Description of 3B2 Message

PIP® 3B2

Validated 11.03.00

	Specification Information
Name	Description Of 3B2 Message
PIP	Notify Of Advance Shipment
Cluster	Order Management
Segment	Transportation And Distribution
Publication Date	30 May 2012
Version Identifier	V11.03

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1. Document Management

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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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SMSC	UPS Supply Chain Solutions
Standard Microsystems Corporation	

1.5 Related Documents

- Associated PIP Message Schemas (included with PIP Specification only)
- Description of Partner Interface Process for 3B2
- Message Structure

1.6 Document Version History

Version	Date	Description
Validated 11.00.00	27 July 2006	Validated version : RosettaNet Automated Enablement (RAE) Milestone Program
Validated 11.01.00	25 July 2008	Validated version : Certificate of Analysis (CofA) Milestone Program
Validated 11.02.00	29 Oct 2009	Maintenance Q4 2009
Validated 11.03.00	30 May 2012	Updated Version

1.7 Document Purpose

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

2. Interchange Model

2.1 AdvanceShipmentNotification

2.1.1 Interchange Diagram
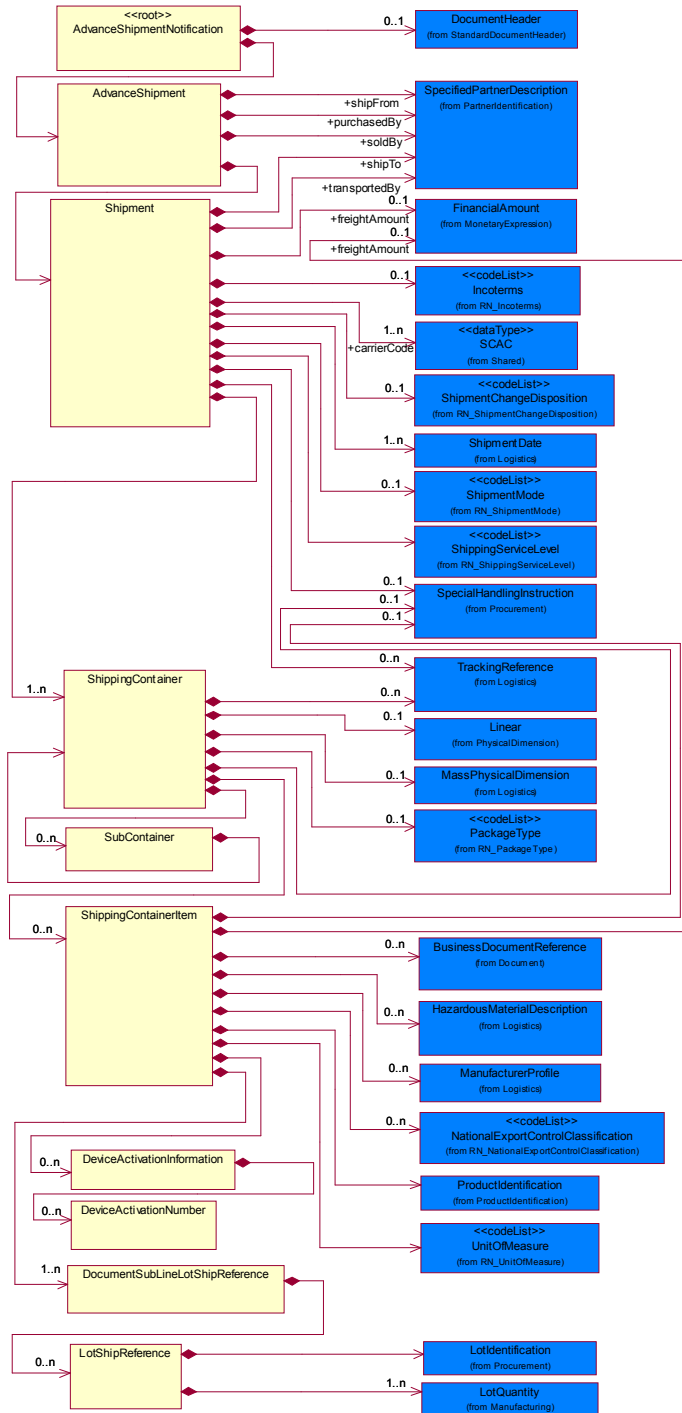
Figure 2-1 Interchange

2.1.2 Dependency Diagram
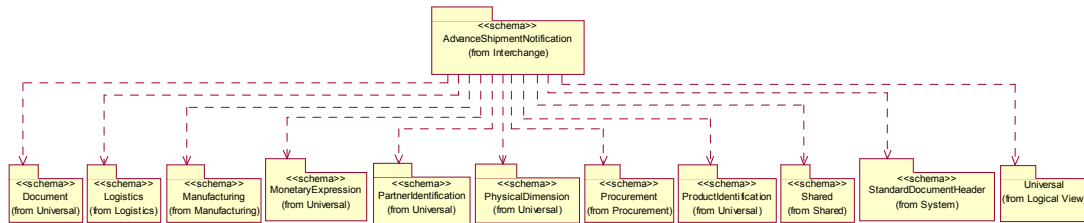
Figure 2-2 Dependency

2.1.3 AdvanceShipment

The Advance Shipment Notification contains detailed information on when product shipped and expected date of arrival, how product shipped, and detail on what the shipment contains.
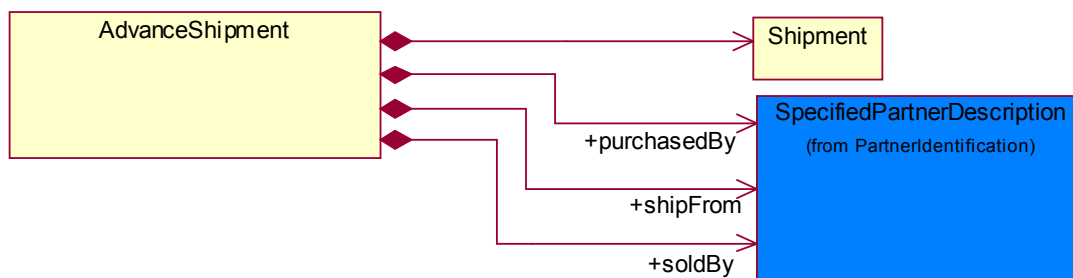
Figure 2-3 AdvanceShipment

Composition	Cardinality	Type	Documentation
Shipment	1	Shipment	The collection of business properties that describe a consignment tendered for transportation from one point to another.
purchasedBy	1	SpecifiedPartnerDescription	The party who is a purchaser of a product.
soldBy	1	SpecifiedPartnerDescription	The party who is a seller of a product.
shipFrom	1	SpecifiedPartnerDescription	The DUNS or DUNS + 4 number of the location of the originating party initiating a shipment or transaction.

2.1.4 AdvanceShipmentNotification

A message wrapper for the PIP3B2.

Figure 2-4 AdvanceShipmentNotification

Composition	Cardinality	Type	Documentation
DocumentHeader	0..1	DocumentHeader	The object allows for the identification of the sender and receiver of the business document.
AdvanceShipment	1	AdvanceShipment	The Advance Shipment Notification contains detailed information on when product shipped and expected date of arrival, how product shipped, and detail on what the shipment contains.

2.1.5 DeviceActivationInformation

Information to activate for a serialized product (i.e. handsets or other wireless devices).

Figure 2-5 DeviceActivationInformation

Composition	Cardinality	Type	Documentation
DeviceActivationNumber	0..n	DeviceActivationNumber	Number used to activate the serialized product.

2.1.6 DeviceActivationNumber

Number used to activate the serialized product.

Figure 2-6 DeviceActivationNumber

Attribute	Type	Documentation
activationNumber[0..1]	string	Text to describe the serialization identifier.
calledNumberIdentifier[0..1]	string	The actual value of the identifier type specified by 'ActivationNumberType'.

2.1.7 DocumentSubLineLotShipReference

Reference to document(s) this shipment is being sent against (i.e. Purchase Order).
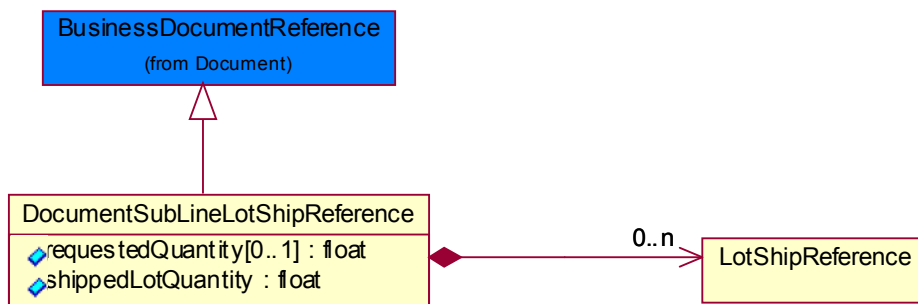
Figure 2-7 DocumentSubLineLotShipReference

Attribute	Type	Documentation
requestedQuantity[0..1]	float	The quantity of product requested.
shippedLotQuantity	float	A quantity of product shipped of a specific manufacturing lot within a shipping container.

Composition	Cardinality	Type	Documentation
LotShipReference	0..n	LotShipReference	Reference to specific lot information (i.e. quantity, lot identifiers) contained in this shipment.

2.1.8 LotShipReference

Reference to specific lot information (i.e. quantity, lot identifiers) contained in this shipment.
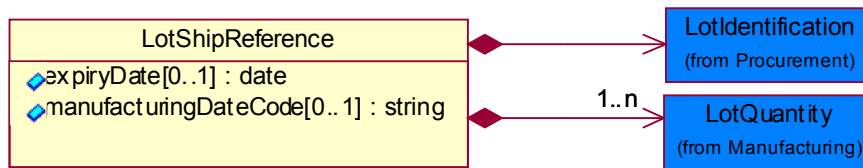
Figure 2-8 LotShipReference

Attribute	Type	Documentation
expiryDate[0..1]	date	The date that a contractual agreement expires.
manufacturingDateCode [0..1]	string	The unique identifier assigned to a product by a manufacturer to distinguish individual manufacturing periods.

Composition	Cardinality	Type	Documentation
LotIdentification	1	LotIdentification	This object identifies a lot which associates the product with a specific group of products with some similar attributes.
LotQuantity	1..n	LotQuantity	The collection of business properties that describe the quantity of items in a lot.

2.1.9 Shipment

The collection of business properties that describe a consignment tendered for transportation from one point to another.
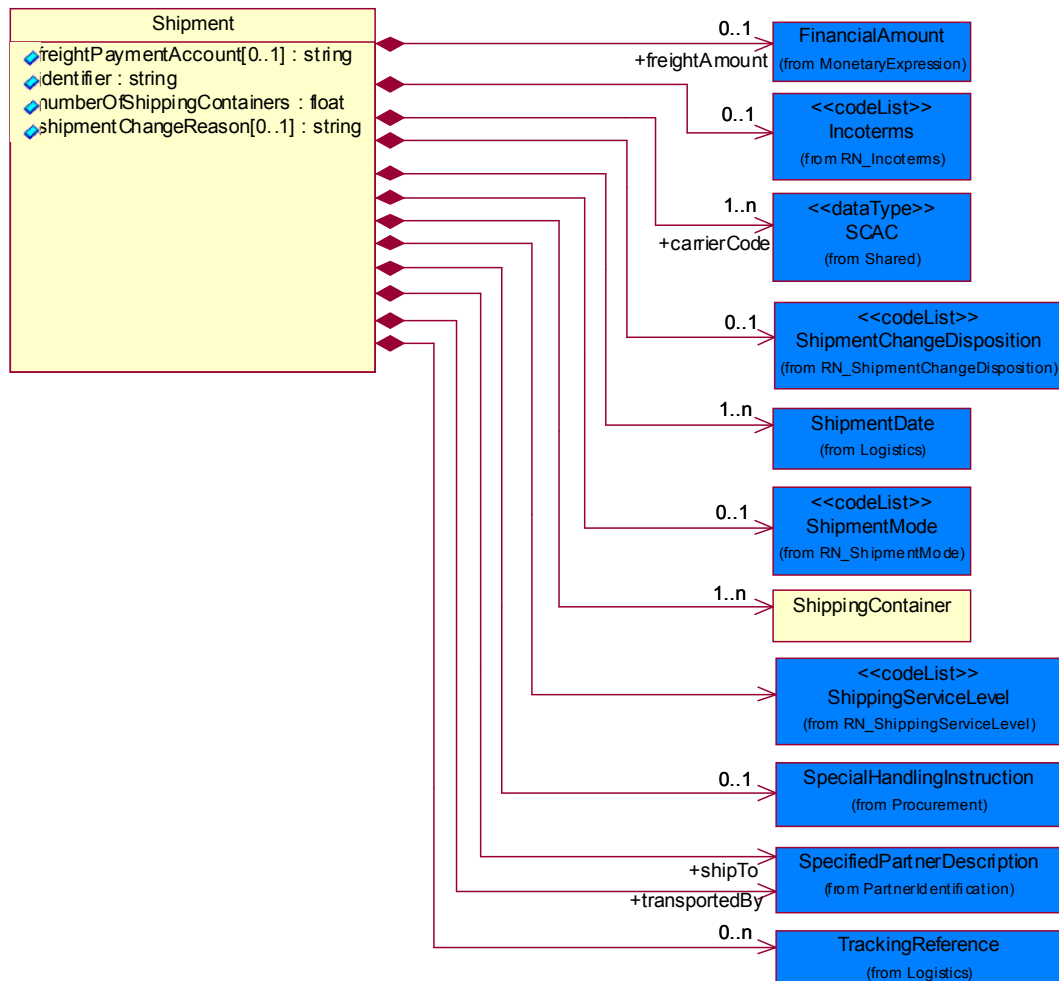
Figure 2-9 Shipment

Attribute	Type	Documentation
freightPaymentAccount[0..1]	string	Identification number of an account.
identifier	string	Reference identifier assigned by the partner originating a shipment to uniquely identify the shipment.
numberOfShippingContainers	float	A numeric expression of the number of outer containers for product shipping.
shipmentChangeReason[0..1]	string	Team must provide valid definition. Should be changed from Free Form Text to a code list.

