

## Description of 4B2 Message

PIP® 4B2

**Validated 11.01.00**

<b>Specification Information</b>	
<b>Name</b>	Description Of 4B2 Message
<b>PIP</b>	Notify Of Shipment Receipt
<b>Cluster</b>	Inventory Management
<b>Segment</b>	Inventory Allocation
<b>Publication Date</b>	30 May 2012
<b>Version Identifier</b>	V11.01

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# 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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Cisco System, Inc.	Sterling Commerce
Danzas	Menlo Worldwide
GridNote, Inc.	MIMOS Berhad.
GridNote Pte, Ltd.	Intel Corporation

## 1.5 Related Documents

- Associated PIP Message Schemas (included with PIP Specification only)
- Description of Partner Interface Process for 4B2
- Message Structure

## 1.6 Document Version History

<b>Version</b>	<b>Date</b>	<b>Description</b>
Validated 11.00.00	01 July 2008	Validated Version: RosettaNet Schema to Market to Validation 2008
Validated 11.00.01	22 July 2009	Internal Maintenance Release
Validated 11.01.00	30 May 2012	Updated Version

## 1.7 Document Purpose

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

## 2. Interchange Model

### 2.1 ShipmentReceiptNotification

#### 2.1.1 Interchange Diagram

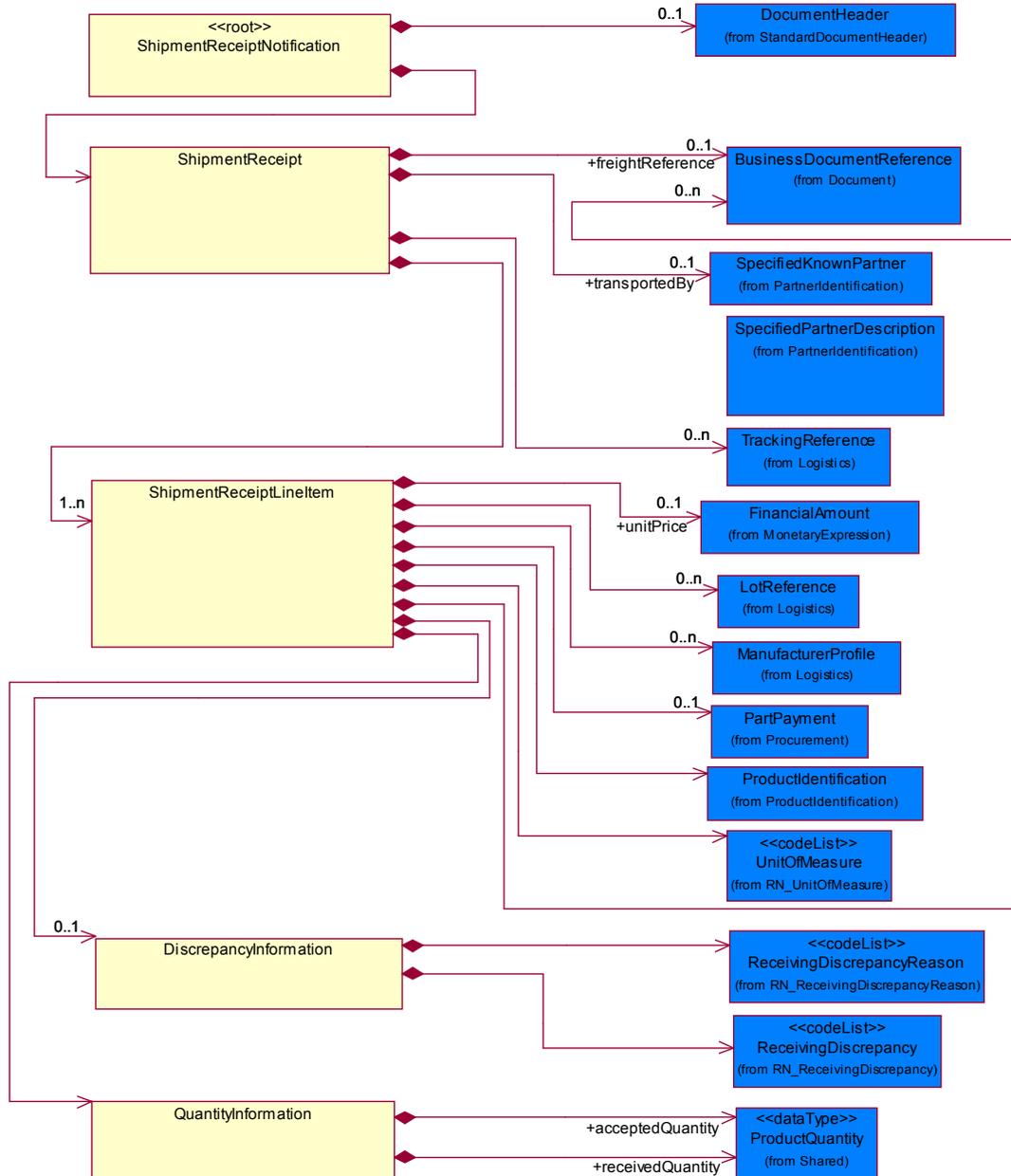


Figure 2-1 Interchange

### 2.1.2 Dependency Diagram

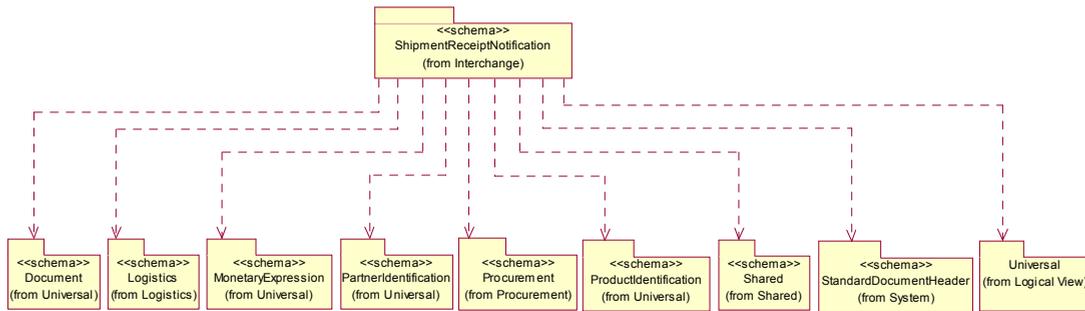


Figure 2-2 Dependency

### 2.1.3 DiscrepancyInformation

Structured electronic information containing shipment receipt information regarding shipment discrepancies.

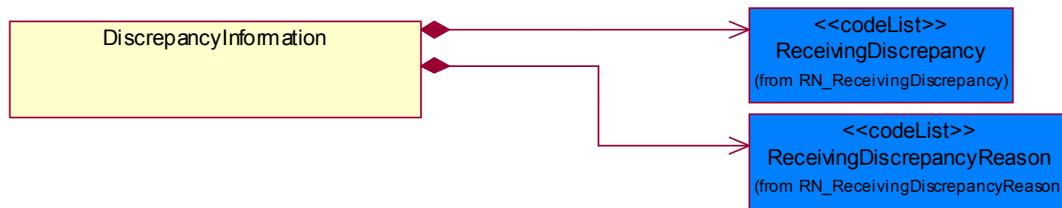


Figure 2-3 DiscrepancyInformation

Composition	Cardinality	Type	Documentation
ReceivingDiscrepancyReason	1	ReceivingDiscrepancyReason	Code identifying the reason for a discrepancy with a shipment at time of receipt.
ReceivingDiscrepancy	1	ReceivingDiscrepancy	Code identifying a discrepancy with a shipment at time of receipt.

### 2.1.4 QuantityInformation

The collection of business properties that describes information regarding the quantity of the product shipped.

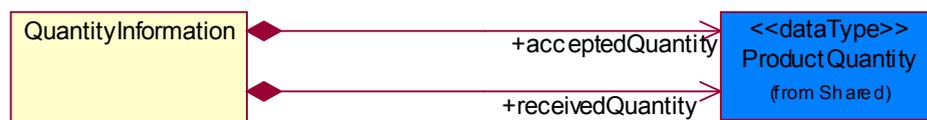


Figure 2-4 QuantityInformation

Composition	Cardinality	Type	Documentation
receivedQuantity	1	ProductQuantity	The product quantity received.
acceptedQuantity	1	ProductQuantity	The quantity of units accepted upon receipt of a shipment.

### 2.1.5 ShipmentReceipt

The collection of business properties that describe the receiving status of shipments received by consignee. The Recommended ProcessRoleIdentifier for PartnerDescription are REC - receiveBy and RFR - receivedFrom.

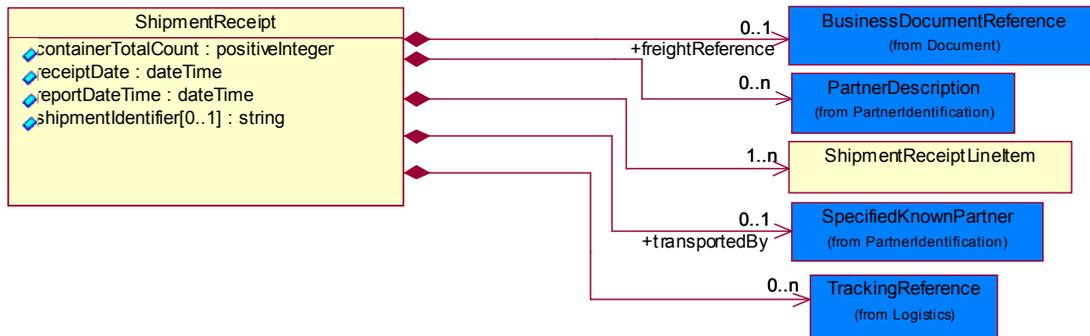


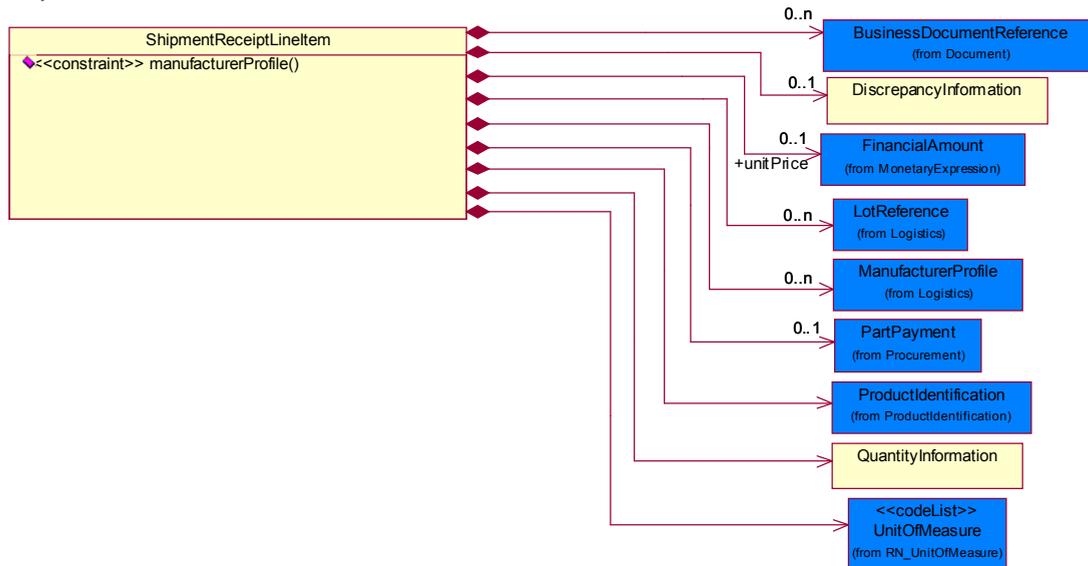
Figure 2-5 ShipmentReceipt

Attribute	Type	Documentation
containerTotalCount	positiveInteger	Indicates the total number of containers in the shipment that belong to this shipping order. This is usually the total number of packed cartons.
receiptDate	dateTime	The date a product or service is received.
reportDateTime	dateTime	The date-time when the shipment receiving report was generated.
shipmentIdentifier[0..1]	string	Reference identifier assigned by the partner originating a shipment to uniquely identify the shipment.

Composition	Cardinality	Type	Documentation
freightReference	0..1	BusinessDocumentReference	A reference identifier for the shipment, such as the Bill Of Lading.
ShipmentReceiptLineItem	1..n	ShipmentReceiptLineItem	The collection of business properties that describe a shipment receipt notification entry.
TrackingReference	0..n	TrackingReference	Proprietary unique identifier for tracking product shipments.
transportedBy	0..1	SpecifiedKnownPartner	The party responsible for either carrying or forwarding the product.
PartnerDescription	0..n	PartnerDescription	The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain.

## 2.1.6 ShipmentReceiptLineItem

The collection of business properties that describe a shipment receipt notification entry.



