

... connecting the Automotive Aftermarket



Invoice

Description of Content and Structure

Version 1.0

The utmost care was taken in the design of text and illustrations. Despite this, errors in the user manual cannot be avoided completely.

The publishers and authors would appreciate any suggestions for improvements or information on errors.

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1 Document management

1.1 Purpose and objectives

To complete the process chain between buyers and seller in TecCom without drawing upon EDI systems at the buyers and sellers, transaction documents such as order responses, despatch advices and invoices should be transferred without EDI systems from the seller to the buyer so that they can be processed further there.

This document describes the structure and content of invoices (hereinafter referred to as Invoice). It also contains recommendations for the rules according to which the content can be generated on the seller side and be interpreted on the buyer side.

2 TXML and DTDs

2.1 Definition of TXML

The TXML documents for transaction contents described by content are defined by means of DTDs. The following transformation rules were applied in defining the TXML formats:

- 1 Qualifiers from the EDI area are described by attributes if their possible values originate from a limited value list that need to be interpreted in TecCom (e.g. for display purposes). This makes it possible to define permissible values in the DTD.
For example, the qualifier for the date is defined via the following attributes: Before, At, After. The value list is maintained by TecCom.
- 2 Qualifiers that are merely displayed (currencies, country codes, EDI identifiers for reason of variance and reason for modification, price types etc.) are represented as elements. This makes the transaction documents open to potential extensions and to bilaterally defined identifiers in these value lists.
- 3 Universal elements (such as Date, Address, Quantity) are embedded in elements that define the respective semantics. To avoid redundancies, such elements are defined without qualifying type elements¹.
- 4 Elements with the same structure (such as SellerPartyNumber, BuyerPartyNumber etc.) are represented by different element names so that they can be distinguished in the element structure definition of the DTD.

The following table describes qualifiers from the EDI area that are described in TXML via attributes with enumeration types. Defaults are underscored.

Element	Attribute	Values	Meaning
Date	Qualifier	<u>At</u>	Exactly on
		Before	At the latest
		After	At the earliest
Date	Format	<u>YYYYMMDD</u>	Current date
		YYYYMMDDHHMM	Current date and time

¹ The Date element should therefore not include any qualifier element that shows the date as the delivery date. The semantic allocation is done by higher-level elements.

2.2 DTDs

Each transaction document is described by a DTD, which bears the name of the applicable transaction document (example: *ordrsp.dtd*).² To avoid having to provide definitions for elements and attributes that appear in several transaction documents (danger of inconsistencies), the common subset is summarized in a DTD called *txml_common.dtd*. To make sure the core elements of a DTD can be reused (for example for the archiving DTD), it is necessary to use disjoint DTDs as base description. The base DTDs are located in a DTD with the prefix *txml_*. The following table describes the current structure of the DTDs:

DTD	Contains as base DTD:
invoice.dtd	txml_common.dtd txml_invoice.dtd
ordrsp.dtd	txml_common.dtd txml_ordrsp.dtd
desadv.dtd	txml_common.dtd txml_desadv.dtd
notif.dtd	txml_common.dtd txml_notif.dtd
archive.dtd	txml_common.dtd txml_notif.dtd txml_desadv.dtd txml_ordrsp.dtd txml_invoice.dtd

The structure of TXML documents is described technically via **document type definitions (DTDs)**. DTD descriptions have a defined XML syntax which makes it possible to automatically check the validity of an XML document on the basis of the DTD. DTD descriptions, however, are not easy for people to read because the core content recedes behind the syntactic details.

This chapter therefore uses a notation that is based on DTDs to describe the **content structure** of the transaction documents. Initially, XML elements and XML attributes are not differentiated.

The description of the content structure focuses on the following issues instead:

- What content elements occur in a transaction document?
- What are the hierarchical relationships between content elements in a transaction document like?
- How often are individual content elements allowed to occur?

The exact DTDs are listed in the annex. These DTDs are an implementation of the described content structure in TXML format. The underlying principles of this are described in the chapter entitled "[Definition of TXML](#)".

² As explained later, the name should also contain the version.

The **notation to describe the content structure** of the transaction documents uses the following symbols:

IE	IE_1 IE_2 <u>IE_3</u>
IE_1	<u>IE_11</u> <u>IE_12</u>
IE_2	IE_21 IE_22

Explanation:

The **content element** **IE** consists of the elements **IE_1**, **IE_2** and **IE_3**. The content element **IE_2** has alternative structures. It consists either of **IE_21** or of **IE_22**.

IE_3, **IE_11**, **IE_12**, **IE_21** and **IE_22** are atomic elements, i.e. they do not have an internal structure.

Atomic elements are shown in regular font whereas **compound elements** are shown in bold font. Atomic elements with a specified **permissible value set** are underscored (here: **IE_12**).

The **frequency** with which a content element must occur is described as follows:

IE	The element must occur precisely once.
IE?	The element can be omitted.
IE*	The element can be omitted or repeated as often as required.
IE+	The element must occur at least once, and can be repeated as often as required.

3 Invoice

3.1 General Invoice business practice

The invoice is forwarded from the supplier to the purchaser with the objective of demanding the payment of goods and services in accordance with the agreed terms; it may have the following contents:

- Quantities delivered and corresponding prices, one or several despatch advices
- Payment terms
- Shipping costs

The seller generates the document number of the Invoice. One invoice may refer to several despatch advices. However, one single invoice will always correspond to one despatch advice.

On the part of the purchaser, there will be a check conducted, on the basis of invoices, for prices and invoiced quantity.

The following figure describes the rough structure of an Invoice: (*Invoice*):

- An invoice consists of one only invoice title (*InvoiceHeader*), one or several invoice items (*InvoiceDetail*) and the final portion of the invoice (*InvoiceSummary*)
- The type and version of the document are described by the content element *Document*.

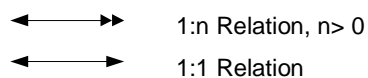
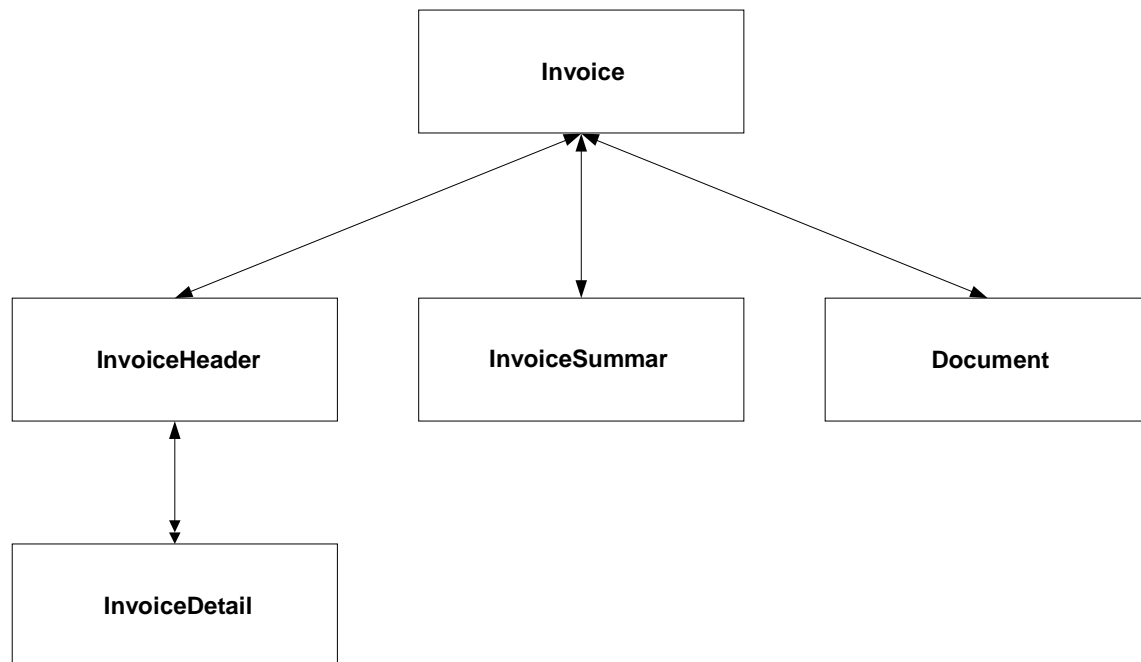