Composition	Cardinality	Type	Documentation
Incoterms	0..1	Incoterms	Code identifying incoterms.
ShipmentChange Disposition	0..1	ShipmentChangeDis position	Code identifying the additional reasons for a change to a product shipment.
ShipmentMode	0..1	ShipmentMode	The method of transport used for the conveyance of goods.
ShippingContaine r	1..n	ShippingContainer	The collection of business properties that describe the nature and contents of a shipping unit.
TrackingReferenc e	0..n	TrackingReference	Proprietary unique identifier for tracking product shipments.
shipTo	1	SpecifiedPartnerDesc ription	The partner and/or location to which the product must be delivered.
transportedBy	1	SpecifiedPartnerDesc ription	The party responsible for either carrying or forwarding the product.
SpecialHandlingIn struction	0..1	SpecialHandlingInstr uction	The collection of business properties that describe product packaging or shipping handling instructions.
freightAmount	0..1	FinancialAmount	The freight amount charge that should be paid for this container.
ShipmentDate	1..n	ShipmentDate	The collection of business properties that identifies a constraint on when the products may be shipped.
carrierCode	1..n	SCAC	A unique carrier identification code, based on Standard Carrier Alpha Code(s).
ShippingServiceL evel	1	ShippingServiceLevel	Code identifying the shipping service level, e.g., overnight, same day.

2.1.10 ShippingContainer

The collection of business properties that describe the nature and contents of a shipping unit.
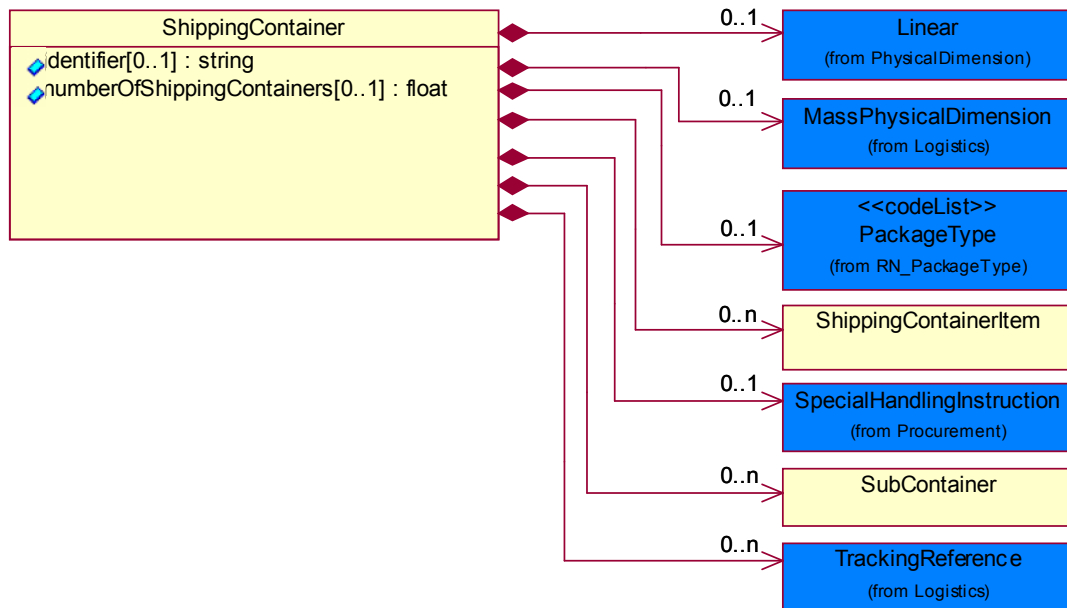
Figure 2-10 ShippingContainer

Attribute	Type	Documentation
identifier[0..1]	string	Unique identifier that represents a shipping container. Normally a UCC structured identifier. Also known as a "license plate".
numberOfShippingContainers[0..1]	float	A numeric expression of the number of outer containers for product shipping.

Composition	Cardinality	Type	Documentation
Linear	0..1	Linear	The business document must be able to express the linear dimensions of an object.
MassPhysicalDimension	0..1	MassPhysicalDimension	The physical dimension of unit of mass used for measuring the masses of weights, volumes etc.
ShippingContainerItem	0..n	ShippingContainerItem	The collection of business properties that describe the nature and contents of the good contained within shipping unit.
TrackingReference	0..n	TrackingReference	Proprietary unique identifier for tracking

			product shipments.
SubContainer	0..n	SubContainer	The collection of business properties that describe the nature and contents of inner containers (packages) contained within an outer shipping unit.
SpecialHandlingInstruction	0..1	SpecialHandlingInstruction	The collection of business properties that describe product packaging or shipping handling instructions.
PackageType	0..1	PackageType	Code specifying the type of packaging for a product.

2.1.11 ShippingContainerItem

The collection of business properties that describe the nature and contents of the good contained within shipping unit.
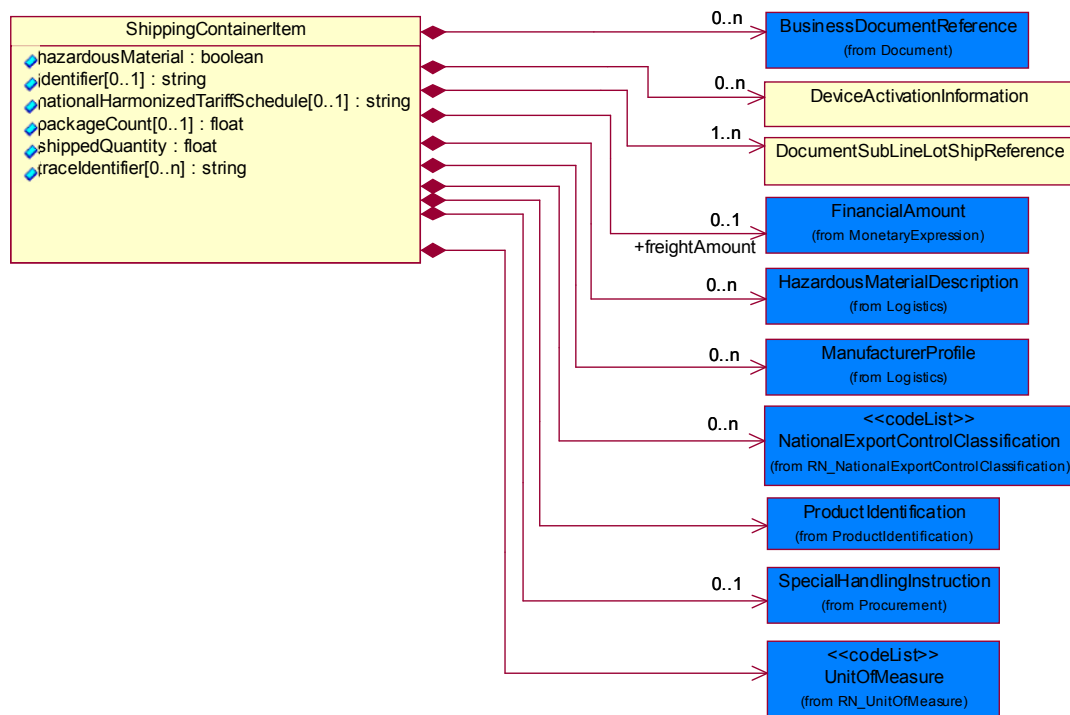
Figure 2-11 ShippingContainerItem

Attribute	Type	Documentation
hazardousMaterial	boolean	Indicates whether the product contains hazardous material.
identifier[0..1]	string	The identifier used to denote the lowest unit in a shipment, i.e., a package within a box.

nationalHarmonizedTariffSchedule[0..1]	string	Code identifying product classification for international shipping.
packageCount[0..1]	float	A numeric expression of the number of item packages within a container.
shippedQuantity	float	Quantity of product shipped.
traceIdentifier[0..n]	string	Free form text for a non-serial lot identifier.

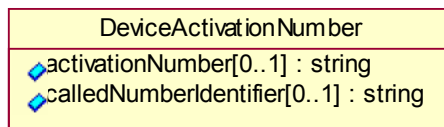| Composition	Cardinality	Type	Documentation
DocumentSubLineLotShipReference	1..n	DocumentSubLineLotShipReference	Reference to document(s) this shipment is being sent against (i.e. Purchase Order).
HazardousMaterialDescription	0..n	HazardousMaterialDescription	The collection of business properties that describe the nature of dangerous goods tendered for transportation.
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.
NationalExportControlClassification	0..n	NationalExportControlClassification	Code identifying product classification for export regulation.
UnitOfMeasure	1	UnitOfMeasure	Code identifying a product unit of measure.
SpecialHandlingInstruction	0..1	SpecialHandlingInstruction	The collection of business properties that describe product packaging or shipping handling instructions.
freightAmount	0..1	FinancialAmount	The freight amount charge that should be paid for this container.
DeviceActivationInformation	0..n	DeviceActivationInformation	Information to activate for a serialized product (i.e. handsets or other wireless devices).
BusinessDocumentReference	0..n	BusinessDocumentReference	The business document reference object allows for the indirect referencing of a relationship to other business related documents.

2.1.12 SubContainer

The collection of business properties that describe the nature and contents of inner containers (packages) contained within an outer shipping unit.

Figure 2-12 SubContainer

Composition	Cardinality	Type	Documentation
ShippingContainer	1	ShippingContainer	The collection of business properties that describe the nature and contents of a shipping unit.

3. Domain ModelProcurement

3.1.1 Procurement

3.1.1.1 Dependency Diagram
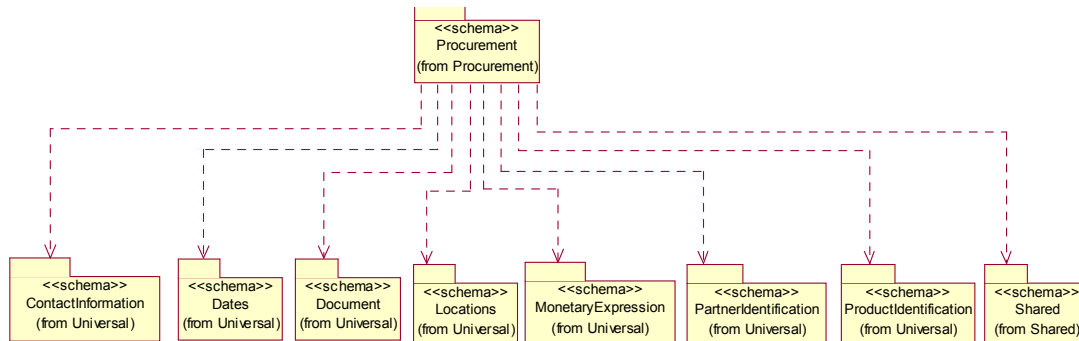
Figure 3-1 Dependency

3.1.1.2 LotIdentification

This object identifies a lot which associates the product with a specific group of products with some similar attributes.
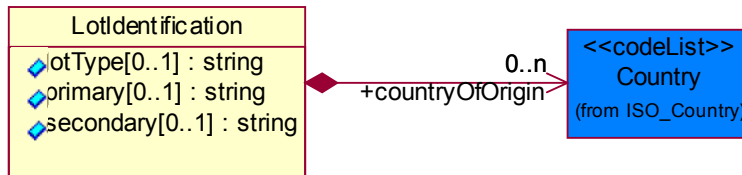
Figure 3-2 LotIdentification

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

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

3.1.1.3 SpecialHandlingInstruction

The collection of business properties that describe product packaging or shipping handling instructions.
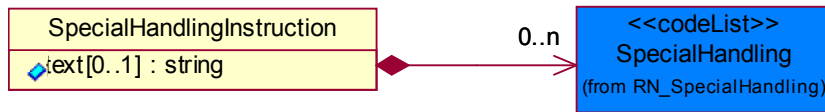
Figure 3-3 SpecialHandlingInstruction

Attribute	Type	Documentation
text[0..1]	string	Free form textual description for how specified goods, packages or containers should be handled.

Composition	Cardinality	Type	Documentation
SpecialHandling	0..n	SpecialHandling	Code identifying special handling or packaging requirements for the product.

3.1.2 CodeList

3.1.2.1 SpecialHandling

Code identifying special handling or packaging requirements for the product.

Name	Documentation
15M	15 Minute Window.
24H	24 Hour Availability.
AAO	Attachments - Advance Only Waybill.
ACC	Accepted by Carrier at Owner's Risk of Freezing.
ACD	Air Conditioning Disconnect and Connect.
ACU	Attachment - Customer's Document.
ADC	Additional Copy of Shipping Papers for Proof of Delivery.
ADF	Advanced Fee.
ADL	Advance Loading.
AGS	Armed Guard Service.
AHM	Accessible Hazardous Material.
AMD	A.M. Delivery Requirement.
ANU	Anchoring and Unanchoring.
ANV	Annual Volume.
APW	Attachment - Prepaid Waybill.
ART	Air Ride Truck Service.
ASE	Attachment - Shipper's Export Document.
ASM	Attachment - Shipper's Manifest.
ASP	Attachment - Shipper's Packing Instructions.
ASR	Assembly Service Requested.
ATD	Aggregate Tender Discount.
ATT	Air Ride Tractor Service.
AUS	Auxiliary Service.

BA1	Bunker Adjustment - 20 Foot Container.
BA2	Bunker Adjustment - 40 Foot Container.
BCC	Bill Consignee for Weigh Charges.
BCP	Bypass Consolidation Point.
BFS	Barge Freight All Kinds Service.
BKA	Bunker Adjustment.
BKS	Block Stowage.
BLB	Blocking and Bracing.
BLS	Blind Shipment.
BNS	If Bad Ordered Notify Shipper.
BOL	Bolster Load, Do Not Switch.
BSA	Bunker Surcharge Authorized.
BSC	Bill Shipper for Weigh Charge.
BUA	Bulky Article.
CA1	Currency Adjustment - 20 Foot Container.
CA2	Currency Adjustment - 40 Foot Container.
CAA	Cargo Aboard.
CAB	Chain and Binders.
CAC	Carrier Caboose.
CAR	Carrier.
CAT	Cargo Taxes.
CBC	Cargo on Board Certification Required.
CCB	Convert Commercial Bill of Lading (BOL) to Government BOL.
CCE	Certification that the Containers Being Returned Empty Were Received Filled by Rail Freight Service.
CCL	Container, Consolidator Load.
CER	Certification.
CFB	Cleared for Border Crossing.
CFC	Customs Fees - Container Level.
CFE	Cleared for Export.
CFI	Customs Fees - Lift Level.
CFL	Container, Factory Load.
CGC	Carrier Guard Car Service.
CHB	Clearinghouse Balance.
CIP	Commercial Invoice Preparation.
CIR	Circuitous Routing.
CLC	Carrier Load and Consignee Unload.
CLE	Cleaning.
CLH	Consolidation and Line Haul.
CLL	Commodity Loaded Less Than or Equal To the Car Ordered.
CLU	Carrier Load and Carrier Unload.
CNE	Certification That the Newsprint Winding Cores Being Returned Empty Were Received Filled by Rail Freight Service.
COA	Controlled Atmosphere.
COD	Container Diversion.
COL	Container Lease.
COM	Container Mounting.
CON	Conductivity/Anti-static Additive.
COO	Certificate of Origin.
COS	Completing Shipment.