**Figure 2-6 ShipmentReceiptLineItem**

Composition	Cardinality	Type	Documentation
UnitOfMeasure	1	UnitOfMeasure	Code identifying a product unit of measure.
ManufacturerProfile	0..n	ManufacturerProfile	The collection of business properties that describe a manufacturer's product.
ProductIdentification	1	ProductIdentification	The object provides the identifier(s) of a product.
QuantityInformation	1	QuantityInformation	The collection of business properties that describes information regarding the quantity of the product shipped.
DiscrepancyInformation	0..1	DiscrepancyInformation	Structured electronic information containing shipment receipt information regarding shipment discrepancies.
LotReference	0..n	LotReference	The collection of business properties that describe a manufacturing lot tendered for shipping.
BusinessDocumentReference	0..n	BusinessDocumentReference	The business document reference object allows for the indirect referencing of a relationship to other business related documents.

PartPayment	0..1	PartPayment	The collection of business properties that represent invoicing for part payments based on paying a percentage of the purchase price for the products or installation services being provided.
unitPrice	0..1	FinancialAmount	Price for each unit.

Constraint	Documentation
manufacturerProfile	At least one occurrence of dl:ManufacturerProfile/dl:CountryOfOrigin, dl:ManufacturerProfile/dl:ManufactureDate or dl:ManufacturerProfile/dl:ProductSerialIdentifier is required.

### 2.1.7 ShipmentReceiptNotification

The message wrapper for PIP 4B2.

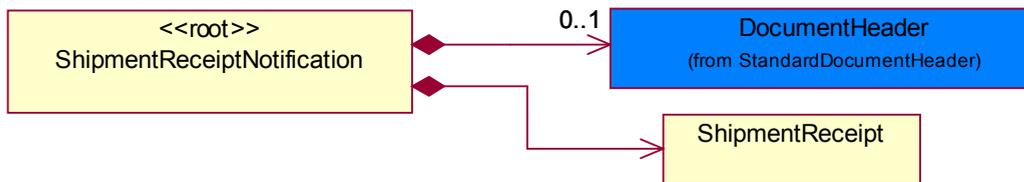


Figure 2-7 ShipmentReceiptNotification

Composition	Cardinality	Type	Documentation
DocumentHeader	0..1	DocumentHeader	The object allows for the identification of the sender and receiver of the business document.
ShipmentReceipt	1	ShipmentReceipt	The collection of business properties that describe the receiving status of shipments received by consignee. The Recommended ProcessRoleIdentifier for PartnerDescription are REC - receiveBy and RFR - receivedFrom.

### 3. Domain Model Logistics

#### 3.1.1 Logistics

##### 3.1.1.1 Dependency Diagram

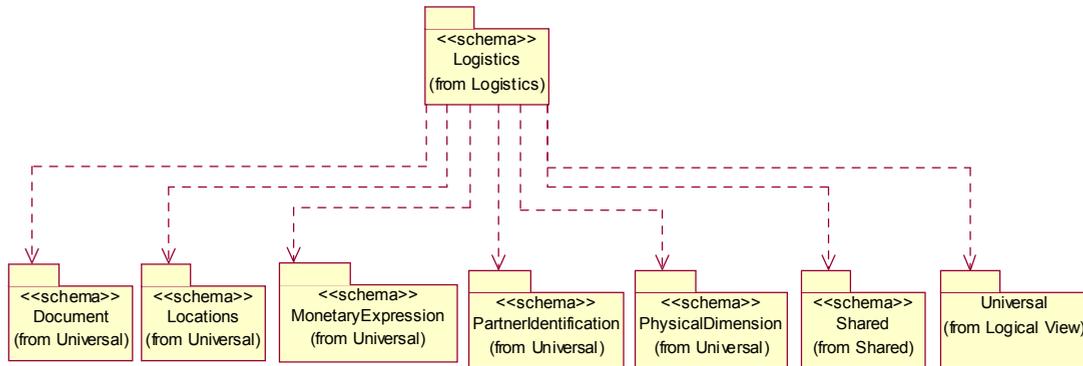


Figure 3-1 Dependency

##### 3.1.1.2 LotReference

The collection of business properties that describe a manufacturing lot tendered for shipping.

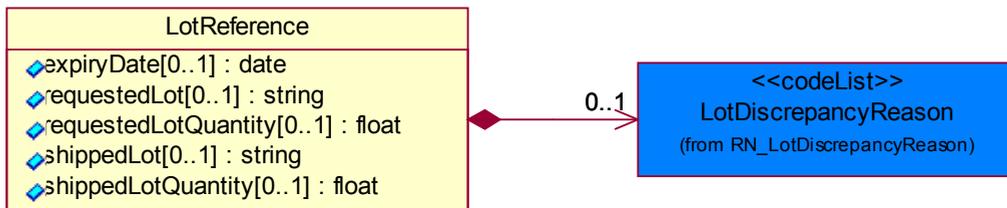


Figure 3-2 LotReference

Attribute	Type	Documentation
expiryDate[0..1]	date	The date that a contractual agreement expires.
requestedLot[0..1]	string	The identifier of a manufacturing lot from which a quantity of product was requested.
requestedLotQuantity[0..1]	float	The quantity of product requested from a specific manufacturing lot.
shippedLot[0..1]	string	The identifier of a manufacturing lot from which a quantity of product was shipped.
shippedLotQuantity[0..1]	float	A quantity of product shipped of a specific manufacturing lot within a shipping container.

Composition	Cardinality	Type	Documentation
LotDiscrepancyReason	0..1	LotDiscrepancyReason	Code identifying the reason for a discrepancy in the lot composition of the shipment.

### 3.1.1.3 ManufacturerProfile

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

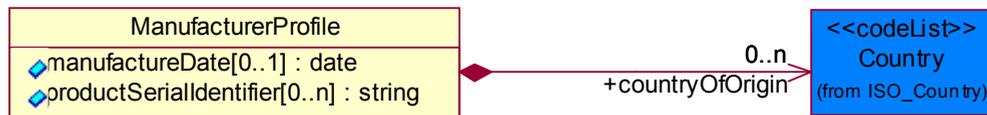


Figure 3-3 ManufacturerProfile

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.

### 3.1.1.4 TrackingReference

Proprietary unique identifier for tracking product shipments.

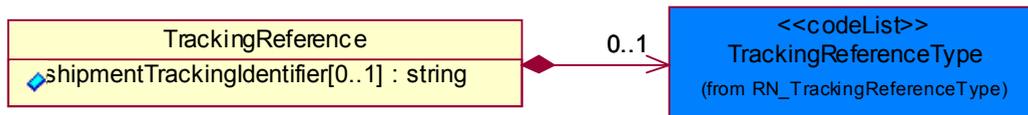


Figure 3-4 TrackingReference

Attribute	Type	Documentation
shipmentTrackingIdentifier[0..1]	string	Proprietary unique identifier for tracking product shipments.

Composition	Cardinality	Type	Documentation
TrackingReferenceType	0..1	TrackingReferenceType	Code identifying the type of document reference being used to track a shipment.

### 3.1.2 CodeList

#### 3.1.2.1 TrackingReferenceType

Code identifying the type of document reference being used to track a shipment.

Name	Documentation
BKN	Booking Number - Shipment identification number assigned by shipper when booking freight shipment with carrier.
BOL	Bill of Lading Number - Shipment identification number on bill of lading issued by shipper, forwarder or carrier.
CIN	Commercial Invoice - An invoice for customs purposes to allow the determination of the proper import/export duty/taxes.
CRN	Carrier Reference Number - Carrier assigned shipment identification number on bill of lading.
FTR	Freight Tracking Reference - Reference number that describes information about tracing shipments during the transportation process.
HAN	House Airwaybill Number - Forwarder assigned shipment identification number on bill of lading issued by forwarder.
MAB	Master Airwaybill Number - Carrier assigned shipment identification number on bill of lading issued by carrier.
OBL	Ocean Bill of Lading Number - Carrier assigned shipment identification number on bill of lading issued by carrier.
PON	Purchase Order Number.
PRO	Pro Number - Carrier assigned shipment identification number on bill of lading.
PSN	Packing Slip Number - Shipment identification number on shipment contents packing list attached to shipment.
RFI	Radio Frequency Identification (RFID).
RRN	Route Reference Number.
SID	Seal Identifier - Trailer or container seal number assigned by party closing doors on trailer or container.
SON	Seller Sales Order Number.
SRN	Shipper Reference Number - Shipper assigned shipment identification number on bill of lading issued by shipper or forwarder.
TRN	Trailer Number - Owner assigned equipment identification number on trailer.

#### 3.1.2.2 LotDiscrepancyReason

Code identifying the reason for a discrepancy in the lot composition of the shipment.

Name	Documentation
DLO	Damaged Lot - Lot was found to be damaged.
WLO	Wrong Lot - Expecting different lot.
WLQ	Wrong Lot Quantity - Expecting different lot quantity.

### 3.1.2.3 ReceivingDiscrepancyReason

Code identifying the reason for a discrepancy with a shipment at time of receipt.

Name	Documentation
BST	Blocked Stock - Product conditionally received (not allocatable).
DAM	Damage.
DOR	Duplicate Order - Order has already been received (doubled shipped).
ILA	Incorrect Labeling - Shipment had incorrect shipping or product labeling.
INM	Item Not Marked - No GTIN or serial number.
NPO	No Purchase Order.
NPS	No Packing Slip.
OVE	Over-ship.
PLD	Packing List Discrepancy.
SHO	Shortage.
WIT	Wrong Item.
WPA	Wrong Packaging.
WPO	Wrong Purchase Order.

### 3.1.2.4 ReceivingDiscrepancy

Code identifying a discrepancy with a shipment at time of receipt.

Name	Documentation
OHO	On Hold.
REJ	Rejected.

## 3.2 Procurement

### 3.2.1 Procurement

#### 3.2.1.1 Dependency Diagram

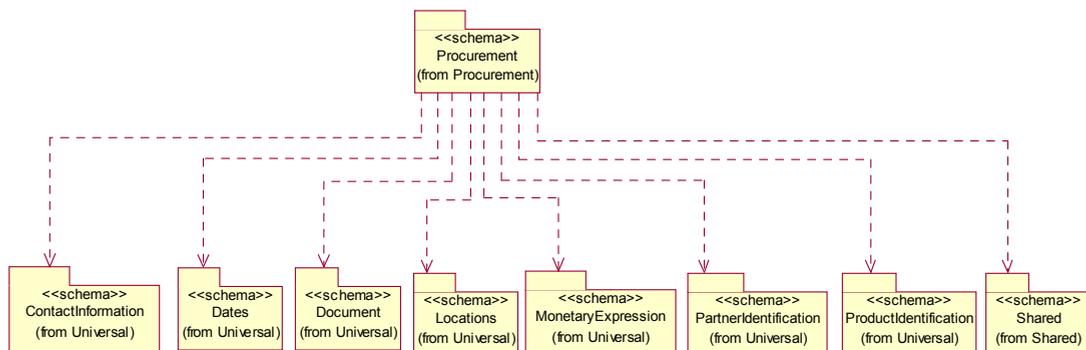


Figure 3-5 Dependency

### 3.2.1.2 PartPayment

The collection of business properties that represent invoicing for part payments based on paying a percentage of the purchase price for the products or installation services being provided.

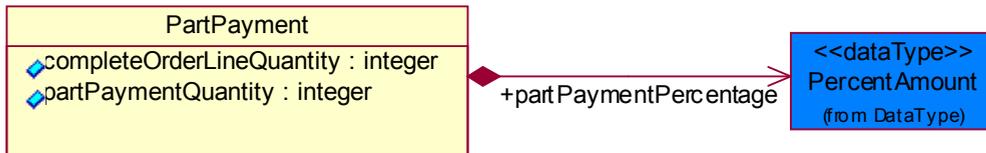


Figure 3-6 PartPayment

Attribute	Type	Documentation
completeOrderLineQuantity	integer	Complete order line quantity.
partPaymentQuantity	integer	The quantity which can be invoiced as a result of applying the part payment percentage to the full line quantity.

Composition	Cardinality	Type	Documentation
partPaymentPercentage	1	PercentAmount	The percentage of the total line quantity which can be invoiced to receive payment.

## 3.3 Shared

### 3.3.1 Shared

#### 3.3.1.1 Dependency Diagram

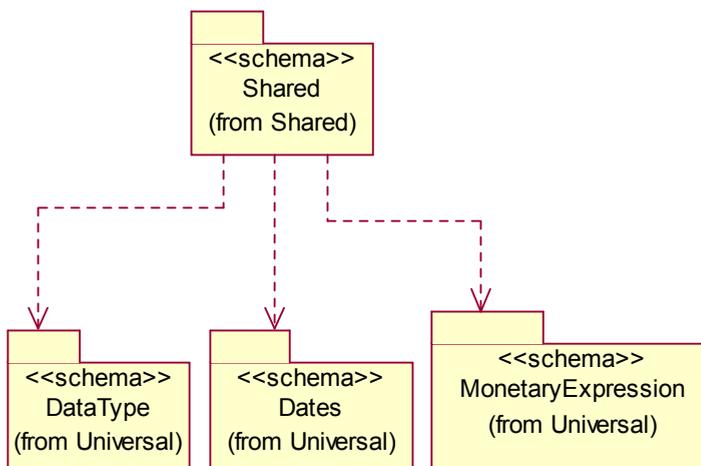
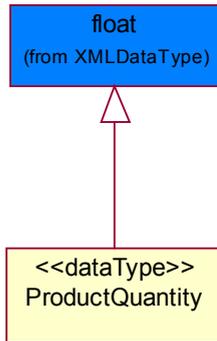


Figure 3-7 Dependency

### 3.3.1.2 ProductQuantity

A quantity specifying the number of product units.