Figure 1: Rough structure of an Invoice

3.2 Invoice structure in terms of content

The rough structure of an Invoice is refined in the following table. The fine structure is characterized as follows:

- The unique document number is set in the element *Invoiceld* in *InvoiceHeader*.
- The header of the Invoice can contain references to several orders. The reference is set in the element *DesAdvRef*. The reference is given by the document number of the despatch advice (despatch advice refers *DesAdvHeader/DesAdvId*)
- The header of the Invoice can contain references to several orders. The reference is set in the element *OrderRef*. Due to the fact that there is no guarantee of the supplier being in a position to provide a reference at all times, this field is designated optional in the TXML.³ The associated order item is referenced both in the seller's and in the buyer's systematology.
- With each invoice position, it is possible to create the reference to the corresponding line item of the delivery (*DesAdvRef*, *DesAdvItemRef*).
- A reference to the associated order item can be made in every package item. To do this, it is necessary to state the order (*OrderRef*) and item (*OrderItemRef*). Due to the fact that there is no guarantee of the supplier being in a position to provide a reference at all times, this field is designated optional in the TXML. Both references can be made in the seller's and buyer's systematology.
- One invoice item may list individual prices and total prices (individual price *quantity). Whether the prices given are net or gross prices is determined uniformly by the taxation code (*TaxTreatmentCode*). Besides, it is possible to associate with each line item a detailed breakdown of all taxes (*Tax**), additional charges and discounts (*AllowOrCharge**). As for additional charges, a breakdown of taxes is again feasible (*Tax**). The tax treatment (*TaxTreatmentCode*) basically determines (also for additional charges and discounts), if the amounts listed are gross or net.
- The invoice summary (*InvoiceSummary*) provides the totals of various invoice items (net value, gross value, taxes, discounts, additional charges) (*InvoiceTotals*). An overview of all types of taxes (*TaxTotals*) and discounts or additional charges (*AllowOrChargeTotals*). In addition, discounts and additional charges may be included, which refer to the entire invoice (*AllowOrCharge**). Shipping costs for example may be expressed through additional charges.
- Various codes distinguish the different types of taxes (*TaxCode*). If taxation codes affects an invoice, a description of the taxation codes as a legend in the invoice summary is required (*TaxCodeDescription*)

Total document		
Invoice	Document InvoiceHeader InvoiceDetail+ InvoiceSummary	Type and format check Invoice header Invoice detail Invoice summary
Document format		
Document	<u>Document Type</u> Document Version	Document name (<i>Notif</i> , <i>DesAdv</i> , <i>OrdRsp</i> , <i>Invoice</i> or <i>Archive</i>) Document version

³ The client will supplement missing references, if possible, by copying them from the applicable despatch advice into the invoice.

Document header		
InvoiceHeader	InvoiceId InvoiceIssueDate DesAdvRef* OrderRef* <u>TaxTreatmentCode</u> InvoiceDueDate? PaymentInstruction? SellerParty BuyerParty* DeliveryParty* InvoiceOrg Currency FreeText*	Document number (Primary Key) Invoice issue date Reference to despatch advice ⁴ Reference to orders Taxation code Invoice due date ⁵ Payment order ⁶ Supplier List of purchasers ⁷ List of consignees ⁸ Invoice recipient Currency Additional text
InvoiceIssueDate	Date	Date of issue
InvoiceDueDate	Date	Invoice due date
Invoice details		
InvoiceDetail	PositionNumber Quantity ProductId ProductDescription BuyerPartyNumber? DeliveryPartyNumber? DesAdvRef? DesAdvItemRef? OrderRef? OrderItemRef? AllowOrCharge* Tax* UnitPrice? TotalPrice? TotalValue FreeText*	Item number Quantity Product number Product Description Purchaser ID Consignee ID Reference to despatch advice Reference to line item in despatch advice ⁹ Order reference Reference to order line item Additions to line item or discounts Line item taxes ¹⁰ Price per line item Total price of line item (individual price *quantity) Total price of line item Additional text
Taxes	TaxCode Percent? Amount?	Tax code applied Percent ¹¹ Tax amount

⁴ Information is optional to keep open the possibility of mailing out invoices without dispatch advice. In straightforward cases, the invoice may serve as the dispatch advice also.

⁵ Optional - as an invoice may become due for payment on receipt of merchandise

⁶ Example: Due on receipt of merchandise

⁷ As the dispatch advice could conceivably refer to several orders, it is possible to have several purchasers.

⁸ As the dispatch advice could conceivably refer to several orders, it is possible to have several consignees.

⁹ Corresponds to the PkgItem/PositionNumber field of the document dispatch advice.

¹⁰ Display only for TaxTreatmentCode, NetLineLevel or GrossLineLevel

¹¹ Will not be used if using Tax in TaxTotals.

AllowOrCharge	AllowOrChargeIdentifier AllowOrChargeCode? AllowOrChargeDescription Percent? Amount? Tax*	<i>Allow</i> (discount) or <i>Charge</i> (additional charges) Label for discount or additional charges Identification of discount or additional charges Percentage of discount or additional charges ¹² Amount of discount or additional charges Taxes applicable to discount or additional charges ¹³
UnitPrice	Amount	Price per line item
TotalPrice	Amount	Total price of line item (individual price *quantity)
TotalValue	Amount	Total price of line item
Invoice summary		
InvoiceSummary	AllowOrCharge* Tax* InvoiceTotals TaxTotals? AllowOrChargeTotals? TaxCodeDescription* FreeText*	Additional charges or discount on total invoice Taxes for total invoice ¹⁴ Invoice totals Total taxes by tax codes Discount and additional charges totals Legend for taxation codes applied Additional text
InvoiceTotals	InvoiceNetValue InvoiceGrossValue InvoiceTaxAmount? InvoiceDiscount? InvoiceCharge? PrepaidAmount? InvoiceAmountPayable	Net invoice total Gross invoice total Total invoice taxes Discount and additional charges totals Additional charges invoice totals Totals of payments already made Remaining amount to be paid
InvoiceNetValue	Amount	Net invoice total
InvoiceGrossValue	Amount	Gross invoice total
InvoiceTaxAmount	Amount	Total invoice taxes
InvoiceDiscount	Amount	Discount and additional charges Totals
InvoiceCharge	Amount	Additional charges invoice totals
PrepaidAmount	Amount	Totals of payments already made
InvoiceAmountPayable	Amount	Remaining amount to be paid
TaxTotals	Tax+	Total taxes by tax codes
AllowOrChargeTotals	AllowOrCharge+	Discount and additional charges totals
TaxCodeDescription	TaxCode TaxDescription	Tax code applied Identify taxes