COU	Consignee Unload.
COV	Courier, Overnight.
CPM	Customs Papers Mailed.
CPN	Customer Required PRO Number.
CRA	Class Rates Applied.
CRD	Comb. Rates over Detroit.
CRL	Customer Required Packing List.
CRN	Customer Required Appointment Number.
CRP	Contract Rates Apply.
CRT	Cross Town.
CSD	Courier, Same Day.
CSL	Consolidation.
CSR	Certification that this Shipment is for Recycling as Defined in Applicable Tariffs Containing Such Provisions.
CSU	Constant Surveillance.
CUI	Customs Inspection.
DAN	Dangerous.
DAR	Drop and Run.
DCE	Detention of Conveying Equipment and the Power Unit.
DEM	Demurrage.
DEP	Detention of Conveying Equipment Excluding the Power Unit.
DES	Delivery Service.
DEV	Detention (Vehicle).
DHI	Do not Hump or Hump into.
DID	Direct Delivery.
DNC	Do Not Couple to Double Shelf Couples.
DND	Do Not Divert.
DNF	Do Not Freeze.
DNH	Do Not Hump.
DNP	Do Not Pool.
DNT	Do Not Transfer Contents.
DNU	Do Not Uncouple.
DOD	DOD Constant Surveillance Service.
DOM	Domestic.
DOS	Documentation - Special.
DP1	Detention With Power Units (30 minute periods).
DP2	Detention With Power Units (60 minute periods).
DPD	Drayage at Port of Debarkation (Rate Zone).
DPE	Drayage at Port of Embarkation (Rate Zone).
DRO	Drop-Off Delivery.
DSR	Distribution Service Requested.
DSW	Delivery Only on Surrender of Written Order.
DVN	Delivery Verification Not Required.
DWA	Destination Weights Apply.
ECS	Escort/Courier Service.
EET	Electronic Equipment Transfer.
EHM	Endorsed as Hazardous Material.
ELB	Extra Labor.
EMM	Empty Movement.
EMR	Empty Return.

EMS	Emergency Service.
END	Endorsement.
EOS	Escort Service with Overnight Subsistence.
EPP	Export Preparation.
EPT	Export.
EQU	Equipment..
ERA	Expedited Rates Applied.
ERI	Expand Remove and Install.
ESC	Escort.
EST	Escort Services (Telephone).
EUV	Exclusive Use of Vehicle.
EVA	Excessive Valuation Authorized.
EXC	Exempt Commodity.
EXD	Extra Driver.
EXL	Extra Lights.
EXP	Expedite.
EXS	Expedited Service.
EXU	Exclusive Use.
EXW	Excessive Weight.
FIS	Filtration Service.
FLS	Flatrack Surcharge.
FOD	FOD, FOB - Destination.
FOS	FOS, FOB Shipping Point.
FPT	For Processing in Transit.
FRA	Fragile - Handle with Care.
FST	For Storage in Transit.
FUS	Full Service.
GGC	Government Guard Car.
GOC	Government-Owned Containers.
GSS	Greater Security Service.
GVC	Government Caboose.
HAL	Hold at Location.
HAN	Handling.
HAR	Harmless.
HCD	Hazardous Cargo On Deck.
HCT	High Cube Trailer Rates.
HEA	Heat.
HES	Heat - Special.
HFO	Hold for Orders.
HFR	Home for Repair.
HIT	Heat in Transit.
HMS	Hazardous Materials Surcharge.
HOR	Heater or Refrigeration.
HVL	High Value Load.
IHM	Inaccessible Hazardous Material.
IMP	Impactographs.
IMS	Import Shipment.
INB	In-bond.
IND	Inside Delivery.
INH	Inspect Hourly if Car Stopped.

INP	Inside Pickup.
INS	Insulated.
IPM	Intra-Plant Move.
ISS	Intermodal Shipment Service.
ITS	Interline Transfer Service.
JIT	Just-In-Time (JIT).
JLE	Joint Line Exception.
KFF	Keep From Freezing Percent Differential.
KMD	Keep Material Dry.
LAA	Labor Associated with Detention of Conveying Equipment.
LAB	Land Bridge (Import/Export).
LAD	Labor Disturbance.
LAO	Layover.
LAS	Layover Service.
LBD	Labor Disturbance.
LBS	Light Bar Service.
LBT	Low Boy Trailer/Flat Bed.
LC1	Land Currency Adjustment - 40 Foot Container.
LC2	Land Currency Adjustment Factor - 20 Foot Container.
LCA	Land Currency Adjustment - 40 Foot Container.
LCF	Land Currency Adjustment Factor - 20 Foot Container.
LDE	Labor Associated with Detention of Conveying Equipment.
LDP	Linehaul from Port of Debarkation.
LEP	Linehaul To Port of Embarkation.
LFC	Less Than Full Carload.
LFL	Less Than Container, Factory Load.
LFV	Loaded to Full Visible Capacity.
LIS	Linehaul Service.
LIU	Live Unload.
LOC	Liability of Carrier.
LOD	Loading Devices.
LPD	Linehaul Percent Differential.
LSO	Local Service Only.
LTC	Less Than Container.
LTD	Liner Terms at Port of Debarkation.
LTE	Liner Terms at Port of Embarkation.
LTL	Less Than Container, Consolidator Load.
LTT	Less Than Truckload.
MAW	Manifest Must Accompany Waybill.
MER	Mechanical Refrigeration.
MFI	Moving Under "For Furtherance Instructions" and May Be Delivered.
MOA	Modified Atmosphere.
MSS	Motor Surveillance Service.
MTS	Multi-Tank Surveillance Service.
MUP	Multiple Pickup.
NCB	Notify Consignee Before Delivery.
NEF	New Equipment First Transborder Movement.
NFE	Not for Export.
NFS	Nontransit Flat Shipment.
NMR	No Marshalling Required for Hazardous Materials.

NPR	No Placards Required.
NRC	Not Restricted Cargo.
NSB	Notify Shipper Before Reconsignment.
NSE	No Special Entrainment Required.
NSI	Notify Shipper Immediately if Shipment is Delayed en Route.
NUW	In Case of Fire Do Not Use Water.
OAH	Offshore - Alaska/Hawaii Service.
ODS	On Deck Stowage.
OHC	Over Height Container.
OTH	Other.
OVF	Overflow.
OVP	Oversized Premium.
OVW	Overweight.
OWR	One Way Rates Applied.
PAD	Pickup and Delivery.
PAS	Partial Shipment.
PAU	Pack and Unpack.
PAW	Preparation of Air Waybill - Origin.
PCC	Preparation of Canadian Customs Invoice.
PDB	Pickup and Delivery Beyond Service Area.
PDL	Percent Differential - Less Than Container.
PDS	Pickup and Delivery From Storage in Transit.
PEE	Preparation of Export Entry.
PFH	Protect From Heat.
PHR	Per Hour Rates Applied.
PIC	Preparation of Insurance Certificate.
PIT	Pier Time.
PIU	Pickup.
PLR	Protect Lowest Through Rate.
PMD	P.M. Delivery Requirement.
PMR	Per Mile Rates Apply.
POC	Port Changes.
PPC	PPC, FOB -Destination charge to customer.
PPD	PPD, Prepay+I35/Add Freight to Invoice.
PPS	Product Protection Service.
PRS	Priority Service.
PSC	Protective Security Service.
PSN	Pickup of Shipments on Saturday, Sunday, and/or Holidays Requiring Absolute Next Day Delivery.
PSP	Pallets/Skids/Platforms.
PSS	Pickup of Shipments Requiring Same Day Delivery Service.
PST	Pickup of Shipments Requiring Same Day Delivery Service and/or Delivery at a Specified Time.
PUE	Preparation of U.S. Export Documentation.
PUP	PUP Trailer Rates Apply.
RAH	Railhead Handling.
RAM	Radioactive Material.
RBC	Render Bill for Charges.
RCD	Reefer Cargo Percent Differential.
RCG	Return Carrier Guard Car Service.

RCP	Railroad Controlled Private Equipment Subject to Demurrage.
RCS	Reconsignment.
REA	Return Authorization.
REC	Return of Empty Container.
RED	Redelivery.
REF	Refrigerated.
REM	Reefer Maintenance.
RER	Reweight Requested.
RES	Reservations.
RFT	Record for Transit.
RMP	Return Movement of Pallet.
ROE	ROEE Van Type Truck.
ROS	Roadrailer Service.
RSC	Requires Shelf Couplers.
RSD	Residential Delivery.
RSM	Reshipment.
RST	Respotting.
RTS	Round Trip Service.
RUO	Rush Order.
RVC	Released Value Charge in Excess of Carrier Maximum Liability.
RWE	Roadway Easy Rates Applied.
SAD	Saturday Delivery.
SAH	Stow Away from Heat.
SAR	Shipper Authorization Required for Diversion or Consignment.
SCA	Service Charge Applies.
SCC	Shipper Load/Carrier Count.
SCG	Shipper Certifies Gross Weight under 240,000 pounds.
SCL	Apply a Uniform Code Council/International Article Numbering Association (UCC/EAN) Serial Shipping Container Label to the Shipping Containers.
SCW	Stretch Wrap.
SDS	Special Dromedary Service.
SEC	Special Equipment Charge.
SED	Shipper Export Declaration Required.
SEE	Stairs, Elevator, Excess Carry.
SES	Security Signature Service.
SFD	Single Factor Origination/Port of Debarkation.
SFO	Single Factor Origination/Destination.
SFP	Single Factor Port of Embarkation/Destination.
SFS	Satisfactory Service Standards.
SGD	Single Driver.
SHH	Shipment Holdover for Holidays.
SHL	Shiftable Load.
SHP	Sunday or Holiday Pickup or Delivery.
SHW	Shipment Holdover for Weekends.
SID	Shipment to be Inspected at Destination and Disposition Instructions will be Furnished.
SIR	Signature Required.
SIS	Single Shipment.
SLC	Shipper Load and Carrier Unload.

SLD	Split Delivery.
SLO	Shipper Load and Count.
SLP	Split Pickup.
SLS	Shipper Load and Consignee Unload.
SMP	Small Package.
SMS	Special Motor Surveillance.
SNT	Shipment from Non-Temp Storage.
SOD	Stop-off at Destination.
SOE	Shipment Holdover on Weekends.
SOH	Shipment Holdover on Holidays.
SOO	Stop-off at Origination.
SOW	Shipment Holdover on Weekdays.
SPC	Special Containers.
SPD	Saturday Pickup or Delivery.
SPL	Shipper Load.
SPP	Special Permit.
SPR	Speed Restricted.
SPS	Special Permits.
SPU	Saturday Pick-Up.
SR1	Speed Restricted to 15 Miles per Hour.
SR2	Speed Restricted to 25 Miles per Hour.
SR3	Speed Restricted to 35 Miles per Hour.
SR4	Speed Restricted to 45 Miles per Hour.
SRC	Shove to Rest and Cover.
SRG	Storage.
SSC	Stripping, Sorting and Consolidation.
SSD	Subject to Special Detention Rules/Charges.
SSN	Substitute Service Not to be Used.
SSS	Satellite Surveillance Service.
SST	Spot for Storage - No Shipment.
STM	Special Train Movement.
STO	Stop-off.
STR	Signature and Tally Record.
STT	Stack Train.
STW	Stowage.
SUR	Supervisor Requested.
SVR	Surveying Routes.
TAT	Tendered as Truckload (Truckload Service Requested).
TCL	Trailer, Consolidator Load.
TDS	Time of Delivery and Signature Required.
TEC	Temperature Control.
TER	Termination.
TFL	Trailer, Factory Load.
TFP	Transfer Product.
THC	Terminal Handling Charges.
TLO	Top Load Only.
TMV	Tendering of Multiple Vehicles.
TOC	Truckload-Double Operator-Common Carrier.
TOP	Truckload-Double Operator-Padded Van.
TOS	Total Shipment.

TPS	Third Party Service.
TRA	Truck Rates Applicable.
TRP	Trailer Preparation - Special.
TRS	Trade Show.
TSN	Transmit a Ship Notice/Manifest Transaction Set.
TSS	Transit Shipment.
TTD	Team Track Delivery.
TTR	Tentative Release - Tentatively releasing the shipment either for import or export and subject to compliance to additional conditions which could be executed later.
TVR	Time Volume Rates Only.
UAP	Unload as Placarded.
UAT	Use of Alternate Terminal.
ULS	Unload from Left Side of Car.
UNH	Use No Hooks.
UNI	Unitized.
UNP	Unpacking.
UOR	Unloading or Reloading.
UPP	Unprotected Perishable.
URS	Unload from Right Side of Car.
VEI	Ventilation Instructions.
VEW	Verification Weigh.
WAI	Waive Inspection.
WCO	Weigh to Check for Overload.
WEE	Weigh Empty.
WEV	Weight Verification.
WID	Waived Inspection - Set Direct.
WPD	Written Proof of Delivery.
WTA	Waiting Time Authorized.

3.2 Logistics

3.2.1 Logistics

3.2.1.1 Dependency Diagram
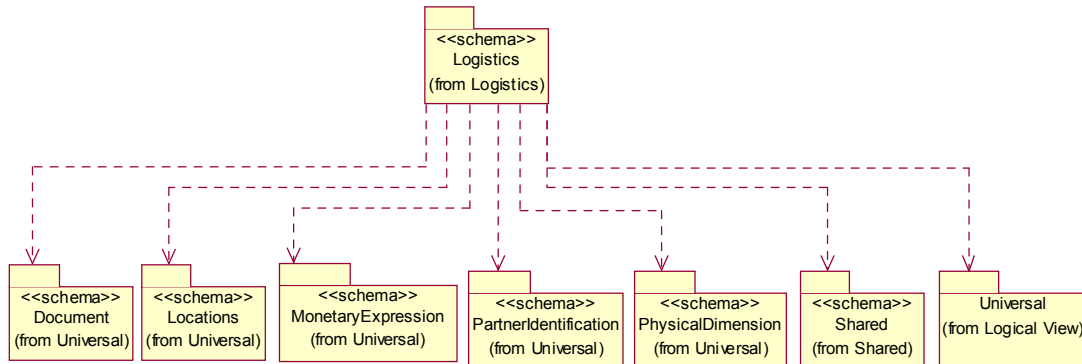
Figure 3-4 Dependency

3.2.1.2 HazardousMaterialDescription

The collection of business properties that describe the nature of dangerous goods tendered for transportation.
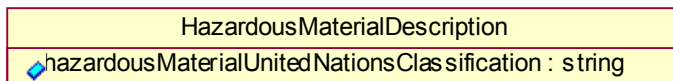
Figure 3-5 HazardousMaterialDescription

Attribute	Type	Documentation
hazardousMaterialUnited NationsClassification	string	Code classifying hazardous material products.

