



**Message Definition
INVOIC - Invoice
ECR-Austria
EANCOM 2002 Syntax 4
and
Security segments for Digital Signature
Version 1.13**

Message Type:	INVOIC
Message Version:	010 (EANCOM)
Responsible Agency:	EAN-Austria
Directory Name:	EDIFACT
Directory Version:	D.01

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1. Introduction

This document describes the electronic exchange of invoices with digital signature based on the Header/Trailer approach in EANCOM format for the ECR-Austria Community.

The intention is to transmit the invoice data and the digital signature in one Interchange using Syntax Version 4.

For this purpose first the invoice itself is generated in EANCOM format. After that the first 4 security segments are added and then through these segments the digital signature is generated.

This document begins with description of INVOIC message, followed by a detailed description of the security segments. The document ends with an example of a whole interchange.

Before legislative regulations regarding electronic invoicing were created for pre-tax allowance purposes only invoices in paper form and handed over personally, per fax or by mail were allowed.

It was already possible to exchange invoices electronically but only for the purposes of the automatic data processing. By this reason the electronic exchange of invoices was practised mostly only by long term business partners.

By this approach it was necessary at the end of each invoicing period to create one additional collective invoice in paper form. According to the EU regulations it is also allowed to provide invoices in electronic form on condition that the receiver accepts this. However authenticity and integrity of the data must be ensured.

The digital signature serves in this legal context as a seal for digital data generated by using a private key. Through a related public signature key marked with a signature key certificate of the security party it lets recognize the authenticity of the signature key holder and the integrity of the data.

The purpose of the digital signature is therefore to protect the electronic data against manipulations or to make eventual changes recognizable.

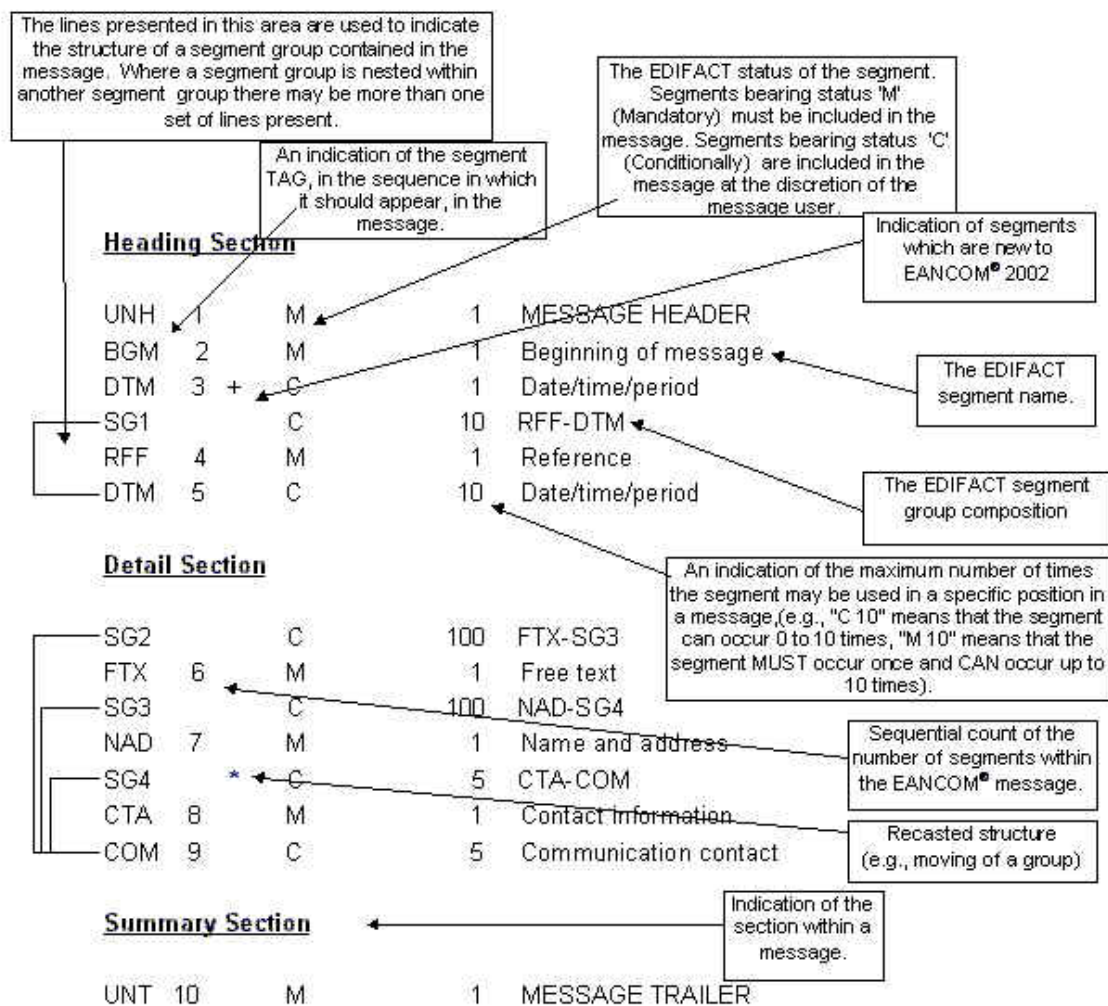
Document structure

1. Message structure
2. Business terms
3. Segment description

Message structure chart

Within every EANCOM[®] message a diagram is presented which explains the structure of the message.

The message structure chart is a sequential chart which presents the message in the sequence in which it must be formatted for transmission. Every message is structured and consists of three sections; a header, detail, and summary section. An example of a message structure chart follows:



2. Message structure INVOIC

Changes to EANCOM 2002 Syntax 4:

- UNB: DE 0002 – Qualifier 4 instead of 3
- UNB: DE 0017 – Data format 8-digit instead of 6-digit
- UNB: DE 0032 – Code EANCOM-DISI for Digital Signature
- SG2/NAD: DE 3026, 3042, 3164, 3251 and 3207 for structured identification of the partner in text form
- SG3/RFF: VAT registration number represented by qualifier VA for supplier, buyer and invoicee
- SG26/IMD: Item description changed from OPTIONAL to MANDATORY

Invoice message

UNA	1	C	1	Service string advice
UNB	2	M	1	Interchange header
UNH	3	M	1	Message header
BGM	4	M	1	Beginning of message
DTM	5	M	2	Date/time/period
FTX	6	C	6	Free text
SG1		M	6	RFF-DTM
RFF	7	M	1	Reference
DTM	8	C	1	Date/time/period
SG2		M	7	NAD-SG3
NAD	9	M	1	Name and address
SG3		C	1	RFF
RFF	10	M	1	Reference
SG7		M	1	CUX
CUX	11	M	1	Currencies
SG8		C	6	PAT-DTM-PCD
PAT	12	M	1	Payment terms basis
DTM	13	C	1	Date/time/period
PCD	14	C	1	Percentage details
SG26		M	999999	LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39
LIN	15	M	1	Line item
PIA	16	C	1	Additional product id
IMD	17	M	5	Item description
QTY	18	M	2	Quantity
ALI	19	C	1	Additional information
SG27		C	2	MOA
MOA	20	M	1	Monetary amount
SG28		C	1	PAT-PCD
PAT	21	M	1	Payment terms basis
PCD	22	C	99	Percentage details
SG29		C	3	PRI
PRI	23	M	1	Price details