¹² Not used if AllowOrCharge in AllowOrChargeTotals is used

¹³ Not used if AllowOrCharge in AllowOrChargeTotals is used

¹⁴ Display only for TaxTreatmentCode NetInvoiceLevel or GrossInvoiceLevel

The following content elements occur in Invoice but are also used in other transaction documents so they are grouped in a table of their own:

Cross-area elements		
Date	Date Date Qualifier? Date Format	Date Type of date Date format
Quantity	Quantity UoM	Quantity Unit of measure (ISO)
FreeText	Caption Text	Text description Text
ProductId	MakerCode ProductNumber Ean?	Maker ID Product No. EAN number
ProductDescription	ProductName1 ProductName2?	Product name 1 Product name 2
ProductPrice	PriceCategory? Price DiscountGroup? PriceUnit?	Price type Amount Discount group Quantity reference
PriceUnit	Quantity	Quantity reference
Amount		Amount
Percent		Percent
SellerParty	PartyNumber Address	Buyer's seller identifier
BuyerParty	PartyNumber Address	Seller's buyer identifier
DeliveryParty	PartyNumber? Address	Goods recipient identifier
InvoiceParty	PartyNumber? Address	Invoice recipient identifier
InvoiceOrg	TaxRegistrationNumber InvoiceParty	Sales tax ID no. Invoice recipient
SenderParty	PartyNumber? Address	Sending ID for recipient Sender address
ReceiverParty	PartyNumber? Address	Receiving ID for sending Recipient address
Address	Name1 Name2? Street1 Street2? PostalCode City CountryCode CountryName?	Name 1 Name 2 Street 1 Street 2 Postal Code Location Country code (2-digit ISO) Name of country
SenderUserName		Name of sending person
ReceiverUserName		Name of receiving person
PositionNumber		Item number

Cross-area elements		
OrderRef	SellerOrderNumber BuyerOrderNumber? Date	Order ID supplier Order ID purchaser Order date
OrderItemRef	SellerOrderItemRef BuyerOrderItemRef?	Reference to order line item (Supplier systems) Reference to order line item (Purchaser systems)
DesAdvRef	DocumentNumber Date	Document number of despatch advice Date of despatch advice
DesAdvItemRef	PositionNumber	Position number of a despatch advice
QtyVariance	Quantity DeviationReason? ModificationReason? QtyVarComment?	Quantity deviation Reason for deviation Cause for change Notes

The following contents elements are atomic and have given **default values**:

Qualifier	Meaning	Values
TaxTreatmentCode	Taxation code Describes how invoice amounts are processed on the line item level This statement determines the writing of the invoice amounts for ItemUnitPrice and ItemTotalPrice as well as the layout of the invoice in the line item area. Price per item (incl. Value Added Tax) Total price (incl. Value Added Tax) Price per item (not incl. Value Added Tax) Total price (not incl. Value Added Tax)	<i>NoTaxApplies</i> : NoTaxApplies <i>NetInvoiceLevel</i> : Line item amounts are net amounts. Taxes will be included in invoice summary; but they are not shown at the line item level <i>GrossInvoiceLevel</i> : Line item amounts are gross amounts. Taxes will be included in invoice summary; but they are not shown at the line item level. <i>NetLineLevel</i> : Line item amounts are net amounts. Additional taxes are shown at the line item level. <i>GrossLineLevel</i> : Line item amounts are gross amounts. Taxes included are shown at the line item level.
AllowOrChargIdentifier	Describes whether discount or additional charges.	<i>Allow</i> : Discount <i>Charge</i> : Additional charges

Notice

At this time, the following information is not yet planned for invoices.

- Payment modalities (discounts when paying within certain payment dates, payment modes)
- Various currencies and rates of exchange (for invoice amounts, payments, taxes)
- Invoice offers no information that describes the delivery per se. This includes the purchaser's address and that of the consignee. Due to the fact that invoices refer to several despatch advices and as such especially to several orders, these addresses would not be required uniformly for the total invoice; in extreme circumstances, they would have to be associated with individual line items.

3.3 Invoice_1.0 Document Type Definition

```
<!-- Include general definitions from txml.dtd -->
<!ENTITY % COMMON SYSTEM    "txml\_common\_1.1.dtd">
<!ENTITY % INVOICE SYSTEM   "txml\_invoice\_1.0.dtd">
%COMMON;
%INVOICE;
```

3.3.1 TXML_Invoice_1.0 Document Type Definition

```
<!-- ***** Invoice ***** -->
<!--#USAGE: Generic root element containing all the data relating to an invoice -->
<!ELEMENT Invoice          (Document, InvoiceHeader, InvoiceDetail+, InvoiceSummary) >

<!-- ***** InvoiceHeader ***** -->
<!--#USAGE: Administrative and partner information -->
<!ELEMENT InvoiceHeader   (InvoiceId, InvoiceIssueDate, DesAdvRef*, OrderRef*,
                           TaxTreatmentCode, InvoiceDueDate?, PaymentInstruction?,
                           SellerParty, BuyerParty*, DeliveryParty*, InvoiceOrg,
                           Currency, FreeText*)>

<!--#USAGE: document id (primary key) -->
<!ELEMENT InvoiceId       (#PCDATA) >
```

```
<!--#USAGE: Issue date of the document -->
<!ELEMENT InvoiceIssueDate (Date) >

<!--#USAGE: identify if it is allowance or charge -->
<!ELEMENT TaxTreatmentCode EMPTY >
<!ATTLIST TaxTreatmentCode Value (NoTaxApplies | NetInvoiceLevel | GrossInvoiceLevel | NetLineLevel |
GrossLineLevel) #REQUIRED >

<!--#USAGE: due date of the invoice -->
<!ELEMENT InvoiceDueDate (Date) >

<!--#USAGE: payment instruction -->
<!ELEMENT PaymentInstruction (#PCDATA) >

<!--***** InvoiceDetail ***** -->
<!--#USAGE: invoice item information -->
<!ELEMENT InvoiceDetail (PositionNumber, Quantity,
ProductId, ProductDescription,
BuyerPartyNumber?, DeliveryPartyNumber?,
DesAdvRef?, DesAdvItemRef?,
OrderRef?, OrderItemRef?,
AllowOrCharge*, Tax*,
UnitPrice?, TotalPrice?, TotalValue,
FreeText* ) >

<!--***** AllowOrCharge ***** -->
```

```
<!--#USAGE: define allowances or charges -->
<!ELEMENT AllowOrCharge      (AllowOrChargeIdentifier, AllowOrChargeCode?, AllowOrChargeDescription,
                             Percent?, Amount?, Tax*) >

<!--#USAGE: identify if it is allowance or charge -->
<!ELEMENT AllowOrChargeIdentifier      EMPTY >
<!ATTLIST AllowOrChargeIdentifier Value      (Allow | Charge) #REQUIRED >

<!--#USAGE: code of the allowance or charge -->
<!ELEMENT AllowOrChargeCode           (#PCDATA) >

<!--#USAGE: description of the allowance or charge -->
<!ELEMENT AllowOrChargeDescription    (#PCDATA) >

<!--***** UnitPrice ***** -->
<!--#USAGE: price of a single unit -->
<!ELEMENT UnitPrice                   (Amount) >

<!--***** TotalPrice ***** -->
<!--#USAGE: total price of a line item (= Quantity * UnitPrice) -->
<!ELEMENT TotalPrice                  (Amount) >

<!--***** TotalValue ***** -->
<!--#USAGE: total value of a line item (including allowances, charges, taxes) -->
<!ELEMENT TotalValue                  (Amount) >
```

```
<!--***** Tax ****>
<!--#USAGE: define tax -->
<!ELEMENT Tax
                (TaxCode, Percent?, Amount?) >

<!--#USAGE: code of the tax -->
<!ELEMENT TaxCode
                (#PCDATA) >

<!--***** TaxCodes ****>
<!--#USAGE: tax codes -->
<!ELEMENT TaxCodeDescription (TaxCode, TaxDescription) >

<!--#USAGE: description of tax -->
<!ELEMENT TaxDescription
                (#PCDATA) >

<!--***** InvoiceSummary ****>
<!--#USAGE: invoice summary -->
<!ELEMENT InvoiceSummary
                (AllowOrCharge*, Tax*,
                 InvoiceTotals, TaxTotals?, AllowOrChargeTotals?,
                 TaxCodeDescription*,
                 FreeText* ) >

<!--***** InvoiceTotals ****>
<!--#USAGE: invoice totals -->
<!ELEMENT InvoiceTotals
                (InvoiceNetValue, InvoiceGrossValue, InvoiceTaxAmount?,
```

```
InvoiceDiscount?, InvoiceCharge?, PrepaidAmount?,  
InvoiceAmountPayable) >
```

```
<!--#USAGE: total net value of the invoice -->
```

```
<!ELEMENT InvoiceNetValue (Amount) >
```

```
<!--#USAGE: total gross value of the invoice -->
```

```
<!ELEMENT InvoiceGrossValue (Amount) >
```

```
<!--#USAGE: total tax amount of the invoice -->
```

```
<!ELEMENT InvoiceTaxAmount (Amount) >
```

```
<!--#USAGE: total discount of the invoice -->
```

```
<!ELEMENT InvoiceDiscount (Amount) >
```

```
<!--#USAGE: total charge of the invoice -->
```

```
<!ELEMENT InvoiceCharge (Amount) >
```

```
<!--#USAGE: amount prepaid -->
```

```
<!ELEMENT PrepaidAmount (Amount) >
```

```
<!--#USAGE: amount remaining to be paid -->
```

```
<!ELEMENT InvoiceAmountPayable (Amount) >
```

```
<!--***** TaxTotals ***** -->
```

```
<!--#USAGE: tax totals -->
```

```
<!ELEMENT TaxTotals (Tax+) >
```

```
<!--***** AllowOrChargeTotals ***** -->
```

```
<!--#USAGE: allow or charge totals -->
```

```
<!ELEMENT AllowOrChargeTotals (AllowOrCharge+) >
```

