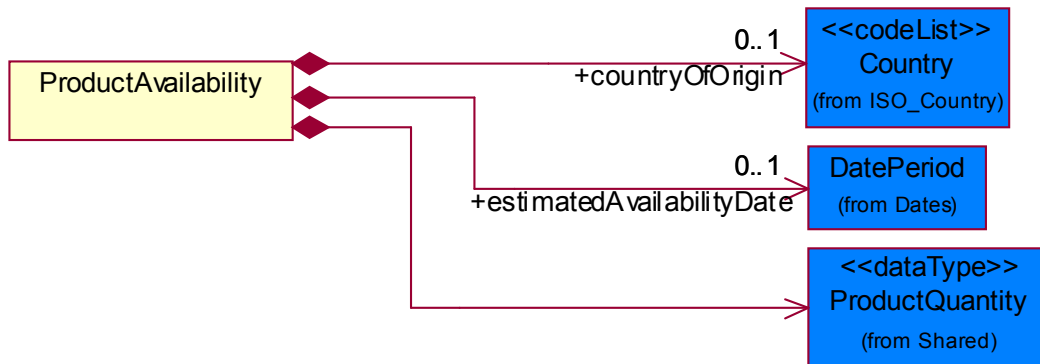


Figure 3-13 ProductAvailability

Composition	Cardinality	Type	Documentation
estimatedAvailabilityDate	0..1	DatePeriod	The estimate date the product will be available.
countryOfOrigin	0..1	Country	Country where product originates.
ProductQuantity	1	ProductQuantity	A quantity specifying the number of product units.

3.2.1.12 ProductClassification

Identifier to identify product classification.

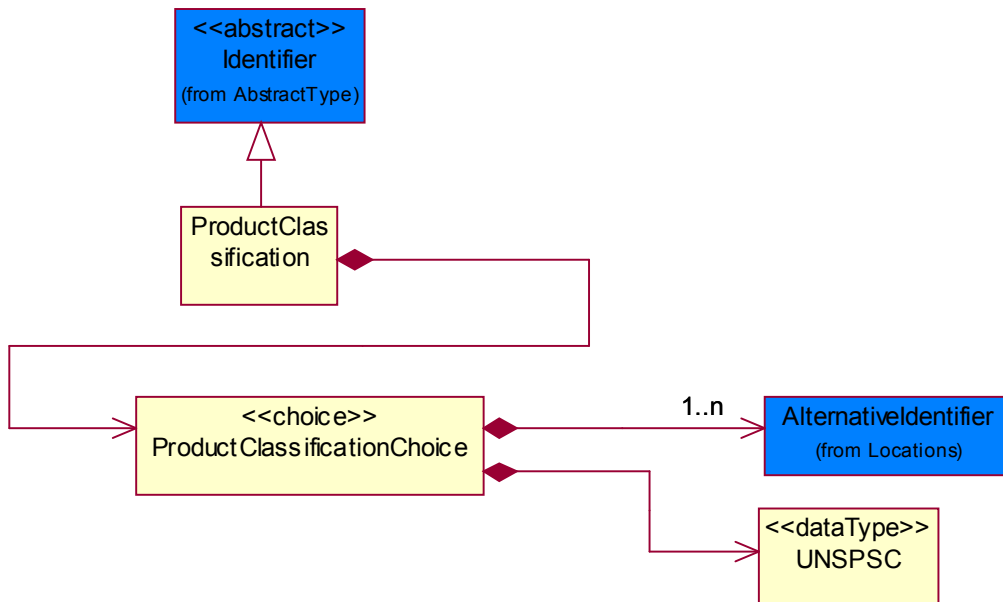


Figure 3-14 ProductClassification

Composition	Cardinality	Type	Documentation
ProductClassificationChoice	1	ProductClassificationChoice	Choices to identify product classification.

3.2.1.13 ProductClassificationChoice

Choices to identify product classification.

Composition	Cardinality	Type	Documentation
AlternativeIdentifier	1..n	AlternativeIdentifier	Identifies the specified code and the name of the organization that a code is utilized from.
UNSPSC	1	UNSPSC	Identifier to identify product classification. RosettaNet has adopted the UNSPSC. Refer to UN/SPSC Website for specific values: http://www.unspsc.org/ .

3.2.1.14 ProductLeadTime

The collection of business properties that describe lead time information about the product.

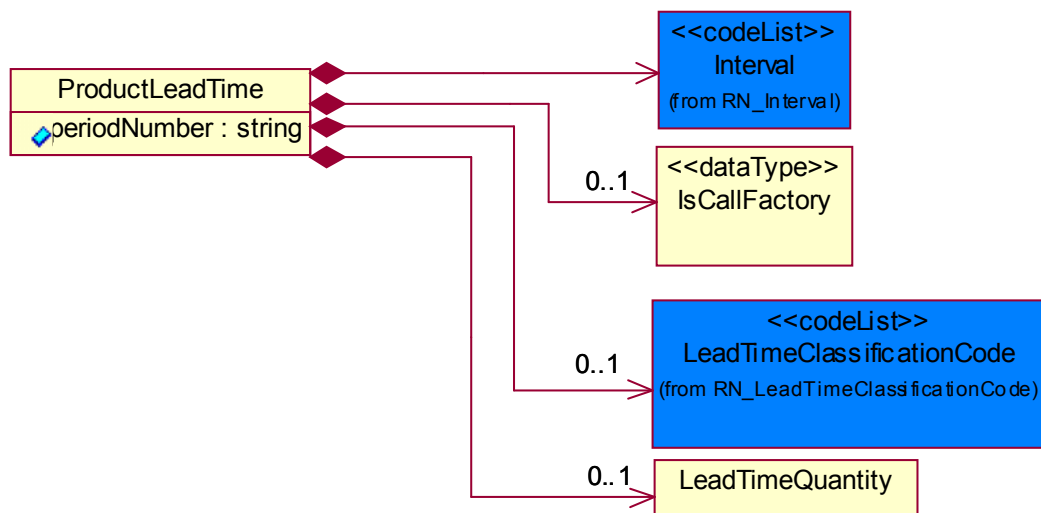


Figure 3-15 ProductLeadTime

Attribute	Type	Documentation
periodNumber	string	The number of measurable units in a date/time period.

Composition	Cardinality	Type	Documentation
LeadTimeQuantity	0..1	LeadTimeQuantity	The collection of business properties that describe manufacturing lead time quantity from the time of order placement to the time the product ships.
IsCallFactory	0..1	IsCallFactory	An indicator for the receiver to call the manufacturer to obtain current information.
LeadTimeClassificationCode	0..1	LeadTimeClassificationCode	Code identifying the classification of a product lead time for ordering.
Interval	1	Interval	Code specifying a forecasting interval.

3.2.1.15 ProductPricing

The collection of business properties that describe the type of pricing and financial amount for a product.

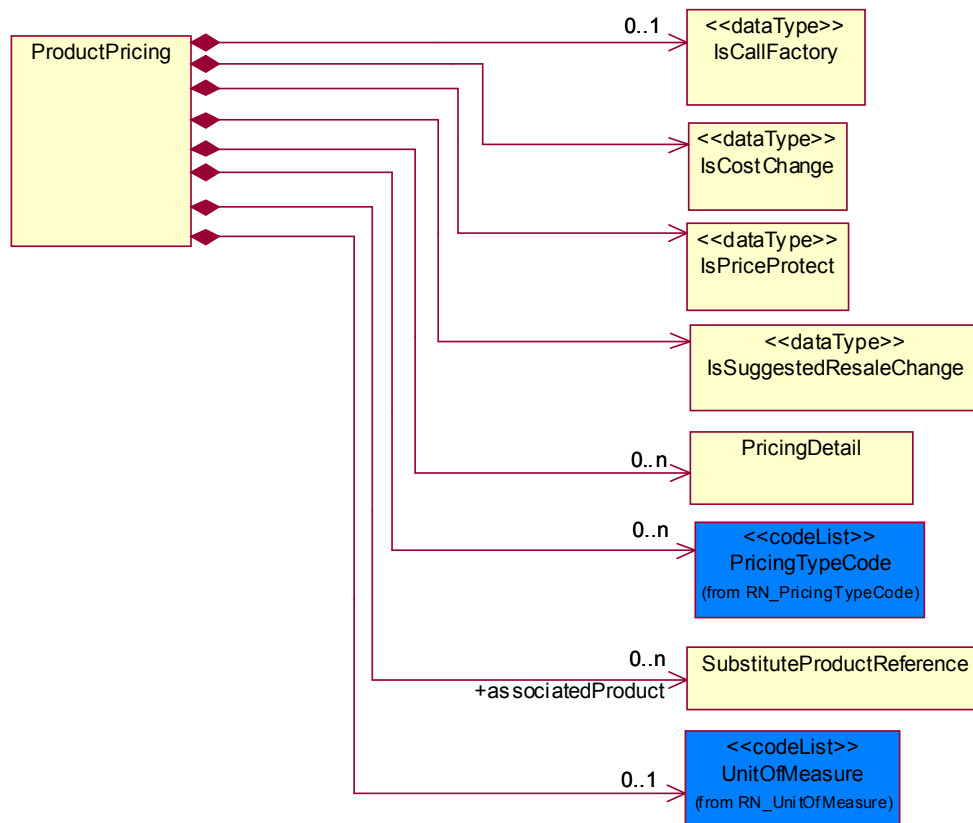


Figure 3-16 ProductPricing

Composition	Cardinality	Type	Documentation
IsCallFactory	0..1	IsCallFactory	An indicator for the receiver to call the manufacturer to obtain current information.
IsCostChange	1	IsCostChange	An indicator for the receiver to take note that the cost has changed.
IsPriceProtect	1	IsPriceProtect	Indicates whether the product pricing is protected.
IsSuggestedResaleChange	1	IsSuggestedResaleChange	An indicator for the receiver to take note that the Suggested Resale Price has changed.
PricingDetail	0..n	PricingDetail	The collection of business properties that describe pricing for a product or service.
PricingTypeCode	0..n	PricingTypeCode	Code identifying the type of pricing available for a product.
associatedProduct	0..n	SubstituteProductReference	The product associated.
UnitOfMeasure	0..1	UnitOfMeasure	Code identifying a product unit of measure.

3.2.1.16 ProductQuantityRange

The collection of business properties that describe an upper and lower range of product quantity.

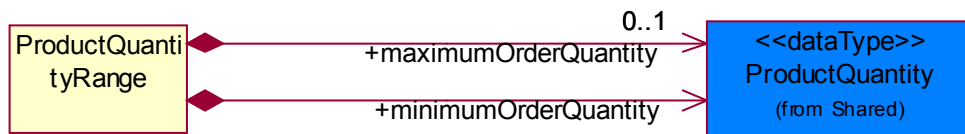


Figure 3-17 ProductQuantityRange

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

3.2.1.17 SubstituteProductReference

The collection of business properties describing a product that is being substituted for a requested product.

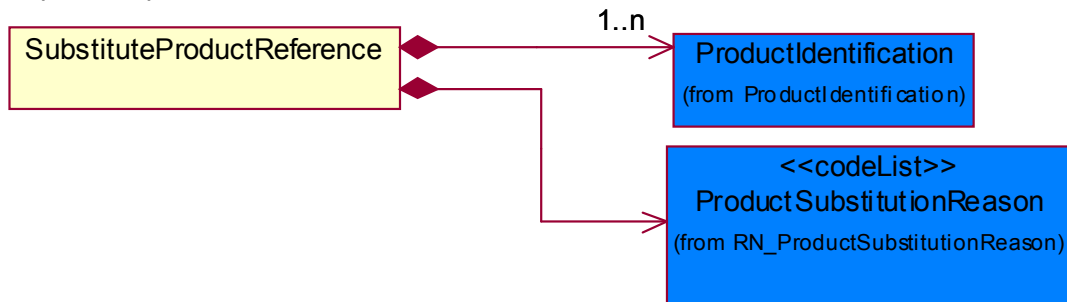


Figure 3-18 SubstituteProductReference

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

3.2.1.18 UNSPSC

Identifier to identify product classification. RosettaNet has adopted the UNSPSC. Refer to UN/SPSC Website for specific values: <http://www.unspsc.org/>.