**Figure 3-8 ProductQuantity**

## 4. Universal Structure

### 4.1 ContactInformation

#### 4.1.1 ContactInformation

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

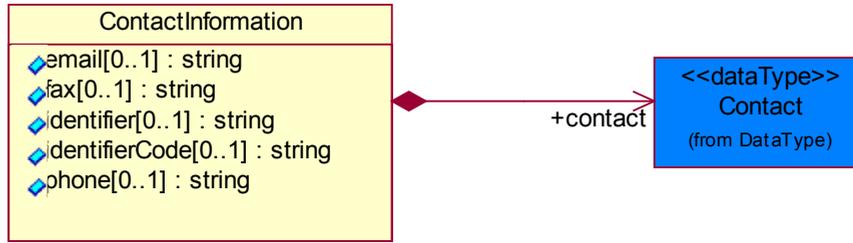


Figure 4-1 ContactInformation

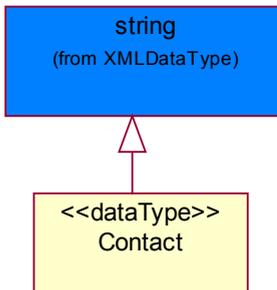
Attribute	Type	Documentation
email[0..1]	string	The electronic mail for the specified contact.
fax[0..1]	string	The fax number for the specified contact.
identifier[0..1]	string	Identifies the role of the contact (i.e. Service Technician, Account Manager) in the Business Process.
identifierCode[0..1]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

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

## 4.2 DataType

### 4.2.1 Contact

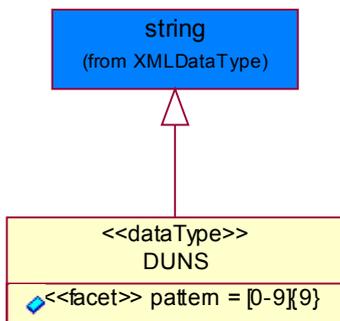
The name of the department, service or individual to be contacted within the organization.



**Figure 4-2 Contact**

### 4.2.2 DUNS

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

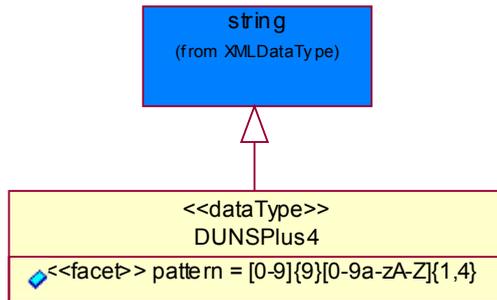


**Figure 4-3 DUNS**

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

### 4.2.3 DUNSPlus4

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

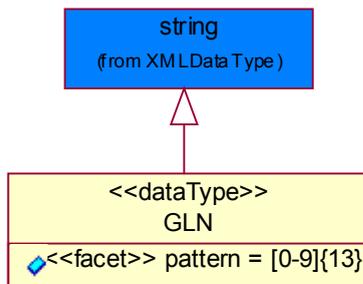


**Figure 4-4 DUNSPlus4**

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

### 4.2.4 GLN

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



**Figure 4-5 GLN**

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

### 4.2.5 GTIN

Global Trade Identification Number (GTIN).

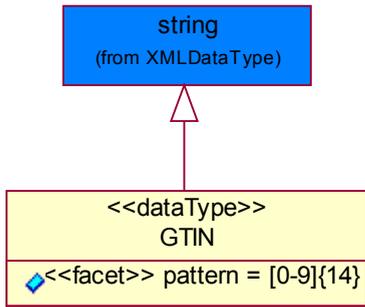


Figure 4-6 GTIN

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

### 4.2.6 PercentAmount

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

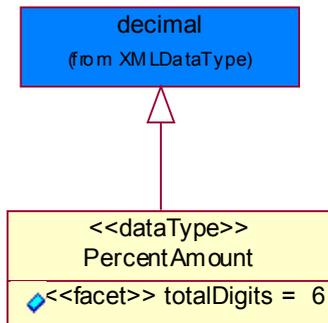


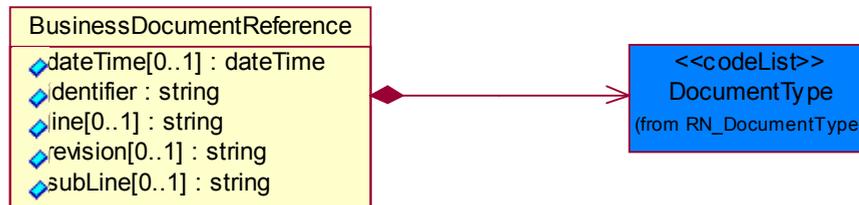
Figure 4-7 PercentAmount

Attribute	Type	Documentation
totalDigits		6

## 4.3 Document

### 4.3.1 BusinessDocumentReference

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



**Figure 4-8 BusinessDocumentReference**

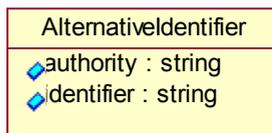
Attribute	Type	Documentation
dateTime[0..1]	dateTime	The date-time stamp indicating on the referenced business document.
identifier	string	Unique identification of the referenced business document.
line[0..1]	string	References the specific line number of the specified business document.
revision[0..1]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

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

## 4.4 Locations

### 4.4.1 AlternativeIdentifier

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



**Figure 4-9 AlternativeIdentifier**

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

### 4.4.2 Location

The business document must specify a location.

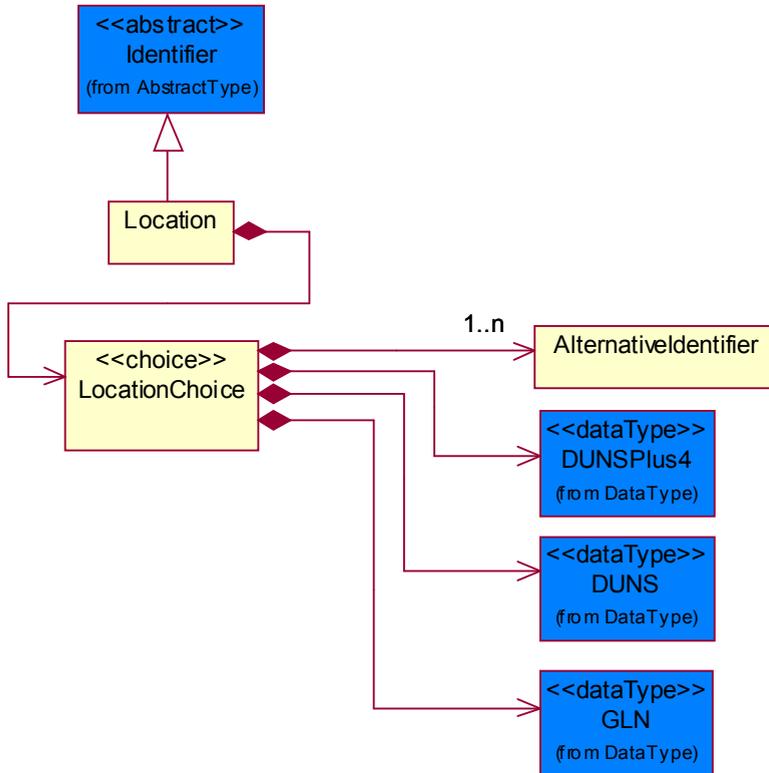


Figure 4-10 Location

Composition	Cardinality	Type	Documentation
LocationChoice	1	LocationChoice	

### 4.4.3 LocationChoice

Composition	Cardinality	Type	Documentation
DUNSPPlus4	1	DUNSPPlus4	A identifier to specify a specific location within a business location.
DUNS	1	DUNS	A number assigned by Dun and Bradstreet to identify a business location.
AlternativeIdentifier	1..n	AlternativeIdentifier	Identifies the specified code and the name of the organization that a code is utilized from.
GLN	1	GLN	Global Location Number (GLN) - A identifier to identify legal entities, trading parties and location.

### 4.4.4 PhysicalAddress

The business document must provide a physical address for a party to the business transaction.

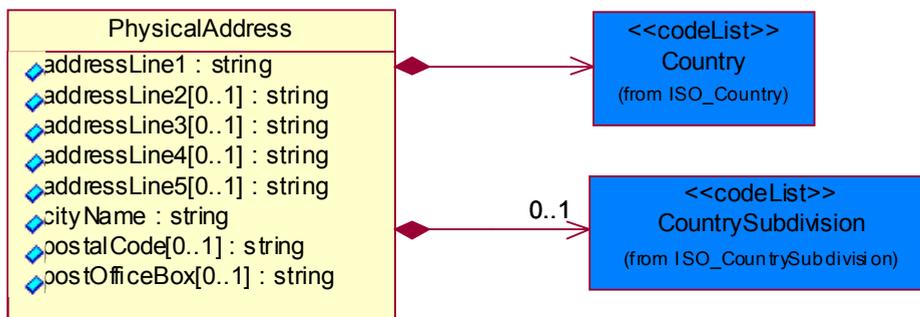


Figure 4-11 PhysicalAddress

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

Composition	Cardinality	Type	Documentation
Country	1	Country	For representation of Country name RosettaNet has adopted ISO 3166-3; 1999. Refer to the following web

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

## 4.5 MonetaryExpression

### 4.5.1 FinancialAmount

The business document must express financial amounts.

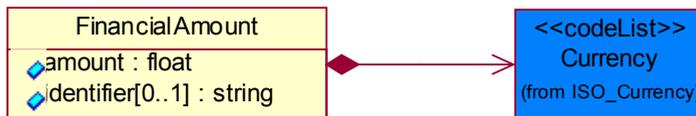


Figure 4-12 FinancialAmount

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

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

## 4.6 PartnerIdentification

### 4.6.1 FullPartner

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

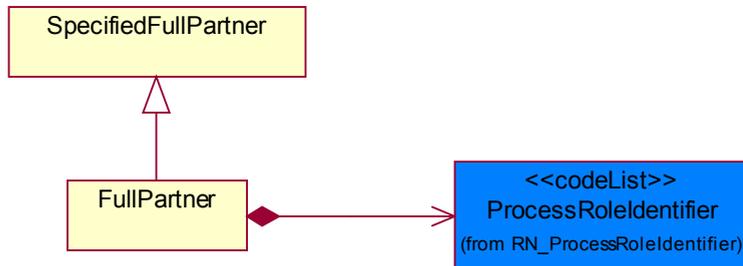


Figure 4-13 FullPartner

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

### 4.6.2 IntermittentPartner

The business document must describe a physical address for a delivery.