3.3.2 TXML_Common_1.1 Document Type Definition

```

<!--***** Document ***** -->
<!--#USAGE: type and version information of the document -->
<!ELEMENT Document          EMPTY >
<!ATTLIST Document Type      (Notif | DesAdv | OrdRsp | Invoice | Archive) #REQUIRED >
<!ATTLIST Document Version   CDATA #REQUIRED >

<!--***** Date **** -->
<!--#USAGE: date definition -->
<!ELEMENT Date              (#PCDATA)>
<!ATTLIST Date Qualifier     (At | Before | After) "At" >
<!ATTLIST Date Format         (YYYYMMDD | YYYYMMDDHHMM) "YYYYMMDD" >

<!--***** Quantity **** -->
<!--#USAGE: quantity -->
<!-- A maximum of 11 digits is allowed to the left of the decimal point.
There must be 3 digits to the right of the decimal point. -->
<!ELEMENT Quantity          (#PCDATA)>
<!--#USAGE:Unit of measure. Three byte ISO UN/ECE 20 code -->
<!ATTLIST Quantity UoM      CDATA #REQUIRED>

<!--***** FreeText **** -->
<!--#USAGE: additional information -->
<!ELEMENT FreeText          (#PCDATA) >

```

```
<!ATTLIST FreeText Caption CDATA #REQUIRED>

<!--***** ProductID ****>
<!--#USAGE: product id -->
<!ELEMENT ProductId (MakerCode, ProductNumber, Ean?) >
<!ELEMENT MakerCode (#PCDATA) >
<!ELEMENT ProductNumber (#PCDATA) >
<!ELEMENT Ean (#PCDATA) >

<!--***** ProductDescription -->
<!--#USAGE: product description -->
<!ELEMENT ProductDescription (ProductName1, ProductName2?) >
<!ELEMENT ProductName1 (#PCDATA) >
<!ELEMENT ProductName2 (#PCDATA) >

<!--***** ProductPrice ****>
<!--#USAGE: price of a product -->
<!ELEMENT ProductPrice (PriceCategory?, Price, DiscountGroup?, PriceUnit?)>
<!ELEMENT PriceCategory (#PCDATA) >
<!--#USAGE: Price -->
<!-- A maximum of 11 digits is allowed to the left of the decimal point.
There must be 3 digits to the right of the decimal point. -->
<!ELEMENT Price (#PCDATA) >
<!ELEMENT DiscountGroup (#PCDATA) >
<!ELEMENT PriceUnit (Quantity) >
```

```
<!--***** Amount ***** -->
<!ELEMENT Amount          (#PCDATA) >
```

```
<!--***** Percent ***** -->
<!ELEMENT Percent         (#PCDATA) >
```

```
<!--***** Seller Party ***** -->
<!--#USAGE: seller information -->
<!ELEMENT SellerParty     (PartyNumber, Address) >
```

```
<!--***** Buyer Party ***** -->
<!--#USAGE: buyer information -->
<!ELEMENT BuyerParty      (PartyNumber, Address) >
```

```
<!--***** Delivery Party *** -->
<!--#USAGE: delivery party information -->
<!ELEMENT DeliveryParty   (PartyNumber?, Address) >
```

```
<!--***** Invoice Party ***** -->
<!--#USAGE: invoice party information -->
<!ELEMENT InvoiceParty     (PartyNumber?, Address) >
```

```
<!--***** Invoice Org ***** -->
<!--#USAGE: invoice organisation -->
```

```
<!ELEMENT InvoiceOrg          (TaxRegistrationNumber?, InvoiceParty) >
<!ELEMENT TaxRegistrationNumber  (#PCDATA) >

<!--***** Sender Party ***** -->
<!--#USAGE: sender party information -->
<!ELEMENT SenderParty          (PartyNumber?, Address) >

<!--***** Receiver Party ***** -->
<!--#USAGE: receiver party information -->
<!ELEMENT ReceiverParty        (PartyNumber?, Address) >

<!--***** Currency *****) -->
<!--#USAGE: currency = three-character currency code specified in ISO 4217 -->
<!ELEMENT Currency             (#PCDATA) >

<!--***** PartyNumber *****) -->
<!--#USAGE: party number definition -->
<!ELEMENT PartyNumber          (#PCDATA)>

<!--***** BuyerPartyNumber *****) -->
<!--#USAGE: buyer party number definition -->
<!ELEMENT BuyerPartyNumber      (#PCDATA)>

<!--***** DeliveryPartyNumber **) -->
<!--#USAGE: delivery party number definition -->
```

```
<!ELEMENT DeliveryPartyNumber      (#PCDATA)>

<!--***** Address ***** -->
<!--#USAGE: address definition -->
<!ELEMENT Address                  (Name1, Name2?, Street1, Street2?, PostalCode, City, CountryCode, CountryName?)>
<!ELEMENT Name1                    (#PCDATA)>
<!ELEMENT Name2                    (#PCDATA)>
<!ELEMENT Street1                  (#PCDATA)>
<!ELEMENT Street2                  (#PCDATA)>
<!ELEMENT PostalCode              (#PCDATA)>
<!ELEMENT City                    (#PCDATA)>
<!--#USAGE: CountryCode = two-character country code specified in ISO 639 -->
<!ELEMENT CountryCode              (#PCDATA)>
<!ELEMENT CountryName              (#PCDATA)>

<!--***** SenderUserName ** -->
<!--#USAGE: name of sender -->
<!ELEMENT SenderUserName          (#PCDATA) >

<!--***** ReceiverUserName ** -->
<!--#USAGE: name of receiver -->
<!ELEMENT ReceiverUserName        (#PCDATA) >

<!--***** PositionNumber ** -->
<!--#USAGE: Position number -->
```

```
<!ELEMENT PositionNumber      (#PCDATA) >

<!--***** OrderRef ***** -->
<!--#USAGE: reference to corresponding order -->
<!ELEMENT OrderRef            (SellerOrderNumber, BuyerOrderNumber?, Date) >
<!ELEMENT SellerOrderNumber  (#PCDATA) >
<!ELEMENT BuyerOrderNumber   (#PCDATA) >

<!--***** OrderItemRef ***** -->
<!--#USAGE: reference to position in order -->
<!ELEMENT OrderItemRef       (SellerOrderItemRef, BuyerOrderItemRef?) >
<!ELEMENT SellerOrderItemRef (#PCDATA) >
<!ELEMENT BuyerOrderItemRef  (#PCDATA) >

<!--***** DesAdvRef ***** -->
<!--#USAGE: reference to a despatch advice -->
<!ELEMENT DesAdvRef          (DocumentNumber, Date) >
<!ELEMENT DocumentNumber    (#PCDATA) >

<!--***** DesAdvItemRef ***** -->
<!--#USAGE: reference to position in despatch advice -->
<!ELEMENT DesAdvItemRef      (PositionNumber) >

<!--***** QtyVariance ***** -->
<!--#USAGE: information on quantity variance -->
```

```
<!ELEMENT QtyVariance      (Quantity, DeviationReason?, ModificationReason?, QtyVarComment?)>  
<!ELEMENT DeviationReason  (#PCDATA) >  
<!ELEMENT ModificationReason (#PCDATA) >  
<!ELEMENT QtyVarComment    (#PCDATA) >
```