3.2.1.3 ManufacturerProfile

The collection of business properties that describe a manufacturer's product.
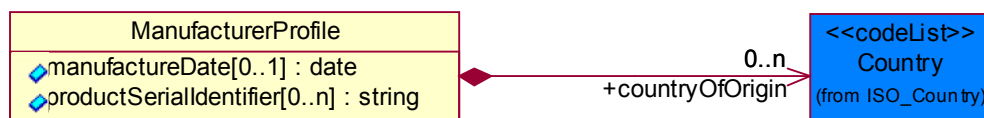
Figure 3-6 ManufacturerProfile

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.

3.2.1.4 MassPhysicalDimension

The physical dimension of unit of mass used for measuring the masses of weights, volumes etc.
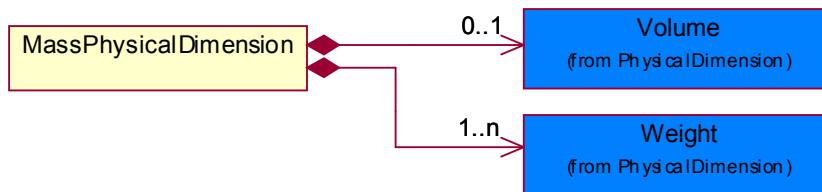
Figure 3-7 MassPhysicalDimension

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

3.2.1.5 ShipmentDate

The collection of business properties that identifies a constraint on when the products may be shipped.
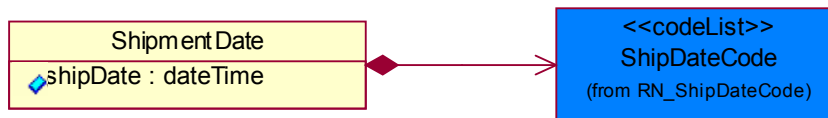
Figure 3-8 ShipmentDate

Attribute	Type	Documentation
shipDate	dateTime	The date when the shipment maybe shipped.

Composition	Cardinality	Type	Documentation
ShipDateCode	1	ShipDateCode	Code identifying a type of ship date.

3.2.1.6 TrackingReference

Proprietary unique identifier for tracking product shipments.
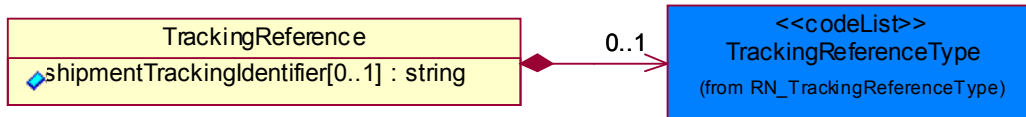
Figure 3-9 TrackingReference

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.

3.2.2 CodeList

3.2.2.1 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.

3.2.2.2 Incoterms

Code identifying incoterms.

Name	Documentation
CFR	Cost and Freight (named port of destination).
CIF	Cost, Insurance and Freight (named port of destination).
CIP	Carriage and insurance paid to (named place of destination).
CPT	Carriage Paid To (named place of destination).
DAF	Delivered at Frontier (named place).
DDP	Delivered Duty Paid (named place of destination).
DDU	Delivered Duty Unpaid (named place of destination).
DEQ	Delivered Ex Quay (duty paid) (named port of destination).
DES	Delivered Ex Ship (named port of destination).
EXW	Ex Works (named place).
FAS	Free Along Ship (named port of shipment).
FCA	Free Carrier (named place).
FOB	Free on Board (named port of shipment).

3.2.2.3 ShipmentChangeDisposition

Code identifying the additional reasons for a change to a product shipment.

Name	Documentation
ABS	Abandon shipment.
CAS	Cancel shipment.
DES	Destroy shipment.
RES	Release shipment.
ROC	Reassignment of carrier.
RTS	Return Shipment.
SFN	Stop shipment until further notice.

3.2.2.4 ShipmentMode

The method of transport used for the conveyance of goods.

Name	Documentation
AIE	Air Express.
AIF	Air Freight.
AIR	Air.
COC	Contract Carrier.
COO	Containerized Ocean.

CPI	Customer Pickup.
EXT	Expedited Truck.
INM	Intermodal.
MAT	Mail Transport.
MOT	Motor.
OCE	Ocean.
OTH	Others.
PRC	Private Carrier.
RAI	Rail.
TRK	Truck.

3.2.2.5 NationalExportControlClassification

Code identifying product classification for export regulation.

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

3.2.2.6 ShipDateCode

Code identifying a type of ship date.

Name	Documentation
ACP	Acceptance.
ACT	Action.
ADY	Arrival at Destination Yard.
AED	Accrual End Date.
AFT	Actual Free Time Expiration Date.
APD	Actual Pickup Date.
APL	Actual Placement.
ASD	Accrual Start Date.
BDO	Beginning Date of Customer Plant Shutdown.
BOI	Bill of Lading Initiated Date.
BOL	Bill of Lading.
BPE	Buy Period Date (End).
BPS	Buy Period Date (Start).
BRD	Backorder Release Date.
CAD	Cancel After This Date.
CBD	Charge Back Date.
CCL	Contract Closed.
CDA	Check Date.
CFP	Contract Final Payment.
CFR	Charged From.
COD	Cutoff Date.
CPC	Contract Physically Completed.
CRE	Customs Release.
CTO	Charged To.
DAG	Delivery Appointment Granted Date.
DAR	Date Available/Constructive Replacement.
DAS	Delivery Appointment Scheduled Date.
DBT	Delivered By This Date.
DDC	Date Delivery Commenced.
DIC	Date Invoice Created.
DIS	Date Issued.
DLC	Date Loading Commenced.
DLD	Date Loading Completed.
DNB	Deliver Not Before Date.
DNL	Deliver No Later Than Date.
DOT	Delivered on This Date.
DPA	Duty Paid.
DRD	Demand Receipt Date.
DRS	Delivery Requested Scheduled Date.
DRT	Delivery Requested on This Date.
DSP	Date Shipped to Port of Embarkation (POE).
DUL	Date Unloaded.
DWO	Deliver Week Of.
ECC	Estimated Contract Completion.
ECL	Extended Closeout.

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EDA	Effective Date.
EDB	Expiration Date.
EDD	Estimated Delivery Date.
EDO	Ending Date of Customer Plant Shutdown.
EES	Est. Next Promo, Ship Date End.
EFD	Equipment Furnished Date.
EPD	Earliest Pickup Date.
EPE	Est. Next Promo (Date end).
EPS	Est. Next Promo (Date start).
ERE	Expected Reply.
ESE	Est. Next Promo, Ship Date Start.
FBD	Freight Bill Date.
FOD	First Order Date.
FSD	First Ship Date.
GED	Guarantee Expiration Date.
INS	Inspection.
IVD	Invoice Date.
LAC	Last Acquisition.
LDE	Last Demand.
LPD	Latest Pickup Date.
MNF	Manufacture.
MRB	Must Respond By.
NTF	Notified.
OFD	Offered for Delivery.
OPO	Original Purchase Order Date.
ORD	Ordered.
OTR	Original Transaction.
PAG	Pickup Appointment Granted Date.
PAS	Pickup Appointment Scheduled Date.
PBD	Publication Date.
PCE	Price Change Effective Date.
PCL	Price Change Last Arrival Date.
PCM	Price Change Last Order Date.
PCO	Purchase Order Date.
PCR	Purchase Order Received.
PCS	Price Change Last Ship Date.
PDA	Pack Date.
PDE	Promotion Order Date (End).
PDS	Promotion Order Date (Start).
PFE	Promotion Floor Stock Protect (End).
PFS	Promotion Floor Stock Protect (Start).
PME	Promotion Ship Date (End).
PMO	Promotion End.
PMS	Promotion Ship Date (Start).
PMT	Promotion Start.
PPD	Preferred Payment Date.
PPE	Promotion Performance Date (End).
PPS	Promotion Performance Date (Start).
PRD	Product Receipt Date.
PRE	Period End.

PRQ	Promotion Requested Delivery Date (End).
PRS	Promotion Requested Delivery Date (Start).
PSD	Process Date.
PSH	Pickup Requested Scheduled Date.
PVE	Promotion Invoice Protection Date (End).
PVS	Promotion Invoice Protection Date (Start).
RDD	Requested Delivery Date.
REC	Recorded.
REJ	Rejection.
REL	Released.
REQ	Required By.
RPD	Requested Pack Date.
RSD	Requested Ship Date/Pick-up Date.
SDA	Scheduled Delivery Date - Appointment confirmed.
SDC	Scheduled Delivery Date - Needs confirmation.
SDD	Scheduled Delivery Date.
SHB	Ship Not Before Date.
SHL	Ship Not Later Than Date.
SHO	Shipped on This Date.
SIG	Signature.
SIS	Store Inventory Stock.
SLD	Sold Date.
SLE	Shelf-Life Expiration.
SLG	Sailing Date.
SPA	Scheduled Pick-up Date - Appointment confirmed.
SPE	Spot for Load Exchange Date (Export).
SPL	Spot for Load Date.
SPN	Scheduled Pick-up Date - Needs confirmation.
SPP	Scheduled Pick - Up Date.
SPS	Spot for Storage Date (No shipment).
SPU	Spot for Unload Date.
SSC	Scheduled Service Completion.
SUD	Superseded Date.
SWO	Ship Week Of Date.
TDD	Terms Discount Due Date.
TND	Terms Net Due Date.
TRA	Transfer.
TRS	Transaction Control Date.
VAL	Validated.
WIS	Warehouse Inventory Stock.
WRT	Warranty Expiration.

3.3 Manufacturing

3.3.1 Manufacturing

3.3.1.1 Dependency Diagram
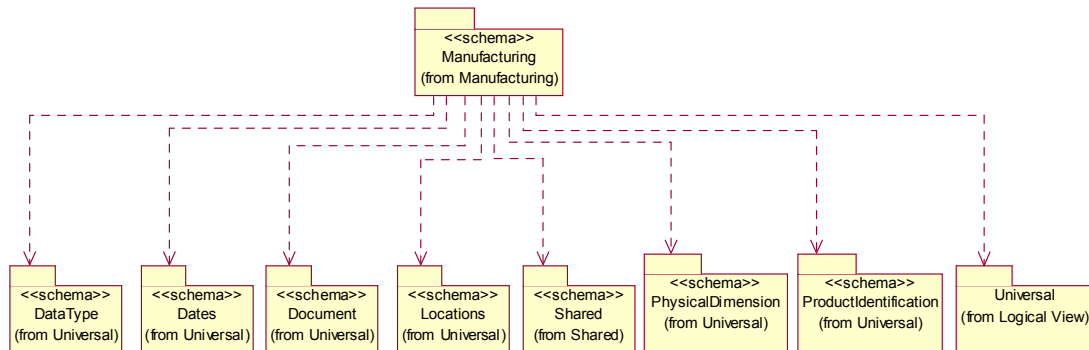
Figure 3-10 Dependency

3.3.1.2 LotQuantity

The collection of business properties that describe the quantity of items in a lot.
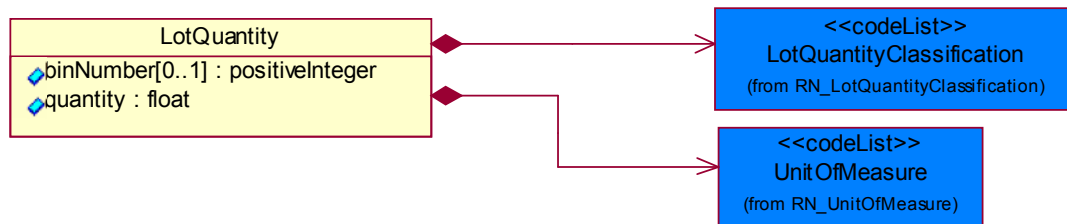
Figure 3-11 LotQuantity

Attribute	Type	Documentation
binNumber[0..1]	positiveInteger	Code number used to segregate lot quantities by performance after final testing.
quantity	float	A quantity specifying the number of product units.

Composition	Cardinality	Type	Documentation
UnitOfMeasure	1	UnitOfMeasure	Code identifying a product unit of measure.
LotQuantityClassification	1	LotQuantityClassification	Code identifying the classification of a manufacturing lot quantity.

3.3.2 CodeList

3.3.2.1 LotQuantityClassification

Code identifying the classification of a manufacturing lot quantity.

Name	Documentation
ACC	Acceptable. The lot quantity meets the minimum requirements.
BON	Bonus. A positive variance in the lot quantity.
BTE	Bin Test. Bin Test Quantity.
CQU	Change Quantity. The change quantity event and quantity is intended to be used when the quantity of a lot changes for a reason other then those we have defined events for (scrap, reject, and bonus).
CUR	Current. Current Quantity.
GRO	Gross. The initial quantity of the lot.
LPR	Lot probe.
MER	Merge. Merge Quantity.
NET	Net. The final quantity of the lot.
PFI	Projected final. The estimated final quantity of the lot.
PLO	Previous lot. The quantity of the preceding lot.
REC	Receipt. Receipt Quantity.
REJ	Reject. Reject/Loss Quantity.
SCH	Schedule. A lot is still physically in the Die Bank (before being started) but has been allocated to start and as a result, is not available for being considered for planning purposes as it is already committed to.
SCR	Scrap. The quantity of products which is disposed of.
SHI	Ship. Actual Ship Quantity.
SPL	Split. Split Quantity.
STA	Start. Start Quantity.