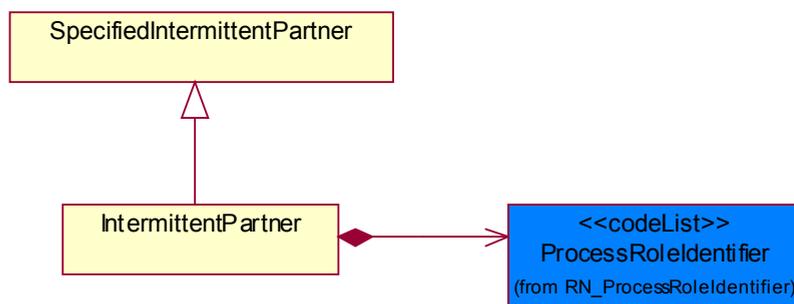


Figure 4-14 IntermittentPartner

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

### 4.6.3 KnownPartner

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

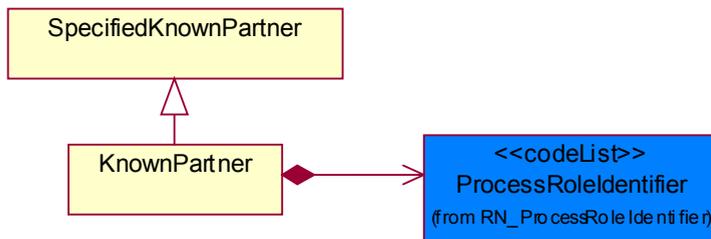


Figure 4-15 KnownPartner

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

### 4.6.4 KnownPartnerContact

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

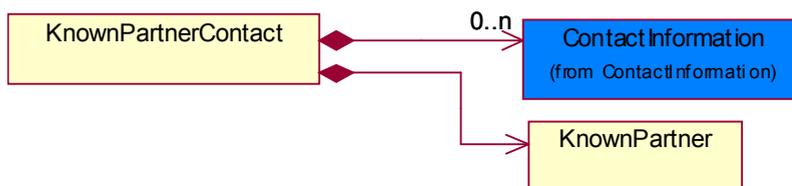


Figure 4-16 KnownPartnerContact

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

### 4.6.5 NewPartner

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

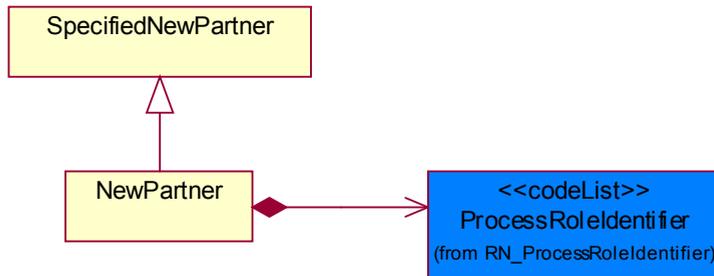


Figure 4-17 NewPartner

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

### 4.6.6 PartnerDescription

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

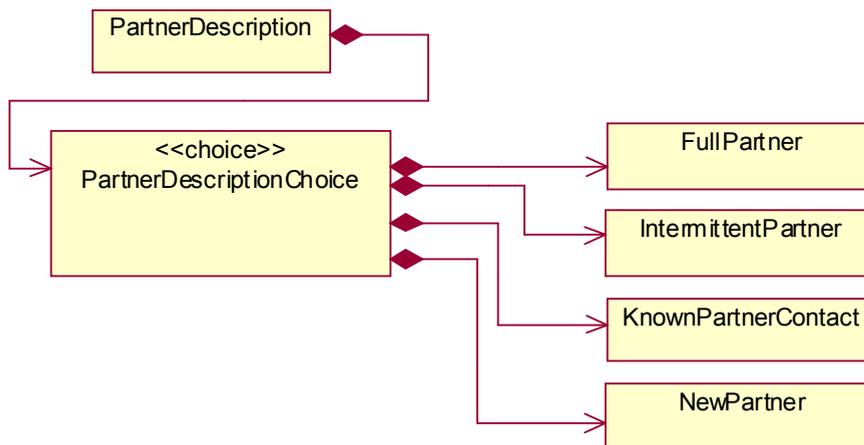


Figure 4-18 PartnerDescription

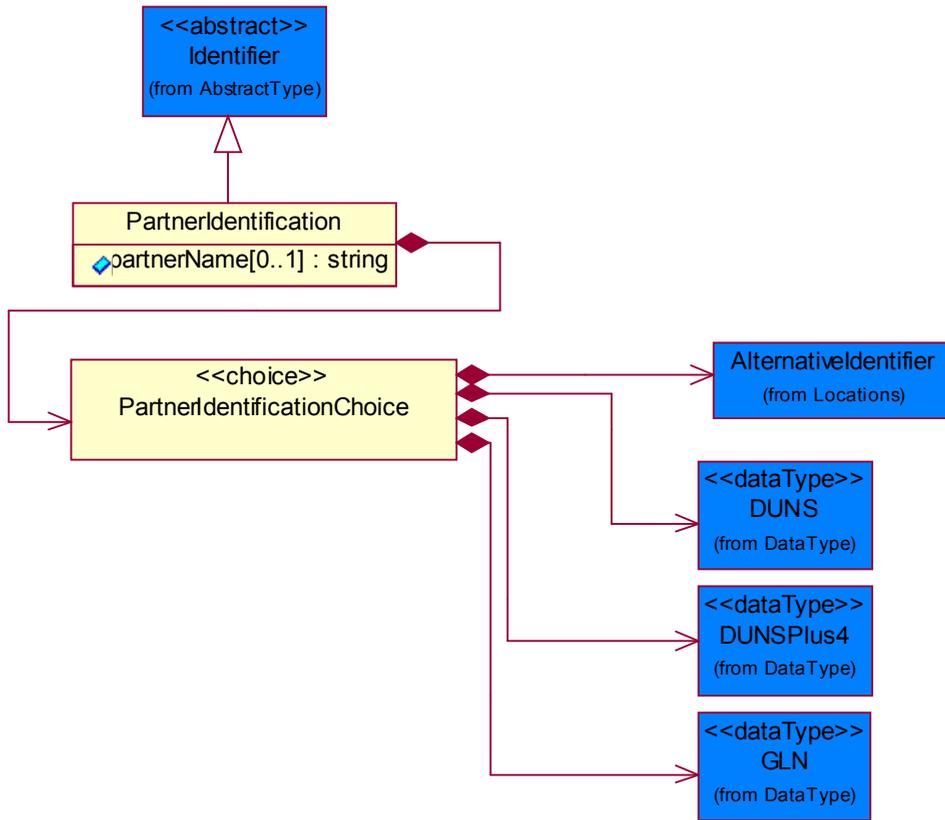
Composition	Cardinality	Type	Documentation
PartnerDescriptionChoice	1	PartnerDescriptionChoice	

#### 4.6.7 PartnerDescriptionChoice

<b>Composition</b>	<b>Cardinality</b>	<b>Type</b>	<b>Documentation</b>
KnownPartnerContact	1	KnownPartnerContact	The business document must describe the trading partners in the business transaction.
IntermittentPartner	1	IntermittentPartner	The business document must describe a physical address for a delivery.
NewPartner	1	NewPartner	The business document must describe a new, existing (but known to only one of the parties to the transaction) or an unknown party to the business transaction.
FullPartner	1	FullPartner	The business document must describe the trading partners in the business transaction. This data structure provide the flexibility to describe a partner in all possible methods as for new, existing or known partner.

### 4.6.8 PartnerIdentification

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



**Figure 4-19 PartnerIdentification**

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

Composition	Cardinality	Type	Documentation
PartnerIdentificationChoice	1	PartnerIdentificationChoice	

### 4.6.9 PartnerIdentificationChoice

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

### 4.6.10 SpecifiedFullPartner

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

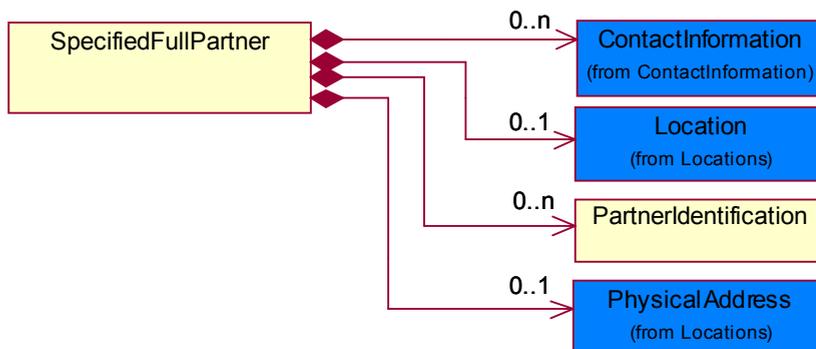


Figure 4-20 SpecifiedFullPartner

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

			of one or more parties to the transaction.
PhysicalAddress	0..1	PhysicalAddress	The business document must provide a physical address for a party to the business transaction.

### 4.6.11 SpecifiedIntermittentPartner

The business document must describe a physical address for a delivery.

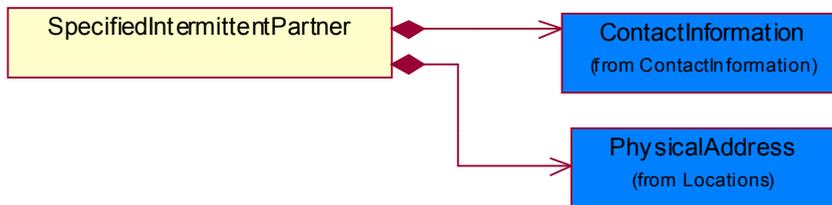


Figure 4-21 SpecifiedIntermittentPartner

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

### 4.6.12 SpecifiedKnownPartner

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

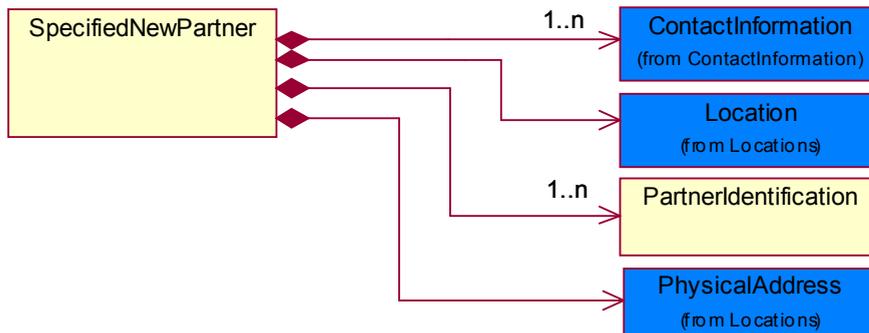


Figure 4-22 SpecifiedKnownPartner

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

### 4.6.13 SpecifiedNewPartner

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



**Figure 4-23 SpecifiedNewPartner**

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

## 4.7 ProductIdentification

### 4.7.1 ProductIdentification

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

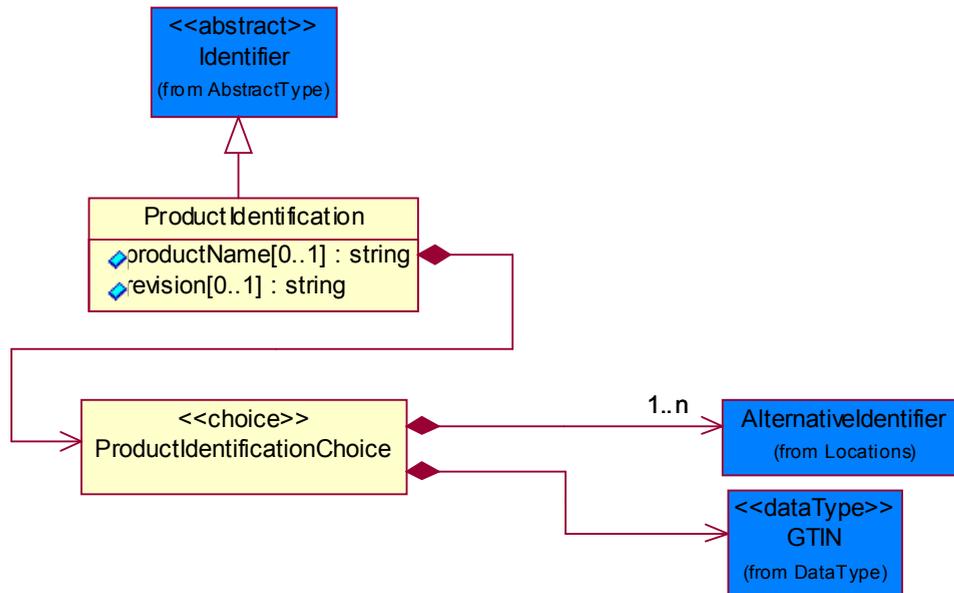


Figure 4-24 ProductIdentification

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

Composition	Cardinality	Type	Documentation
ProductIdentificationChoice	1	ProductIdentificationChoice	

### 4.7.2 ProductIdentificationChoice

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

## 4.8 CodeList

### 4.8.1 Country

For representation of Country name RosettaNet has adopted ISO 3166-3; 1999.

Refer to the following web page to get the latest version of the standard:

<http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/index.html>

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

For representation of a Countries subdivisions RosettaNet has adopted ISO 3166-3; 1999. Refer to the following web page to get the latest version of the standard:

<http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/index.html>

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

A code identifying the business context of a document.

Instance	Documentation
APM	Applied Promotions.
ARA	Authorization Request Approval.
CAR	Certificate of Analysis Response.
CBN	Product batch number of customer.
CCN	Customs clearance number.
CFA	Failure Analysis - Request document that will accompany the product providing characteristics of the component failure.
CIN	Commercial Invoice.
CNM	Traditional credit note or memo.
COA	Certificate of Analysis.
CON	In a virtual sourcing relationship, a third party trading partner is supplying a part to a customer on behalf of another company that has taken the order for the customer. In this case a Customer Order Number is associated to the request for material that is sent to the virtual trading partners.
COS	Consumption Notice.
COT	Contract.
CRN	Unique consumption reference number identifying the product

	consumption issue i.e. one-to-one relationship with physical flow.
DEM	Traditional debit note or memo.
DEN	Delivery Note.
DIN	Discontinuation Notice.
DOR	Delivery Order.
DRN	Drawing Number.
DRR	Design Registration Request.
ECO	Engineering Change Order - The proprietary unique identification number that represents an engineering change order.
EDD	Export Declaration Document.
EIR	Engineering Information Request.
EOL	End of Life.
FUO	Sales order or transfer order fulfilling demand out of a facility (outbound shipment).
IDD	Import Declaration Document.
INV	Invoice.
LID	Location Identifier. Data for on-site work that have to be done on the machine (associated with preventive maintenance order).
MEN	Master Event Number.
MID	Machine Identifier. Data for on-site work that have to be done on the machine (associated with preventive maintenance order).
MON	Model Number.
NTS	Notes.
OCL	The unique identifier assigned by the OEM for a warranty claim.
OGA	Other governmental agency issued document.
OPO	The unique identifier assigned by the OEM for a part order.
OPR	The unique identifier assigned by the OEM for a part return.
PCN	Product/Process Change.
PFA	Failure Analysis - Request document that will accompany the product providing characteristics of the product failure.
PII	Refers to previously issued invoice.
PLS	Unique number that identifies packing form prior to shipment.
POI	Purchase Order IN.
PON	Production order number for material release.
POO	Purchase Order OUT.
PRC	Product Catalog.
PSI	Refers to previously issued self-billing invoice.
PUO	Purchase Order.
QUO	Quote.
REC	Document identifying the receipt of materials or products into a facility against a purchase order or transfer order (inbound shipment).
REN	Release Number.
REO	Purchase order or transfer order replenishing inventory into a facility (inbound shipment).
REQ	Requisition.
RMA	Returned Material Authorization.
RPO	Purchase order for materials or product returned to and reworked by a supplier.
RTA	Remittance Advice - Remittance details.
SAO	Sales Order.
SBC	Credit Memo used in self-billing scenario.