4 Content of an Invoice

The following table presents the content of an Invoice:

<Invoice>
<Document Type="Invoice" Version="1.0"/>
<InvoiceHeader>
<InvoiceId>Invoice-4711</InvoiceId>
<InvoiceIssueDate>
<Date>20000813</Date>
</InvoiceIssueDate>
<DesAdvRef>
<DocumentNumber>DesAdv-76214</DocumentNumber>
<Date>20000723</Date>
</DesAdvRef>
<DesAdvRef>
<DocumentNumber>DesAdv-76215</DocumentNumber>
<Date>20000723</Date>
</DesAdvRef>
<OrderRef>
<SellerOrderNumber>76214</SellerOrderNumber>
<BuyerOrderNumber>03462</BuyerOrderNumber>
<Date>20000713</Date>
</OrderRef>
<OrderRef>
<SellerOrderNumber>76215</SellerOrderNumber>
<BuyerOrderNumber>03463</BuyerOrderNumber>
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<Name2>Plant 48</Name2>
<Street1>Dellestraat 20</Street1>

4 Content of an Invoice

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4 Content of an Invoice

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4 Content of an Invoice

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4 Content of an Invoice

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4 Content of an Invoice

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4 Content of an Invoice

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<code><AllowOrChargeIdentifier Value="Charge" /></code>
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<code><AllowOrChargeIdentifier Value="Charge" /></code>
<code><AllowOrChargeCode>D</AllowOrChargeCode></code>
<code><AllowOrChargeDescription>Costs of Deliv- ery</AllowOrChargeDescription></code>
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4 Content of an Invoice

<code><TaxDescription>VAT 10%</TaxDescription></code>
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5 Presentation of Invoice

Transaction documents are described in TXML format and therefore only contain net data. The transaction documents should be displayed in a browser control in the *Document Details* dialog. Transformation from TXML to HTML is therefore necessary. Transformation takes place with the aid of **XSLT templates**.

XSLT (Extensible Style Sheet Language Transformation) serves to transform XML files with any DTD into another form of XML. The most common application of XSLT is probably transformation into HTML. XSLT Templates consist of a number of template rules, which again are made up of two parts: one is the pattern and the other is the template that will be executed in the transformation process.

Invoice			
Document Number:	Invoice-4711	Issue Date:	13.08.2000
Delivery References:	Document Number	Issue Date	
	DesAdv-76214	23.07.2000	
	DesAdv-76215	23.07.2000	
Order References:	Purchaser Order ID	Supplier Order ID	Order Date
	03462	76214	13.07.2000
	03463	76215	13.07.2000
Supplier:	BOSAL International N.V.	12345	
	Plant 49		
	Dellestraat 20		
	3560 Lummen		
Invoice Recipient:	KLEIN AUTOTEILE VERTR.MBH	I-4711	
	61 BRUNNER FELDSTRASSE		
	A-2380 PERCHTOLDSORF		
	VAT ID No.:	471147114711	
Due Date:	31.08.2000		
Payment:	to be paid not before invoice due date		
Quantity	Product Maker Product No. / EAN / Designation	Item Price excl. Tax	Total
1 2 PCE	BOSAL 002-082 002-082 XXXXX XXXXX	100,00 ATS	200,00 ATS
Discounts:	Marketing Campaign 2001 (MC2001)	5%	- 10,00 ATS
	Shop Campaign 2001 (SC2001)	5%	- 10,00 ATS
			180,00 ATS
Delivery Reference:	Delivery Item 1 in Delivery Announcement DesAdv-76214 dated 23.07.2000		
Order Reference:	Order Line Item 10 in Order 76214 dated 13.07.2000 (Supplier) Order Line Item 1 in Order 03462 dated 13.07.2000 (Purchaser)		
Purchaser:	O-4711		
Consignee:	D-4711		
Freertext1:	Free Text 1		
Freertext2:	Free Text 2		
2 30 PCE	BOSAL 785-407 YYYYY YYYYY	10,00 ATS	300,00 ATS
Additional Charges:	Packaging Material (PM)		20,00 ATS
			320,00 ATS

Total Amounts				
Subtotal:	Net Price			500,00 ATS
Plus Tax:	(1)	10,00%	48,00	ATS
	(2)	5,00%	1,00	ATS
	Total Tax			49,00 ATS
	Gross Price			549,00 ATS
Additional Charges:	Costs of Delivery (D)			25,50 ATS
Total:	Already Paid			- 74,50 ATS
	Remaining Payment Due			500,00 ATS
Summary				
Discounts:	Marketing Campaign 2001 (MC2001)			10,00 ATS
	Shop Campaign 2001 (SC2001)			10,00 ATS
	Total Discounts			20,00 ATS
Additional Charges:	Packaging Material (PM)			20,00 ATS
	Costs of Delivery (D)			25,50 ATS
	Total Additional Charges			45,50 ATS
Tax Totals:	(1)			48,00 ATS
	(2)			1,00 ATS
Tax Types:	(1)	VAT 10%		
	(2)	VAT on Packaging Material 5%		
Freertext:	Free Text			