3.4 Shared

3.4.1 Shared

3.4.1.1 Dependency Diagram
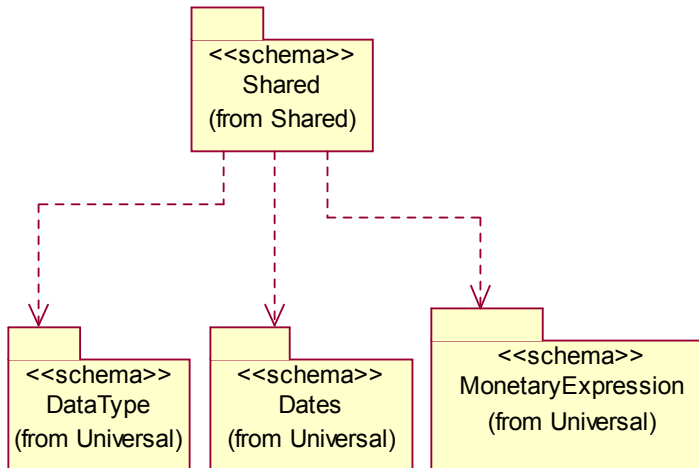
Figure 3-12 Dependency

3.4.1.2 SCAC

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

Refer http://www.nmfta.org   for more detail.
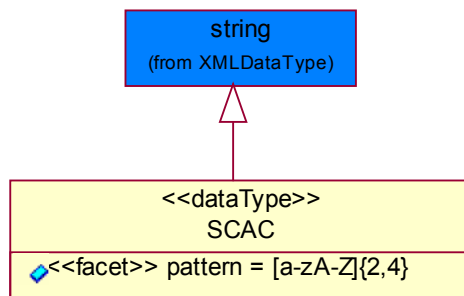
Figure 3-13 SCAC

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

3.4.2 CodeList

3.4.2.1 PackageType
Code specifying the type of packaging for a product.

Name	Documentation
BOX	Box.
BRL	Barrel.
CRT	Carton.
LPK	Loose Package.
MHC	Material/Method of holding a string of computer chips.
MIX	Mixed Package.
OTH	Others.
PAC	Parcel.
PBG	Plastic Ball Grind Array.
PBX	Paper Box.
PCC	Plastic Chip Carrier.
PLT	Pallet.
REE	Reel.
TQF	Thin Quad Flat Package.
TRA	Tray.
TUB	Plastic tube to hold computer chips.
WDC	Wooden Crate.

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

Name	Documentation
1BD	1BD, Same Business Day - 4 hour Response Time.
5BD	5 Business Days.
9AM	9 A.M.
ACH	Air Charter.
AEC	Air Economy.
AIC	Air Cargo.
AM	A.M.
ARS	Authorized Return Service.
ATA	Airport to Airport.
ATD	Airport to Door.
BCT	Bulk Commodity Train.
BUC	Business Class.
CBS	Consignee Billing Service.
COE	Courier Express.
DCR	Delivery Confirmation Return.
DEC	Delivery Confirmation.
DES	Deferred Service.
DNO	Delivery Notification Only.
DOS	Door Service.
DSN	Delivery scheduled next day by cartage agent.

DSS	Delivery scheduled second day by cartage agent.
DST	Delivery scheduled third day by cartage agent.
DTA	Door to Airport.
DTD	Door to Door.
DTP	Door to Port (Ocean).
ESP	Express Service Plus.
ESV	Expedited Service.
ESW	Expedited Service Worldwide.
EXS	Express Service.
EXW	Express Service - Worldwide.
FIC	First Class.
GEN	General.
GRO	Ground.
ISS	Other intermodal and stack service.
MAF	Manifest freight.
MET	Metro.
MUW	Multiweight.
NBD	Next Business Day.
NDA	Next Day Air.
NEM	Next Morning.
NFO	Next Flight Out.
NHW	Next day Hundred Weight.
NOR	NORMAL - Normal delivery.
NOS	Not served.
OIS	Other Intermodal and Stack service
OTH	Other.
OVN	Overnight.
PAS	Passenger service.
PIU	Pickup.
PM	PM.
PMI	Priority Mail Insured.
POB	P.O. Box/Zip code.
POD	Proof of Delivery (POD) with Signature.
PRM	Priority Mail.
PRS	Premium Surface.
PS1	Primary Service Area - Next Day by 10:30 A.M.
PS2	Primary Service Area - Next Day by 5:00 P.M.
PS3	Primary Service Area - Next Day By 9:30 A.M.
PS4	Primary Service Area - Next Day by Noon.
PS5	Primary Service Area - Second Day by Noon.
PTD	Port to Door (Ocean).
PTP	Port to Port (Ocean).
REG	Regular.
SAD	Same day.
SAP	Saturday Pickup.
SAT	Saturday.
SBD	SBD, Second Business Day.
SCH	Scheduled.
SDA	Second Day Air.
SDW	Second Day Hundred Weight.

SED	Second Day.
SEM	Second Morning.
SGW	Standard Ground Hundred Weight.
STC	Standard Class.
STG	Standard Ground.
STO	Standard Ocean.
STS	Standard Service.
SUH	Sunday and Holidays.
TDS	Three Day Service.
TIC	Time Critical.
TRG	Tracking - Ground.

4. Universal Structure

4.1 ContactInformation

4.1.1 ContactInformation

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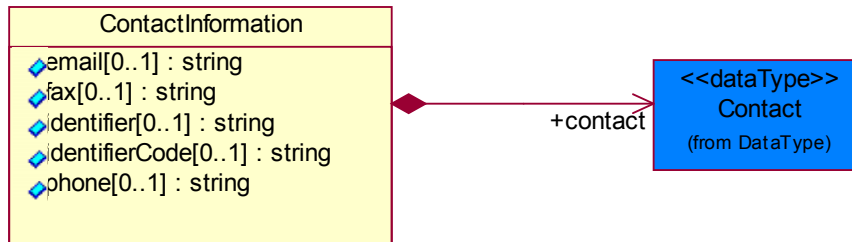
Figure 4-1 ContactInformation

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

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

4.2 DataType

4.2.1 Contact

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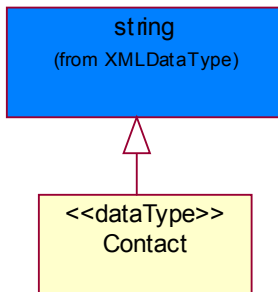
Figure 4-2 Contact

4.2.2 DUNS

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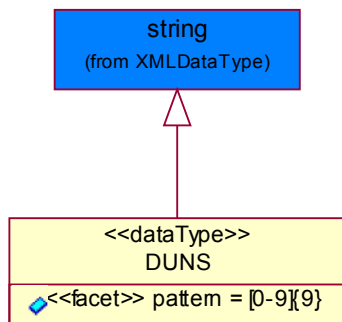
Figure 4-3 DUNS

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

4.2.3 DUNSPlus4

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

```
                    ┌─────────────────────┐
                    │       string        │
                    │  (from XMLDataType)  │
                    └─────────────────────┘
                              △
                              │
        ┌─────────────────────────────────────────┐
        │           <<dataType>>                    │
        │            DUNSPlus4                       │
        ├───────────────────────────────────────────┤
        │ ◆<<facet>> pattern = [0-9]{9}[0-9a-zA-Z]{1,4} │
        └───────────────────────────────────────────┘
```
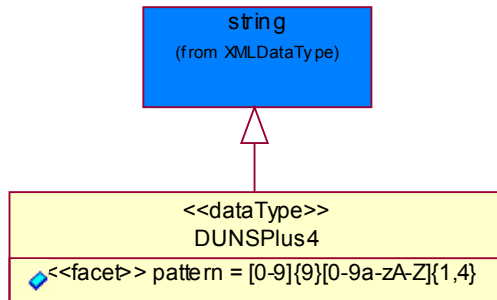
Figure 4-4 DUNSPlus4

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

4.2.4 GLN

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

```
                ┌─────────────────────┐
                │       string        │
                │  (from XMLDataType)  │
                └─────────────────────┘
                          △
                          │
        ┌───────────────────────────────┐
        │         <<dataType>>           │
        │            GLN                 │
        ├───────────────────────────────┤
        │ ◆<<facet>> pattern = [0-9]{13} │
        └───────────────────────────────┘
```
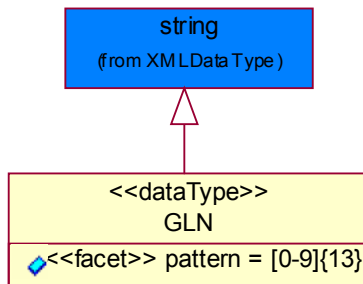
Figure 4-5 GLN

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

4.2.5 GTIN

Global Trade Identification Number (GTIN).
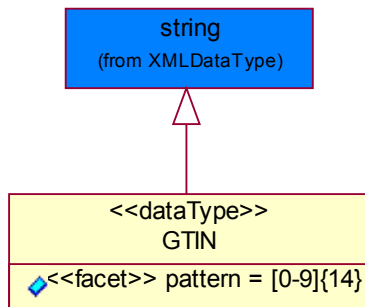
Figure 4-6 GTIN

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

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.
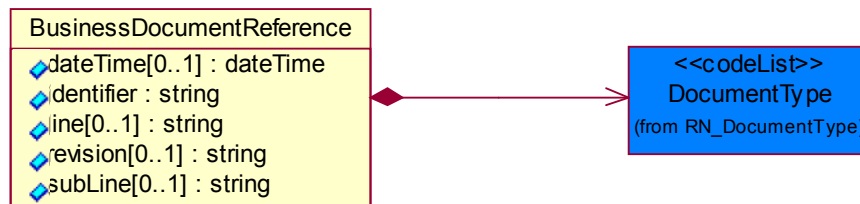
Figure 4-7 BusinessDocumentReference

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 4-8 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 4-9 Location

Composition	Cardinality	Type	Documentation
LocationChoice	1	LocationChoice	

4.4.3 LocationChoice

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

4.4.4 PhysicalAddress

The business document must provide a physical address for a party to the business transaction.
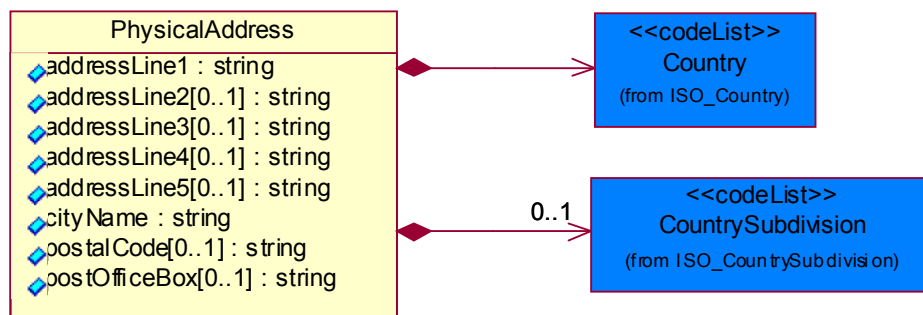
Figure 4-10 PhysicalAddress

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

Composition	Cardinality	Type	Documentation
Country	1	Country	For representation of

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

4.5 MonetaryExpression

4.5.1 FinancialAmount

The business document must express financial amounts.
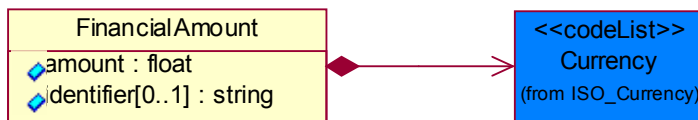
Figure 4-11 FinancialAmount

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

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

4.6 PartnerIdentification

4.6.1 PartnerIdentification

The business document must allow for the identity of one or more parties to the transaction.
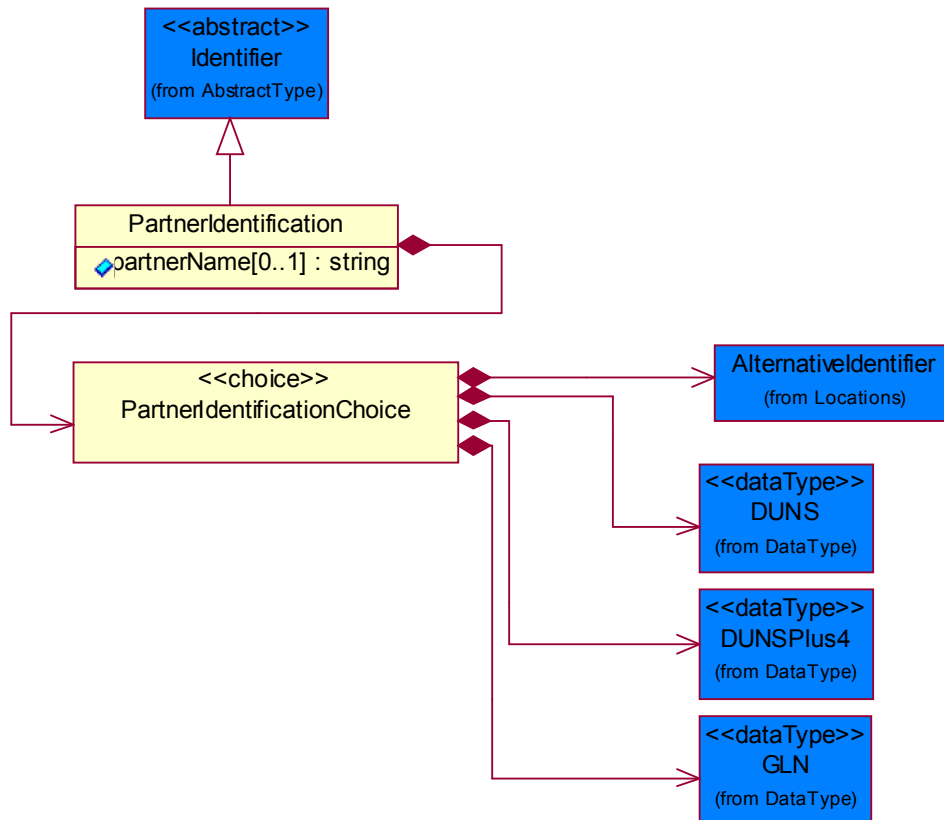
Figure 4-12 PartnerIdentification

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

Composition	Cardinality	Type	Documentation
PartnerIdentificationChoice	1	PartnerIdentificationChoice	

4.6.2 PartnerIdentificationChoice

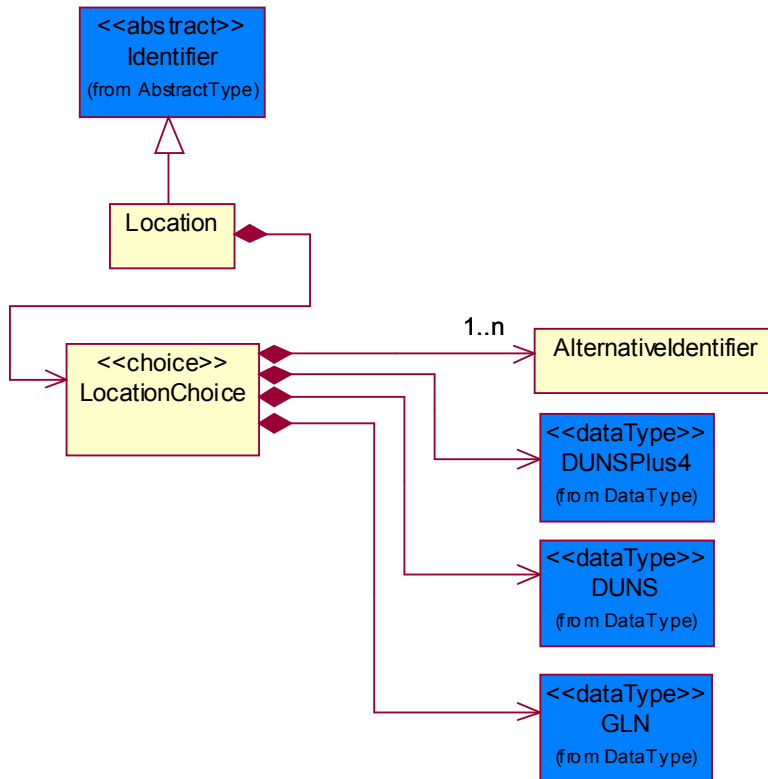| Composition	Cardinality	Type	Documentation
AlternativeIdentifier	1	AlternativeIdentifier	Identifies the specified code and the name of the organization that a code is utilized from.
DUNS	1	DUNS	A number assigned by Dun and Bradstreet to identify a business location.
DUNSPlus4	1	DUNSPlus4	A identifier 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.