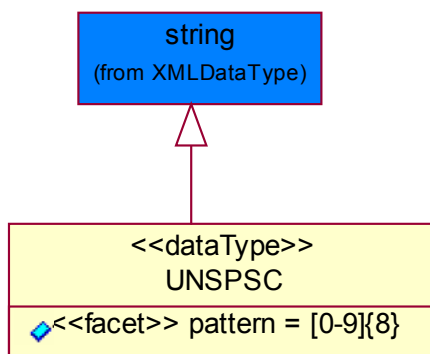


Figure 3-19 UNSPSC

Attribute	Type	Documentation
pattern		

3.2.2 CodeList

3.2.2.1 ProductSubstitutionReason

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

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

3.2.2.2 LeadTimeClassificationCode

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

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

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

3.2.2.3 ProductProcurementType

States that describe product procurement conditions.

Name	Documentation
AAP	Product is eligible to be ordered as part of Authorized Assembly Program.
ALC	Allocation.
BLK	Bulk.
CQS	Custom QS is the availability of expedited shipping for certain models or configurations (but not all) of the product specified.
CSU	Product is eligible for customer set up.
DPA	Distributor Price Adjustment - Used to indicate that the distributor price is negotiable.
JIT	Just in Time.
LBD	Limited Book Device - Engineering devices that have not reached final revision, or sample products.
NAP	Not Applicable.
NCN	Non-Cancelable, Non-returnable.
NPB	Non Published Book device - Products available for sale but not published in General Price Book.
NPI	New Product Introduction - Products that are new to the market.
NSB	Non Stockable Book devices - Software products or other products containing software that will under go revision changes. (software, boards, evaluation tools).
ONC	On Contract - Used to indicate that the product is attached to the purchase agreement.
QUS	Quickship - QuickShip is the availability of expedited shipping for the product specified.
REP	Replenishment - Product is eligible to be ordered for inventory replenishment agreements.
SBD	Standard Book Device - Standard products available for sale.

SEG	Segmented - Used to identify products that are under planned procurement processes.
SPS	Supply Split.
SUB	Sub contract.
VMI	Vendor Management Inventory.

3.3 Logistics

3.3.1 Logistics

3.3.1.1 Dependency Diagram

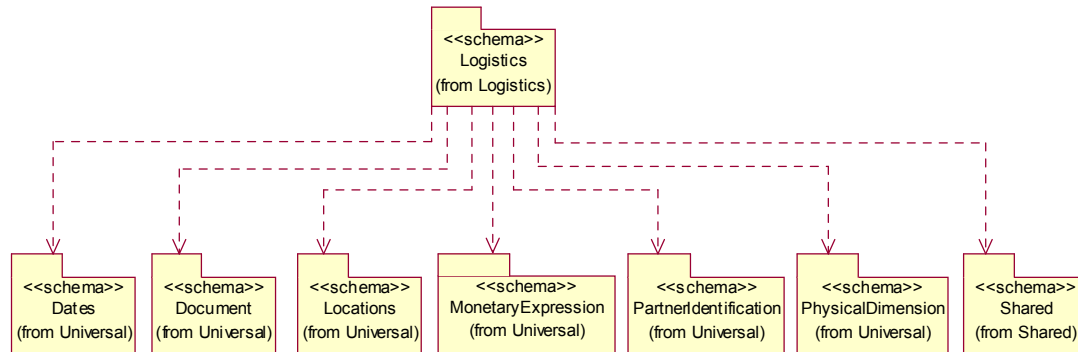


Figure 3-20 Dependency

3.3.1.2 ExportLicense

The collection of business properties that describe an export license number.

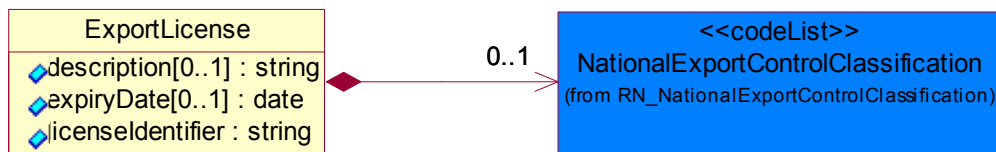


Figure 3-21 ExportLicense

Attribute	Type	Documentation
description[0..1]	string	The description of inventory item to appear on the commercial invoice.
expiryDate[0..1]	date	The date that a contractual agreement expires.
licenseIdentifier	string	The unique identifier representing a license.

Composition	Cardinality	Type	Documentation
NationalExportControlClassification	0..1	NationalExportControlClassification	Code identifying product classification for export regulation.

3.3.1.3 GeographicRegion

The collection of business properties that reflects multiple countries of choice or a specified region.



Figure 3-22 GeographicRegion

Composition	Cardinality	Type	Documentation
Country	0..n	Country	<p>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:</p> <p>http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/index.html</p> <p>If you need more information about the ISO standard please contact ISO for more details.</p>
regionIdentifier	0..1	Location	Identifying a geographic region.

3.3.1.4 IsHazardousMaterial

Indicates whether the product contains hazardous material.

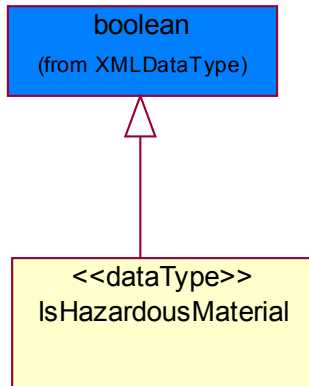


Figure 3-23 IsHazardousMaterial

3.3.1.5 ManufacturerProfile

The collection of business properties that describe a manufacturer's product.

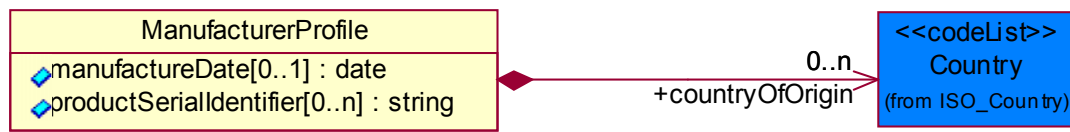


Figure 3-24 ManufacturerProfile

Attribute	Type	Documentation
manufactureDate[0..1]	date	The date the product was manufactured.
productSerialIdentifier[0..n]	string	Serial number(s) of a product.

Composition	Cardinality	Type	Documentation
countryOfOrigin	0..n	Country	Country where product originates.

3.3.1.6 MassPhysicalDimension

The physical dimension of unit of mass used for measuring the masses of weights, volumes etc.

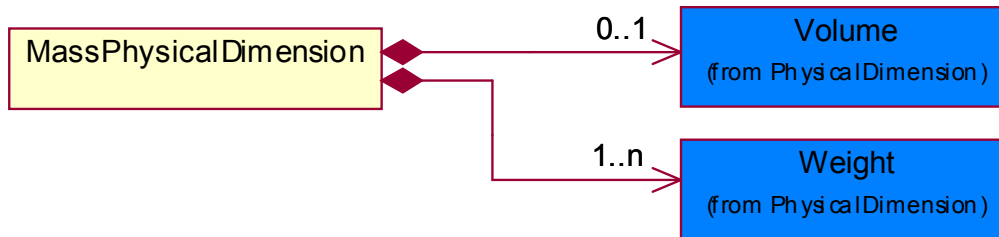


Figure 3-25 MassPhysicalDimension

Composition	Cardinality	Type	Documentation
Volume	0..1	Volume	The business document must be able to express the volume of an object.
Weight	1..n	Weight	The business document must be able to express the weight of an object.

3.3.1.7 ProductAttribute

The collection of business properties that describes attributes of the product.

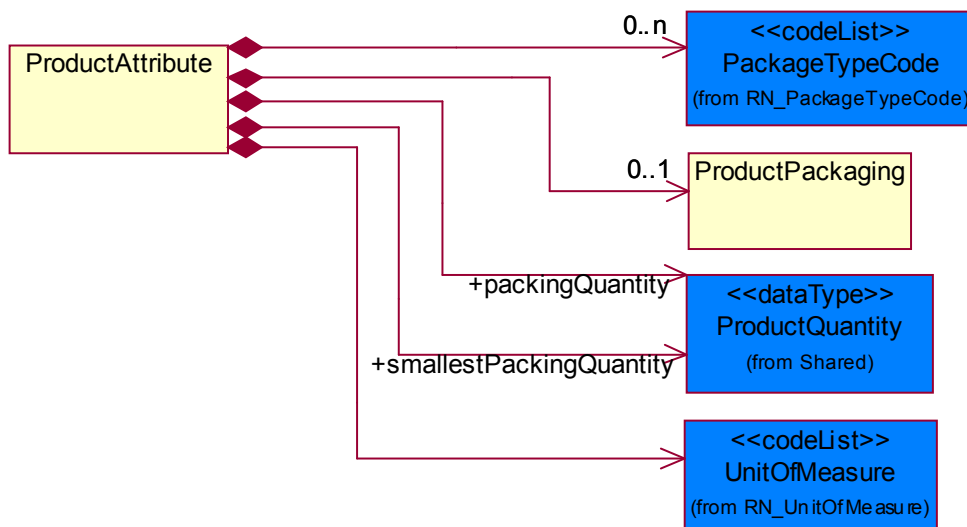


Figure 3-26 ProductAttribute

Composition	Cardinality	Type	Documentation
ProductPackaging	0..1	ProductPackaging	The collection of business properties that describe a product's packaging attributes.
packingQuantity	1	ProductQuantity	The quantity of products contained in an outer packing unit.
smallestPackingQuantity	1	ProductQuantity	The quantity of products contained in an inner packing unit or a sub-packing unit.
UnitOfMeasure	1	UnitOfMeasure	Code identifying a product unit of measure.
PackageTypeCode	0..n	PackageTypeCode	Code specifying the type of packaging for a product.

3.3.1.8 ProductLicenseRequired

Indicates that a special permit is required in order to purchase or use the product.

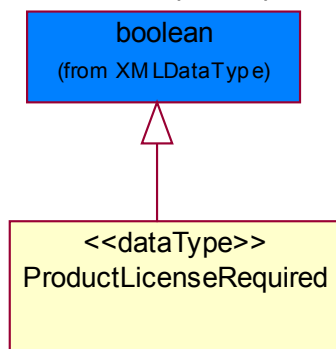


Figure 3-27 ProductLicenseRequired

3.3.1.9 ProductPackaging

The collection of business properties that describe a product's packaging attributes.