SG34		C	3	TAX-MOA
TAX	24	M	1	Duty/tax/fee details
MOA	25	C	1	Monetary amount
SG39		C	15	ALC-SG41-SG42
ALC	26	M	1	Allowance or charge
SG41		C	1	PCD
PCD	27	M	1	Percentage details
SG42		C	2	MOA
MOA	28	M	1	Monetary amount
UNS	29	M	1	Section control
SG50		M	6	MOA
MOA	30	M	1	Monetary amount

[	SG52		M	10	TAX-MOA
	TAX	31	M	1	Duty/tax/fee details
	MOA	32	M	9	Monetary amount
[	SG53		C	15	ALC-MOA
	ALC	33	M	1	Allowance or charge
	MOA	34	C	1	Monetary amount
	UNT	35	M	1	Message trailer
	UNZ	36	M	1	Interchange trailer

4. BUSINESS TERMS

Business term	Description	Status	Format	Segment		Data element	
Commercial invoice/ Credit note		M	A/N 3		BGM	C002 1001	Document name code
Invoice or Credit note number		M	A/N 16		BGM	C106 1004	Document identifier
Message date		M	D 8		DTM	C507 2380	Date or time or period value
Delivery date	by Invoice	M	D 8		DTM	C507 2380	Date or time or period value
Delivery date	by Credit note	O	D 8		DTM	C507 2380	Date or time or period value
Coded text references	average tax rate, intra-community delivery, tax exempt export delivery etc.	O	A/N 3		FTX	C107 4441	Free text value code
Order number assigned by the buyer	to which delivery/invoice refer, optional by credit note	M	A/N 16	SG1	RFF	C506 1154	Reference identifier
Delivery note number	optional by credit note	M	A/N 16	SG1	RFF	C506 1154	Reference identifier
Invoice number	Invoice reference number (only by credit note)	O	A/N 16	SG1	RFF	C506 1154	Reference identifier
Receiving advice number		O	A/N 16	SG1	RFF	C506 1154	Reference identifier
Instruction for returns number		O	A/N 16	SG1	RFF	C506 1154	Reference identifier
Organic control number of the supplier		O	A/N 35	SG1	RFF	C506 1154	Reference identifier
Reference date		O	D8	SG1	DTM	C507 2380	Date or time or period value
Buyer	GLN	M	N 13	SG2	NAD	C082 3039	Party identifier

Business term	Description	Status	Format	Segment		Data element		
Supplier	GLN	M	N 13	SG2	NAD	C082	3039	Party identifier
Delivery party	GLN, only if not identical with the buyer	O	N 13	SG2	NAD	C082	3039	Party identifier
Ultimate consignee	GLN, only if not identical with the delivery party (Cross-Docking)	O	N 13	SG2	NAD	C082	3039	Party identifier
Ordered by	GLN, only if not identical with the buyer	O	N 13	SG2	NAD	C082	3039	Party identifier
Invoicee	GLN, only if not identical with the buyer	O	N 13	SG2	NAD	C082	3039	Party identifier
Issuer of invoice	GLN, only if not identical with the supplier	O	N 13	SG2	NAD	C082	3039	Party identifier
Company name	for SU,BY and IV	M	A/N 3x	SG2	NAD	C080	3036	Party name
Street	for SU, BY and IV	M	A/N 2x	SG2	NAD	C059	3042	Street and number or post office b
City	for SU, BY and IV	M	A/N 35	SG2	NAD		3164	City name
Postal code	for SU, BY and IV	M	A/N 17	SG2	NAD		3251	Postal identification code
Country name code		O	A/N 3	SG2	NAD		3207	Country name code
VAT registration number		O	A/N 20	SG3	RFF	C506	1154	Reference identifier
Currency		M	A/N 3	SG7	CUX	C504	6345	Currency identification code
Net payment terms	in days	O	N 3	SG8	PAT	C112	2152	Period count quantity
Discount terms	in days	O	N 3	SG8	PAT	C112	2152	Period count quantity
Value date	Due date for the general payment term, only if different from the date of Invoice	O	D 8	SG8	DTM	C507	2380	Date or time or period value
Discount percentage rate		O	N 2+2	SG8	PCD	C501	5482	Percentage

Business term	Description	Status	Format	Segment	Data element		
Article	EAN	M	N 14	SG26 LIN	C212	7140	Item identifier
Object number		O	N 5	SG26 PIA	C212	7140	Item identifier
Issue number		O	N 8	SG26 PIA	C212	7140	Item identifier
Release number		O	N 10	SG26 PIA	C212	7140	Item identifier
ADD-ON number		O	A/N 5	SG26 PIA	C212	7140	Item identifier
Identification of display article		O	A/N 3	SG26 IMD	C273	7009	Item description code
Identification of returnable containers		O	A/N 3	SG26 IMD	C273	7009	Item description code
Identification of consumer units		O	A/N 3	SG26 IMD	C273	7009	Item description code
Identification of deduction for pickup		O	A/N 3	SG26 IMD	C273	7009	Item description code
Article description		M	A/N 70	SG26 IMD	C273	7008	Item description
Invoiced quantity	Delivered quantity that is being invoiced, related to EAN	M	N 7+3	SG26 QTY	C186	6060	Quantity
Free goods quantity	Delivered quantity that is not being invoiced, related to EAN	M	N 7+3	SG26 QTY	C186	6060	Quantity
Number of units in higher packaging or configuration level (EAN Code)		O	N 7+3	SG26 QTY	C186	6060	Quantity
Measurement unit	only used for variable quantity products (unit is not equal piece)	O	A/N 3	SG26 QTY	C186	6411	Measurement unit code

Business term	Description	Status	Format	Segment	Data element		
Item not to be included in bonus calculation		O	A/N 3	SG26 ALI	4183	Special condition code	
Line item amount		M	N 10+3	SG27 MOA	C516 5004	Monetary amount	
Total charges/ allowances		O	N 10+3	SG27 MOA	C516 5004	Monetary amount	
Discount percentage	only if different from Header	O	N 2+2	SG28 PCD	C501 5482	Percentage	
Net price		M	N 7+3	SG29 PRI	C509 5118	Price amount	
Gross calculation price		O	N 7+3	SG29 PRI	C509 5118	Price amount	
Calculation price	to identify beer tax	O	N 7+3	SG29 PRI	C509 5118	Price amount	
VAT rate	as percentage	M	N 2+2	SG34 TAX	C243 5278	Duty or tax or fee rate	
Producer fees as percentage	beer, sparkling wine etc.	O	N 2+2	SG34 TAX	C243 5278	Duty or tax or fee rate	
Tax amount	producer fees (beer, sparkling wine etc.) as a monetary amount	O	N 7+3	SG34 MOA	C516 5004	Monetary amount	
Percentage discount	field repetition is possible (only for information)	O	N 2+2	SG41 PCD	C501 5482	Percentage	
Monetary allowance	field repetition is possible (only for information)	O	N 7+3	SG42 MOA	C516 5004	Monetary amount	
Charge/allowance basis		O	N 7+3	SG42 MOA	C516 5004	Monetary amount	
Total line items amount	sum of all line item amounts	M	N 11+2	SG50 MOA	C516 5004	Monetary amount	