4.6.3 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.
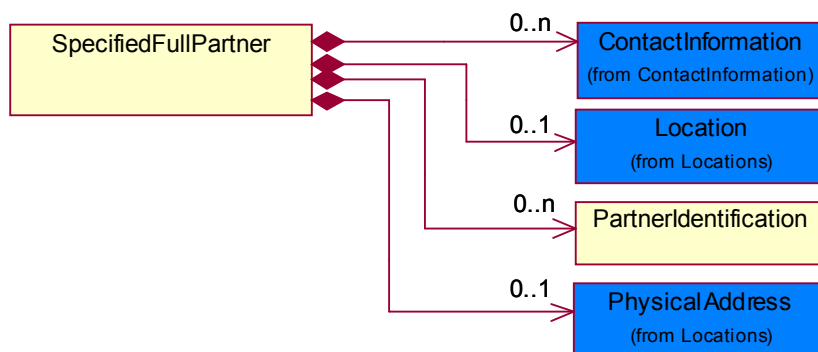
Figure 4-13 SpecifiedFullPartner

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.

4.6.4 SpecifiedIntermittentPartner

The business document must describe a physical address for a delivery.
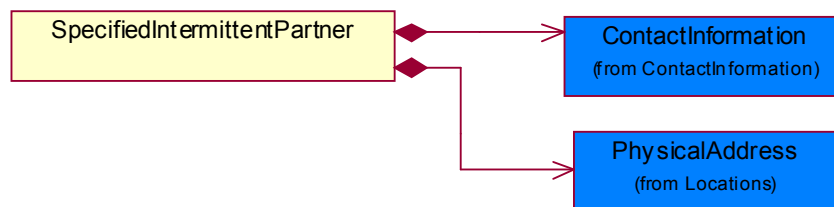
Figure 4-14 SpecifiedIntermittentPartner

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.

4.6.5 SpecifiedKnownPartner

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

Figure 4-15 SpecifiedKnownPartner

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

4.6.6 SpecifiedKnownPartnerContact

The business document must describe the trading partners in the business transaction and allow for a identification of an individual of the trading partner.
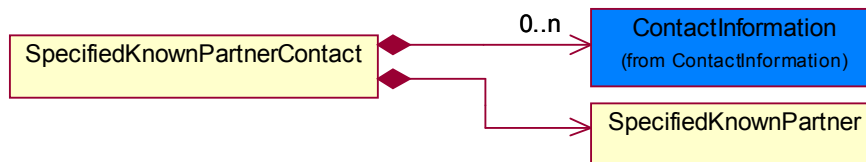
Figure 4-16 SpecifiedKnownPartnerContact

Composition	Cardinality	Type	Documentation
SpecifiedKnownPartner	1	SpecifiedKnownPartner	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.

4.6.7 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.
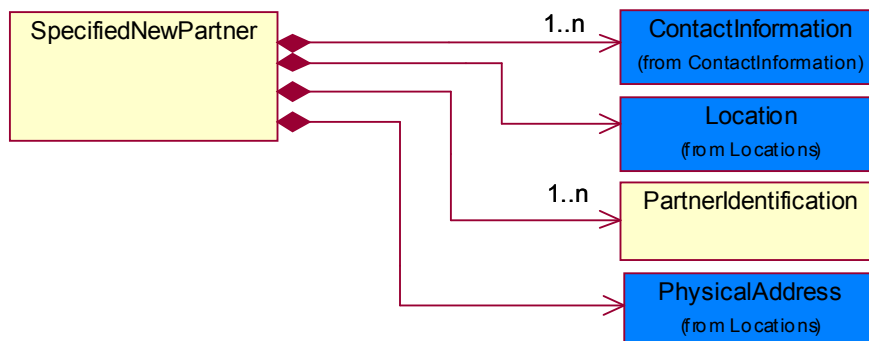
Figure 4-17 SpecifiedNewPartner

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

4.6.8 SpecifiedPartnerDescription

The collection of business properties that describe a business partners' identity, their contact information, where they are physically located and their function in a supply chain.
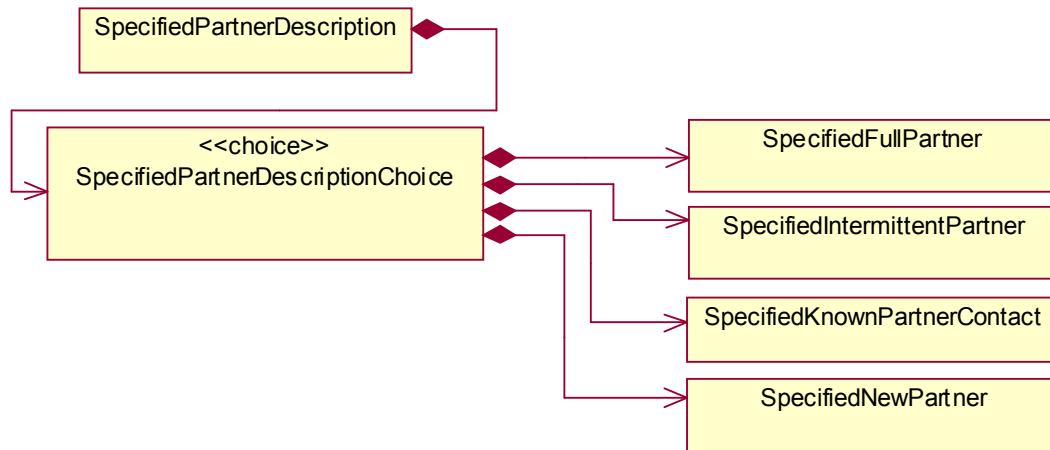
Figure 4-18 SpecifiedPartnerDescription

Composition	Cardinality	Type	Documentation
SpecifiedPartnerDescriptionChoice	1	SpecifiedPartnerDescriptionChoice	

4.6.9 SpecifiedPartnerDescriptionChoice

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

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

4.7 PhysicalDimension

4.7.1 Linear

The business document must be able to express the linear dimensions of an object.
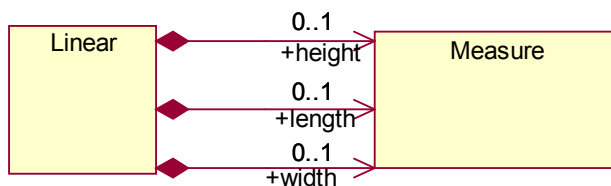
Figure 4-19 Linear

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

4.7.2 Measure

The business document must describe measurement information.
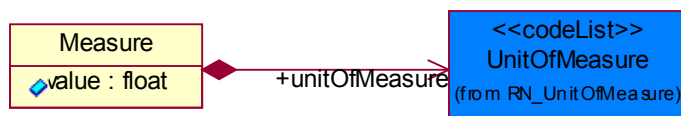
Figure 4-20 Measure

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

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

4.7.3 Volume

The business document must be able to express the volume of an object.
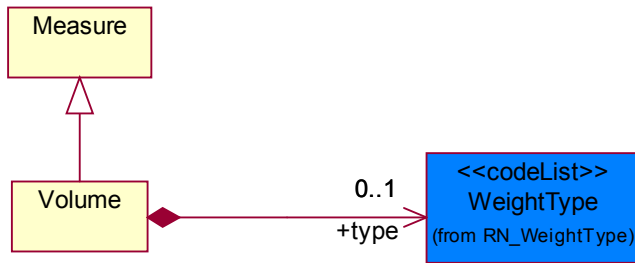
Figure 4-21 Volume

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

4.7.4 Weight

The business document must be able to express the weight of an object.
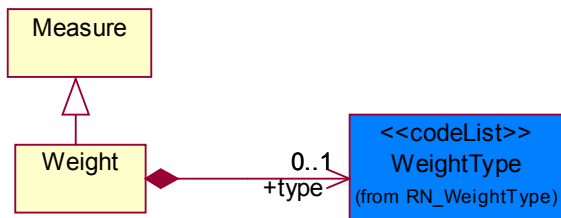
Figure 4-22 Weight

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

4.8 ProductIdentification

4.8.1 ProductIdentification

The object provides the identifier(s) of a product.
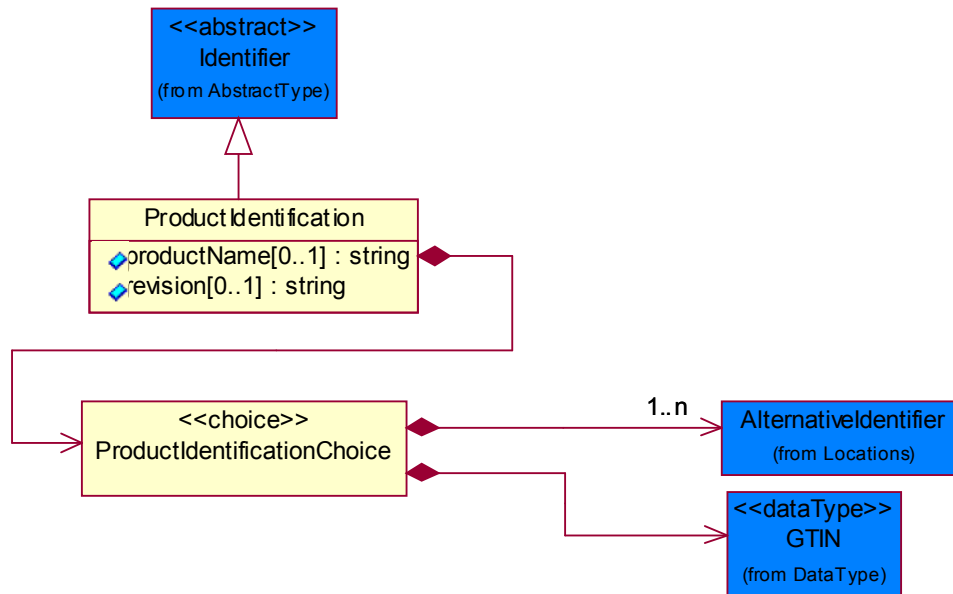
Figure 4-23 ProductIdentification

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

Composition	Cardinality	Type	Documentation
ProductIdentificationChoice	1	ProductIdentificationChoice	

4.8.2 ProductIdentificationChoice

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

4.9 CodeList

4.9.1 Country

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

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

4.9.6 MimeTypeQualifier

The MIME type as defined by IANA.

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

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

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

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

application/vnd.ecdis-update	[Buettgenbach]
application/vnd.ecowin.chart	[Olsson]
application/vnd.ecowin.filerequest	[Olsson]
application/vnd.ecowin.fileupdate	[Olsson]
application/vnd.ecowin.series	[Olsson]
application/vnd.ecowin.seriesrequest	[Olsson]
application/vnd.ecowin.seriesupdate	[Olsson]
application/vnd.enliven	[Santinelli]
application/vnd.epson.esf	[Hoshina]
application/vnd.epson.msf	[Hoshina]
application/vnd.epson.quickanime	[Gu]
application/vnd.epson.salt	[Nagatomo]
application/vnd.epson.ssf	[Hoshina]
application/vnd.ericsson.quickcall	[Tidwell]
application/vnd.eudora.data	[Resnick]
application/vnd.fdf	[Zilles]
application/vnd.ffsns	[Holstage]
application/vnd.FloGraphIt	[Floersch]
application/vnd.framemaker	[Wexler]
application/vnd.fsc.weblaunch	[D.Smith]
application/vnd.fujitsu.oasys	[Togashi]
application/vnd.fujitsu.oasys2	[Togashi]
application/vnd.fujitsu.oasys3	[Okudaira]
application/vnd.fujitsu.oasysgp	[Sugimoto]
application/vnd.fujitsu.oasysprs	[Ogita]
application/vnd.fujixerox.ddd	[Onda]
application/vnd.fujixerox.docuworks	[Taguchi]
application/vnd.fujixerox.docuworks.binder	[Matsumoto]
application/vnd.fut-misnet	[Pruulmann]
application/vnd.grafeq	[Tupper]
application/vnd.groove-account	[Joseph]
application/vnd.groove-help	[Joseph]
application/vnd.groove-identity-message	[Joseph]
application/vnd.groove-injector	[Joseph]
application/vnd.groove-tool-message	[Joseph]
application/vnd.groove-tool-template	[Joseph]
application/vnd.groove-vcard	[Joseph]
application/vnd.hbci	[Hammann]
application/vnd.hhe.lesson-player	[Jones]
application/vnd.hp-HPGL	[Pentecost]
application/vnd.hp-hpid	[Gupta]
application/vnd.hp-hps	[Aubrey]
application/vnd.hp-PCL	[Pentecost]
application/vnd.hp-PCLXL	[Pentecost]
application/vnd.httphone	[Lefevre]
application/vnd.hzn-3d-crossword	[Minnis]
application/vnd.ibm.afplinedata	[Buis]
application/vnd.ibm.electronic-media	[Tantlinger]
application/vnd.ibm.MiniPay	[Herzberg]
application/vnd.ibm.modcap	[Hohensee]

application/vnd.ibm.secure-container	[Tantlinger]
application/vnd.informix-visionary	[Gales]
application/vnd.intercon.formnet	[Gurak]
application/vnd.intertrust.digibox	[Tomasello]
application/vnd.intertrust.nncp	[Tomasello]
application/vnd.intu.qbo	[Scratchley]
application/vnd.intu.qfx	[Scratchley]
application/vnd.irepository.package+xml	[Knowles]
application/vnd.is-xpr	[Natarajan]
application/vnd.japannet-directory-service	[Fujii]
application/vnd.japannet-jpnstore-wakeup	[Yoshitake]
application/vnd.japannet-payment-wakeup	[Fujii]
application/vnd.japannet-registration	[Yoshitake]
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application/vnd.kde.kontour	[Faure]
application/vnd.kde.kpresenter	[Faure]
application/vnd.kde.kspread	[Faure]
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application/vnd.Mobius.PLC	[Kabayama]
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application/vnd.powerbuilder6-s	[Guy]
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application/vnd.publishare-delta-tree	[Ben-Kiki]
application/vnd.pvi.ptid1	[Lamb]

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application/whoispp-response	[RFC2958]
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audio/AMR-WB	[RFC3267]
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audio/G729E	
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audio/L20	[RFC3190]
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message/disposition-notification	[RFC2298]
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message/s-http	[RFC2660]
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multipart/parallel	[RFC2045,RFC2046]
multipart/related	[RFC2387]
multipart/report	[RFC1892]
multipart/signed	[RFC1847]
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text/css	[RFC2318]
text/directory	[RFC2425]
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video/vnd.vivo	[Wolfe]

4.9.7 UnitOfMeasure

Code identifying a product unit of measure.