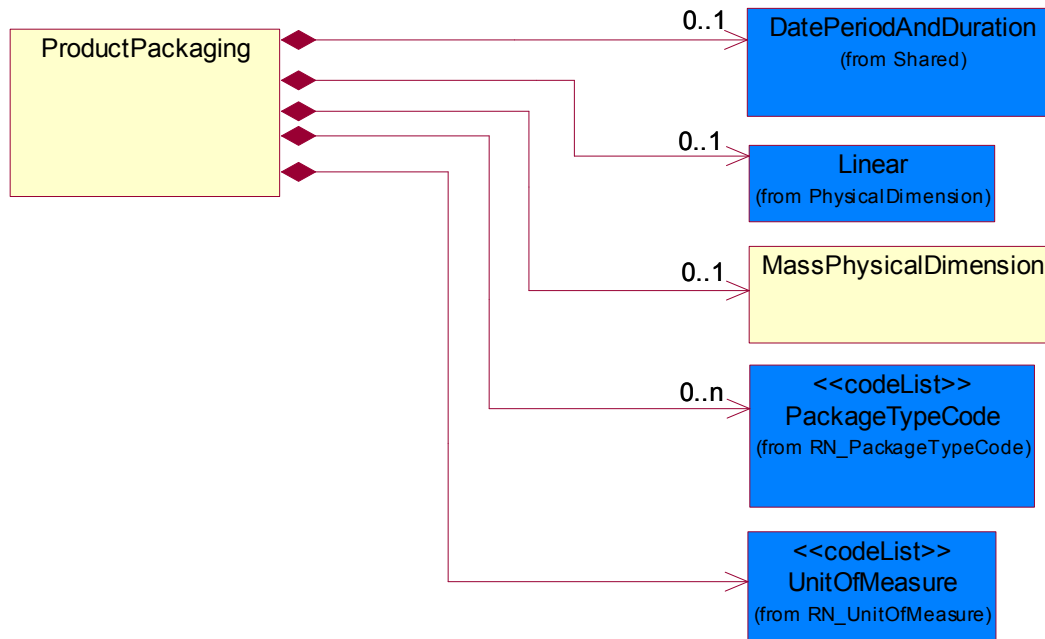


Figure 3-28 ProductPackaging

Composition	Cardinality	Type	Documentation
MassPhysicalDimension	0..1	MassPhysicalDimension	The physical dimension of unit of mass used for measuring the masses of weights, volumes etc.
Linear	0..1	Linear	The business document must be able to express the linear dimensions of an object.
UnitOfMeasure	1	UnitOfMeasure	Code identifying a product unit of measure.
DatePeriodAndDuration	0..1	DatePeriodAndDuration	The collection of business properties that describe a date period or duration.
PackageTypeCode	0..n	PackageTypeCode	Code specifying the type of packaging for a product.

3.3.2 CodeList

3.3.2.1 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.

3.4 Marketing

3.4.1 Marketing

3.4.1.1 Dependency Diagram

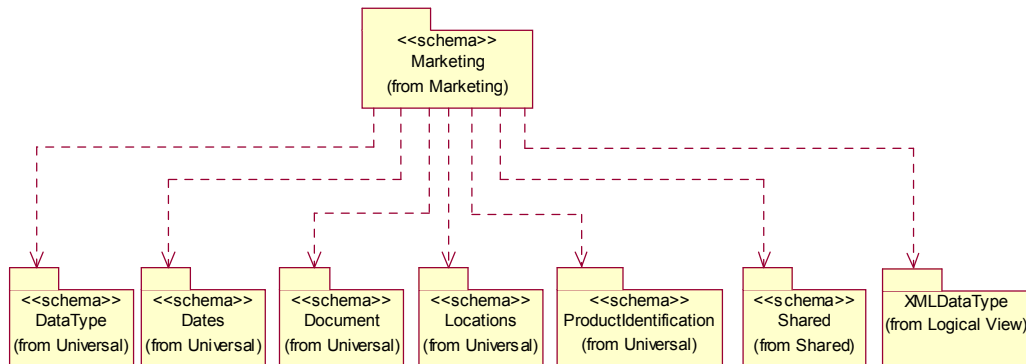


Figure 3-29 Dependency

3.4.1.2 ChangeNotification

The collection of business properties that describe the product change notification information.

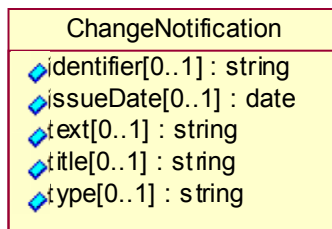


Figure 3-30 ChangeNotification

Attribute	Type	Documentation
identifier[0..1]	string	The issuer's proprietary number that is assigned to the product change notification.
issueDate[0..1]	date	The date that the issuer of the product change notification assigns it to be published.
text[0..1]	string	A free form textual description of information, relating to a product.
title[0..1]	string	The issuer's descriptor name of the product change notification.
type[0..1]	string	The category of change that the product change notification entails. Typically it is Fit, Form, Function, or FYI (For Your Information) only.

3.4.1.3 IsDesignWin

Indicates whether a product has design win process.

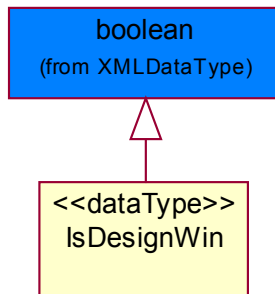


Figure 3-31 IsDesignWin

3.4.1.4 MarketingInstruction

The collection of business properties that describe the product marketing instruction information.

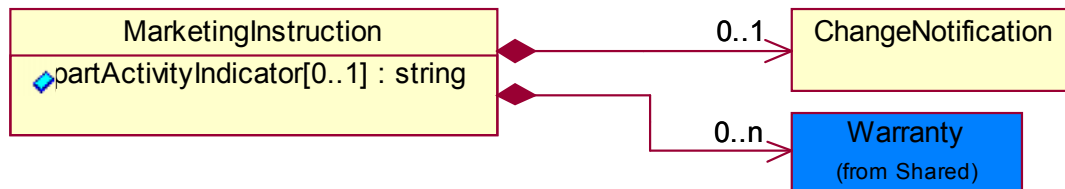


Figure 3-32 MarketingInstruction

Attribute	Type	Documentation
partActivityIndicator[0..1]	string	Describes relative actions that apply to the product.

Composition	Cardinality	Type	Documentation
ChangeNotification	0..1	ChangeNotification	The collection of business properties that describe the product change notification information.
Warranty	0..n	Warranty	The collection of business properties that describes the details of a warranty applied to a product or service

3.5 Shared

3.5.1 Shared

3.5.1.1 Dependency Diagram

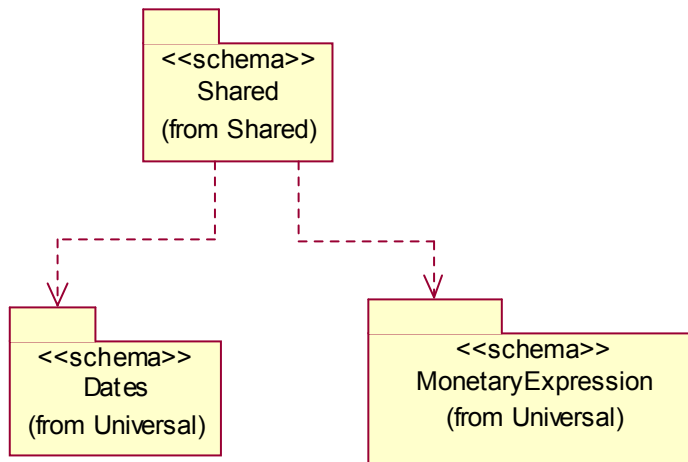


Figure 3-33 Dependency

3.5.1.2 DatePeriodAndDuration

The collection of business properties that describe a date period or duration.

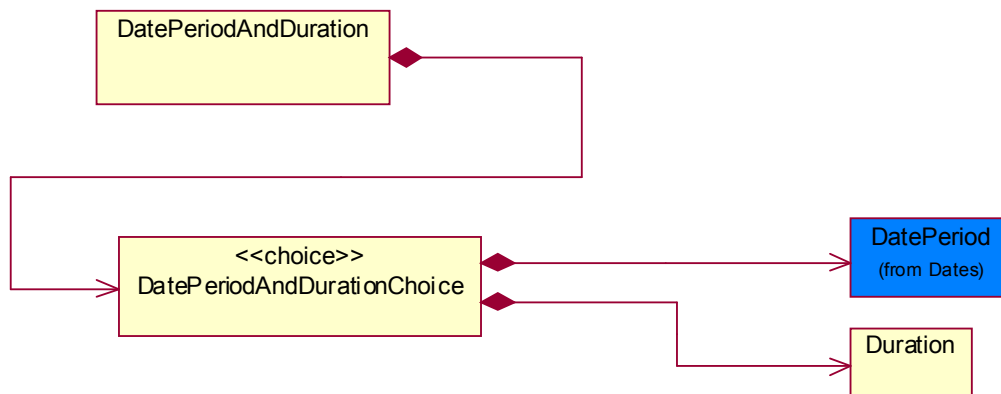


Figure 3-34 DatePeriodAndDuration

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

3.5.1.3 DatePeriodAndDurationChoice

The choice structure for DatePeriodAndDuration.

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

3.5.1.4 Duration

This object allows representation of a duration of time.

Duration
◆ period : duration ◆ startDate[0..1] : date

Figure 3-35 Duration

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

3.5.1.5 MonetaryAmount

The collection of business properties that describe the monetary amount defined by a specified currency.

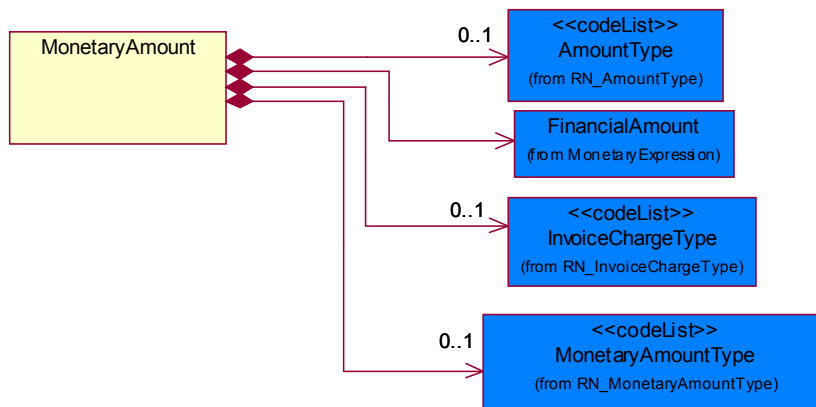


Figure 3-36 MonetaryAmount

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.
MonetaryAmountType	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.

3.5.1.6 ProductQuantity

A quantity specifying the number of product units.

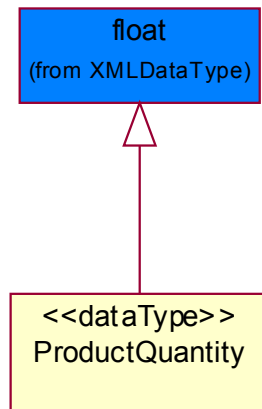


Figure 3-37 ProductQuantity

3.5.1.7 Warranty

The collection of business properties that describes the details of a warranty applied to a product or service

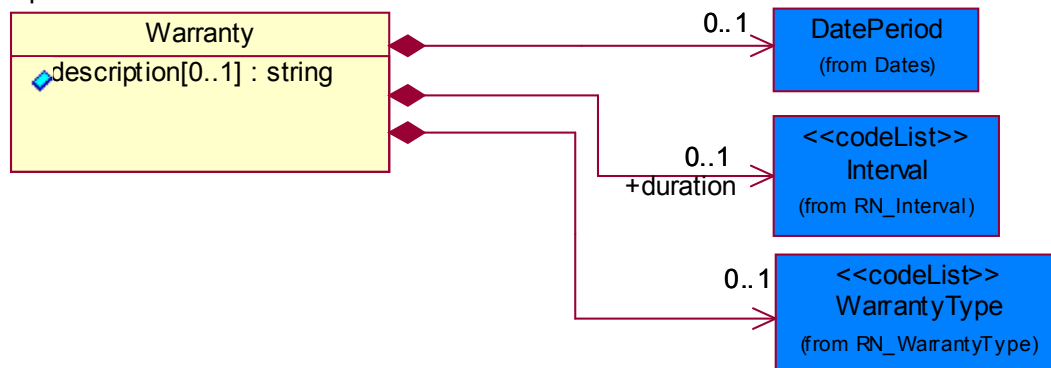


Figure 3-38 Warranty

Attribute	Type	Documentation
description[0..1]	string	The issuer's proprietary number that is assigned to the product change notification.