Business term	Description	Status	Format	Segment	Data element		
Goods and services total amount	only from the gross calculation price (incl. VAT) as percentage	M	N 11+2	SG50 MOA	C516	5004	Monetary amount
Total returnable items deposit amount		M	N 11+2	SG50 MOA	C516	5004	Monetary amount
Message total duty/ tax/fee amount		O	N 11+2	SG50 MOA	C516	5004	Monetary amount
Discount amount		O	N 11+2	SG50 MOA	C516	5004	Monetary amount
Invoice amount		M	N 11+2	SG50 MOA	C516	5004	Monetary amount
VAT		M	N 2+2	SG52 TAX	C243	5278	Duty or tax or fee rate
Producer fees		M	N 2+2	SG52 TAX	C243	5278	Duty or tax or fee rate
Taxable amount		M	N 11+2	SG52 MOA	C516	5004	Monetary amount
Tax amount		M	N 11+2	SG52 MOA	C516	5004	Monetary amount
Allowance/charge type		O	A/N 3	SG53 ALC	C214	7161	Special service description code
Allowance/charge amount		O	N 11+2	SG53 MOA	C516	5004	Monetary amount

4. Segment description INVOIC

UNA - C		1 - Service string advice			
Function :		The service string advice shall begin with the upper case characters UNA immediately followed by six characters in the order shown below. The space character shall not be used in positions 010, 020, 040, 050 or 060. The same character shall not be used in more than one position of the UNA.			
Segment number :		1			
Data element group/Data element		EDIFACT	ANW	*	Description
UNA1	Component data element separator	M an1	M	*	Used as a separator between component data elements contained within a composite data element (default value: ";")
UNA2	Data element separator	M an1	M	*	Used as a separator between two simple or composite data elements (default value: "+")
UNA3	Decimal mark	M an1	M	*	Used to indicate the character used for decimal notation (default value: ".")
UNA4	Release character	M an1	M	*	Used to restore separator and terminator signs to their normal meaning (value: "?") .
UNA5	Repetition separator	M an1	M	*	Separator sign ("*")
UNA6	Segment terminator	M an1	M	*	Used to indicate the end of a segment (default value: " ' ")
<u>Segment notes</u> This segment is used to inform the receiver of the interchange that a set of service string characters which are different to the default characters are being used. When using the default set of service characters, the UNA segment need not be sent. If it is sent, it must immediately precede the UNB segment and contain the four service string characters (positions UNA1, UNA2, UNA4 and UNA6) selected by the interchange sender. Regardless of whether or not all of the service string characters are being changed every data element within this segment must be filled, (i.e. if some default values are being used together with user-defined values then both the default and the user-defined values must be specified). When expressing the service string characters in the UNA segment, it is not necessary to include any element separators. The use of the UNA segment is required when a character set other than level A is being used. Example: UNA:+.?*'					

UNB - M 1 - Interchange header				
Function : To identify an interchange.				
Segment number : 2				
Data element group/Data element	EDIFACT	ANW	*	Description
S001 Syntax identifier	M	M		
0001 Syntax identifier	M a4	M	*	See code list
0002 Syntax version number	M an1	M	*	4 = Version 4
0080 Service code list directory version number	C an..6	N		
0133 Character encoding, coded	C an..3	N		
S002 Interchange sender	M	M		
0004 Interchange sender identification	M an..35	M		GLN (n13)
0007 Identification code qualifier	C an..4	R	*	14 = EAN International.
0008 Interchange sender internal identification	C an..35	N		
0042 Interchange sender internal sub-identification	C an..35	N		
S003 Interchange recipient	M	M		
0010 Interchange recipient identification	M an..35	M		GLN (n13)
0007 Identification code qualifier	C an..4	R	*	14 = EAN International.
0014 Interchange recipient internal identification	C an..35	N		
0046 Interchange recipient internal sub-identification	C an..35	N		
S004 Date and time of preparation	M	M		
0017 Date	M n8	M		CCYYMMDD
0019 Time	M n4	M		HHMM
0020 Interchange control reference	M an..14	M		Unique reference identifying the interchange. Created by the interchange sender.
S005 Recipient reference/password details	C	N		
0022 Recipient reference/password	M an..14			
0025 Recipient reference/password qualifier	C an2			
0026 Application reference	C an..14	O		
0029 Processing priority code	C a1	N		

Data element group/Data element	EDIFACT	ANW	*	Description
0031 Acknowledgement request	C n1	N		
0032 Interchange agreement identifier	C an..35	M		EANCOM-DISI = Indicator for Digital Signature
0035 Test indicator	C n1	O		1 = Interchange is a test
<u>Segment notes</u> The UNB segment is used to envelope the interchange and also to identify the party for whom the interchange is intended and the party who has sent the interchange. The principle of the UNB segment is the same as a physical envelope which covers one or more letters or documents and which details the address where delivery is to take place and the address from where the envelope has come. DE 0001: The recommended (default) character set for use in EANCOM® for international exchanges is character set A (UNOA). Should users wish to use character sets other than A, an agreement on which set to use should be reached on a bilateral basis before communications begin. DE 0004 and 0010: Within EANCOM® the Global Location Number (GLN) is recommended for the identification of the interchange sender and recipient. DE 0008: The address for reverse routing is provided by the interchange sender to inform the interchange recipient of the address within the sender's system to which responding interchanges must be sent. It is recommended that the GLN be used for this purpose. DE 0014: The address for routing, formerly provided by the interchange recipient, is used by the interchange sender to inform the recipient of the internal address within the recipient's system, to which the interchange should be routed. It is recommended that the GLN be used for this purpose. DE S004: The date and time at which the sender prepared the interchange. This date and time may not necessarily be the same as the date and time of contained messages. DE 0020: The interchange control reference number is generated by the interchange sender and is used to identify uniquely each interchange. Should the sender wish to re-use interchange control reference numbers, it is recommended that each number is held for a period of at least three months before being re-used. In order to guarantee uniqueness, the interchange control reference number should always be linked to the sender's identification (DE 0004). DE S005: Any use of passwords must first be agreed bilaterally by the parties to the exchange. DE 0026: This data element is used to identify the application on the recipient's system to which the interchange is directed. This data element may be used if, and only if, the interchange contains only one type of message, e.g. invoices. The reference used in this data element is assigned by the interchange sender. DE 0031: This data element is used to indicate whether an acknowledgement to the interchange is required or not. The EANCOM® APERAK or CONTRL message should be used to provide acknowledgement of interchange receipt. In addition the EANCOM® CONTRL message may be used to indicate when an interchange has been rejected due to syntactical errors. DE 0032: This data element contains an indicator for Digital Signature in order to facilitate the automatic processing of the interchange. Example: UNB+UNOC:4+9099999300314:14+8798765432106:14+20060102:1000+12345555+++++EANCOM-DISI'				