Instance	Documentation
10P	10-pack.
1BF	100 Board Feet.
1FC	20 Foot Container.
1GR	Gram/Cubic Centimeter.
1GT	10,000 Gallon Tankcar.
1KB	25 Kilogram Bulk Bag.
1KD	10 Kilogram Drum.
1KP	1000-pack.
1M2	1/Square Meter (1/M2).
1PA	20-Pack.
1PB	50 Pound Bag.
1PD	100 Pound Drum.
1PM	1/minute (1/min).
22S	Square Millimeter/Second (mm2/s).
2FC	40 Foot Container.
2GR	Gram/square meter.
2GT	20,000 Gallon Tankcar.
2KB	300 Kilogram Bulk Bag.
2KD	15 Kilogram Drum.
2PA	100-Pack.
3GR	Grams Per 100 Centimeters.
3KB	500 Kilogram Bulk Bag.
3KD	55 Gallon Drum.
3MH	Cubic Millimeters/Hour (mm3/hour).
4GR	Grams Per 100 Grams.
4KD	115 Kilogram Drum.
50P	50-pack.
5GR	Grams Per Cubic Centimeter.
6GR	Grams Per Square Centimeter.
7GR	Grams Per Square Meter.
ABC	Absorbance per centimeter (Absorbance per cm).
ABU	Absorbance per Unit (absorbance per unit).
ACC	Atoms per Cubic Centimeters (atoms per cu cm).
ACR	Acre.
ACS	Acidic strength/concentration.
ACT	Actual Pounds.
ACU	Activity unit (Activ.unit).
ALU	Aluminum Pounds Only.
AM1	Ampoule.
AMN	Ångstroms/Minute (Ångst/min).
AMP	Ampere.
ANG	Angstrom (A).
APB	Atomic Parts per Billion (atomic ppb).
APG	API Specific Gravity (API Grav).
APM	Atomic Parts per Million (atomic ppm).
APT	Atomic Parts per Trillion (atomic ppt).

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

BYT	Bytes.
C0W	Counts per Wafer (Counts/wf).
C3M	Cubic centimeter per minute (cm3/minute).
CAA	Carat.
CAB	Carboy.
CAC	Card.
CAD	Candela.
CAG	Cartridge.
CAK	Cask.
CAL	Calorie.
CAN	Can.
CAO	Carload.
CAR	Car.
CAS	Case.
CAT	Canister.
CAW	Catchweight.
CC2	Centipoises per hour per square centimeters (cps per hr per sq cm).
CCC	Counts per Square Centimeters (Counts/cm2).
CD3	Cubic decimeter (Cubic dec).
CEL	Cell.
CEM	Centimeter.
CEP	Centipoises (CPS).
CET	Centiliter.
CGM	Centigram.
CHA	Chains (Land Survey).
CHE	Chest.
CM2	Square centimeter (cm2).
CMH	Centimeter/hour (cm/h).
CML	Colony/Milliliter (col/ml).
CMS	Centimeter/Second (cm/s).
CNN	Connector.
COG	Coil Group.
COI	Coil.
COL	Coulomb.
COM	Composite Product Pounds (Total Weight).
CON	Cone.
COT	Container.
COV	Cover.
CRA	Crate.
CRT	Carton.
CSE	Cassette.
CST	Centistokes.
CUB	Cubic centimeter.
CUC	Cubic centimeter/second.
CUF	Cubic Foot.
CUI	Cubic inch.
CUM	Cubic meter.
CUP	Cup.
CUY	Cubic yard.
CYC	Cycles.

CYL	Cylinder.
DAL	Dalton units (dalton).
DAY	Day.
DCB	Decibels.
DCG	Decagram.
DCL	Deciliter.
DCM	Defects per Square Centimeters (Defects/cm2).
DE1	Defects.
DE2	Degrees in Angles.
DE3	Degree.
DEA	Deal.
DEC	Decimeter.
DEF	Degree Fahrenheit.
DEG	Degree Celsius.
DEP	Dep. Factor.
DFW	Defects per Wafer (Defects/Wafer).
DGM	Decigram.
DIE	Die.
DIL	Display.
DIP	Dispenser.
DNC	Dynes per centimeter (Dynes per cm).
DOZ	Dozen.
DPM	Parts per Million per Day (ppm per day).
DRA	Dram.
DRU	Drum.
DRY	Dry Pounds.
EAC	Each.
ELE	Electrical Capacitance.
EML	Enzyme Units/Milliliter (Enzyme/ml).
ENU	Enzyme Units (Enzy.Units).
EQ2	Milliequivalent per 30 Kg (mequ/30Kg).
EQG	Milliequivalent per gram (milliequivalent per g).
EQK	Milliequivalent per Kilogram (mequ/Kg).
EQM	Milliequivalent per Millimeter (milliequivalent per mm).
FAR	Farads.
FFA	Femtofarad.
FIN	1/32 inch.
FLO	Fluid Ounce.
FOI	Fluid Ounce (Imperial).
FOO	Foot.
FOU	Fluid Ounce US.
FPS	Feet per second (Feet/s).
FRH	Sales FT3 at 60°F per hour (FTR/hour).
FRM	Sales FT3 at 60°F per minute (FTR/min).
FTR	Sales FT3 at 60°F, 14.7 psia (SFT3_60F_S).
FTS	Sales FT3 at 70°F, 14.7 psia (SFT3_70F_S).
FTT	1000 FT3 at 60°F, 14.7 psia (KFT3_60F_S).
FTU	1000 FT3 at 70°F, 14.7 psia (KFT3_70F_S).
FUU	Fuel Usage (Gallons).
G2S	Gram square per second (g²/s).

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

IHG	Inches of Mercury Gauge (inHg-g).
ILB	Inch pounds (in.lb).
IMG	Imperial Gallons.
INC	Inch.
IPS	Inch per second (inch / sec).
JAR	Jar.
JKG	Joule/Kilogram (J/kg).
JMO	Joule/Mol (J/mol).
JOI	Joint.
JOU	Joule.
KAI	Kilogram act. Ingrd. (kg ac.ing.).
KAK	kg act.ingrd. / kg (kai/kg).
KBY	Kilobyte.
KCM	Kilogram per cm2 gauge (kg/cm2-g).
KD3	Kilogram per Cubic Decimeter (kg/dm3).
KEG	Keg.
KEL	Kelvin.
KGE	Container Fill Weight in Kg/Ea.
KGH	Kilogram per Hour (kg/h).
KGL	Kilograms per Liter (kg/L).
KGM	Kilogram/Mol (kg/mol).
KGS	Kilogram per Second (kg/s).
KHO	Kilometer/hour.
KIC	Kilogram per cubic meter.
KIE	Kilometer.
KIG	Kilogram.
KIH	Kilohertz.
KIK	Kilobecquerel/Kilogram.
KIL	Kiloampere.
KIM	Kilogram/square meter.
KIO	Kiloohm.
KIS	Kilogramm pro Sekunde.
KIT	Kit.
KIV	Kilovolt.
KIW	Kilowatt.
KJK	Kilojoule per kilogram (KJ/kg).
KJL	Kilojoule.
KJM	Kilojoule/Mol (KJ/mol).
KKG	Kilogram/Kilogram.
KMK	Cubic meter/Cubic meter (m3/m3).
KMN	Kelvin per Minute (K/min).
KMS	Kelvin per Second (K/s).
KNM	Kilonewton per square meter (kN/m2).
KNT	Kilonewton (ND).
KPA	Kilopascal (kPa).
KRU	Kreb Unit.
KTN	Kilotonne (kt).
KUD	Kubikdezimeter.
KUM	Kubikmeter pro Sekunde.
KVA	Kilovoltampere (kVA).

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

MEH	Megahertz.
MEJ	Megajoule (MJ).
MEP	Megapascal.
MET	Meter.
MEW	Megawatt.
MFD	Microfarad (µF).
MGA	Milligram per Amp (mg per amp).
MGF	Milligram per Square Centimeter (mg/cm2).
MGG	Milligram per Gram (mg/g).
MGL	Microgram per Liter (µg/l).
MGM	Milligram.
MGO	Megohm (MOhm).
MGR	Micrograms per Gram (µg/g).
MGS	Milligram per Second (mg per sec).
MH1	Millimeter per Hour (mm/h).
MHC	Micromhos per Centimeter (µmhos/cm).
MHR	Meter per Hour (m/h).
MHV	Megavolt.
MIB	Million BTU's.
MIC	Mikrogram/cubic meter.
MIG	Micrograms Per Cubic Meter.
MIL	Mile.
MIM	Micrometer.
MIN	Minute.
MIP	Millipascal seconds.
MIS	Microsecond.
MIT	Miter.
MIV	Millivolt.
MIW	Milliwatt.
MJM	Wobbe Number (MJ/m3).
MJO	Millijoule.
MKG	Milligrams of KOH per Gram (mg KOH per g).
MKL	Millimol per Gram (mmol/g).
ML1	Milliliter per Liter (ml/l).
ML2	Milliliter per Liter (ml/l).
ML3	Mol per Liter (Mol/Liter).
ML4	Millimol per Liter (Millimol/l).
MLA	Milliampere.
MLB	Millibar.
MLC	Milligram/cubic meter.
MLG	Milliliter per Gallon (ml per gal).
MLI	Milliliter.
MLK	Milligram/kilogram.
MLL	Milligram/Liter.
MLM	Mole per Mole (mole/mole).
MLP	Mole Percent (% mole).
MLR	Microliter (µl).
MLS	Miles.
MLW	Milliliter act. Ingr. (ml act.in.).
MM3	Cubic Millimeter (mm3).

MMA	Millimeter per Year (mm/a).
MME	Millimeter.
MMG	Millimol/gram (mmol/g).
MMH	Millimeter H20.
MMK	Millimol/kilogram.
MMM	0.000001 meter (1 millionth of a meter). (Micrometer/Micron).
MMN	Meter per Minute (m/min).
MMO	Millimol.
MMS	Millimeter per Second (mm/s).
MNM	Millinewton per meter (mN/m).
MNT	Meganewton (MN).
MOK	Mol/kilogram.
MOL	Mol.
MON	Month.
MPB	Mass parts per billion (ppb(m)).
MPG	Miles per Gallon (US) (Mi/Gal(US)).
MPH	Megagrams Per Hour.
MPM	Mass Parts per Million (ppm(m)).
MPT	Mass Parts per Trillion (ppt(m)).
MPZ	Meterpascal per Second (m.Pa/s).
MQG	Mircoequivalent per Gram (microeq/g).
MRF	Millifarad (mF).
MS1	MilliSiemen per Centimeter (mS/cm).
MS2	Meter per Second Squared (m/s2).
MS3	Microsiemens per Centimeter (µS/cm).
MSC	Millisecond.
MSM	Milligrams Per Square Meter.
MTA	Millitesla.
MTQ	Meter pro Quadratsekunde.
MTR	Meter (m).
MTS	Meters per second.
MUL	Multichip - When 2 or more dies (chips) are merged into one package.
MVA	Megavoltampere (MVA).
MVS	Millivolts.
MVT	Millivolt.
MWH	Megawatt Hours (mwh).
MWR	Megavolt Ampere Reactive Hours (MVAH reac.).
MWT	Molecular Weight (mW).
MYS	Micro Siemens (mic. Siem.).
N2M	Newton/Square millimeter (N/mm2).
NAA	Nanoamps.
NAM	Nanometer.
NAS	Nanosecond.
NEB	Net Barrels.
NEG	Net Gallons.
NEI	Net Imperial Gallons.
NEL	Net Liters.
NEW	Newton.
NM2	Newton per Square Meter (N/m²).
NM3	Normal m3 at 0°C, 1 atmos (Normal m3).

NMH	Newton per Hour (N/h).
NMM	Newton per Millimeter (N/mm).
NMR	Normal m3 per Hour (Nm3/h).
NOL	Normality.
NPK	Nowpac Container (Nowpac).
NRG	Bar Gauge.
NRU	Nanofarad (nF).
NTU	Nephelometric Turbidity Units (NTU).
NTY	Equivalents per Liter (equ/l).
NUM	Numbers.
NWM	Newton per Meter (N/m).
NXM	Newton per 25 mm (N/25mm).
O2P	Percent Oxygen (% Oxygen).
OCT	Ohm/ct.
OHC	Ohm-Centimeter (ohm cm).
OHM	Ohm.
OMM	Ohm/mm.
ONE	One.
OPH	Operating hour (Oper. Hour).
OSQ	Ohm/sq.
OTP	One Thousand Pieces.
OUN	Ounce.
OVI	Ohm/via.
OZG	Ounce per Gallon (oz per gal).
PAC	Parcel.
PAD	Pad.
PAG	Package.
PAI	Pail.
PAK	Pack (PAK).
PAL	Pallet.
PAN	Panel.
PAR	Pair.
PAS	Pascal.
PAT	Packet.
PBA	PPBA Silicon (ppba Si).
PBW	Parts Per Billion by Weight (ppbw).
PC2	Parts per Square Centimeters (part per sq cm).
PCA	Percent Active (% Active).
PCL	Picocuries per Liter (pCi/l).
PEC	Percent.
PEG	Percentage.
PEH	Percent Per 1000 Hours.
PEN	Pennyweight.
PER	Per Hundred Pieces.
PEW	Percent Weight.
PF3	Per Cubic Foot (per cu ft).
PF4	Particles per Cubic Feet (particles per cu ft).
PFA	Percent Failed Area (Failed Area %).
PFR	Picofarad.
PH	PH Factor (pH).