Composition	Cardinality	Type	Documentation
DatePeriod	0..1	DatePeriod	The business document must allow for the computation or statement of a duration based upon a beginning and an ending date.
duration	0..1	Interval	The length of time a product is under warranty.

WarrantyType	0..1	WarrantyType	The classification of each warranty coverage type that can be claimed.
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3.5.2 CodeList

3.5.2.1 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.

3.5.2.2 MonetaryAmountType

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

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

3.5.2.3 PackageTypeCode

Code specifying the type of packaging for a product.

Name	Documentation
6PC	6 Pack-packaged in multiples of 6 units.
BAG	Bag.
BIN	Bin.
BOX	Box.
BPC	Bulk Pack - Packaged in large volume.
BUD	Bundle.
CAN	Can.
CAR	Carrier.
CLD	Cylinder.
CMS	CLAMSHELL - Packaged in a device with two hinged jaws.
COI	Coil.
CON	Container.
CPK	C-PAK - A powerful vacuum unit complete with filter/cyclone and starter placed inside a heavy-duty container; a flexfiber cyclone for coarse separation; or packaged in covered tape.
CRT	Crate.
CTN	Carton.
DRM	Drum.
DSM	Diskette Mailer - A container made of a small plastic magnetic disk enclosed in a stiff envelope with a radial slit; used to store data.
FLC	FLATPK Carrier - Packaged and laid in full length.
GLP	Gel Pack - Packaged in a colloid or semi-solid substance container.
IND	Individual - Each packed separately.
KDB	Knockdown Tote Bin.
KIT	Kit.
OTH	Other - The package type is not contained in this list; contact manufacturer for the specific package type.
PAG	Package.
PAK	Packed.
PAL	Pallet.
PBG	Plastic Ball Grind array.
PJA	Peanut Jar-packaged in a container filled with foam inserts.
PLC	PLC - Plastic Chip Carrier.
REB	Retail Box - Packaged in a container that is for direct sales to the consumer.

REL	Reel.
ROL	Roll.
SAC	Sack.
SDC	Standard Carton - General pack that is commonly used or established as an acceptable media.
SKI	Skid.
SLV	Sleeve.
SSP	Sample Shipper - A portion, piece, or segment that is representative of a whole.
TAP	Tape - Material/Method of holding a string of computer chips.
TBE	Tube - Packaged in a cylinder container.
TBN	Tote Bin.
TNR	Tape and Reel - Used to identify that a product is packaged in a tape and reel form.
TQF	Thin Quad Flat Package.
TRA	Tray - Packaged on a shallow flat receptacle with a raised edge or rim, used for carrying or holding pieces.
TUB	Tub.
WFB	Wafer Boat - A small thin circular slice of a semiconducting material, such as pure silicon, on which an integrated circuit can be formed.
WFP	Waffle Pack- Die that are packaged in a cavity with a defined matrix; typically a 2-inch or 4-inch square carrier with separate compartments for each die.

3.5.2.4 PricingTypeCode

Code identifying the type of pricing available for a product.

Name	Documentation
ACR	Authorized Cost and Resale.
ACS	Authorized Cost - The negotiated cost agreed upon between the supplier and distributor at the time the "debit?is authorized.
ACT	Authorized cost.
ANY	Any available.
ARS	Authorized resale.
ASP	Average Selling Price - Manufacturer's published price.
BPA	Budgetary Price Amount.
BPP	Broken Purchase Price.
BSH	Book-Ship.
CAT	Catalog price - Book (the supplier's published cost at the time of transaction) or Published Price.
CMC	Commercial.
CMD	Commodity.
CMF	Contract Manufacturing.
CON	Contract.
COS	Cost - Price for which the distributor purchased the parts.
DBC	Disti Book Cost.
DFR	Duty free.
DIS	Distribution.

DPD	Duty paid.
DTP	Distribution price.
EDU	Education.
ERT	E-Rate.
EXC	Exception.
FGM	Federal government.
GEN	General.
HIE	Higher Education.
LCL	Local.
LGM	Local government.
LIS	List.
MPR	Market price.
MRP	Manufacturer's recommendation for unit pricing.
MSR	Manufacturer Suggested Retail Price (MSRP).
MUS	Minimum Unit Sale (MUS) - Manufacturer requirement of total dollar value for design opportunity.
NPF	Nonprofit.
OEM	Original Equipment Manufacturing (OEM).
OVP	OEM Volume Pricing - Original equipment manufacturing price per volume ordered.
PED	Primary Education.
QUO	Quote Price
RCS	Requested Cost (RCS) - Reseller requested cost to the manufacturer.
RFB	Refurbished.
RIN	Religious Institution.
RSP	Resale - Price the distributor is authorized to use for sale to their customer (RSP).
SCE	Special Education.
SEC	Security and management reseller.
SED	Secondary Education.
SEV	Service provider.
SGM	State Government.
SPD	Special Discount Price.
SPE	Special Education.
SPL	Samples.
SRP	Suggested Resale Price.
STR	Standard Rebate.
THP	Threshold Price.
TOC	Total Other Charges - Suggested resale price - The sum total of all distributor added charges to the customer for value added services, including but not limited to programming, tape and reel, labeling, date coding, kitting and in-house assembly.

3.5.2.5 ProductStatusCode

Code specifying the production status of an item.

Name	Documentation
ACT	Active.
ALO	The quantity available to buyer.
BOR	Back Ordered.
DCN	Discontinued. No longer available.
NPR	New Product.
POS	Purchase Order with Supplier.
REP	Replaced.

3.5.2.6 Interval

Code specifying a forecasting interval.

Name	Documentation
1WM	1st week of the month.
2WM	2nd week of the month.
3WM	3rd week of the month.
4WM	4th week of the month.
5DW	5 day work week-Monday through Friday.
5WM	5th week of the month.
CAD	Calendar day-period given as a number of days including weekends and holidays.
CAW	Calendar week-period given as a number of 7 day-weeks including holidays.
DAY	Day.
FMP	Four month period.
FRI	Friday.
HFM	Half month.
HFW	Half week.
HFY	Half year.
HOU	Hour.
IND	Indefinite-an indefinite period.
MIN	Minute.
MOD	Monday.
MON	Month.
MTF	Monday through Friday.
MTS	Monday through Saturday.
MTU	Monday through Sunday.
QUA	Quarter.
SAT	Saturday.
SUN	Sunday.
TDP	Ten days period-period of 10 days.
THU	Thursday.
TMP	Two month period.
TUE	Tuesday.
TWP	Two week period.
UNS	Unspecified.

WDY	Work day.
WED	Wednesday.
WEE	Week.
WOR	Working days - days when the partner company normally works.
YEA	Year.

3.5.2.7 WarrantyType

The classification of each warranty coverage type that can be claimed.

Name	Documentation
CRI	Carry In - The warranty coverage for a unit that is carried in for repair.
DEP	Depot.
EVN	Event - The labor warranty coverage per incident.
FCL	Facilitation.
FLL	Full - A warranty which covers all aspects of the product.
LTD	Limited - A warranty which only certain aspects of the product which is described more fully in the warranty description.
OEM	OEM Service Pack.
ONS	Onsite - The warranty coverage for repairing a unit at the customer's location.
PCI	Portable Carry In - The warranty coverage for a portable unit that is carried in for repair.
PCK	Support Pack.
PLA	Parts and Labor - A warranty which covers both the parts cost as well as any labor charges required to replace those parts.
PRO	Parts Only - A warranty which covers only the parts cost of the product.
PRT	Part - The spare parts warranty coverage.
STD	Standard - Indicates standard warranty coverage.

3.5.2.8 AmountType

Code identifying the type of monetary amount.

Name	Documentation
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.
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.

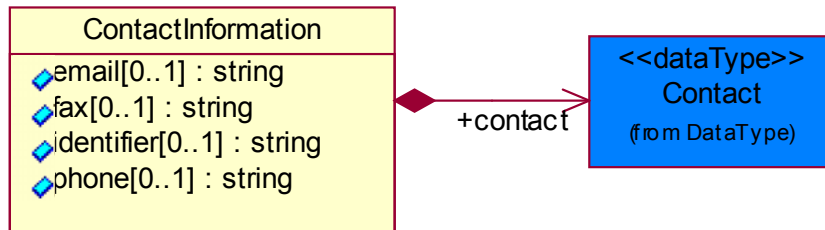


Figure 4-1 ContactInformation

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.
phone[0..1]	string	The telephone number for the specified contact.

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

4.2 DataType

4.2.1 Contact

The name of the department, service or individual to be contacted within the organization.

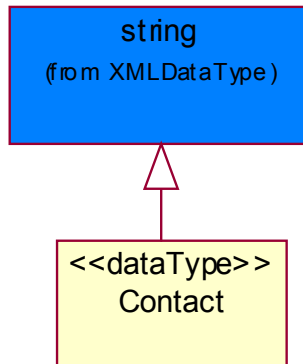


Figure 4-2 Contact

4.2.2 DUNS

A number assigned by Dun and Bradstreet to identify a business location.

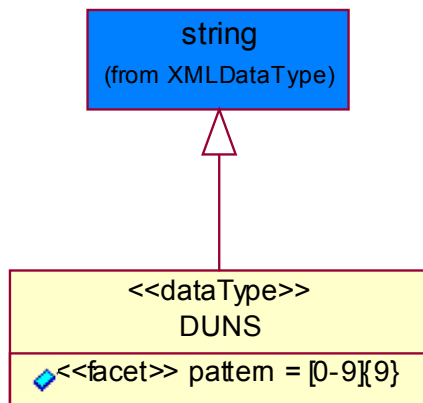


Figure 4-3 DUNS

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

4.2.3 DUNSPlus4

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

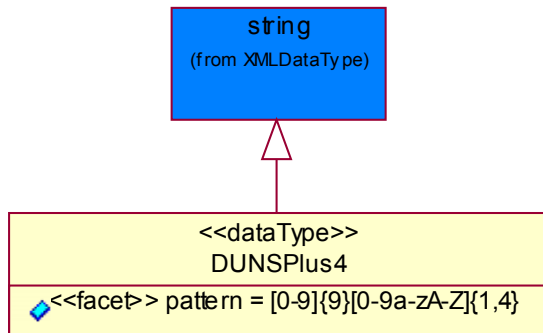


Figure 4-4 DUNSPlus4

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

4.2.4 GLN

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

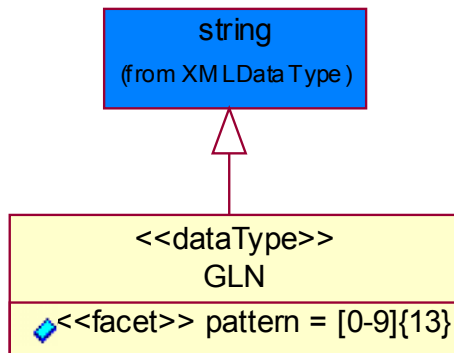


Figure 4-5 GLN

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

4.2.5 GTIN

Global Trade Identification Number (GTIN).