UNH - M 1 - Message header				
Function : To head, identify and specify a message.				
Segment number : 3				
Data element group/Data element	EDIFACT	ANW	*	Description
0062 Message reference number	M an..14	M		Sender's unique message reference. Sequence number of the messages in the interchange. DE 0062 in the UNT will be exactly the same. Sender generated.
S009 Message identifier	M	M		
0065 Message type	M an..6	M	*	INVOIC = Invoice message
0052 Message version number	M an..3	M	*	D = Draft version/UN/EDIFACT Directory
0054 Message release number	M an..3	M	*	01B = Release 2001 - B
0051 Controlling agency, coded	M an..3	M	*	UN = UN/CEFACT
0057 Association assigned code	C an..6	R	*	EAN010 = EAN version control number (EAN Code)
0110 Code list directory version number	C an..6	O		Code list version
0113 Message type sub-function identification	C an..6	N		
0068 Common access reference	C an..35	N		
S010 Status of the transfer	C	N		
0070 Sequence of transfers	M n..2			
0073 First and last transfer	C a1			
S016 Message subset identification	C	N		
0115 Message subset identification	M an..14			
0116 Message subset version number	C an..3			
0118 Message subset release number	C an..3			
0051 Controlling agency, coded	C an..3			
S017 Message implementation guideline identification	C	N		
0121 Message implementation guideline identification	M an..14			
0122 Message implementation guideline version number	C an..3			
0124 Message implementation guideline release number	C an..3			
0051 Controlling agency, coded	C an..3			

Data element group/Data element		EDIFACT	ANW	*	Description
S018	Scenario identification	C	N		
0127	Scenario identification	M an..14			
0128	Scenario version number	C an..3			
0130	Scenario release number	C an..3			
0051	Controlling agency, coded	C an..3			
<u>Segment notes</u>					
Example: UNH+ME00001+INVOIC:D:01B:UN:EAN010'					

BGM - M 1 - Beginning of message				
Function : To indicate the type and function of a message and to transmit the identifying number.				
Segment number : 4				
Data element group/Data element	EDIFACT	ANW	*	Description
C002 Document/message name	C	R		
1001 Document name code	C an..3	R	*	380 = Commercial invoice 381 = Credit note - goods and services
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
1000 Document name	C an..35	N		
C106 Document/message identification	C	R		
1004 Document identifier	C an..35	R		Invoice number/credit note number; assigned by the document sender.
1056 Version identifier	C an..9	N		
1060 Revision identifier	C an..6	N		
1225 Message function code	C an..3	R	*	9 = Original 1 = Cancellation
4343 Response type code	C an..3	N		
<u>Segment notes</u> - Message type- Invoice (DE1001 = 380), Mandatory *); A/N 3 - Invoice number (DE1004); Mandatory; A/N 16 BGM+380+200099+9' - Message type - Credit note (DE1001 = 381); Mandatory *); A/N 3 - Credit note number (DE1004); Mandatory; A/N 16 BGM+381+300200+9' *) One of these message types (together with the message number) must be set. The INVOIC serves as both: Invoice and Credit note.				

DTM - M 2 - Date/time/period					
Function : To specify date, and/or time, or period.					
Segment number : 5					
Data element group/Data element		EDIFACT	ANW	*	Description
C507	Date/time/period	M	M		
2005	Date or time or period function code qualifier	M an..3	M	*	137 = Document/message date/time 35 = Delivery date/time, actual
2380	Date or time or period value	C an..35	R		
2379	Date or time or period format code	C an..3	R	*	102 = CCYYMMDD
<u>Segment notes</u> - Message date (DE2005 = 137); Mandatory; D 8 DTM+137:20060522:102' - Delivery date (DE2005 = 35); Mandatory by Invoice (Qualifier=380); Optional by Credit Note (Qualifier=381); D 8 DTM+35:20060615:102'					

FTX - C 6 - Free text				
Function : To provide free form or coded text information.				
Segment number : 6				
Data element group/Data element	EDIFACT	ANW	*	Description
4451 Text subject code qualifier	M an..3	M	*	REG = Regulatory information
4453 Free text function code	C an..3	M	*	1 = Text for subsequent use
C107 Text reference	C	M		
4441 Free text value code	M an..17	M	*	DSS = Average tax rate according to § 22 paragraph 1 / Value Added Tax Act S67 = Tax exempt according to § 6 paragraph 1 Z 27 / Value Added Tax Act S69 = Tax exempt according to § 6 paragraph 1 Z 9 / Value Added Tax Act IGL = Intra-community deliveries according to article 6 paragraph 1 / Value Added Tax Act RCH = Reverse Charge according to § 19 paragraph 1 / Value Added Tax Act SA7 = Tax-exempt export delivery according to § 7 / Value Added Tax Act
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	M	*	294 = GS1 Austria
C108 Text literal	C	N		
4440 Free text value	M an..512			
4440 Free text value	C an..512			
4440 Free text value	C an..512			
4440 Free text value	C an..512			
4440 Free text value	C an..512			
3453 Language name code	C an..3	N		
4447 Free text format code	C an..3	N		

Segment notes

Use of this segment in free form is not recommended since in most cases it inhibits automatic processing of the Invoice.

Coded references to standard texts is an available functionality which enables automatic processing and reduces transmission and processing overheads. Standard texts should be mutually defined among trading partners and can be used to cover legal and other requirements.