SBD	Debit Memo used in self-billing scenario.
SBI	Invoice in self billing scenario.
SBN	Product batch number of supplier.
SCA	Similar to contracts - Contains the quantity of an article that is to be ordered from a vendor and the price for article or service that is to be procured.
SEN	Serial Number.
SEO	A document that gives a repair provider the necessary authorization to repair or upgrade a product either at the customer site or at the repair provider's site.
SHD	Shipping Document.
SNC	Shipset Number on Code List.
SPC	The unique identifier assigned by the ASP for a warranty claim.
SPN	Spec Number.
SPO	The unique identifier assigned by the ASP for a part order.
SPR	The unique identifier assigned by the ASP for a part return.
SPW	The unique identifier assigned by the ASP to reference a work order.
SRI	A document that contains the shipping reference number which allows the product to be tracked within the outsourced logistic providers network.
SWT	Switch Authorization.
TCS	Terms and Conditions.
TRO	Order which results in materials or products being moved from one facility to another (outbound shipment and inbound shipment).
WAB	Waybill.
WAC	Denotes a warranty claim.
WOO	Work Order.

#### 4.8.6 MimeTypeQualifier

The MIME type as defined by IANA.

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

Instance	Documentation
application/activemessage	[Shapiro]
application/andrew-inset	[Borenstein]
application/applefile	[Faltstrom]
application/atomicmail	[Borenstein]
application/batch-SMTP	[RFC2442]
application/beep+xml	[RFC3080]
application/cals-1840	[RFC1895]
application/cnrp+xml	[RFCCNRP]
application/commonground	[Glazer]
application/cpl+xml	
application/cybercash	[Eastlake]
application/dca-rft	[Campbell]
application/dec-dx	[Campbell]
application/dicom	[RFC3240]
application/dvcs	[RFC3029]
application/EDI-Consent	[RFC1767]

application/EDIFACT	[RFC1767]
application/EDI-X12	[RFC1767]
application/eshop	[Katz]
application/font-tdpfr	[RFC3073]
application/http	[RFC2616]
application/hyperstudio	[Domino]
application/iges	[Parks]
application/index	[RFC2652]
application/index.cmd	[RFC2652]
application/index.obj	[RFC2652]
application/index.response	[RFC2652]
application/index.vnd	[RFC2652]
application/iotp	[RFC2935]
application/ipp	[RFC2910]
application/isup	[RFC3204]
application/mac-binhex40	[Faltstrom]
application/macwriteii	[Lindner]
application/marc	[RFC2220]
application/mathematica	[Van Nostern]
application/msword	[Lindner]
application/news-message-id	[RFC1036,Spencer]
application/news-transmission	[RFC1036, Spencer]
application/ocsp-request	[RFC2560]
application/ocsp-response	[RFC2560]
application/octet-stream	[RFC2045,RFC2046]
application/oda	[RFC2045,RFC2046]
application/ogg	[RFC-walleij-ogg-mediatype-08.txt]
application/parityfec	[RFC3009]
application/pdf	[Lindner]
application/pgp-encrypted	[RFC3156]
application/pgp-keys	[RFC3156]
application/pgp-signature	[RFC3156]
application/pkcs10	[RFC2311]
application/pkcs7-mime	[RFC2311]
application/pkcs7-signature	[RFC2311]
application/pkix-cert	[RFC2585]
application/pkixcmp	[RFC2510]
application/pkix-crl	[RFC2585]
application/postscript	[RFC2045,RFC2046]
application/prs.alvestrand.titrax-sheet	[Alvestrand]
application/prs.cww	[Rungchavalnont]
application/prs.nprend	[Doggett]
application/prs.plucker	[Janssen]
application/qsig	[RFC3204]
application/reginfo+xml	[RFC-ietf-sipping-reg-event-00.txt]
application/remote-printing	[RFC1486,Rose]
application/riscos	[Smith]
application/rtf	[Lindner]
application/sdp	[RFC2327]
application/set-payment	[Korver]

application/set-payment-initiation	[Korver]
application/set-registration	[Korver]
application/set-registration-initiation	[Korver]
application/sgml	[RFC1874]
application/sgml-open-catalog	[Grosso]
application/sieve	[RFC3028]
application/slate	[Crowley]
application/timestamp-query	[RFC3161]
application/timestamp-reply	[RFC3161]
application/tve-trigger	[Welsh]
application/vemmi	[RFC2122]
application/vnd.3gpp.pic-bw-large	[Meredith]
application/vnd.3gpp.pic-bw-small	[Meredith]
application/vnd.3gpp.pic-bw-var	[Meredith]
application/vnd.3gpp.sms	[Meredith]
application/vnd.3M.Post-it-Notes	[O'Brien]
application/vnd.accpac.simply.aso	[Leow]
application/vnd.accpac.simply.imp	[Leow]
application/vnd.acucobol	[Lubin]
application/vnd.acucorp	[Lubin]
application/vnd.adobe.xfdf	[Perelman]
application/vnd.aether.imp	[Moskowitz]
application/vnd.amiga.ami	[Blumberg]
application/vnd.anser-web-certificate-issue-initiation	[Mori]
application/vnd.anser-web-funds-transfer-initiation	[Mori]
application/vnd.audiograph	[Slusanschi]
application/vnd.blueice.multipass	[Holmstrom]
application/vnd.bmi	[Gotoh]
application/vnd.businessobjects	[Imoucha]
application/vnd.canon-cpdl	[Muto]
application/vnd.canon-lips	[Muto]
application/vnd.cinderella	[Kortenkamp]
application/vnd.claymore	[Simpson]
application/vnd.commerce-battelle	[Applebaum]
application/vnd.commonspace	[Chandhok]
application/vnd.contact.cmsg	[Patz]
application/vnd.cosmocaller	[Dellutri]
application/vnd.ctc-posml	[Kohlhepp]
application/vnd.cups-postscript	[Sweet]
application/vnd.cups-raster	[Sweet]
application/vnd.cups-raw	[Sweet]
application/vnd.curl	[Byrnes]
application/vnd.cybank	[Helmee]
application/vnd.data-vision.rdz	[Fields]
application/vnd.dna	[Searcy]
application/vnd.dpgraph	[Parker]
application/vnd.dreamfactory	[Appleton]
application/vnd.dxr	[Duffy]

application/vnd.ecdis-update	[Buettgenbach]
application/vnd.ecowin.chart	[Olsson]
application/vnd.ecowin.filerequest	[Olsson]
application/vnd.ecowin.fileupdate	[Olsson]
application/vnd.ecowin.series	[Olsson]
application/vnd.ecowin.seriesrequest	[Olsson]
application/vnd.ecowin.seriesupdate	[Olsson]
application/vnd.enliven	[Santinelli]
application/vnd.epson.esf	[Hoshina]
application/vnd.epson.msf	[Hoshina]
application/vnd.epson.quickanime	[Gu]
application/vnd.epson.salt	[Nagatomo]
application/vnd.epson.ssf	[Hoshina]
application/vnd.ericsson.quickcall	[Tidwell]
application/vnd.eudora.data	[Resnick]
application/vnd.fdf	[Zilles]
application/vnd.ffsns	[Holstage]
application/vnd.FloGraphIt	[Floersch]
application/vnd.framemaker	[Wexler]
application/vnd.fsc.weblaunch	[D.Smith]
application/vnd.fujitsu.oasys	[Togashi]
application/vnd.fujitsu.oasys2	[Togashi]
application/vnd.fujitsu.oasys3	[Okudaira]
application/vnd.fujitsu.oasysgp	[Sugimoto]
application/vnd.fujitsu.oasysprs	[Ogita]
application/vnd.fujixerox.ddd	[Onda]
application/vnd.fujixerox.docuworks	[Taguchi]
application/vnd.fujixerox.docuworks.binder	[Matsumoto]
application/vnd.fut-misnet	[Pruulmann]
application/vnd.grafeq	[Tupper]
application/vnd.groove-account	[Joseph]
application/vnd.groove-help	[Joseph]
application/vnd.groove-identity-message	[Joseph]
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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]
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application/vnd.ibm.electronic-media	[Tantlinger]
application/vnd.ibm.Minipay	[Herzberg]
application/vnd.ibm.modcap	[Hohensee]

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application/vnd.intertrust.nncp	[Tomasello]
application/vnd.intu.qbo	[Scratchley]
application/vnd.intu.qfx	[Scratchley]
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application/vnd.kde.kformula	[Faure]
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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]
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application/vnd.lotus-1-2-3	[Wattenberger]
application/vnd.lotus-approach	[Wattenberger]
application/vnd.lotus-freelance	[Wattenberger]
application/vnd.lotus-notes	[Laramie]
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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]
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application/vnd.Mobius.MBK	[Devasia]
application/vnd.Mobius.MQY	[Devasia]
application/vnd.Mobius.MSL	[Kabayama]
application/vnd.Mobius.PLC	[Kabayama]
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application/vnd.mophun.certificate	[Wennerstrom]
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application/vnd.motorola.flexsuite.kmr	[Patton]
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application/vnd.msimg	[Borcherding]
application/vnd.ms-lrm	[Ledoux]
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application/vnd.music-niff	[Butler]
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application/vnd.powerbuilder6-s	[Guy]
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application/vnd.powerbuilder7-s	[Shilts]
application/vnd.previewsystems.box	[Smolgovsky]
application/vnd.publishare-delta-tree	[Ben-Kiki]
application/vnd.pvi.ptid1	[Lamb]

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application/vnd.seemail	[Webb]
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application/vnd.sss-ntf	[Bruno]
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application/vnd.svd	[Becker]
application/vnd.swiftview-ics	[Widener]
application/vnd.triscape.mxs	[Simonoff]
application/vnd.trueapp	[Hepler]
application/vnd.truedoc	[Chase]
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application/vnd.uplanet.bearer-choice	[Martin]
application/vnd.uplanet.bearer-choice-wbxml	[Martin]
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application/vnd.wap.wmlc	[Stark]
application/vnd.wap.wmlscriptc	[Stark]
application/vnd.webturbo	[Rehem]

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application/whoispp-response	[RFC2958]
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application/wordperfect5.1	[Lindner]
application/x400-bp	[RFC1494]
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audio/AMR	[RFC3267]
audio/AMR-WB	[RFC3267]
audio/basic	[RFC2045,RFC2046]
audio/CN	[RFC3389]
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audio/EVRC0	[RFC-ietf-avt-evrc-smv-03.txt]
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audio/G726-24	
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audio/G728	
audio/G729	
audio/G729D	
audio/G729E	
audio/GSM	
audio/GSM-EFR	
audio/L16	[RFC2586]
audio/L20	[RFC3190]
audio/L24	[RFC3190]
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audio/vnd.lucent.voice	[Vaudreuil]
audio/vnd.nortel.vbk	[Parsons]
audio/vnd.nuera.ecelp4800	[Fox]
audio/vnd.nuera.ecelp7470	[Fox]
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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]
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image/tiff-fx	[RFC3250] Tag Image File Format Fax eXtended
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image/vnd.svf	[Moline]

image/vnd.wap.wbmp	[Stark]
image/vnd.xiff	[S.Martin]
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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]
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multipart/encrypted	[RFC1847]
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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]
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text/plain	[RFC2646,RFC2046]
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text/sgml	[RFC1874]
text/t140	[RFC2793]

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video/CelB	
video/DV	[RFC3189]
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video/H263-2000	
video/JPEG	
video/MP1S	
video/MP2P	
video/MP2T	
video/MP4V-ES	[RFC3016]
video/mpeg	[RFC2045,RFC2046]
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video/vnd.objectvideo	[Clark]
video/vnd.vivo	[Wolfe]

### 4.8.7 UnitOfMeasure

Code identifying a product unit of measure.