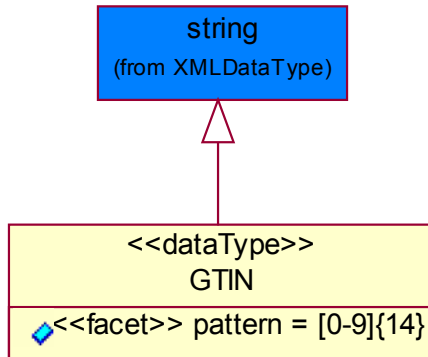


Figure 4-6 GTIN

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

4.3 Dates

4.3.1 DatePeriod

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

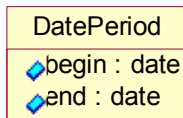


Figure 4-7 DatePeriod

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

4.4 Document

4.4.1 BusinessDocumentReference

The business document reference object allows for the indirect referencing of a relationship to other business related documents.

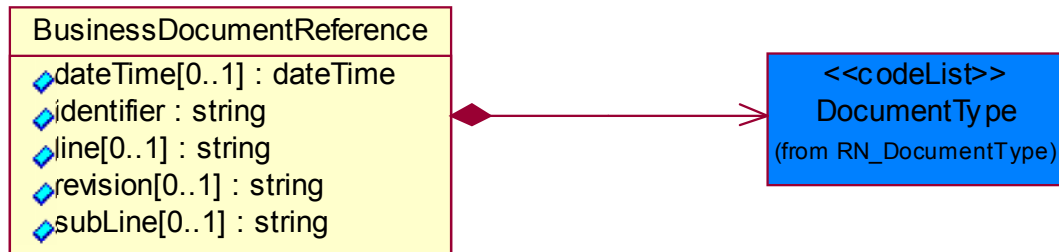


Figure 4-8 BusinessDocumentReference

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.

4.5 Locations

4.5.1 AlternativeIdentifier

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

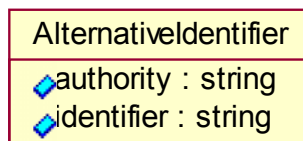


Figure 4-9 AlternativeIdentifier

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.).

4.5.2 Location

The business document must specify a location.

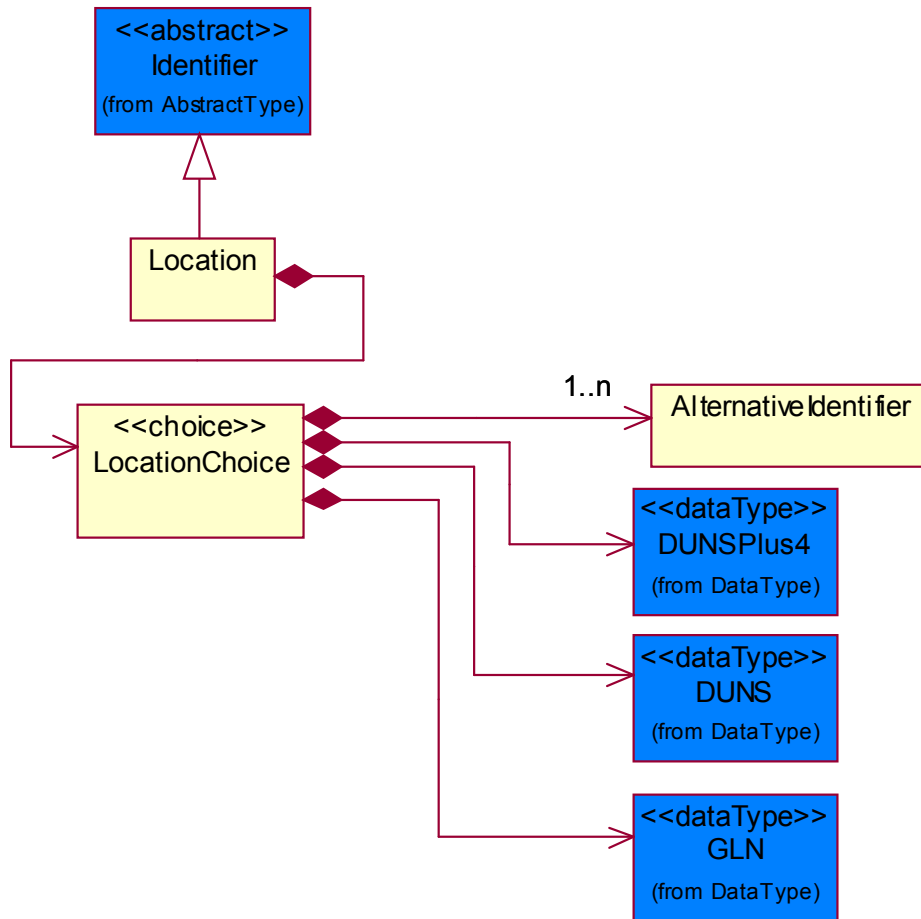


Figure 4-10 Location

Composition	Cardinality	Type	Documentation
LocationChoice	1	LocationChoice	

4.5.3 LocationChoice

Composition	Cardinality	Type	Documentation
DUNSP4	1	DUNSP4	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.

4.6 MonetaryExpression

4.6.1 FinancialAmount

The business document must express financial amounts.



Figure 4-11 FinancialAmount

Attribute	Type	Documentation
amount	float	Specifies the monetary amount.

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+Inf

			ormation/Publications/ Publications/tig90.xalter If you need more information about the ISO standard please contact ISO for more details.
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4.7 PartnerIdentification

4.7.1 PartnerIdentification

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

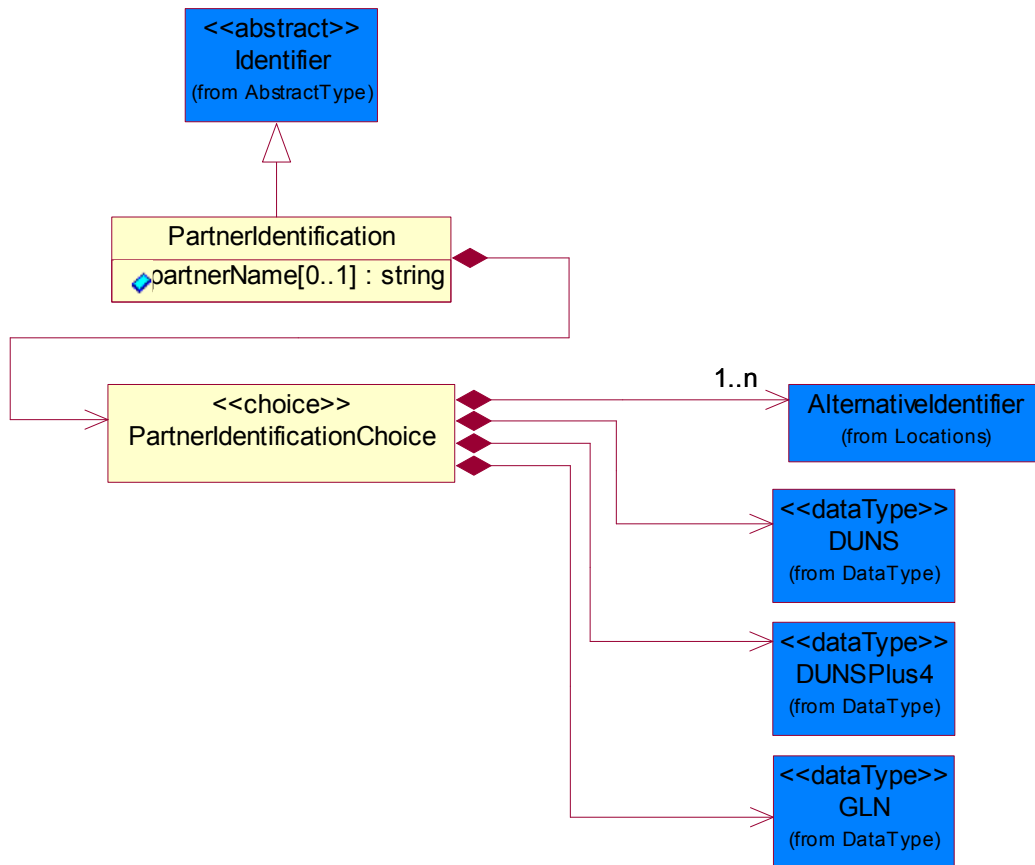


Figure 4-12 PartnerIdentification

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

Composition	Cardinality	Type	Documentation
PartnerIdentificationChoice	1	PartnerIdentificationChoice	

4.7.2 PartnerIdentificationChoice

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

4.8 PhysicalDimension

4.8.1 Linear

The business document must be able to express the linear dimensions of an object.

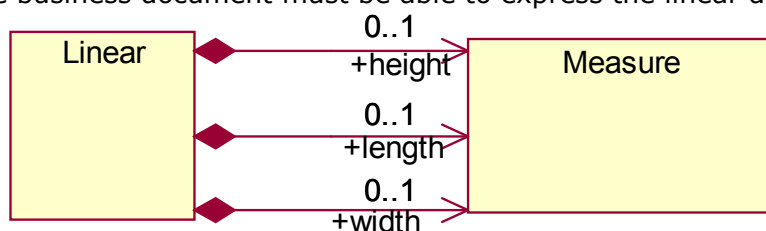


Figure 4-13 Linear

Composition	Cardinality	Type	Documentation
height	0..1	Measure	To express the height of an object.
length	0..1	Measure	To express the length of an object.
width	0..1	Measure	To express the weight of an object.

4.8.2 Measure

The business document must describe measurement information.

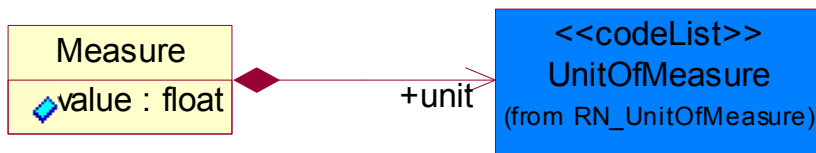


Figure 4-14 Measure

Attribute	Type	Documentation
value	float	The worth of an object in the specified unit of measure.

Composition	Cardinality	Type	Documentation
unit	1	UnitOfMeasure	To express the unit type of measurement.

4.8.3 Volume

The business document must be able to express the volume of an object.

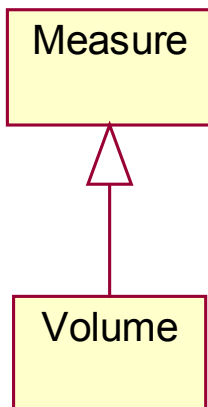


Figure 4-15 Volume

4.8.4 Weight

The business document must be able to express the weight of an object.

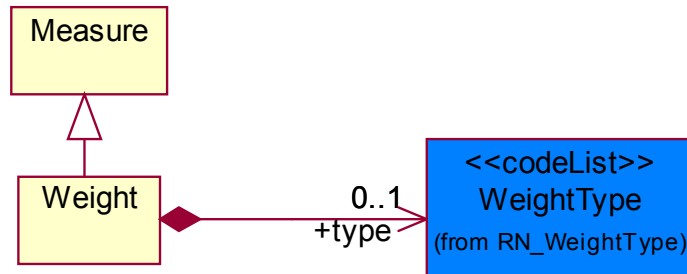


Figure 4-16 Weight

Composition	Cardinality	Type	Documentation
type	0..1	WeightType	A code identifying the type of weight.