The codes in DE 4451 are maintained by GS1 Austria (DE3055 = 294) and are defined as following:

DSS = Average tax rate according to § 22 paragraph 1 / Value Added Tax Act

Average tax rate (12%) applied by flat rate farmers

FTX+REG+1+DSS::294'

S67 = Tax exempt according to § 6 paragraph 1 Z 27 / Value Added Tax Act

Tax exempt (below the VAT threshold): According to § 6 paragraph 1 Z 27 the delivery/service is tax exempt

FTX+REG+1+S67::294'

S69 = Tax exempt according to § 6 paragraph 1 Z 9 / Value Added Tax Act

Tax exempt (gambling turnovers, brake-open tickets): According to § 6 paragraph 1 Z 9 the delivery/service is tax exempt

FTX+REG+1+S69::294'

IGL = Intra-community deliveries according to article 6 paragraph 1 / Value Added Tax Act

Intra-community delivery: Tax exempt intra-community delivery according to article 6 paragraph 1 Value Added Tax Act

FTX+REG+1+IGL::294'

RCH = Reverse Charge according to § 19 paragraph 1 / Value Added Tax Act

FTX+REG+1+RCH::294'

SA7 = Tax-exempt export delivery according to § 7 / Value Added Tax Act

By export in third country (outside the EU)

FTX+REG+1+SA7::294'

SG1 - M 6 - RFF-DTM				
RFF - M 1 - Reference				
Function : To specify a reference.				
Segment number : 7				
Data element group/Data element	EDIFACT	ANW	*	Description
C506 Reference	M	M		ON = Order number (buyer) DQ = Delivery note number IV = Invoice number ALO = Receiving advice number IRN = Instruction for returns number (EAN Code) XC1 = Product certification number (EAN Code)
1153 Reference code qualifier	M an..3	M	*	
1154 Reference identifier	C an..70	R		
1156 Document line identifier	C an..6	N		
4000 Reference version identifier	C an..35	N		
1060 Revision identifier	C an..6	N		
<u>Segment notes</u> - Order number (buyer) (DE1153 = ON); Mandatory by Invoice (Optional by Credit note); A/N 16 RFF+ON:4711' - Delivery note number (DE1153 = DQ); Mandatory by Invoice (Optional by Credit note); A/N 16 RFF+DQ:1234' - Reference invoice number (DE1153 = IV); Mandatory by Credit note (not used by Invoice); A/N 16 RFF+IV:5678' - Receiving advice number (DE1153 = ALO); Optional; A/N 16 RFF+ALO:39973' - Instruction for returns number (DE1153 = IRN); Optional; A/N 16 RFF+IRN:5664' - Organic control number of the supplier (DE1153 = XC1); Optional; A/N 35 RFF+XC1: AT-N-01-BIO'				

SG1 - M 6 - RFF-DTM				
DTM - C 1 - Date/time/period				
Function : To specify date, and/or time, or period.				
Segment number : 8				
Data element group/Data element	EDIFACT	ANW	*	Description
C507 Date/time/period	M	M		
2005 Date or time or period function code qualifier	M an..3	M	*	171 = Reference date/time
2380 Date or time or period value	C an..35	R		
2379 Date or time or period format code	C an..3	R	*	102 = JJJMMTT
<u>Segment notes</u> - Reference date; Optional; D 8 DTM+171:20060602:102'				

SG2 - M 7 - NAD-SG3				
NAD - M 1 - Name and address				
Function : To specify the name/address and their related function, either by C082 only and/or unstructured by C058 or structured by C080 thru 3207.				
Segment number : 9				
Data element group/Data element	EDIFACT	ANW	*	Description
3035 Party function code qualifier	M an..3	M	*	BY = Buyer SU = Supplier DP = Delivery party UC = Ultimate consignee OB = Ordered by IV = Invoicee II = Issuer of invoice
C082 Party identification details	C	R		
3039 Party identifier	M an..35	M		GLN - Format n13
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	R	*	9 = EAN (International Article Numbering Association)
C058 Name and address	C	N		
3124 Name and address description	M an..35			
3124 Name and address description	C an..35			
3124 Name and address description	C an..35			
3124 Name and address description	C an..35			
3124 Name and address description	C an..35			
C080 Party name	C	D		
3036 Party name	M an..35	M		
3036 Party name	C an..35	O		
3036 Party name	C an..35	O		
3036 Party name	C an..35	N		
3036 Party name	C an..35	N		
3045 Party name format code	C an..3	N		
C059 Street	C	D		
3042 Street and number or post office box identifier	M an..35	M		
3042 Street and number or post office box identifier	C an..35	O		
3042 Street and number or post office box identifier	C an..35	N		

Data element group/Data element	EDIFACT	ANW	*	Description
3042 Street and number or post office box identifier	C an..35	N		
3164 City name	C an..35	D		
C819 Country sub-entity details	C	N		
3229 Country sub-entity name code	C an..9			
1131 Code list identification code	C an..17			
3055 Code list responsible agency code	C an..3			
3228 Country sub-entity name	C an..70			
3251 Postal identification code	C an..17	D		
3207 Country name code	C an..3	D		
<u>Segment notes</u> - Buyer (DE3035 = BY); Mandatory; N 13 NAD+BY+9012345000004::9++buyer name:buyer name:buyer name+STREET 5+TOWN++1190+AT' - Supplier (DE3035 = SU); Mandatory; N 13 NAD+SU+9012345000004::9++supplier name:supplier name:supplier name+STREET 5+TOWN++1190+AT' - Delivery party (DE3035 = DP); Optional; N 13 NAD+DP+9012345000028::9' - Ultimate consignee (DE3035 = UC); Optional; N 13 NAD+UC+9012345000035::9' - Ordered by (DE3035 = OB); Optional; N 13 NAD+OB+9012345000042::9' - Invoicee (DE3035 = IV); Optional; N 13 NAD+IV+9012345000004::9++invoicee name:invoicee name:invoicee name+STREET 5+TOWN++1190+AT' - Issuer of invoice (DE3035 = II); Optional; N 13 This Qualifier is only used when the issuer of the invoice is different from the supplier (SU) ! NAD+II+9099999300414::9++issuer of invoice name:issuer of invoice name:issuer of invoice name+STREET 5+WIEN++1190+AT' Remark to Cross-Docking: The field for delivery party (DE3035 = DP) should contain the Cross-Docking-Point. The data field Ultimate consignee (DE3035 =UC) is used to identify the address for which the goods are picked. DE3039: For partner identification use exclusively the GLN.				

SG2 - M 7 - NAD-SG3				
SG3 - C 1 - RFF				
RFF - M 1 - Reference				
Function : To specify a reference.				
Segment number : 10				
Data element group/Data element	EDIFACT	ANW	*	Description
C506 Reference	M	M		VA = VAT registration number
1153 Reference code qualifier	M an..3	M	*	
1154 Reference identifier	C an..70	R		
1156 Document line identifier	C an..6	N		
4000 Reference version identifier	C an..35	N		
1060 Revision identifier	C an..6	N		
<u>Segment notes</u>				
- VAT registration number, in connection with BY, SU, II and IV (DE1154); Mandatory; A/N 20 RFF+VA:AT3929292'				

SG7 - M 1 - CUX				
CUX - M 1 - Currencies				
Function : To specify currencies used in the transaction and relevant details for the rate of exchange.				
Segment number : 11				
Data element group/Data element	EDIFACT	ANW	*	Description
C504 Currency details	C	R		
6347 Currency usage code qualifier	M an..3	M	*	2 = Reference currency
6345 Currency identification code	C an..3	R		EUR = Euro (EAN-Code)
6343 Currency type code qualifier	C an..3	R	*	4 = Invoicing currency
6348 Currency rate value	C n..4	N		
C504 Currency details	C	N		
6347 Currency usage code qualifier	M an..3			
6345 Currency identification code	C an..3			
6343 Currency type code qualifier	C an..3			
6348 Currency rate value	C n..4			
5402 Currency exchange rate	C n..12	N		
6341 Exchange rate currency market identifier	C an..3	N		
<u>Segment notes</u> - Currency; Mandatory; A/N 3 CUX+2:EUR:4'				