Instance	Documentation
10P	10-pack.
1BF	100 Board Feet.
1FC	20 Foot Container.
1GR	Gram/Cubic Centimeter.
1GT	10,000 Gallon Tankcar.
1KB	25 Kilogram Bulk Bag.
1KD	10 Kilogram Drum.
1KP	1000-pack.
1M2	1/Square Meter (1/M2).
1PA	20-Pack.
1PB	50 Pound Bag.
1PD	100 Pound Drum.
1PM	1/minute (1/min).
22S	Square Millimeter/Second (mm <sup>2</sup> /s).
2FC	40 Foot Container.
2GR	Gram/square meter.
2GT	20,000 Gallon Tankcar.
2KB	300 Kilogram Bulk Bag.
2KD	15 Kilogram Drum.
2PA	100-Pack.
3GR	Grams Per 100 Centimeters.
3KB	500 Kilogram Bulk Bag.
3KD	55 Gallon Drum.
3MH	Cubic Millimeters/Hour (mm <sup>3</sup> /hour).
4GR	Grams Per 100 Grams.
4KD	115 Kilogram Drum.
50P	50-pack.
5GR	Grams Per Cubic Centimeter.
6GR	Grams Per Square Centimeter.
7GR	Grams Per Square Meter.
ABC	Absorbance per centimeter (Absorbance per cm).
ABU	Absorbance per Unit (absorbance per unit).
ACC	Atoms per Cubic Centimeters (atoms per cu cm).
ACR	Acre.
ACS	Acidic strength/concentration.
ACT	Actual Pounds.
ACU	Activity unit (Activ.unit).
ALU	Aluminum Pounds Only.
AM1	Ampoule.
AMN	Ångstroms/Minute (Ångst/min).
AMP	Ampere.
ANG	Angstrom (A).
APB	Atomic Parts per Billion (atomic ppb).
APG	API Specific Gravity (API Grav).
APM	Atomic Parts per Million (atomic ppm).
APT	Atomic Parts per Trillion (atomic ppt).

APU	APHA Units (apha).
ASC	Atoms per Square Centimeters (atoms per sq cm).
ASM	Angstrom.
ASY	Assembly (ASY).
ATG	Atmospheric gauge.
ATM	Atmosphere absolute.
ATP	Atomic %.
ATY	Activity.
BAB	Base Box.
BAC	Batch.
BAE	Bale.
BAG	Bag.
BAL	Ball.
BAN	Band.
BAP	Batting Pound.
BAR	Bar.
BAS	Basket.
BAT	Batt.
BAW	Base Weight.
BEA	Beam.
BEC	Becquerel/kilogram.
BEL	Belt.
BHP	Brake HP.
BIL	Billet.
BIN	Bin.
BIT	Bit.
BKC	Bulk Car Load.
BLN	Balance.
BLO	Block.
BOA	Board.
BOF	Board Feet.
BOL	Bolt.
BOT	Bottle.
BOX	Box.
BRB	Bar absolute.
BRD	Barrels Per Day.
BRE	Barrel.
BRI	Barrel (Imperial).
BRM	Barrels Per Minute.
BTF	British Thermal Units (BTUs) Per Cubic Foot.
BTP	British Thermal Units (BTUs) Per Pound.
BTU	British Thermal Unit (BTU).
BUB	Bubbler.
BUC	Bucket.
BUD	Bushel, Dry Imperial.
BUK	Bunks.
BUL	Bulk.
BUN	Bundle.
BUP	Bulk Pack.
BUS	Bushel.

BYT	Bytes.
C0W	Counts per Wafer (Counts/wf).
C3M	Cubic centimeter per minute (cm <sup>3</sup> /minute).
CAA	Carat.
CAB	Carboy.
CAC	Card.
CAD	Candela.
CAG	Cartridge.
CAK	Cask.
CAL	Calorie.
CAN	Can.
CAO	Carload.
CAR	Car.
CAS	Case.
CAT	Canister.
CAW	Catchweight.
CC2	Centipoises per hour per square centimeters (cps per hr per sq cm).
CCC	Counts per Square Centimeters (Counts/cm <sup>2</sup> ).
CD3	Cubic decimeter (Cubic dec).
CEL	Cell.
CEM	Centimeter.
CEP	Centipoises (CPS).
CET	Centiliter.
CGM	Centigram.
CHA	Chains (Land Survey).
CHE	Chest.
CM2	Square centimeter (cm <sup>2</sup> ).
CMH	Centimeter/hour (cm/h).
CML	Colony/Milliliter (col/ml).
CMS	Centimeter/Second (cm/s).
CNN	Connector.
COG	Coil Group.
COI	Coil.
COL	Coulomb.
COM	Composite Product Pounds (Total Weight).
CON	Cone.
COT	Container.
COV	Cover.
CRA	Crate.
CRT	Carton.
CSE	Cassette.
CST	Centistokes.
CUB	Cubic centimeter.
CUC	Cubic centimeter/second.
CUF	Cubic Foot.
CUI	Cubic inch.
CUM	Cubic meter.
CUP	Cup.
CUY	Cubic yard.
CYC	Cycles.

CYL	Cylinder.
DAL	Dalton units (dalton).
DAY	Day.
DCB	Decibels.
DCG	Decagram.
DCL	Deciliter.
DCM	Defects per Square Centimeters (Defects/cm <sup>2</sup> ).
DE1	Defects.
DE2	Degrees in Angles.
DE3	Degree.
DEA	Deal.
DEC	Decimeter.
DEF	Degree Fahrenheit.
DEG	Degree Celsius.
DEP	Dep. Factor.
DFW	Defects per Wafer (Defects/Wafer).
DGM	Decigram.
DIE	Die.
DIL	Display.
DIP	Dispenser.
DNC	Dynes per centimeter (Dynes per cm).
DOZ	Dozen.
DPM	Parts per Million per Day (ppm per day).
DRA	Dram.
DRU	Drum.
DRY	Dry Pounds.
EAC	Each.
ELE	Electrical Capacitance.
EML	Enzyme Units/Milliliter (Enzyme/ml).
ENU	Enzyme Units (Enzy.Units).
EQ2	Milliequivalent per 30 Kg (mequ/30Kg).
EQG	Milliequivalent per gram (milliequivalent per g).
EQK	Milliequivalent per Kilogram (mequ/Kg).
EQM	Milliequivalent per Millimeter (milliequivalent per mm).
FAR	Farads.
FFA	Femtofarad.
FIN	1/32 inch.
FLO	Fluid Ounce.
FOI	Fluid Ounce (Imperial).
FOO	Foot.
FOU	Fluid Ounce US.
FPS	Feet per second (Feet/s).
FRH	Sales FT3 at 60°F per hour (FTR/hour).
FRM	Sales FT3 at 60°F per minute (FTR/min).
FTR	Sales FT3 at 60°F, 14.7 psia (SFT3_60F_S).
FTS	Sales FT3 at 70°F, 14.7 psia (SFT3_70F_S).
FTT	1000 FT3 at 60°F, 14.7 psia (KFT3_60F_S).
FTU	1000 FT3 at 70°F, 14.7 psia (KFT3_70F_S).
FUU	Fuel Usage (Gallons).
G2S	Gram square per second (g <sup>2</sup> /s).

GAI	Gram act. ingr. (g act.ing).
GAL	Gallon.
GAS	Gage Systems.
GAU	Gram Gold.
GCL	Gardner Color.
GEG	Keim/Gramm (keim/g).
GEQ	Gram per Equivalent (g/Eq).
GGM	Gram per gram mole (g/gmole).
GHG	Gram per Hectogram (g/hg).
GIH	Gigahertz.
GIJ	Gigajoules.
GIL	Gill (Imperial).
GM4	Gram per 100 Milliliters (g/100ml).
GME	Gram per Mole Equivalent (g/mole Eq).
GMO	Gram per Mol (g/mol).
GNL	Gram act.Ingrd per Liter (gai/liter).
GOB	Gross Barrels.
GOG	Gross Gallons.
GOH	Gigaohm (GOhm).
GOK	Gross Kilogram.
GOT	Gross Ton.
GOY	Gross Yard.
GPN	US Gallon per minute (gpm US).
GRA	Gram.
GRG	Great Gross (Dozen Gross).
GRK	Grams Per Kilogram.
GRL	Grams Per Liter.
GRM	Grams Per Milliliter.
GRN	Grain.
GRO	Gross.
GRP	Group.
HAG	Half Gallon.
HAH	Half Hour.
HAL	Half Liter.
HAN	Hank.
HEA	Heat lots.
HEC	Hectare.
HEL	Hectoliter.
HEP	Hectopascal.
HER	Hertz.
HGM	Hegman.
HNY	Henry.
HOS	Hours.
HOU	Hour.
HUA	Hundredth of a Carat.
HUB	Hundred Boxes.
HUC	Hundred Count.
HUS	Hundred Sheets.
HZM	Hertz per Minute (Hertz per min).
IH2	Inches of Water Gauge (inH2O-g).

IHG	Inches of Mercury Gauge (inHg-g).
ILB	Inch pounds (in.lb).
IMG	Imperial Gallons.
INC	Inch.
IPS	Inch per second (inch / sec).
JAR	Jar.
JKG	Joule/Kilogram (J/kg).
JMO	Joule/Mol (J/mol).
JOI	Joint.
JOU	Joule.
KAI	Kilogram act. Ingrd. (kg ac.ing.).
KAK	kg act.ingrd. / kg (kai/kg).
KBY	Kilobyte.
KCM	Kilogram per cm <sup>2</sup> gauge (kg/cm <sup>2</sup> -g).
KD3	Kilogram per Cubic Decimeter (kg/dm <sup>3</sup> ).
KEG	Keg.
KEL	Kelvin.
KGE	Container Fill Weight in Kg/Ea.
KGH	Kilogram per Hour (kg/h).
KGL	Kilograms per Liter (kg/L).
KGM	Kilogram/Mol (kg/mol).
KGS	Kilogram per Second (kg/s).
KHO	Kilometer/hour.
KIC	Kilogram per cubic meter.
KIE	Kilometer.
KIG	Kilogram.
KIH	Kilohertz.
KIK	Kilobecquerel/Kilogram.
KIL	Kiloampere.
KIM	Kilogram/square meter.
KIO	Kiloohm.
KIS	Kilogramm pro Sekunde.
KIT	Kit.
KIV	Kilovolt.
KIW	Kilowatt.
KJK	Kilojoule per kilogram (KJ/kg).
KJL	Kilojoule.
KJM	Kilojoule/Mol (KJ/mol).
KKG	Kilogram/Kilogram.
KMK	Cubic meter/Cubic meter (m <sup>3</sup> /m <sup>3</sup> ).
KMN	Kelvin per Minute (K/min).
KMS	Kelvin per Second (K/s).
KNM	Kilonewton per square meter (kN/m <sup>2</sup> ).
KNT	Kilonewton (ND).
KPA	Kilopascal (kPa).
KRU	Kreb Unit.
KTN	Kilotonne (kt).
KUD	Kubikdezimeter.
KUM	Kubikmeter pro Sekunde.
KVA	Kilovoltampere (kVA).

KWH	Kilowatt-hour.
KWR	Kilovolt ampere reactive hours (KVAH reac.).
LBH	US Pound per Hour (lb/hour).
LBM	US Pound per minute (lb/min).
LG2	Liter per Gram per Centimeter (l/g/cm).
LGC	Liters per Gram-Centimeters (l/g-cm).
LHK	Liter per 100 km (l/100 km).
LIF	Lifts.
LIM	Link.
LIQ	Liquid Pounds.
LIT	Liter.
LMI	Liter per Minute (l/min).
LMS	Liter per Molsecond (l/mol.s).
LOA	Load.
LOT	Lot.
LPD	Light Point Defects per Wafer (LPD/Wafer).
LPH	Liter per hour (l/hr).
LUG	Lug.
M15	Micron per 15 Square Millimeters (mu per 15 sq mm).
M20	Micron per 20 Square Millimeters (mu per 20 sq mm).
M25	Micron per 25 Square Millimeters (mu per 25 sq mm).
M26	Micron per 26 by 8 Millimeters (mu per 26 by 8 mm).
M2G	Meters square per gram (m sq per gram).
M3A	Sales m3 at 15 °C, 1 atmos (Sm3_15C_S).
M3B	Sales m3 at 21 °C, 1 atmos (Sm3_21C_S).
M3C	Sales m3 at 10 °C, 1 atmos (Sm3_10C_S).
M3D	Sales m3 at 43 °C, 1 bar (Sm3_43C_D).
M3E	Sales m3 at 9 °C, 1 bar (Sm3_9C_D).
M3F	Sales m3 at 15 °C, 1 bar (Sm3_15C_D).
M3G	Sales m3 at 27 °C, 1 atmos (Sm3_27C_S).
M3H	Cubic Meter per Hour (m3/h).
M3J	Sales m3 at 35 °C, 1 atmos (Sm3_35C_S).
M3K	Cubic Meter/Kilogram (m3/Kg).
M3M	Milliliter per Cubic Meter (ml/m3).
M3N	Mol per Cubic Meter (Mol/m3).
MAM	Milliamps/mm.
MAT	Mat.
MBY	Megabyte.
MBZ	Meterbar per Second (m.bar/s).
MC2	Millisecond per Centimeter (mS/cm).
MCA	Microampere (µA).
MCG	Microgram.
MCH	Micromhos (µmhos).
MCK	Microcuries per Kilogram (µci/kg).
MCL	Microcuries per Gaseous Liter (µc/l).
MCM	Milligrams Per Cubic Meter.
MCN	Metal Can.
MCP	Manifolded Cylinder Pack.
MCR	Micron.
MEG	Megagram.