4.9 ProductIdentification

4.9.1 ProductDescription

The business document must allow for the identification of the product and multiple textual descriptions of a product.

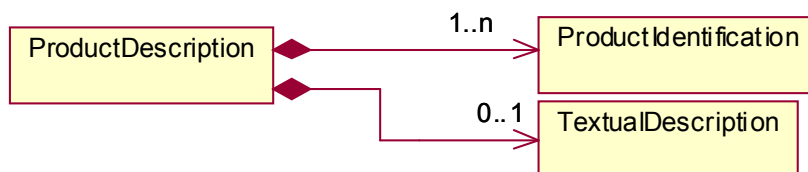


Figure 4-17 ProductDescription

Composition	Cardinality	Type	Documentation
ProductIdentification	1..n	ProductIdentification	The object provides the identifier(s) of a product.
TextualDescription	0..1	TextualDescription	The business document must allow for multiple levels of textual description of an event or object.

4.9.2 ProductIdentification

The object provides the identifier(s) of a product.

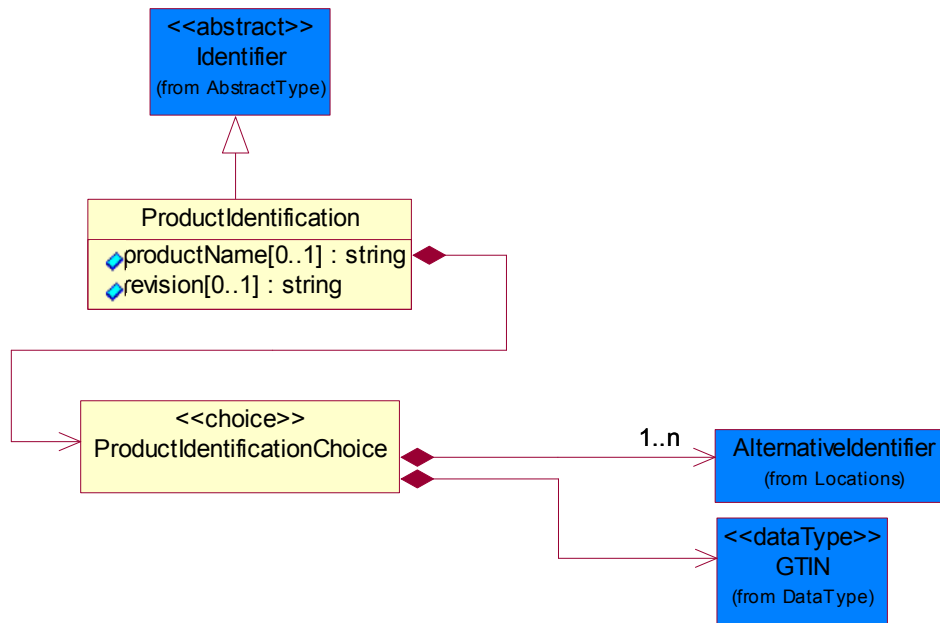


Figure 4-18 ProductIdentification

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	

4.9.3 ProductIdentificationChoice

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

4.9.4 TextualDescription

The business document must allow for multiple levels of textual description of an event or object.




TextualDescription
 detail[0..1] : string
 primary : string
 summary[0..1] : string

Figure 4-19 TextualDescription

Attribute	Type	Documentation
detail[0..1]	string	A detail description of an event or object.
primary	string	A phrase or single word description of an event or object.
summary[0..1]	string	A condensed description of an event or object.

4.10 CodeList

4.10.1 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.

4.10.2 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.

4.10.3 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.

4.10.4 DocumentType

A code identifying the business context of a document.

Instance	Documentation
ARA	Authorization Request Approval.
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.
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.
EIR	Engineering Information Request.
EOL	End of Life.
FUO	Sales order or transfer order fulfilling demand out of a facility (outbound shipment).
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.
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).
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.
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.

4.10.5 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/cnrm+xml	[RFC2646]
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.ffmpeg	[Holstage]
application/vnd.FloGraphIt	[Floersch]
application/vnd.framemaker	[Wexler]
application/vnd.fsc.weblaunch	[D.Smith]
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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.httpphone	[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]
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application/vnd.is-xpr	[Natarajan]
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application/vnd.japannet-jpnstore-wakeup	[Yoshitake]
application/vnd.japannet-payment-wakeup	[Fujii]
application/vnd.japannet-registration	[Yoshitake]
application/vnd.japannet-registration-wakeup	[Fujii]

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application/vnd.japannet-verification-wakeup	[Fujii]
application/vnd.jisp	[Deckers]
application/vnd.kde.karbon	[Faure]
application/vnd.kde.kchart	[Faure]
application/vnd.kde.kformula	[Faure]
application/vnd.kde.kivio	[Faure]
application/vnd.kde.kontour	[Faure]
application/vnd.kde.kpresenter	[Faure]
application/vnd.kde.kspread	[Faure]
application/vnd.kde.kword	[Faure]
application/vnd.kenameaapp	[DiGiorgio-Haag]
application/vnd.koan	[Cole]
application/vnd.liberty-request+xml	[McDowell]
application/vnd.llamagraphics.life-balance.desktop	[White]
application/vnd.lotus-1-2-3	[Wattenberger]
application/vnd.lotus-approach	[Wattenberger]
application/vnd.lotus-freelance	[Wattenberger]
application/vnd.lotus-notes	[Laramie]
application/vnd.lotus-organizer	[Wattenberger]
application/vnd.lotus-screencam	[Wattenberger]
application/vnd.lotus-wordpro	[Wattenberger]
application/vnd.mcd	[Gotoh]
application/vnd.mediastation.cdkey	[Flurry]
application/vnd.meridian-slingshot	[Wedel]
application/vnd.micrografx.flo	[Prevo]
application/vnd.micrografx.igx	[Prevo]
application/vnd.mif	[Wexler]
application/vnd.minisoft-hp3000-save	[Bartram]
application/vnd.mitsubishi.misty-guard.trustweb	[Tanaka]
application/vnd.Mobius.DAF	[Kabayama]
application/vnd.Mobius.DIS	[Kabayama]
application/vnd.Mobius.MBK	[Devasia]
application/vnd.Mobius.MQY	[Devasia]
application/vnd.Mobius.MSL	[Kabayama]
application/vnd.Mobius.PLC	[Kabayama]
application/vnd.Mobius.TXF	[Kabayama]
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application/vnd.mophun.certificate	[Wennerstrom]
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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.msimg	[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]
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application/vnd.music-niff	[Butler]
application/vnd.netfpx	[Mutz]
application/vnd.noblenet-directory	[Solomon]
application/vnd.noblenet-sealer	[Solomon]
application/vnd.noblenet-web	[Solomon]
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application/vnd.novadigm.EDX	[Swenson]
application/vnd.novadigm.EXT	[Swenson]
application/vnd.obn	[Hessling]
application/vnd.osa.netdeploy	[Klos]
application/vnd.palm	[Peacock]
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application/vnd.pg.osasli	[Gandert]
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application/vnd.powerbuilder6-s	[Guy]
application/vnd.powerbuilder7	[Shilts]
application/vnd.powerbuilder75	[Shilts]
application/vnd.powerbuilder75-s	[Shilts]
application/vnd.powerbuilder7-s	[Shilts]
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application/vnd.publishare-delta-tree	[Ben-Kiki]
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application/vnd.pwg-multiplexed	[RFC3391]
application/vnd.pwg-xml-print+xml	[Wright]
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application/vnd.rapid	[Szekely]
application/vnd.s3sms	[Tarkkala]
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application/vnd.seemail	[Webb]
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application/vnd.shana.informed.package	[Selzler]
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application/vnd.sss-ntf	[Bruno]
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application/vnd.svd	[Becker]

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application/vnd.truedoc	[Chase]
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application/vnd.uplanet.bearer-choice-wbxml	[Martin]
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application/vnd.uplanet.cacheop-wbxml	[Martin]
application/vnd.uplanet.channel	[Martin]
application/vnd.uplanet.channel-wbxml	[Martin]
application/vnd.uplanet.list	[Martin]
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application/vnd.vsf	[Rowe]
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application/vnd.wap.slc	[WAP-Forum]
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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]
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application/vnd.xfdl	[Manning]
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application/whoispp-response	[RFC2958]
application/wita	[Campbell]
application/wordperfect5.1	[Lindner]
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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]
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audio/EVRC0	[RFC-ietf-avt-evrc-smv-03.txt]
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audio/G723	
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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]
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audio/PCMU	
audio/prs.sid	[Walleij]
audio/QCELP	
audio/RED	
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audio/SMV0	[RFC-ietf-avt-evrc-smv-03.txt]
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audio/tone	[RFC2833]
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audio/vnd.cns.anp1	[McLaughlin]
audio/vnd.cns.inf1	[McLaughlin]
audio/vnd.digital-winds	[Strazds]
audio/vnd.everad.plj	[Cicelsky]
audio/vnd.lucent.voice	[Vaudreuil]
audio/vnd.nortel.vbk	[Parsons]
audio/vnd.nuera.ecelp4800	[Fox]
audio/vnd.nuera.ecelp7470	[Fox]
audio/vnd.nuera.ecelp9600	[Fox]

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audio/vnd.qcelp	[Lundblade]
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audio/vnd.vmx.cvsd	[Vaudreuil]
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image/g3fax	[RFC1494]
image/gif	[RFC2045,RFC2046]
image/ief	[RFC1314] Image Exchange Format
image/jpeg	[RFC2045,RFC2046]
image/naplps	[Ferber]
image/png	[Randers-Pehrson]
image/prs.btif	[Simon]
image/prs.pti	[Laun]
image/t38	[RFC3362]
image/tiff	[RFC3302] Tag Image File Format
image/tiff-fx	[RFC3250] Tag Image File Format Fax eXtended
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image/vnd.djvu	[Bottou]
image/vnd.dwg	[Moline]
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image/vnd.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]
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text/vnd.curl	[Byrnes]
text/vnd.DMClientScript	[Bradley]
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text/vnd.ms-mediapackage	[Nelson]
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text/vnd.wap.sl	[WAP-Forum]
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text/vnd.wap.wmlscript	[Stark]
text/xml	[RFC3023]
text/xml-external-parsed-entity	[RFC3023]
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video/BT656	
video/CelB	
video/DV	[RFC3189]
video/H261	
video/H263	
video/H263-1998	
video/H263-2000	
video/JPEG	
video/MP1S	
video/MP2P	
video/MP2T	
video/MP4V-ES	[RFC3016]
video/mpeg	[RFC2045,RFC2046]
video/MPV	
video/nv	
video/parityfec	[RFC3009]
video/pointer	[RFC2862]
video/quicktime	[Lindner]
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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]

4.10.6 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.
1PA	20-Pack.
1PB	50 Pound Bag.
1PD	100 Pound Drum.
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.
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.
ACR	Acre.
ACT	Actual Pounds.
ALU	Aluminum Pounds Only.
AMP	Ampere.
ASM	Angstrom.
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.