SG8 - C 6 - PAT-DTM-PCD				
PAT - M 1 - Payment terms basis				
Function : To specify the payment terms basis.				
Segment number : 12				
Data element group/Data element	EDIFACT	ANW	*	Description
4279 Payment terms type code qualifier	M an..3	M	*	1 = Basic 22 = Discount
C110 Payment terms	C	N		
4277 Payment terms description identifier	M an..17			
1131 Code list identification code	C an..17			
3055 Code list responsible agency code	C an..3			
4276 Payment terms description	C an..35			
4276 Payment terms description	C an..35			
C112 Terms/time information	C	R		
2475 Time reference code	M an..3	M	*	5 = Date of invoice 66 = Specified date
2009 Terms time relation code	C an..3	D	*	3 = After reference
2151 Period type code	C an..3	D	*	D = Day
2152 Period count quantity	C n..3	D		Net payment terms in days
<u>Segment notes</u>				
- Net payment terms (in days); Optional; N 3 PAT+1++5:3:D:31'				
- Discount terms in days; Optional; N 3; 4 different discounts are allowed - to be used together with the following PCD-Segment PAT+22++5:3:D:30' PCD+12:3' PAT+22++5:3:D:40' PCD+12:1'				
- Value date; Optional; D 8; to be used together with the following DTM-Segment PAT+22++66' DTM+209:19990605:102'				

SG8 - C 6 - PAT-DTM-PCD					
DTM - C 1 - Date/time/period					
Function : To specify date, and/or time, or period.					
Segment number : 13					
Data element group/Data element		EDIFACT	ANW	*	Description
C507 Date/time/period		M	M		
2005	Date or time or period function code qualifier	M an..3	M	*	209 = Value date
2380	Date or time or period value	C an..35	R		
2379	Date or time or period format code	C an..3	R	*	102 = CCYYMMDD
<u>Segment notes</u> - Value date; Optional; D 8; see also PAT-Segment DTM+209:19990603:102'					

SG8 - C 6 - PAT-DTM-PCD				
PCD - C 1 - Percentage details				
Function : To specify percentage information.				
Segment number : 14				
Data element group/Data element	EDIFACT	ANW	*	Description
C501 Percentage details	M	M		
5245 Percentage type code qualifier	M an..3	M	*	12 = Discount
5482 Percentage	C n..10	R		Percentage rate
5249 Percentage basis identification code	C an..3	N		
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
4405 Status description code	C an..3	N		
<u>Segment notes</u> - Discount percentage rate; Optional; N 2+2; see also the PAT-Segment PCD+12:3'				

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39						
LIN - M 1 - Line item						
Function : To identify a line item and configuration.						
Segment number : 15						
Data element group/Data element		EDIFACT	ANW	*	Description	
1082	Line item identifier	C an..6	R		Application generated number of the count of the order lines. The number must be unique and ascending within the message.	
1229	Action request/notification description code	C an..3	N			
C212	Item number identification	C	R			
7140	Item identifier	C an..35	R			Format n..14
7143	Item type identification code	C an..3	R	*		SRV = EAN.UCC Global Trade Item Number
1131	Code list identification code	C an..17	N			
3055	Code list responsible agency code	C an..3	N			
C829	Sub-line information	C	D			
5495	Sub-line indicator code	C an..3	M	*	1 = Sub-line information	
1082	Line item identifier	C an..6	M			
1222	Configuration level number	C n..2	N			
7083	Configuration operation code	C an..3	N			
<u>Segment notes</u> - Article identification by EAN (DE7140); Mandatory; N 14 LIN+1++9012345000103:SRV' - Identification of Display article LIN+2++9099999000021:SRV+1:1' The LIN-Segment indicates the beginning of the detail section within the Invoice and is used to identify the item being invoiced.						

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39				
PIA - C 1 - Additional product id				
Function : To specify additional or substitutional item identification codes.				
Segment number : 16				
Data element group/Data element	EDIFACT	ANW	*	Description
4347 Product identifier code qualifier	M an..3	M	*	1 = Additional identification
C212 Item number identification	M	M		
7140 Item identifier	C an..35	R		
7143 Item type identification code	C an..3	R	*	MN = Object number ST = Issue number SN = Release number AA = ADD-ON number
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
C212 Item number identification	C	O		
7140 Item identifier	C an..35	R		
7143 Item type identification code	C an..3	R	*	MN = Object number ST = Issue number SN = Release number AA = ADD-ON number
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
C212 Item number identification	C	O		
7140 Item identifier	C an..35	R		
7143 Item type identification code	C an..3	R	*	MN = Object number ST = Issue number SN = Release number AA = ADD-ON number
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
C212 Item number identification	C	O		
7140 Item identifier	C an..35	R		
7143 Item type identification code	C an..3	R	*	MN = Object number ST = Issue number SN = Release number AA = ADD-ON number

Data element group/Data element		EDIFACT	ANW	*	Description
1131	Code list identification code	C an..17	N		
3055	Code list responsible agency code	C an..3	N		
C212	Item number identification	C	N		
7140	Item identifier	C an..35			
7143	Item type identification code	C an..3			
1131	Code list identification code	C an..17			
3055	Code list responsible agency code	C an..3			
<u>Segment notes</u> The information in this segment is used exclusively in the media sector! - Object number, serial number (DE7143 = MN); Optional; N 5 PIA+1+02011:MN' - Issue number (DE7143 = ST);Optional; N 8 PIA+1+02125623:ST' - Release number, this number is also transmitted in the RETINS (DE7143 = SN);Optional; N 10 PIA+1+20060038:SN' - ADD-ON number (2 or 5-digits)(DE7143 = AA); Optional; A/N 5 PIA+1+09:SA' The PIA-Segment may appear only once per position (LIN)! Transmission of more information in the PIA-Segment is carried out by repetition of the data element group C212. Example: PIA+1+50615:MN+20060038:ST+2006092806:SN+09:AA'					

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39				
IMD - M 5 - Item description				
Function : To describe an item in either an industry or free format.				
Segment number : 17				
Data element group/Data element	EDIFACT	ANW	*	Description
7077 Description format code	C an..3	M	*	A = Free-form long description C = Code (from industry code list)
C272 Item characteristic	C	N		
7081 Item characteristic code	C an..3			
1131 Code list identification code	C an..17			
3055 Code list responsible agency code	C an..3			
C273 Item description	C	M		SG = Standard group of products (mixed assortment) (EAN Code) RC = Returnable container (EAN Code) CU = Consumer unit (EAN Code) SER = Service (Deduction for pickup) (EAN Code)
7009 Item description code	C an..17	O	*	
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	D	*	
7008 Item description	C an..256	M		
7008 Item description	C an..256	N		Max. 70 symbols
3453 Language name code	C an..3	N		
7383 Surface or layer code	C an..3	N		