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

REE	Reel.
RIN	Ring.
RLU	Relative Light Unit (RLU).
ROD	Rod.
ROL	Roll.
RPM	Revolutions per Minute (Revs/min).
SAC	Sack.
SBB	Super Bulk Bag.
SCL	Scales.
SEC	Second.
SET	Set.
SHE	Sheet.
SHI	Shipment.
SHM	Sheet - Metric measure.
SHO	Shot.
SID	Disk (Disc).
SIE	Siemens per Meter (Siemens/m).
SKE	Skein.
SKI	Skid.
SLE	Sleeve.
SLI	Slip Sheet.
SMI	Square mile.
SMM	Square millimeter.
SPO	Spool.
SQF	Square foot.
SQI	Square inch.
SQK	Square kilometer.
SQM	Square meter.
SQS	Square meter/second.
SQU	Square.
SQY	Square Yard.
STI	Stick.
STM	Statute Mile.
STP	Steps.
STR	Strip.
STU	Stabilizer Units (SU).
SVU	Say Bolt Viscosity Units (SVU).
TAB	Tablet.
TAN	Tank.
TAR	Target pieces (target).
TAT	Tank Truck.
TES	Tesla.
THO	Thousand.
TM3	1/Cubic Meter (1/m3).
TNN	Tonne.
TOM	Ton per Cubic Meter (t/m3).
TON	Ton.
TOR	Torr.
TOT	Tote.
TPT	Pass Test (Pass).

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

4.9.8 WeightType

A code identifying the type of weight.

Instance	Documentation
CHR	Chargeable.
DMN	Dimensional.
EXA	Exact Net.
GNR	General.
GRS	Gross.
NET	Net.
NOM	Nominal Net.
TAR	Tare.

5. System Structure

5.1 BusinessProcessIdentifier

A Business Process Identifier to uniquely define the TPIR-PIP 'role' within a Business Scenario at a company or MNC level. The identifier MUST be composed of alphanumeric characters only and its length MUST be between one and twelve characters.
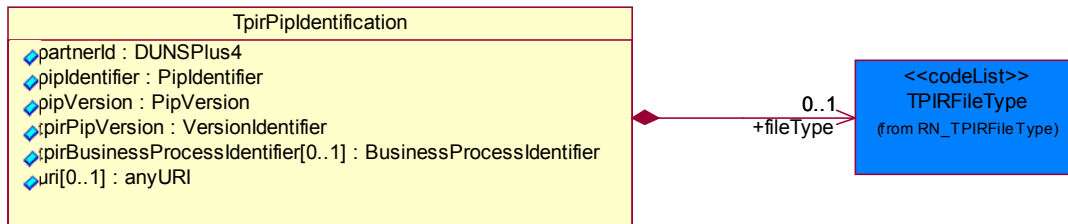
Figure 5-1 BusinessProcessIdentifier

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

5.2 BusinessServiceInformation

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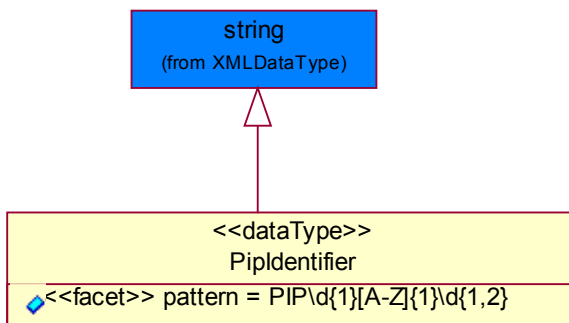
Figure 5-2 BusinessServiceInformation

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

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

5.3 ContractInformation

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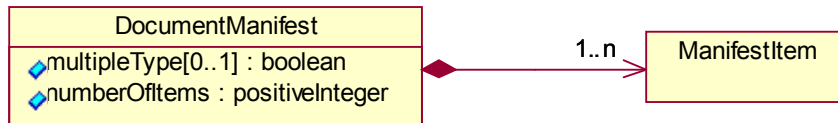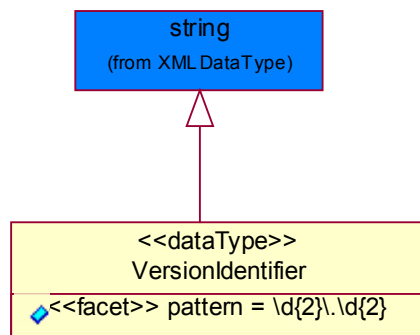

Figure 5-3 ContractInformation

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

5.4 CorrelationInformation

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

Figure 5-4 CorrelationInformation

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

			choreography.

5.5 DocumentHeader

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

```
┌─────────────────────────────────────┐
│   StandardDocumentIdentification     │
├─────────────────────────────────────┤
│ ◆standard[0..1] : string             │
│ ◆version : string                    │
└─────────────────────────────────────┘
```

Figure 5-5 DocumentHeader

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

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

5.6 DocumentIdentification

The object specifies all information necessary to identify the business document.
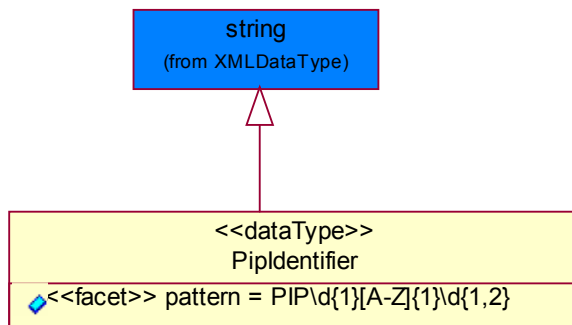
Figure 5-6 DocumentIdentification

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

Composition	Cardinality	Type	Documentation
DocumentIdentificationChoice	1	DocumentIdentificationChoice	

5.7 DocumentIdentificationChoice

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

5.8 DocumentInformation

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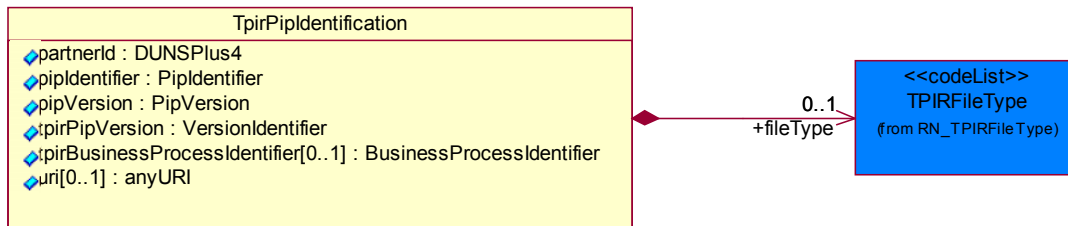

Figure 5-7 DocumentInformation

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

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

5.9 DocumentManifest

The block provides a brief summary of attachments and Service Content.
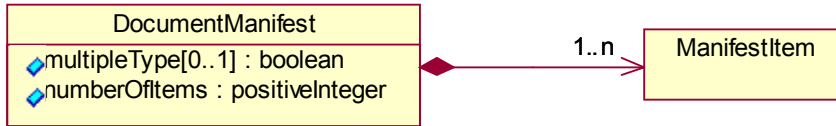
Figure 5-8 DocumentManifest

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

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

5.10 DocumentSecurity

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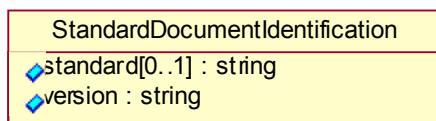

Figure 5-9 DocumentSecurity

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

5.11 ManifestItem

The object provides details about the specific attachment(s).
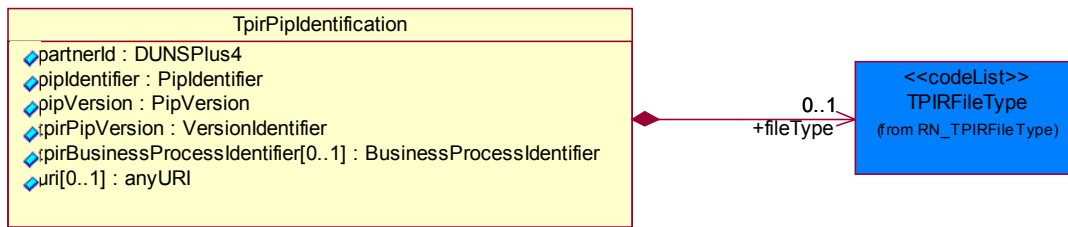
Figure 5-10 ManifestItem

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

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

5.12 PipIdentifier
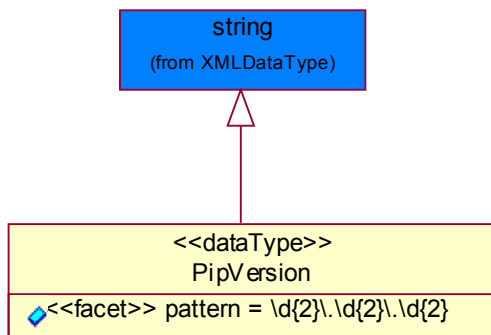
PIP Identification.[i.e. PIP3A4]
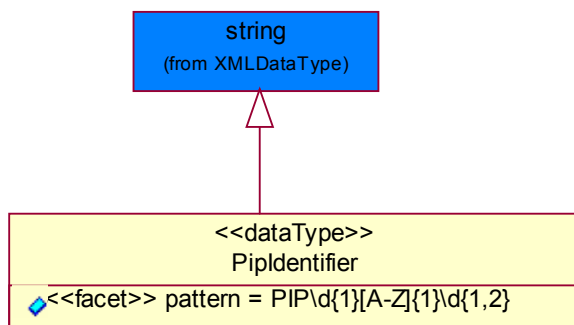
Figure 5-11 PipIdentifier

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

5.13 PipVersion

PIP version number (i.e. 02.02.00).

Figure 5-12 PipVersion

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

5.14 Receiver

The object allows the identification of the receiving party of the business message.
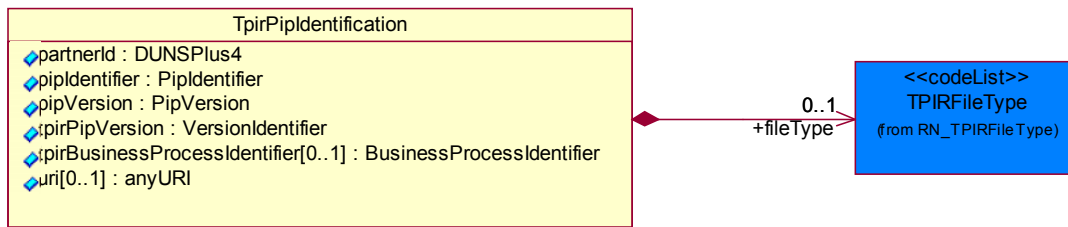
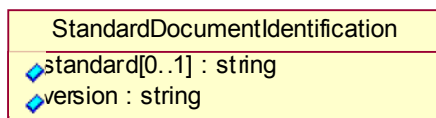**Figure 5-13 Receiver**

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

5.15 RequestingDocumentInformation

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


Figure 5-14 RequestingDocumentInformation

Attribute	Type	Documentation
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.

requestingDocumentCre ationDateTime[0..1]	dateTime	The date-time of the requesting business document.
requestingDocumentInst anceIdentifier	string	The Business Document identification number that identifies the requesting Business Document.

5.16 Sender

The object allows the identification of the initiating party of the business message.
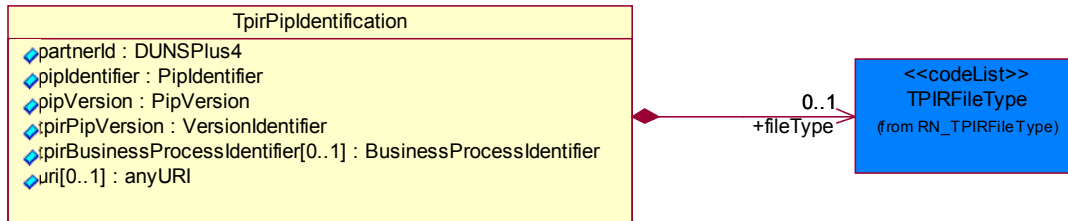
Figure 5-15 Sender

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

5.17 StandardDocumentIdentification

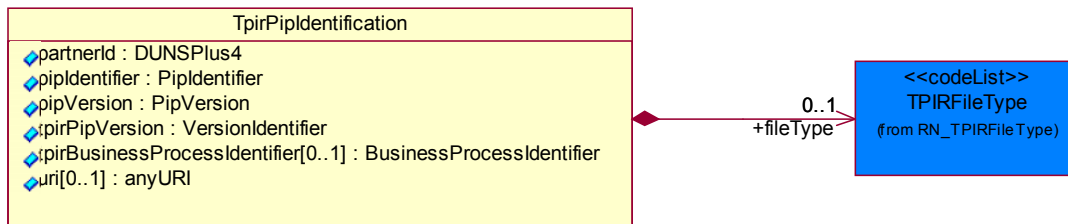The object specifies additional information necessary to identify the standard business document.

```
StandardDocumentIdentification
standard[0..1] : string
version : string
```
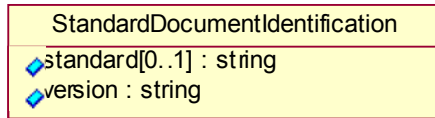
Figure 5-16 StandardDocumentIdentification

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

5.18 TpirPipIdentification

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

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

```
<<codeList>>
TPIRFileType
(from RN_TPIRFileType)
```
0..1 +fileType

Figure 5-17 TpirPipIdentification

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

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

5.19 VersionIdentifier

Version Number (i.e., major and minor version number as XX.XX).
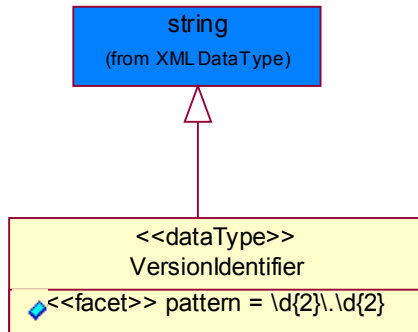
Figure 5-18 VersionIdentifier

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

5.20 CodeList

5.20.1 TPIRFileType

A code identifying the file type of TPIR form.

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

6. XML Data Type

6.1 anyURI

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

6.2 boolean

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

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 float

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

6.6 positiveInteger

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

6.7 string

Represents character string.