BIL	Billet.
BIN	Bin.
BIT	Bit.
BKC	Bulk Car Load.
BLO	Block.
BOA	Board.
BOF	Board Feet.
BOL	Bolt.
BOT	Bottle.
BOX	Box.
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).
BUC	Bucket.
BUD	Bushel, Dry Imperial.
BUK	Bunks.
BUL	Bulk.
BUN	Bundle.
BUP	Bulk Pack.
BUS	Bushel.
BYT	Bytes.
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.
CEL	Cell.
CEM	Centimeter.
CEP	Centipoise (CPS).
CET	Centiliter.
CGM	Centigram.
CHA	Chains (Land Survey).
CHE	Chest.
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.
CUB	Cubic centimeter.
CUC	Cubic centimeter/second.
CUF	Cubic Foot.
CUI	Cubic inch.
CUM	Cubicmeter.
CUP	Cup.
CUY	Cubic yard.
CYC	Cycles.
CYL	Cylinder.
DAY	Day.
DCB	Decibels.
DCG	Decagram.
DCL	Deciliter.
DEA	Deal.
DEC	Decimeter.
DEF	Degree Fahrenheit.
DEG	Degree Celsius.
DEP	Dep. Factor.
DGM	Decigram.
DIE	Die.
DIL	Display.
DIP	Dispenser.
DOZ	Dozen.
DRA	Dram.
DRU	Drum.
DRY	Dry Pounds.
EAC	Each.
ELE	Electrical Capacitance.
FAR	Farads.
FFA	Femtofarad.
FLO	Fluid Ounce.
FOI	Fluid Ounce (Imperial).
FOO	Foot.
FOU	Fluid Ounce US.
FUU	Fuel Usage (Gallons).
GAL	Gallon.
GAS	Gage Systems.
GIH	Gigahertz.
GIJ	Gigajoules.
GIL	Gill (Imperial).
GOB	Gross Barrels.
GOG	Gross Gallons.
GOK	Gross Kilogram.
GOT	Gross Ton.

GOY	Gross Yard.
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.
HNY	Henry.
HOS	Hours.
HOU	Hour.
HUA	Hundredth of a Carat.
HUB	Hundred Boxes.
HUC	Hundred Count.
HUS	Hundred Sheets.
IMG	Imperial Gallons.
INC	Inch.
JAR	Jar.
JOI	Joint.
JOU	Joule.
KBY	Kilobyte.
KEG	Keg.
KEL	Kelvin.
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.
KJL	Kilojoule.
KKG	Kilogram/Kilogram.
KUD	Kubikdezimeter.
KUM	Kubikmeter pro Sekunde.

KWH	Kilowatt-hour.
LIF	Lifts.
LIM	Link.
LIQ	Liquid Pounds.
LIT	Liter.
LOA	Load.
LOT	Lot.
LUG	Lug.
MAM	Milliamps/mm.
MAT	Mat.
MBY	Megabyte.
MCG	Microgram.
MCM	Milligrams Per Cubic Meter.
MCR	Micron.
MEG	Megagram.
MEH	Megahertz.
MEP	Megapascal.
MET	Meter.
MEW	Megawatt.
MGM	Milligram.
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.
MJO	Millijoule.
MLA	Milliampere.
MLB	Millibar.
MLC	Milligram/cubic meter.
MLI	Milliliter.
MLK	Milligram/kilogram.
MLL	Milligram/Liter.
MLS	Miles.
MME	Millimeter.
MMH	Millimeter H2O.
MMK	Millimol/kilogram.
MMO	Millimol.
MOK	Mol/kilogram.
MOL	Mol.
MON	Month.
MPH	Megagrams Per Hour.
MSC	Millisecond.
MSM	Milligrams Per Square Meter.
MTA	Millitesla.

MTQ	Meter pro Quadratsekunde.
MTS	Meters per second.
MUL	Multichip - When 2 or more dies (chips) are merged into one package.
MVS	Millivolts.
MVT	Millivolt.
NAA	Nanoamps.
NAM	Nanometer.
NAS	Nanosecond.
NEB	Net Barrels.
NEG	Net Gallons.
NEI	Net Imperial Gallons.
NEL	Net Liters.
NEW	Newton.
OCT	Ohm/ct.
OHM	Ohm.
OMM	Ohm/mm.
ONE	One.
OSQ	Ohm/sq.
OTP	One Thousand Pieces.
OUN	Ounce.
OVI	Ohm/via.
PAC	Parcel.
PAD	Pad.
PAG	Package.
PAI	Pail.
PAK	Pack (PAK).
PAL	Pallet.
PAN	Panel.
PAR	Pair.
PAS	Pascal.
PAT	Packet.
PEC	Percent.
PEG	Percentage.
PEH	Percent Per 1000 Hours.
PEN	Pennyweight.
PER	Per Hundred Pieces.
PEW	Percent Weight.
PFR	Picofarad.
PID	Pint U.S. Dry.
PIE	Piece.
PIL	Pint - US liquid.
PLA	Plate.
PLL	Pallet (Lift).
PLT	Pallette.
PLU	Pallet/Unit Load.
POF	Pounds Per Foot.
POG	Pounds Per Gallon.
PON	Pound.
POP	Pounds Per Piece of Product.

POS	Pounds Per 1000 Square Feet.
POT	Pounds Per Thousand.
PPB	Parts per billion (US).
PPM	Parts per million.
PPP	Pounds Per Pound of Product.
PSC	Picosecond.
PSS	Pascal second.
QUA	Quart - US liquid.
RAC	Rack.
REA	Ream of 500 Sheets.
REE	Reel.
RIN	Ring.
ROD	Rod.
ROL	Roll.
SAC	Sack.
SBB	Super Bulk Bag.
SEC	Second.
SET	Set.
SHE	Sheet.
SHI	Shipment.
SHM	Sheet - Metric measure.
SHO	Shot.
SID	Disk (Disc).
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.
STR	Strip.
TAB	Tablet.
TAN	Tank.
TAT	Tank Truck.
TES	Tesla.
THO	Thousand.
TNN	Tonne.
TON	Ton.
TOR	Torr.
TOT	Tote.
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.
VIA	Vial.
VOL	Volt.
VTA	Volts (Alternating Current).
VTD	Volts (Direct Current).
VTM	Volts Per Meter.
WAF	Wafer.
WAR	Watt.
WEE	Week.
WRA	Wrap.
YAR	Yard.
YEA	Year.

4.10.7 WeightType

A code identifying the type of weight.

Instance	Documentation
CHR	Chargeable.
DMN	Dimensional.
GNR	General.
GRS	Gross.
NET	Net.

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.

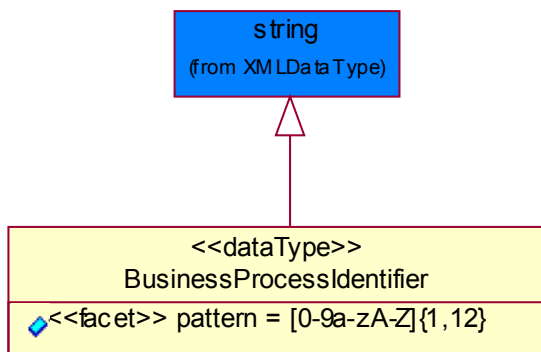


Figure 5-1 BusinessProcessIdentifier

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.

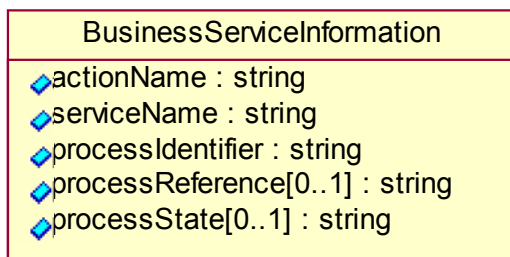


Figure 5-2 BusinessServiceInformation

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.

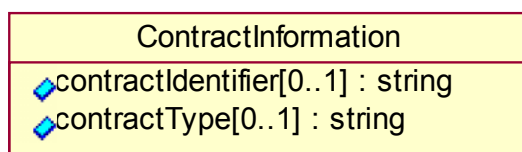


Figure 5-3 ContractInformation

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 ContractIdentification. 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.

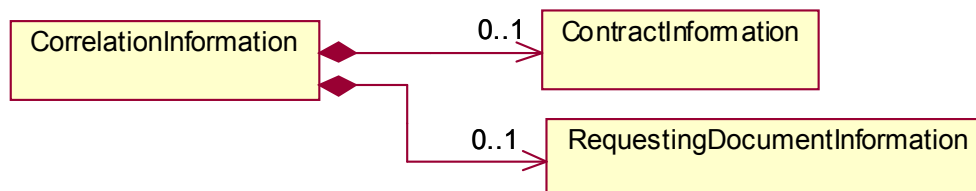


Figure 5-4 CorrelationInformation

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

entInformation		entInformation	to correlate a requesting document to a responding document in an executing choreography.
----------------	--	----------------	---

5.5 DocumentHeader

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

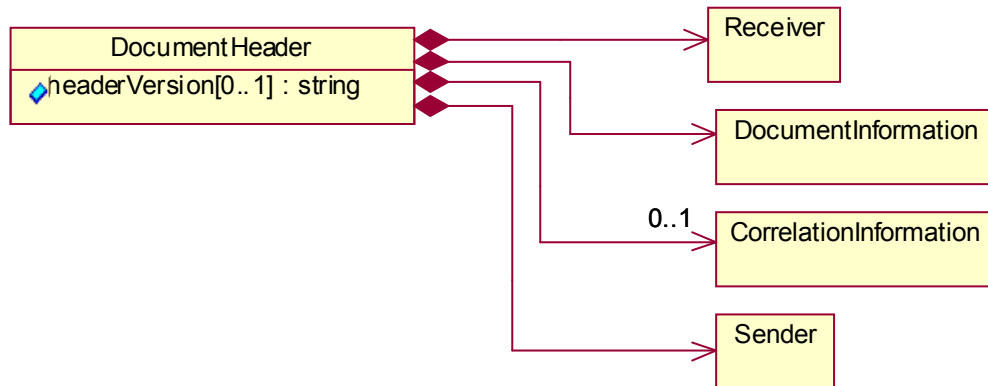


Figure 5-5 DocumentHeader

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

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

5.6 DocumentIdentification

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

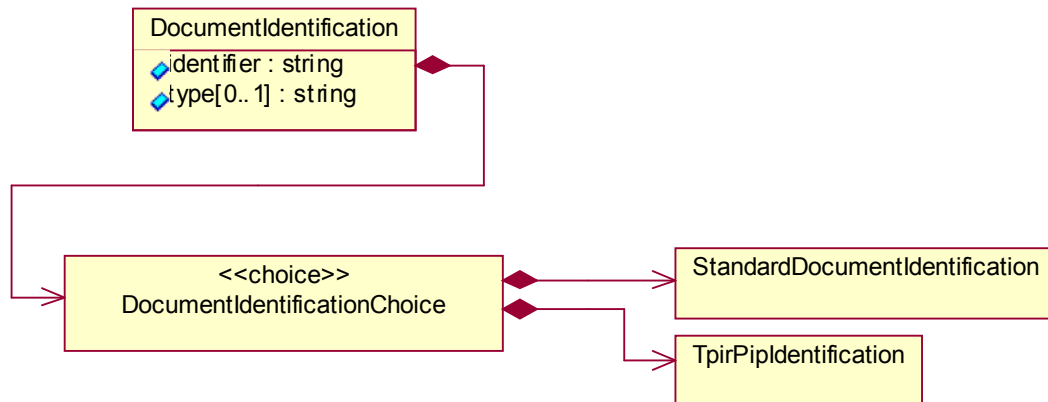


Figure 5-6 DocumentIdentification

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

Composition	Cardinality	Type	Documentation
DocumentIdentificationChoice	1	DocumentIdentificationChoice	

5.7 DocumentIdentificationChoice

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

5.8 DocumentInformation

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

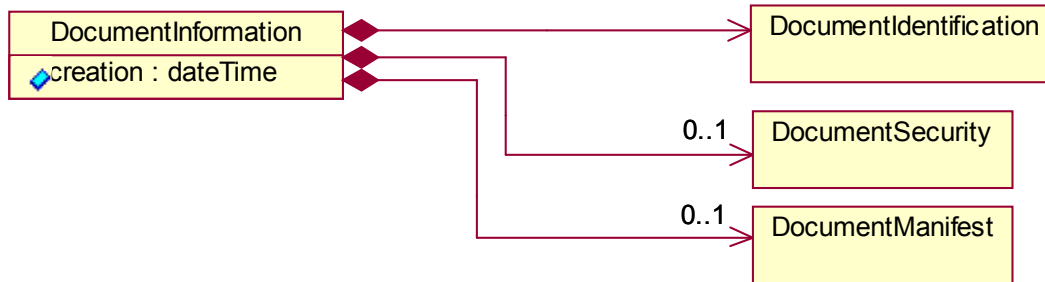


Figure 5-7 DocumentInformation

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

Composition	Cardinality	Type	Documentation
DocumentIdentifi cation	1	DocumentIdentific ation	The object specifies all information necessary to identify the business document.
DocumentSecurit y	0..1	DocumentSecurity	The object provides additional granularity in specifying business document security (this is in addition to the specified PIP security).
DocumentManifes t	0..1	DocumentManifes t	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.