6 Annex

6.1 XML glossary

Document	XML documents consist of a prolog and a root element.
Prolog	The prolog consists of the XML declaration and the document type definition.
XML declaration	Processing instruction to identify the XML version and the character set that is in use.
Documenttyp-Definition	<p>Document type definition Formal description of the structure of an XML document that can be used to check the validity of an XML document.</p> <p>It contains information on what element types there are, what they are allowed to contain, which attributes are permitted and which values they may assume. DTDs thus provide a certain measure of control of the content of attributes but not of the content of elements (for example no value types).</p> <p>DTDs are linked to an XML file. They can be external (pointer to a DTD file) or internal (integral part of the document type definition).</p> <p>Example of syntax for external:</p> <pre><!DOCTYPE hallo SYSTEM "hallo.dtd"></pre> <p>Example of syntax for internal:</p> <pre><!DOCTYPE hallo [element type declarations]> <hallo> </hallo></pre>
Processing instruction	<p>Instruction for a program that processes an XML document.</p> <p>Example of syntax:</p> <pre><?PI ?></pre>
Element	<p>Part of an XML document that is identified by a start and end tag. The two tags embrace the content of the element. Elements can also be empty, however.</p> <p>Example of syntax for an empty element:</p> <pre><Empty /></pre>
Attribute	<p>Within start tags, attribute value pairs can be assigned to elements and these may contain information about the content.</p> <p>Example of syntax:</p> <pre><element attribute="value"/></pre>
Content	Section between the start and end tag of an element. The content can be elements, character data or comments.
Character data	

Character reference	<p>Coded representation of a character.</p> <p>Example of syntax: &#nn;</p>
Entity reference	<p>Text module to define character data. Entity references are suitable as abbreviations and for multiple applications of repetitive phrases.</p> <p>Example of syntax: <!ENTITY EntityReferenz "..."></p> <p>Call up: &Entity Reference;</p>
Reserved characters	<p>Some characters (<, >, &, quotation mark, apostrophe) are reserved in XML and are not allowed to be used as element content. The following alternative character references can be used: &lt; &gt; &amp; &quot; &apos;¹⁵</p>
CDATA section, Character data	<p>Section within an XML document in which no mark-up is recognized. CDATA sections therefore make it possible to enter such characters as & and < to be input directly.</p> <p>Example of syntax: <![CDATA[character data]]></p>
Element type declaration	<p>Element type declarations define which elements are allowed to occur in the current element, as well as the sequence and frequency of occurrence. As far as atomic elements are concerned, the possible content is described.</p> <p><u>Common content specifications for atomic elements are:</u></p> <ul style="list-style-type: none"> • PCDATA: character string that can be parsed • ANY: any content with every element in the DTD • EMPTY: empty element
PCDATA section, Parsed character data	<p>Section within an XML document that is processed by the parser. In PCDATA sections, entity references are therefore recognized and resolved.</p> <p>Example of syntax in DTD: <!ELEMENT street (#PCDATA)></p>

¹⁵ When a node is created with the XML-DOM and its content has been defined, the reserved characters are automatically converted to the alternatives.

Attribute list declaration	<p>Attribute list declarations define which attributes exist for an element type, the type of attribute values, and which standard values exist.</p> <p><u>Common types:</u></p> <ul style="list-style-type: none"> • CDATA: string attribute • ID: token attribute for clear-cut identifications • (a b c): enumeration attribute with values a, b, c <p><u>Common standard values for attributes are:</u></p> <ul style="list-style-type: none"> • #REQUIRED: mandatory attribute • #IMPLIED: optional attribute • #FIXED: mandatory attribute with standard value <p>In the standard value, it is also possible to set a default that is used when the attribute is missing.</p>
XSLT	<p>A language that was approved in November 1999 to transform XML documents into HTML, WML or other XML documents.</p>
Parameter entity reference	<p>Text module to define DTD elements. Entity references are suitable as abbreviations and for multiple applications of repetitive phrases within a DTD.</p> <p>Example of syntax:</p> <pre><!ENTITY %EntityReferenz "..."></pre> <p>Call up: %Entity Reference;</p>
Reserved name character	<p>Character for reserved name. Pound sign #</p>

6.2 Units of measure according to UN/ECE recommendation 20

ACR Acre (4840 square yards)
ASM Alcoholic strength by mass
ASV Alcoholic strength by volume
AMP Ampere
AMH Ampere-hour (3.6kC)
ARE Are (100 square metres)
BAR Bar
BLL Barrel (petroleum) (158.987 dm³)
BFT Board foot
BQL Becquerel
BIL Billion EUR
MLD Billion US
BHP Brake horse power (245s7 watts)
BTU British thermal unit (1.055 kilojoules)
BUA Bushel (35.23911 dm³)
BUI Bushel (36.36874 dm³)
CDL Candela
CCT Carrying capacity in metric tonnes
CNT Cental GB (45.359237 kg)
CGM Centigram
CLT Centilitre
CMT Centimetre
DTN Centner, metric (100 kg) (syn. hectokilogram)
WCD Cord (3.63 m³)
COU Colomb
CKG Colomb per kilogram
CMQ Cubic centimetre
DMQ Cubic decimetre
FTQ Cubic foot
INQ Cubic inch
MTQ Cubic metre
MQH Cubic metre per hour
MQS Cubic metre per second
MMQ Cubic millimetre
YDQ Cubic yard
CUR Curie
DAY Day
DEC Decade (ten years)
DAA Decare
DLT Decilitre
DMT Decimetre
DTN Decitonne
CEL Degree Celsius
FAH Degree Fahrenheit
DPT Displacement tonnage
DZN Dozen
DZP Dozen packs
DPR Dozen pairs
DPC Dozen pieces
DRL Dozen rolls
DRM Drachm GB (3.887935 g)
DRI Dram GB (1,7711745 g)
DRA Dram US (3.887935 g)
BLD Dry barrel (115.627 dm³)
GLD Dry gallon (4.404884 dm³)
PTD Dry pint (0.55061 dm³)
QTD Dry quart (1.101221 dm³)
FAR Farad
OZI Fluid ounce (28.413 cm³)
OZA Fluid ounce (29.5735 cm³)
FOT Foot (0.3048 m)
GLI Gallon (4.546092 dm³)
GBQ Gigabecquerel
GWH Gigawatt-hour (1 million kW/h)
GII Gill (0.142065 dm³)
GIA Gill (11.8294 cm³)
GRN Grain GB, US (64.798910 mg)
GRM Gram
GFI Gram of fissile isotopes