Segment notes

- Indicator for Display article (mixed assortment)(DE7009=SG); Optional; A/N 3
IMD+C++SG::9'

- Article description (DE7008); Mandatory; A/N 70
IMD+A++::ARTIKELTEXT1'

Representation of returnable containers in INVOIC:

Basically there are 2 types of returnable containers to be differed:

1) bounded returnable container: the returnable container is sent together with content (full item)

Approach:

- Both content (full item) and returnable container should be represented as main positions
- Returnable container is additionally identified by the qualifier RC
- all returnable containers related to the full item should be sent immediate after the full item and not as a sum of all positions at the end

2) unbounded returnable container: the returnable container is sent without content (full item), e.g. by ordering of an "empty" case

Approach:

- Returnable container is represented as a normal article
- The qualifier RC is not sent

- Identification of Returnable container / empties (DE7009=RC); Optional; A/N 3
IMD+C++RC::9'

- Identification of Consumer unit (DE7009=CU); Optional; A/N 3
IMD+C++CU::9'

- Identification of deduction for pick up (DE7009=SER); Optional; A/N 3
IMD+C++SER::9'

A deduction for pickup will be shown as an own position with the article number of the product. Additionally it will be identified by the Qualifier "SER".

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39				
QTY - M 2 - Quantity				
Function : To specify a pertinent quantity.				
Segment number : 18				
Data element group/Data element	EDIFACT	ANW	*	Description
C186 Quantity details	M	M		
6063 Quantity type code qualifier	M an..3	M	*	47 = Invoiced quantity 192 = Free goods quantity (EAN-Code) 45E = Number of units in higher packaging or configuration level (EAN Code)
6060 Quantity	M an..35	M		
6411 Measurement unit code	C an..3	D		KGM = Kilogram
<u>Segment notes</u> - Invoiced quantity (DE6063 = 47); Mandatory*); N 7+3 QTY+47:250' - Free goods quantity (DE6063 = 192); Mandatory*); N 7+3 QTY+192:100' *) One of these quantity types must be set, both can also appear at the same time. - Number of units in higher packaging or configuration level (EAN Code) (Display article); Optional; N 7+3 In the qualifier 45E must be displayed the total quantity of the sub-positions (Quantity main position x number of the sub-positions within the main position = total quantity) QTY+45E:10' DE 6411: Measurement unit for quantity variable products (unit not equal piece); for further codes see the code list.				
Mapping beer tax				
<u>Variant 1: article is free of charge and NO beer tax will be charged</u> Identified with the QTY+192 segment (free goods quantity). Therefore the Line item amount (MOA+203) is 0, but the net price in the PRI+AAA segment has to be shown.				
<u>Variant 2: article is free of charge but a the beer tax will be charged</u> QTY+47:xxx' Amount MOA+203:xxx.xx' Statement about the beer tax PRI+CAL:xxx.xx' Calculated price for the beer tax (beer tax/amount) PRI+AAA:xxx.xx' regular price, which has to be shown but won't be charged				

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39					
ALI - C 1 - Additional information					
Function : To indicate that special conditions due to the origin, customs preference, fiscal or commercial factors are applicable.					
Segment number : 19					
Data element group/Data element		EDIFACT	ANW	*	Description
3239	Country of origin name code	C an..3	N		5 = Item not to be included in bonus calculation
9213	Duty regime type code	C an..3	N		
4183	Special condition code	C an..3	M	*	
4183	Special condition code	C an..3	N		
4183	Special condition code	C an..3	N		
4183	Special condition code	C an..3	N		
4183	Special condition code	C an..3	N		
<u>Segment notes</u>					
- Item not to be included in bonus calculation; Optional; A/N 3					
ALI+++5'					

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39				
SG27 - C 2 - MOA				
MOA - M 1 - Monetary amount				
Function : To specify a monetary amount.				
Segment number : 20				
Data element group/Data element	EDIFACT	ANW	*	Description
C516 Monetary amount	M	M		
5025 Monetary amount type code qualifier	M an..3	M	*	203 = Line item amount 131 = Total charges/allowances
5004 Monetary amount	C n..35	R		
6345 Currency identification code	C an..3	N		
6343 Currency type code qualifier	C an..3	N		
4405 Status description code	C an..3	N		
<u>Segment notes</u> - Line item amount; Mandatory *); N 10+3 MOA+203:3500' - Sum of total charges/allowances for the actual position; Optional; N 10+3 The amount has to appear with the right prefix (+/-) ! MOA+131:-1.65' - Allowances for this position are 1,65 EURO. *) According to the EANCOM structure the segments MOA, PRI and TAX have status OPTIONAL, because the single display articles within the assortment (=sub-positions) have not being invoiced so that the segments MOA, PRI and TAX are not used in this case. Sub-positions are represented only by one LIN - Segment and one QTY - Segment (see the example at the end of this document). For main-positions respectively invoiced articles the information in the MOA, PRI and TAX segments is considered as mandatory. This segment is used to specify the line item amount. The line item amount is calculated on the base of the net price(AAA), specified in the PRI-Segment X Quantity!				
Mapping beer tax				
<u>Variant 1: article is free of charge and NO beer tax will be charged</u> Identified with the QTY+192 segment (free goods quantity). Therefore the Line item amount (MOA+203) is 0, but the net price in the PRI+AAA segment has to be shown.				
<u>Variant 2: article is free of charge but a beer tax will be charged</u> QTY+47:xxx' Amount MOA+203:xxx.xx' Statement about the beer tax PRI+CAL:xxx.xx' Calculated price for the beer tax (beer tax/amount) PRI+AAA:xxx.xx' regular price, which has to be shown but won't be charged				

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39						
SG28 - C 1 - PAT-PCD						
PAT - M 1 - Payment terms basis						
Function : To specify the payment terms basis.						
Segment number : 21						
Data element group/Data element		EDIFACT	ANW	*	Description	
4279	Payment terms type code qualifier	M an..3	M	*	22 = Discount	
C110	Payment terms	C	N			
4277	Payment terms description identifier	M an..17				
1131	Code list identification code	C an..17				
3055	Code list responsible agency code	C an..3				
4276	Payment terms description	C an..35				
4276	Payment terms description	C an..35				
C112	Terms/time information	C	N			
2475	Time reference code	M an..3				
2009	Terms time relation code	C an..3				
2151	Period type code	C an..3				
2152	Period count quantity	C n..3				
<u>Segment notes</u>						
Trigger-Segment for the following PCD-Segment. It is used to provide the discount percentage in the detail section.						
Example: PAT+22'						

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39				
SG28 - C 1 - PAT-PCD				
PCD - C 99 - Percentage details				
Function : To specify percentage information.				
Segment number : 22				
Data element group/Data element	EDIFACT	ANW	*	Description
C501 Percentage details	M	M		
5245 Percentage type code qualifier	M an..3	M	*	12 = Discount
5482 Percentage	C n..10	R		
5249 Percentage basis identification code	C an..3	N		
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
4405 Status description code	C an..3	N		
<u>Segment notes</u> - Discount percentage (only if different from Header); Optional; N 2+2 PCD+12:3'				