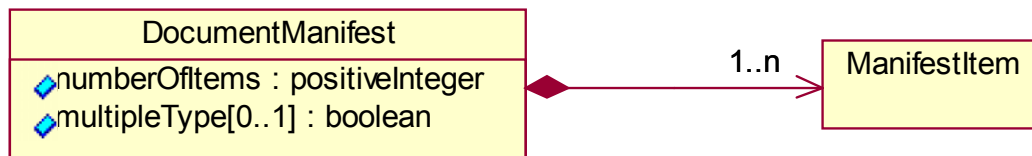


Figure 5-8 DocumentManifest

Attribute	Type	Documentation
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.
multipleType[0..1]	boolean	Indicates whether the manifest contains documents of multiple types. True if yes, and False if no.

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

5.10 DocumentSecurity

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




DocumentSecurity
 nonRepudiableReceipt : boolean  persistentEncryption : boolean  persistentSignature : boolean

Figure 5-9 DocumentSecurity

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

5.11 ManifestItem

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

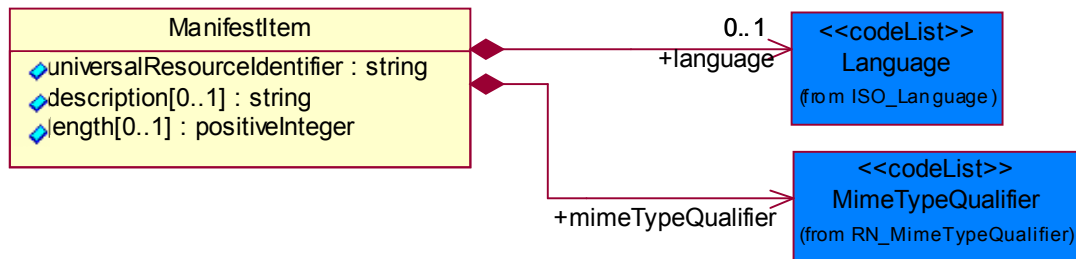


Figure 5-10 ManifestItem

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

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

5.12 PipIdentifier

PIP Identification.[i.e. PIP3A4]

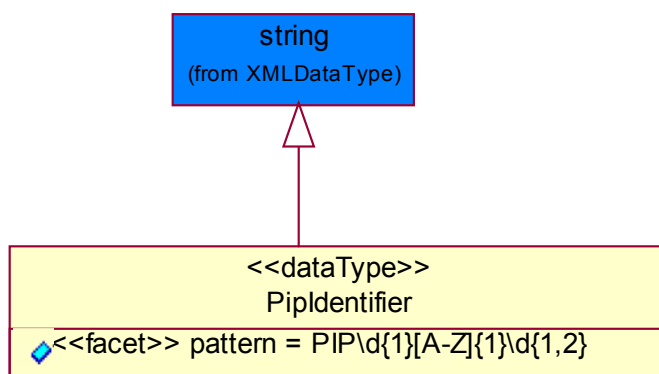


Figure 5-11 PipIdentifier

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

5.13 PipVersion

PIP version number (i.e. 02.02.00).

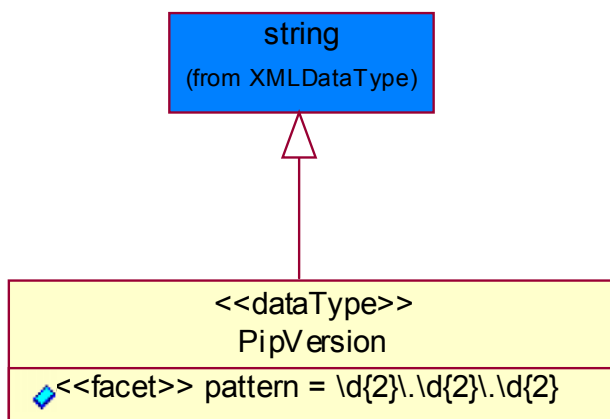


Figure 5-12 PipVersion

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

5.14 Receiver

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

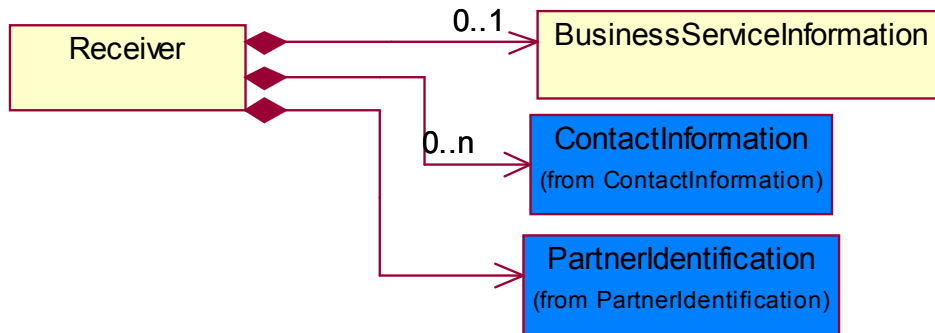


Figure 5-13 Receiver

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

5.15 RequestingDocumentInformation

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

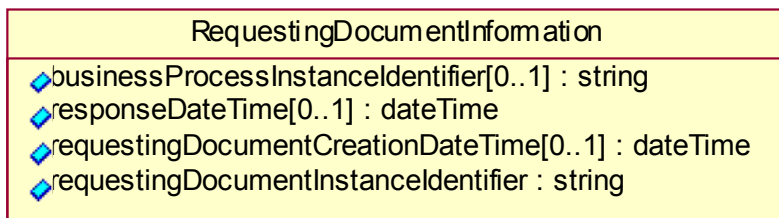


Figure 5-14 RequestingDocumentInformation

Attribute	Type	Documentation
businessProcessInstanceIdentifier[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.
requestingDocumentCreationDateTime[0..1]	dateTime	The date-time of the requesting business document.
requestingDocumentInstanceIdentifier	string	The Business Document identification number that identifies the requesting Business Document.

5.16 Sender

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

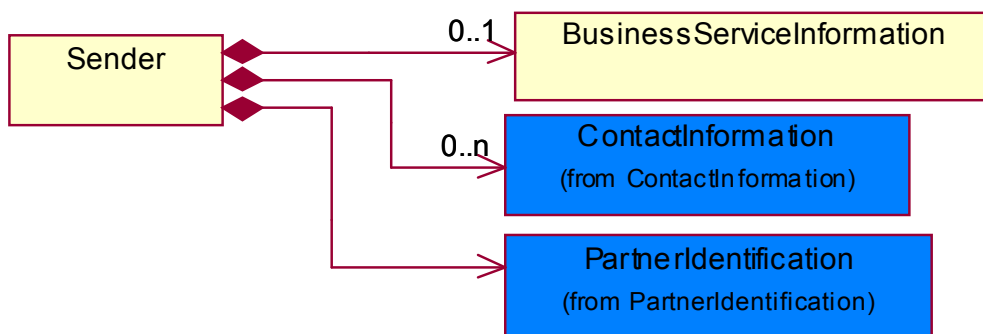


Figure 5-15 Sender

Composition	Cardinality	Type	Documentation
PartnerIdentification	1	PartnerIdentification	The business document must allow for the identity of one or more parties to the transaction.
BusinessServiceIn	0..1	BusinessServiceIn	The object allows the

formation		formation	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.
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.

5.17 StandardDocumentIdentification

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

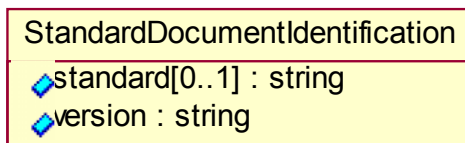


Figure 5-16 StandardDocumentIdentification

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

5.18 TpirPipIdentification

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

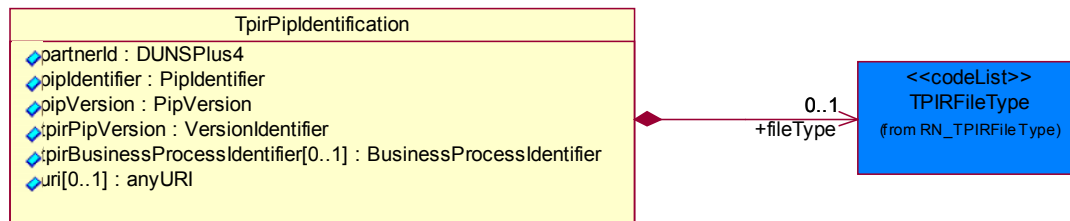


Figure 5-17 TpirPipIdentification

Attribute	Type	Documentation
partnerId	DUNSP4	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).

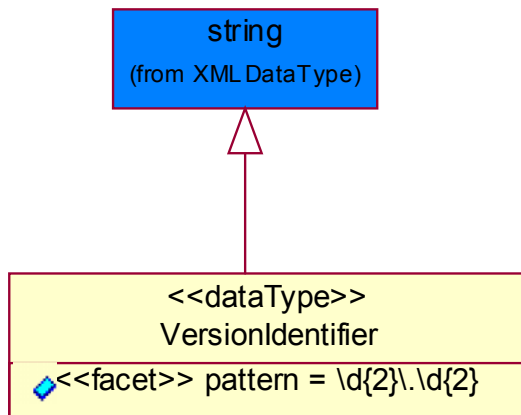


Figure 5-18 VersionIdentifier

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".

6.3 date

For the represents a calendar date.

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

6.4 dateTime

Represents a specific instance of time.

The pattern for dateTime is CCYY-MM-DDThh:mm:ss where CC represents the century, YY the year, MM the month, and DD the day, preceded by an optional leading negative (-) character to indicate a negative number. If the negative character is omitted, positive (+) is assumed. The T is the date/time separator and hh, mm, and ss represent hour, minute, and second respectively. Additional digits can be used to increase the precision of fractional seconds if desired. For example, the format ss.ss... with any number of digits after the decimal point is supported. The fractional seconds part is optional.

This representation may be immediately followed by a "Z" to indicate Coordinated Universal Time (UTC) or to indicate the time zone. For example, the difference between the local time and Coordinated Universal Time, immediately followed by a sign, + or -, followed by the difference from UTC represented as hh:mm (minutes is required). If the time zone is included, both hours and minutes must be present.

6.5 duration

Represents a duration of time.

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

6.6 float

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

6.7 positiveInteger

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

6.8 string

Represents character string.