MEH	Megahertz.
MEJ	Megajoule (MJ).
MEP	Megapascal.
MET	Meter.
MEW	Megawatt.
MFD	Microfarad ( $\mu\text{F}$ ).
MGA	Milligram per Amp (mg per amp).
MGF	Milligram per Square Centimeter (mg/cm <sup>2</sup> ).
MGG	Milligram per Gram (mg/g).
MGL	Microgram per Liter ( $\mu\text{g/l}$ ).
MGM	Milligram.
MGO	Megohm (M $\Omega$ ).
MGR	Micrograms per Gram ( $\mu\text{g/g}$ ).
MGS	Milligram per Second (mg per sec).
MH1	Millimeter per Hour (mm/h).
MHC	Micromhos per Centimeter ( $\mu\text{mhos/cm}$ ).
MHR	Meter per Hour (m/h).
MHV	Megavolt.
MIB	Million BTU's.
MIC	Mikrogram/cubic meter.
MIG	Micrograms Per Cubic Meter.
MIL	Mile.
MIM	Micrometer.
MIN	Minute.
MIP	Millipascal seconds.
MIS	Microsecond.
MIT	Miter.
MIV	Millivolt.
MIW	Milliwatt.
MJM	Wobbe Number (MJ/m <sup>3</sup> ).
MJO	Millijoule.
MKG	Milligrams of KOH per Gram (mg KOH per g).
MKL	Millimol per Gram (mmol/g).
ML1	Milliliter per Liter (ml/l).
ML2	Milliliter per Liter (ml/l).
ML3	Mol per Liter (Mol/Liter).
ML4	Millimol per Liter (Millimol/l).
MLA	Milliampere.
MLB	Millibar.
MLC	Milligram/cubic meter.
MLG	Milliliter per Gallon (ml per gal).
MLI	Milliliter.
MLK	Milligram/kilogram.
MLL	Milligram/Liter.
MLM	Mole per Mole (mole/mole).
MLP	Mole Percent (% mole).
MLR	Microliter ( $\mu\text{l}$ ).
MLS	Miles.
MLW	Milliliter act. Ingr. (ml act.in.).
MM3	Cubic Millimeter (mm <sup>3</sup> ).

MMA	Millimeter per Year (mm/a).
MME	Millimeter.
MMG	Millimol/gram (mmol/g).
MMH	Millimeter H2O.
MMK	Millimol/kilogram.
MMM	0.000001 meter (1 millionth of a meter). (Micrometer/Micron).
MMN	Meter per Minute (m/min).
MMO	Millimol.
MMS	Millimeter per Second (mm/s).
MNM	Millinewton per meter (mN/m).
MNT	Meganewton (MN).
MOK	Mol/kilogram.
MOL	Mol.
MON	Month.
MPB	Mass parts per billion (ppb(m)).
MPG	Miles per Gallon (US) (Mi/Gal(US)).
MPH	Megagrams Per Hour.
MPM	Mass Parts per Million (ppm(m)).
MPT	Mass Parts per Trillion (ppt(m)).
MPZ	Meterpascal per Second (m.Pa/s).
MQG	Mircoequivalent per Gram (microeq/g).
MRF	Millifarad (mF).
MS1	MilliSiemen per Centimeter (mS/cm).
MS2	Meter per Second Squared (m/s <sup>2</sup> ).
MS3	Microsiemens per Centimeter ( $\mu$ S/cm).
MSC	Millisecond.
MSM	Milligrams Per Square Meter.
MTA	Millitesla.
MTQ	Meter pro Quadratsekunde.
MTR	Meter (m).
MTS	Meters per second.
MUL	Multichip - When 2 or more dies (chips) are merged into one package.
MVA	Megavoltampere (MVA).
MVS	Millivolts.
MVT	Millivolt.
MWH	Megawatt Hours (mwh).
MWR	Megavolt Ampere Reactive Hours (MVAH reac.).
MWT	Molecular Weight (mW).
MYS	Micro Siemens (mic. Siem.).
N2M	Newton/Square millimeter (N/mm <sup>2</sup> ).
NAA	Nanoamps.
NAM	Nanometer.
NAS	Nanosecond.
NEB	Net Barrels.
NEG	Net Gallons.
NEI	Net Imperial Gallons.
NEL	Net Liters.
NEW	Newton.
NM2	Newton per Square Meter (N/m <sup>2</sup> ).
NM3	Normal m <sup>3</sup> at 0°C, 1 atmos (Normal m <sup>3</sup> ).

NMH	Newton per Hour (N/h).
NMM	Newton per Millimeter (N/mm).
NMR	Normal m <sup>3</sup> per Hour (Nm <sup>3</sup> /h).
NOL	Normality.
NPK	Nowpac Container (Nowpac).
NRG	Bar Gauge.
NRU	Nanofarad (nF).
NTU	Nephelometric Turbidity Units (NTU).
NTY	Equivalents per Liter (equ/l).
NUM	Numbers.
NWM	Newton per Meter (N/m).
NXM	Newton per 25 mm (N/25mm).
O2P	Percent Oxygen (% Oxygen).
OCT	Ohm/ct.
OHC	Ohm-Centimeter (ohm cm).
OHM	Ohm.
OMM	Ohm/mm.
ONE	One.
OPH	Operating hour (Oper. Hour).
OSQ	Ohm/sq.
OTP	One Thousand Pieces.
OUN	Ounce.
OVI	Ohm/via.
OZG	Ounce per Gallon (oz per gal).
PAC	Parcel.
PAD	Pad.
PAG	Package.
PAI	Pail.
PAK	Pack (PAK).
PAL	Pallet.
PAN	Panel.
PAR	Pair.
PAS	Pascal.
PAT	Packet.
PBA	PPBA Silicon (ppba Si).
PBW	Parts Per Billion by Weight (ppbw).
PC2	Parts per Square Centimeters (part per sq cm).
PCA	Percent Active (% Active).
PCL	Picocuries per Liter (pCi/l).
PEC	Percent.
PEG	Percentage.
PEH	Percent Per 1000 Hours.
PEN	Pennyweight.
PER	Per Hundred Pieces.
PEW	Percent Weight.
PF3	Per Cubic Foot (per cu ft).
PF4	Particles per Cubic Feet (particles per cu ft).
PFA	Percent Failed Area (Failed Area %).
PFR	Picofarad.
PH	PH Factor (pH).

PI2	Parts per Square Inch (part per sq in).
PID	Pint U.S. Dry.
PIE	Piece.
PIL	Pint - US liquid.
PL1	Parts per Liter (parts per l).
PL2	Parts per Milliliter (parts per ml).
PL3	Part per Millilitre (Part/ml).
PLA	Plate.
PLI	Pounds per Linear Inch (lb/Lin. In).
PLL	Pallet (Lift).
PLR	Per Liter.
PLT	Palette.
PLU	Pallet/Unit Load.
PMA	Percent Mass (%(m)).
PMI	Per Mille (%0).
PML	Particles per Milliliter (particles/mL).
PMO	Per Mille mass (%0(mass)).
PMP	Parts Per Million Platinum (ppm Pt).
PMV	Parts Per Million (weight/Vol) (ppm (w/v)).
PMW	Parts Per Million by Weight (ppmw).
PNJ	Particles per Injection (particles per inj).
PNT	Points.
POF	Pounds Per Foot.
POG	Pounds Per Gallon.
PON	Pound.
POP	Pounds Per Piece of Product.
POR	Pores.
POS	Pounds Per 1000 Square Feet.
POT	Pounds Per Thousand.
PP3	Parts per Million mole (ppm mole).
PP4	Parts per Billion Mole (ppb mole).
PPB	Parts per billion (US).
PPF	Parts per Ft3 (Parts/Ft3).
PPH	Parts Per Hundred (pph).
PPM	Parts per million.
PPP	Pounds Per Pound of Product.
PPT	Parts per Trillion (ppt).
PRS	Number of Persons.
PSA	Pounds per Square Inch Absolute.
PSC	Picosecond.
PSG	Pound per Square Inch Gauge (psi gauge).
PSI	PSI Unit (PSI).
PSS	Pascal second.
PSV	Poise.
PTL	Particles per Liter (Part/Liter).
PWF	Particles per Wafer (particles/wf).
QML	Kilomol (kmol).
QUA	Quart - US liquid.
RAC	Rack.
REA	Ream of 500 Sheets.

REE	Reel.
RIN	Ring.
RLU	Relative Light Unit (RLU).
ROD	Rod.
ROL	Roll.
RPM	Revolutions per Minute (Revs/min).
SAC	Sack.
SBB	Super Bulk Bag.
SCL	Scales.
SEC	Second.
SET	Set.
SHE	Sheet.
SHI	Shipment.
SHM	Sheet - Metric measure.
SHO	Shot.
SID	Disk (Disc).
SIE	Siemens per Meter (Siemens/m).
SKE	Skein.
SKI	Skid.
SLE	Sleeve.
SLI	Slip Sheet.
SMI	Square mile.
SMM	Square millimeter.
SPO	Spool.
SQF	Square foot.
SQI	Square inch.
SQK	Square kilometer.
SQM	Square meter.
SQS	Square meter/second.
SQU	Square.
SQY	Square Yard.
STI	Stick.
STM	Statute Mile.
STP	Steps.
STR	Strip.
STU	Stabilizer Units (SU).
SVU	Say Bolt Viscosity Units (SVU).
TAB	Tablet.
TAN	Tank.
TAR	Target pieces (target).
TAT	Tank Truck.
TES	Tesla.
THO	Thousand.
TM3	1/Cubic Meter (1/m <sup>3</sup> ).
TNN	Tonne.
TOM	Ton per Cubic Meter (t/m <sup>3</sup> ).
TON	Ton.
TOR	Torr.
TOT	Tote.
TPT	Pass Test (Pass).

TRA	Train.
TRF	Track Foot.
TRL	Trailer.
TRO	Troy.
TRU	Truckload.
TRY	Tray.
TRZ	Troy OZ.
TUB	Tube.
ULU	Unitless Unit of Measure.
UNT	Unit.
USG	US gallon.
USP	US pound.
UST	US ton.
VAL	VO mat. (Value).
VAP	Voltampere (VA).
VHN	Vickers Micro-Hardness (VHN10).
VIA	Vial.
VMP	Molar %.
VOL	Volt.
VPB	Volume Parts per Billion (ppb(V)).
VPC	Percent Volume (%(V)).
VPM	Volume Parts per Million (ppm(V)).
VPR	Per Mille Volume (%O(V)).
VPT	Volume parts per Trillion (ppt(V)).
VTA	Volts (Alternating Current).
VTD	Volts (Direct Current).
VTM	Volts Per Meter.
WAF	Wafer.
WAR	Watt.
WEE	Week.
WPT	Parts Per Trillion by Weight (pptw).
WRA	Wrap.
YAR	Yard.
YEA	Year.

### 4.8.8 ProcessRoleIdentifier

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

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

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

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

## 5. System Structure

### 5.1 BusinessProcessIdentifier

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

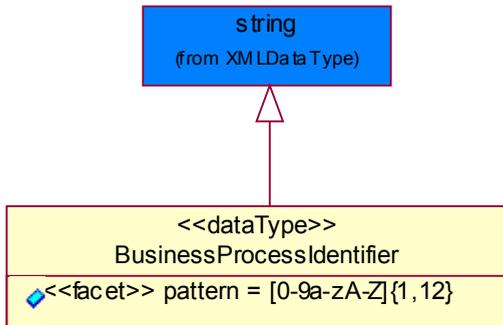


Figure 5-1 BusinessProcessIdentifier

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

### 5.2 BusinessServiceInformation

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

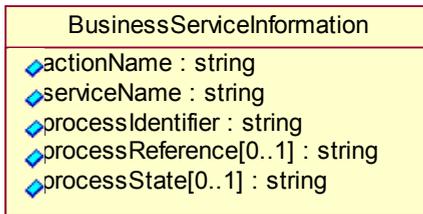
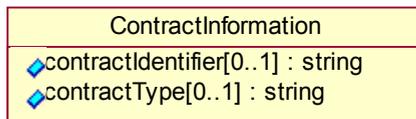


Figure 5-2 BusinessServiceInformation

Attribute	Type	Documentation
actionName	string	The name of Action. For RosettaNet usually any of Request/Confirm/Notify/Query/Response.
serviceName	string	The name of the Business Activity with the "Request/Confirm" part removed. E.g., for the Activity "Request Purchase Order"==> "Purchase Order".
processIdentifier	string	The name of the PIP e.g. Notify of Forecast Reply.
processReference[0..1]	string	The URN for the PIP that includes Cluster/Segment/Process pattern used to identify the interface process (such as PIP3A4)
processState[0..1]	string	The business process (or service) state of the sender of a document. When a service receives this document, the receiver may use the state as a precondition.