GGR Great gross (12 gross)
GRO Gross
GRT Gross (register) ton
SAN Half year (six month)
HAR Hectare
HBA Hectobar
HGM Hectogram
DTH Hectokilogram
HLT Hectolitre
HPA Hectolitre of pure alcohol
HMT Hectometre
HTZ Hertz
HUR Hour
CEN Hundred
BHX Hundred boxes
HIU Hundred international units
CLF Hundred leaves
CNP Hundred packs
CWA Hundredweight US (45.3592 kg)
INH Inch (25.4 mm)
JOU Joule
KEL Kelvin
KBA Kilobar
KGM Kilogram
KPH Kilogram of caustic potash
KSH Kilogram of caustic soda
KNS Kilogram of named substance
KNI Kilogram of nitrogen
KPP Kilogram of phosphorus pentoxide
KPH Kilogram of potassium hydroxide
KPO Kilogram of potassium oxide
KSD Kilogram of substance 90 per cent dry
KUR Kilogram of uranium
KMQ Kilogram per cubic metre
KGS Kilogram per second
KHZ Kilohertz
KJO Kilojoule
KMT Kilometre
KMH Kilometre per hour
KPA Kilopascal
KTN Kilotonne
KVR Kilovar
KVT Kilovolt
KVA Kilovolt-ampere
KWT Kilowatt
KWH Kilowatt-hour
KNT Knot (1 nautical mile per hour)
LEF Leaf
GLL Liquid gallon (3.78541 dm³)
PTL Liquid pint (0.473176 dm³)
QTL Liquid quart (0.946353 dm³)
LTR Litre (1 dm³)
LPA Litre of pure alcohol
CWI (Long) hundredweight GB (50.802345 kg)
LTN Long ton GB, US (1.0160469 t)
LUM Lumen
LUX Lux
MHZ Megahertz
MAL Megalitre
MAM Megametre
MPA Megapascal
MVA Megavolt-ampere (1000 KVA)
MAW Megawatt
MWH Megawatt-hour (1000 kW/h)
MTR Metre
MTS Metre per second
MSK Metre per second squared
CTM Metric carat (200 mg = 2.10⁻⁴ kg)
TNE Metric tonne (1000 kg)
MLD Milliard
MBR Millibar
MCU Millicurie
MGM Milligram
MLT Millilitre
MMT Millimetre

MIO Million
HMQ Million cubic metres
MIU Million international units
MIN Minute
MON Month
NMI Nautical mile (1852 m)
NTT Net (register) ton
NEW Newton
NMB Number
NAR Number of articles
NBB Number of bobbins
NCL Number of cells
NIU Number of international units
NMP Number of packs
NPR Number of pairs
NPL Number of parcels
NPT Number of parts
NRL Number of rolls
OHM Ohm
ONZ Ounce GB, US (28.349523 g)
APZ Ounce GB, US (31.10348 g; syn.: Troy ounce)
PAL Pascal
DWT Pennyweight GB, US (1.555174 g)
PCE Piece
PTI Pint (0.568262 dm³)
LBR Pound GB, US (0.45359237 kg)
PGL Proof gallon
QTI Quart (1.1136523 dm³)
QAN Quarter (of a year)
QTR Quarter GB (12.700586 kg)
DTN Quintal, metric (100 kg)
RPM Revolution per minute
RPS Revolution per second
SCO Score
SCR Scruple GB, US (1.295982 g)
SEC Second
SET Set
SHT Shipping ton
SST Short standard (7200 matches)
STN Short ton GB, US (0.90718474 t)
SIE Siemens
CMK Square centimetre
DMK Square decimetre
FTK Square foot
INK Square inch
KMK Square kilometre
MTK Square metre
MIK Square mile
MMK Square millimetre
YDK Square yard
WSD Standard
ATM Standard atmosphere (101325 Pa)
SMI (Statute) mile (1609.344 m)
STI Stone GB (6.350293 kg)
ATT Technical atmosphere (98066.5 Pa)
DAD Ten days
TPR Ten pairs
MIL Thousand
TAH Thousand ampere-hour
MBF Thousand board feet (2.36 m³)
TQD Thousand cubic metre per day
MBE Thousand standard brick equivalent
TSH Ton of steam per hour
TNE Tonne (1000 kg)
TSD Tonne of substance 90 per cent dry
TRL Trillion EUR
BIL Trillion US
LBT Troy pound, US (373.242 g)
VLT Volt
WTT Watt
WHR Watt-hour
WEB Weber
WEE Week
YRD Yard (0.9144 m)
ANN Year

6.3 TECDOC maker identifiers

AP	AUTOMOTIVE PRODUCTS	KYB	KAYABA
ATE	ITT AUTOMOTIVE (ATE)	LEIST	LEISTRITZ
BEHR	BEHR-THERMOTRONIK	LEMFO	LEMFÖRDER
BENDIX	ALLIED SIGNAL (BENDIX)	LOCTIT	LOCTITE
BERU	BERU	LOEBRO	GKN (LÖBRO)
BILST	BILSTEIN	LUCAS	LUCAS
BOGE	BOGE	LUK	AS-AUTOTEILE-SERVICE (LUK)
BOSAL	BOSAL	MAHLE	MAHLE FILTER
BOSCH	BOSCH	MANN	MANN + HUMMEL
BREMBO	BREMBO	MINTEX	MINTEX
BREMI	BREMI AUTO-ELEKTRIK	MONROE	MONROE
CENTRO	CENTRO	NGK	NGK
CHAMP	LUBERFINER (CHAMP)	NOR	Nor Aalborg A/S
CHAMPI	CHAMPION	OPTIBE	ARNTZ-OPTIBELT
CONTI	CONTITECH	OPTILU	HELLA (OPTILUX)
DASIS	Dasis	ORIS	ORIS
DAYCO	DAYCO EUROPE	OSRAM	OSRAM
DENSO	DENSO	PAGID	PAGID
EBERS	EBERSPÄCHER	PEX	PEX
EKG	EKG GELENKWELLEN	PHILIP	PHILIPS
ELRING	ELRING	PIERBG	PIERBURG
ERNST	ERNST	PURFLU	PURFLUX
EVR	RUVILLE AUTOTEILE	PUROLA	PUROLATOR
EXIDE	EXIDE	QH	QUINTON HAZELL
F+S	SACHS HANDEL	REINZ	REINZ
FERODO	FERODO BERAL	SCHMID	SCHMID-DONZDORF
FRAM	ALLIED SIGNAL (FRAM)	SKF	SKF
FTE	FTE automotive	SONNEN	SONNENSCHIEIN
GABRIE	GABRIEL	SRS	SRS
GATES	GATES	SWF	ITT AUTOMOTIVE (SWF)
GERI	GERI	TESH	TESH
GKN	GKN (SPIDAN)	TEXTAR	TEXTAR
GOETZE	GOETZE MOTORENTEILE	TTV	TTV Kraftfahrzeugteile-Vertriebs GmbH
HE+BU	HERTH + BUSS (NIPPARTS)	TW	TEROSON
HELLA	HELLA	VALEO	VALEO
HENGST	Hengst Filter	VARTA	VARTA
HER+BU	HERTH & BUSS -AUTOELEKTRONIK-	VDO	VDO
HJS	HJS	WABCO	WABCO
HOPPEC	HOPPECKE	WAHLER	Wahler
JURID	ALLIED SIGNAL (JURID)	WALKER	WALKER
KLOKKE	KLOKKERHOLM	WESTF	WESTFALIA
KLOTZ	HK AUTOTEILE	WEZEL	VAN WEZEL
KNECHT	KNECHT FILTER	ZIMANN	Zimmermann
KONI	ITT AUTOMOTIVE (KONI)		

6.4 Currency codes according to ISO 4217

AFGHANISTAN	AFA	EL SALVADOR	SVC
ALBANIA	ALL	EQUATORIAL GUINEA	XAF
ALGERIA	DZD	ERITREA	
AMERICAN SAMOA	USD	ESTONIA	E EK
AMERICAN SAMOA	ESP	ETHIOPIA	ETB
ANDORRA	FRF	EUROPEAN MONETARY COOP. FUND (EMCF)	
ANDORRA	ADP	FALKLAND ISLANDS (MALVINAS)	FKP
ANGOLA	AON	FAROE ISLANDS	DKK
ANGUILLA	XCD	FIJI	FJD
ANTARCTICA		FINLAND	FIM
ANTIGUA AND BARBUDA	XCD	FRANCE	FRF
ARGENTINA	ARS	FRANCE, METROPOLITAN	FRF
ARMENIA	AMD	FRENCH GUIANA	FRF
ARUBA	AWG	FRENCH POLYNESIA	XPF
AUSTRALIA	AUD	FRENCH SOUTHERN TERRITORIES	FRF
AUSTRIA	ATS	GABON	XAF
AZERBAIJAN	AZM	GAMBIA	GMD
BAHAMAS	BSD	GEORGIA	GEK
BAHRAIN	BHD	GERMANY	DEM
BANGLADESH	BDT	GHANA	GHC
BARBADOS	BBB	GIBRALTAR	GIP
BELARUS	BYB	GREECE	GRD
BELGIUM	BEF	GREENLAND	DKK
BELIZE	BZD	GRENADA	XCD
BENIN	XOF	GUADELOUPE	FRF
BERMUDA	BMD	GUAM	USD
BHUTAN	INR	GUATEMALA	GTQ
BHUTAN	BTN	GUINEA	GNF
BOLIVIA	BOB	GUINEA-BISSAU	GWP
BOSNIA AND HERZEGOVINA		GUYANA	GYD
BOTSWANA	BWP	HAITI	HTG
BOUVET ISLAND	NOK	HAITI	USD
BRAZIL	BRL	HEARD ISLAND AND MCDONALD ISLANDS	
BRITISH INDIAN OCEAN TERRITORY	USD	HONDURAS	HNL
BRUNEI DARUSSALAM	BND	HONG KONG	HKD
BULGARIA	BGL	HUNGARY	HUF
BURKINA FASO	XOF	ICELAND	ISK
BURUNDI	BIF	INDIA	INR
CAMBODIA	KHR	INDONESIA	IDR
CAMEROON	XAF	INTERNATIONAL MONETARY FUND (IMF)	
CANADA	CAD	IRAN (ISLAMIC REP.)	IRR
CAPE VERDE	CVE	IRAQ	IQD
CAYMAN ISLANDS	KYD	IRELAND	IEP
CENTRAL AFRICAN REP.	XAF	ISRAEL	ILS
CHAD	XAF	ITALY	ITL
CHILE	CLP	JAMAICA	JMD
CHILE	CLF	JAPAN	JPY
CHINA	CNY	JORDAN	JOD
CHRISTMAS ISLAND	AUD	KAZAKHSTAN	KZT
COCOS (KEELING) IS.S	AUD	KENYA	KES
COLOMBIA	COP	KIRIBATI	AUD
COMOROS	KMF	KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF	
CONGO	XAF	KOREA, REPUBLIC OF	KRW
COOK ISLANDS	NZD	KUWAIT	KWD
COSTA RICA	CRC	KYRGYZSTAN	KGS
COTE D IVOIRE	XOF	LAO PEOPLE S DEMOCRATIC REPUBLIC	
CROATIA	HRK	LATVIA	LVL
CUBA	CUP	LATVIA	LVR
CYPRUS	CYP	LEBANON	LBP
CZECH REPUBLIC	CZK	LESOTHO	ZAR
DENMARK	DKK	LESOTHO	ZAL
DJIBOUTI	DJF	LESOTHO	LSL
DOMINICA	XCD	LIBERIA	LRD
DOMINICAN REPUBLIC	DOP	LIBYAN ARAB JAMAHIRIYA	LYD
EAST TIMOR	TPE	LIECHTENSTEIN	CHF
EAST TIMOR	IDR	LITHUANIA	LTL
ECUADOR	ECS	LUXEMBOURG	LUF
EGYPT	EGP	MACAU	MOP

MACEDONIA, THE FORMER YUGOSLAV REP. OF		SAMOA	WST
MADAGASCAR	MGF	SAN MARINO	ITL
MALAWI	MWK	SAO TOME AND PRINCIPE	STD
MALAYSIA	MYR	SAUDI ARABIA	SAR
MALDIVES	MVR	SENEGAL	XOF
MALI	XOF	SEYCHELLES	SCR
MALTA	MTL	SIERRA LEONE	SLL
MARSHALL ISLANDS	USD	SINGAPORE	SGD
MARTINIQUE	FRF	SLOVAKIA	SKK
MAURITANIA	MRO	SLOVENIA	SIT
MAURITIUS	MUR	SOLOMON ISLANDS	SBD
MAYOTTE	FRF	SOMALIA	SOS
MEXICO	MXN	SOUTH AFRICA	ZAR
MICRONESIA (FEDERATED STATES OF)		SOUTH AFRICA	ZAL
MOLDOVA, REPUBLIC OF	MDL	SOUTH GEORGIA + THE SOUTH SANDWICH ISL.	
MONACO	FRF	SPAIN	ESP
MONGOLIA	MNT	SRI LANKA	LKR
MONTSERRAT	XCD	SUDAN	SDD
MOROCCO	MAD	SUDAN	SDP
MOZAMBIQUE	MZM	SURINAME	SRG
MYANMAR	MMK	SVALBARD AND JAN MAYEN	NOK
NAMIBIA	ZAR	SWAZILAND	SZL
NAMIBIA	NAD	SWEDEN	SEK
NAURU	AUD	SWITZERLAND	CHF
NEPAL	NPR	SYRIAN ARAB REPUBLIC	SYP
NETHERLANDS	NLG	TAIWAN, PROVINCE OF CHINA	TWD
NETHERLANDS ANTILLES	ANG	TAJIKISTAN	RUR
NEW CALEDONIA	XPF	TANZANIA, UNITED REPUBLIC OF	TZS
NEW ZEALAND	NZD	THAILAND	THB
NICARAGUA	NIO	TOGO	XOF
NIGER	XOF	TOKELAU	NZD
NIGERIA	NGN	TONGA	TOP
NIUE	NZD	TRINIDAD AND TOBAGO	TTD
NORFOLK ISLAND	AUD	TUNISIA	TND
NORTHERN MARIANA ISLANDS	USD	TURKEY	TRL
NORWAY	NOK	TURKMENISTAN	
OMAN	OMR	TURKS AND CAICOS ISLANDS	USD
PAKISTAN	PKR	TUVALU	AUD
PALAU	USD	UGANDA	UGX
PANAMA	PAB	UKRAINE	UAK
PANAMA	USD	UNITED ARAB EMIRATES	AED
PAPUA NEW GUINEA	PGK	UNITED KINGDOM	GBP
PARAGUAY	PYG	UNITED STATES	USD
PERU	PEN	UNITED STATES MINOR OUTLYING ISLANDS	
PHILIPPINES	PHP	URUGUAY	UYU
PITCAIRN	NZD	UZBEKISTAN	UZS
POLAND	PLZ	VANUATU	VUV
PORTUGAL	PTE	VATICAN CITY STATE (HOLY SEE)	
PUERTO RICO	USD	VENEZUELA	VEB
QATAR	QAR	VIET NAM	VND
REUNION	FRF	VIRGIN ISLANDS (BRITISH)	USD
ROMANIA	ROL	VIRGIN ISLANDS (U.S.)	USD
RUSSIAN FEDERATION	RUR	WALLIS AND FUTUNA ISLANDS	XPF
RWANDA	RWF	WESTERN SAHARA	MAD
SAINT HELENA	SHP	YEMEN	YER
SAINT KITTS AND NEVIS	XCD	YUGOSLAVIA	YUN
SAINT LUCIA	XCD	ZAIRE	ZRN
SAINT PIERRE AND MIQUELON	FRF	ZAMBIA	ZMK
SAINT VINCENT AND THE GRENADINES		ZIMBABWE	ZWD