### 5.3 ContractInformation

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

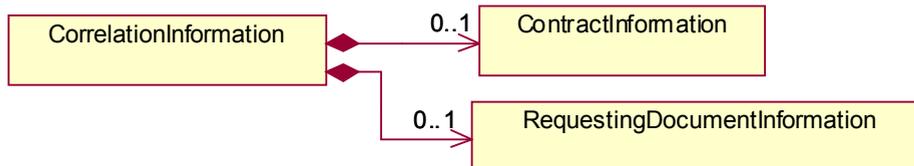


**Figure 5-3 ContractInformation**

Attribute	Type	Documentation
contractIdentifier[0..1]	string	Unique identification of a contract between the Sender and the Receiver
contractType[0..1]	string	The type of the contract: an attribute describing the type of the 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.
RequestingDocumentInformation	0..1	RequestingDocumentInformation	A block of information used to correlate a requesting document to a responding document in an executing choreography.

## 5.5 DocumentHeader

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

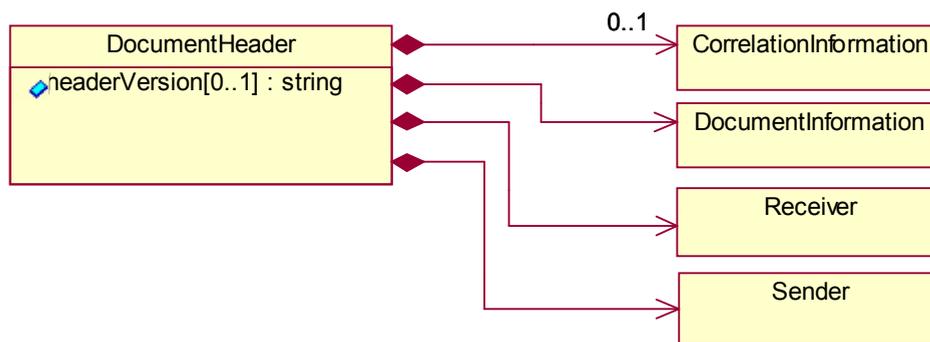


Figure 5-5 DocumentHeader

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

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

## 5.6 DocumentIdentification

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

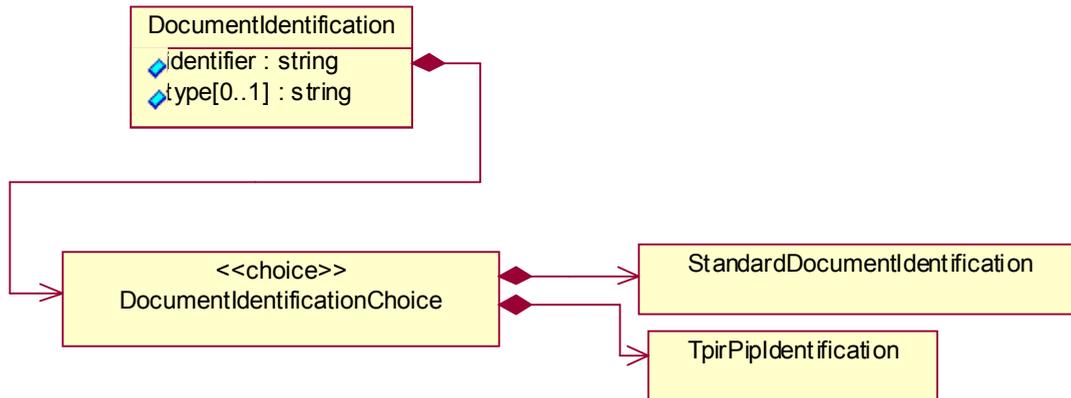


Figure 5-6 DocumentIdentification

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

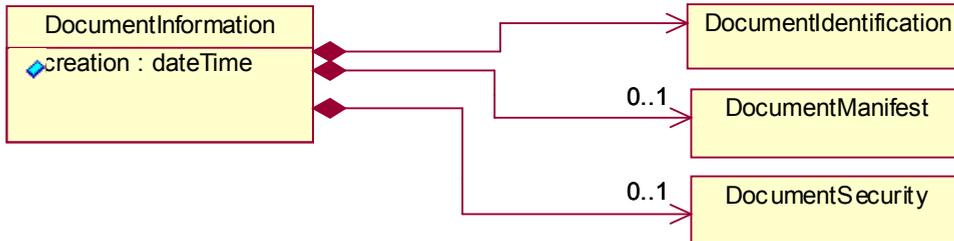
Composition	Cardinality	Type	Documentation
DocumentIdentificationChoice	1	DocumentIdentificationChoice	

## 5.7 DocumentIdentificationChoice

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

## 5.8 DocumentInformation

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



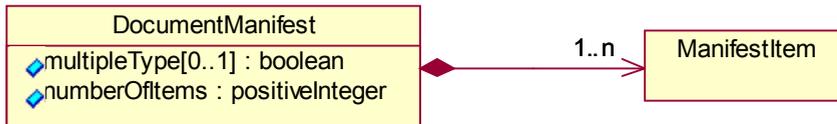
**Figure 5-7 DocumentInformation**

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

Composition	Cardinality	Type	Documentation
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.



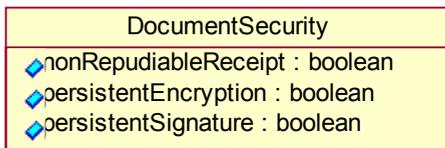
**Figure 5-8 DocumentManifest**

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

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

## 5.10 DocumentSecurity

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

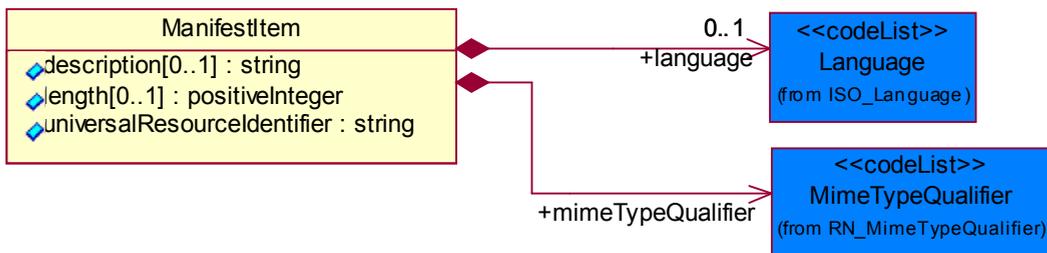


**Figure 5-9 DocumentSecurity**

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

## 5.11 ManifestItem

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



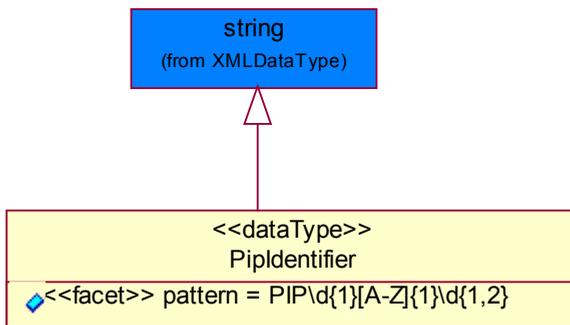
**Figure 5-10 ManifestItem**

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

Composition	Cardinality	Type	Documentation
mimeTypeQualifier	1	MimeTypeQualifier	The MIME type as defined by IANA. Please refer to <a href="http://www.iana.org/assignments/media-types/">http://www.iana.org/assignments/media-types/</a> 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: <a href="http://www.loc.gov/standards/iso639-2/iso639jac.html">http://www.loc.gov/standards/iso639-2/iso639jac.html</a> . If you need more information about the ISO standard please contact ISO for more details.

## 5.12 PipIdentifier

PIP Identification.[ i.e. PIP3A4]

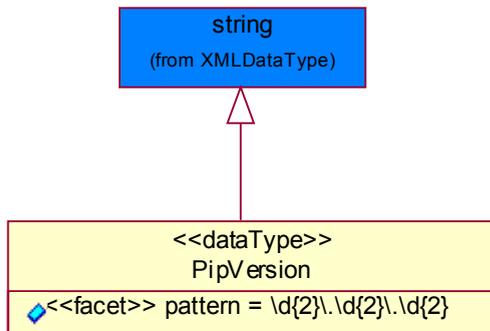


**Figure 5-11 PipIdentifier**

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

## 5.13 PipVersion

PIP version number (i.e. 02.02.00).

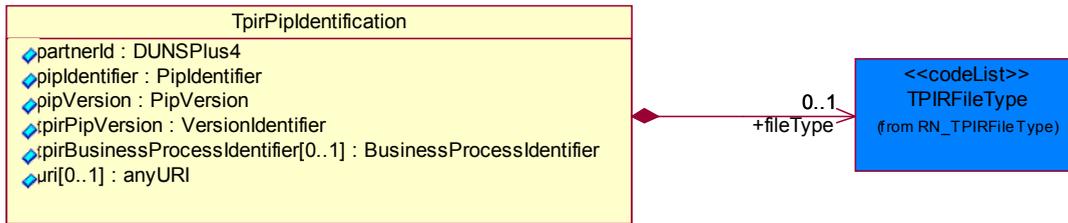


**Figure 5-12 PipVersion**

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.

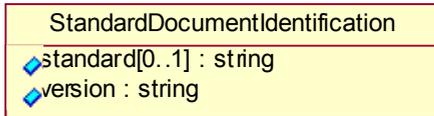


Figure 5-14 RequestingDocumentInformation

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.

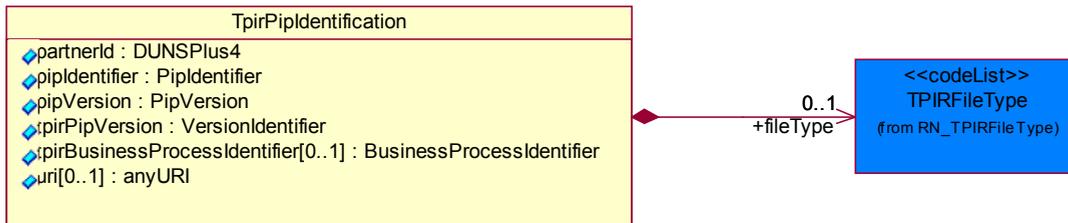


Figure 5-15 Sender

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

n		n	allow for the identification of the name of the department, service or individual to be contacted regarding the context of the business document.
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### 5.17 StandardDocumentIdentification

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

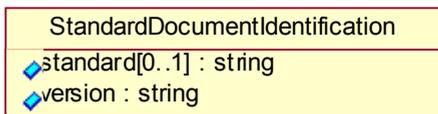


Figure 5-16 StandardDocumentIdentification

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

### 5.18 TpirPipIdentification

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

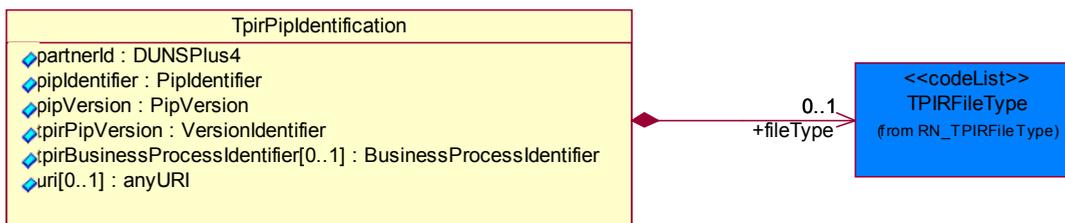


Figure 5-17 TpirPipIdentification

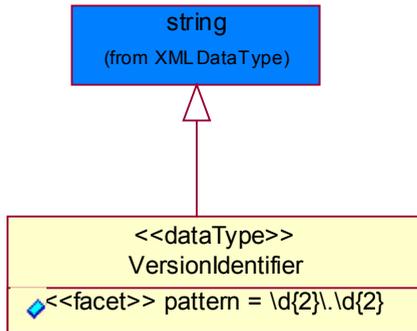
Attribute	Type	Documentation
partnerId	DUNSPlus4	The Trading Partner Identification of MNC that is creating this TPIR PIP.
pipIdentifier	PipIdentifier	A TPIR PIP Identification [i.e., 3A4 ).
pipVersion	PipVersion	A TPIR PIP version number (i.e., 02.02.00)
tpirPipVersion	VersionIdentifier	A TPIR-PIP Version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

uri[0..1]	anyURI	Describes the destination uri for the TPIR form.
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<b>Composition</b>	<b>Cardinality</b>	<b>Type</b>	<b>Documentation</b>
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 decimal

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

### 6.6 float

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

### 6.7 integer

Represents a sequence of decimal digits with an optional leading sign (+ or -). This data type is derived from decimal.

### 6.8 positiveInteger

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

**6.9 string**

Represents character string.