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39				
SG29 - C 3 - PRI				
PRI - M 1 - Price details				
Function : To specify price information.				
Segment number : 23				
Data element group/Data element	EDIFACT	ANW	*	Description
C509 Price information	C	R		
5125 Price code qualifier	M an..3	M	*	AAA = Calculation net AAB = Calculation gross CAL = Calculation price
5118 Price amount	C n..15	R		
5375 Price type code	C an..3	N		
5387 Price specification code	C an..3	N		
5284 Unit price basis value	C n..9	O		
6411 Measurement unit code	C an..3	O		
5213 Sub-line item price change operation code	C an..3	N		
<u>Segment notes</u> - Net price (DE5125 = AAA); Mandatory *); N 7+3 PRI+AAA:55' *) According to the EANCOM structure the segments MOA, PRI and TAX are set to status OPTIONAL, because the single articles within the mixed assortment (=sub-positions) are not being invoiced so that the segments MOA, PRI and TAX are not used in this case. Sub-positions are represented only by using one LIN - Segment and one QTY - Segment (see the example at the end of this document). For main-positions respectively invoiced articles the information in the MOA, PRI and TAX segments is considered as mandatory. - Gross calculation price (DE5125 = AAB); Optional; N 7+3 PRI+AAB:60' - Calculated price (DE5125 = CAL); Optional; N 7+3 PRI+CAL:2.5' will be used to identify the beer tax Mapping beer tax <u>Variant 1: article is free of charge an NO beer tax will be charged</u> Identified with the QTY+192 segment (free goods quantity). Therefore the Line item amount (MOA+203) is 0, but the net price in the PRI+AAA segment has to be shown. <u>Variant 2: article is free of charge but a the beer tax will be charged</u> QTY+47:xxx' Amount MOA+203:xxx.xx' Statement about the beer tax PRI+CAL:xxx.xx' Calculated price for the beer tax (beer tax/amount) PRI+AAA:xxx.xx' regular price, which has to be shown but won't be charged				

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39				
SG34 - C 3 - TAX-MOA				
TAX - M 1 - Duty/tax/fee details				
Function : To specify relevant duty/tax/fee information.				
Segment number : 24				
Data element group/Data element	EDIFACT	ANW	*	Description
5283 Duty or tax or fee function code qualifier	M an..3	M	*	7 = Tax 6 = Fee
C241 Duty/tax/fee type	C	D		
5153 Duty or tax or fee type name code	C an..3	R	*	VAT = Value added tax GST = Goods and services tax
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
5152 Duty or tax or fee type name	C an..35	N		
C533 Duty/tax/fee account detail	C	D		
5289 Duty or tax or fee account code	M an..6	M		BIE = Beer fees TAB = Tobacco fees BRA = Brandy fees GLA = Gambling fees
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
5286 Duty or tax or fee assessment basis value	C an..15	N		
C243 Duty/tax/fee detail	C	D		
5279 Duty or tax or fee rate code	C an..7	N		
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
5278 Duty or tax or fee rate	C an..17	R		Actual tax rate/fee rate
5273 Duty or tax or fee rate basis code	C an..12	N		
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
5305 Duty or tax or fee category code	C an..3	O		E = Exempt from tax S = Standard rate
3446 Party tax identifier	C an..20	N		
1227 Calculation sequence code	C an..3	N		

Segment notes

- Value added tax for the actual position; Mandatory *); N 2+2
TAX+7+VAT+++:::20+S'

*) According to the EANCOM structure the segments MOA, PRI and TAX are set to status OPTIONAL, because the single articles within the mixed assortment (=sub-positions) are not being invoiced so that the segments MOA, PRI and TAX are not used in this case. Sub-positions are represented only by using one LIN - Segment and one QTY - Segment (see the example at the end of this document).

For main-positions respectively invoiced articles the information in the MOA, PRI and TAX segments is considered as mandatory.

- Producer fees (beer, sparkling wine) as percentage; Optional; N 2+2; (the respective amounts are displayed in the following MOA-Segment)
TAX+6+GST+BIE'

Remark to DE 5278 and DE 5305:

By exempt from tax amounts or tax free amounts DE 5278 must always be filled with value 0 (Zero).

It is allowed to set one VAT rate and two fees for one article.

Mapping of beer fees on position:

LIN+1+++3334445567895:SRV' EAN-number for a box beer
QTY+47:10:PCE' 10 boxes are ordered.

MOA+203:170'

PRI+AAA:17:::1:PCE' The unit price, as net price € 17,-- for a box beer, already includes the beer fees in the amount of
€2,60 per box.

TAX+7+VAT+++:::20'

TAX+6+GST+BIE'

The beer fee is always mapped as a value.

MOA+124:26'

The amount of the beer fee per position in this example: € 2,60/box x 10 = € 26,--.

Important: The beer fee is already included in the net price. The indication about the value of the beer fee is just for information and is not considered in the price calculation!

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39				
SG34 - C 3 - TAX-MOA				
MOA - C 1 - Monetary amount				
Function : To specify a monetary amount.				
Segment number : 25				
Data element group/Data element	EDIFACT	ANW	*	Description
C516 Monetary amount	M	M		
5025 Monetary amount type code qualifier	M an..3	M	*	124 = Tax amount
5004 Monetary amount	C n..35	R		
6345 Currency identification code	C an..3	N		
6343 Currency type code qualifier	C an..3	N		
4405 Status description code	C an..3	N		
<u>Segment notes</u> This segment is exclusively used to specify in monetary terms the amount of tax due on the current line item, except VAT! VAT is not to be displayed as a monetary amount! - Tax amount; Optional; N 7+3 MOA+124:250'				

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39				
SG39 - C 15 - ALC-SG41-SG42				
ALC - M 1 - Allowance or charge				
Function : To identify allowance or charge details.				
Segment number : 26				
Data element group/Data element	EDIFACT	ANW	*	Description
5463 Allowance or charge code qualifier	M an..3	M	*	A = Allowance C = Charge
C552 Allowance/charge information	C	N		
1230 Allowance or charge identifier	C an..35			
5189 Allowance or charge identification code	C an..3			
4471 Settlement means code	C an..3	N		
1227 Calculation sequence code	C an..3	D		1 = First step of calculation 2 = Second step of calculation etc.
C214 Special services identification	C	R		
7161 Special service description code	C an..3	R		DI = Discount AEO = Collection and recycling service
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
7160 Special service description	C an..35	N		
7160 Special service description	C an..35	N		
<u>Segment notes</u> - Allowance; Optional; A/N 3 Allowance as percentage is displayed by the combination: ALC-Segment + PCD-Segment Allowance in monetary amount is displayed by the combination: ALC-Segment + MOA-Segment. Example: Allowance 10% ALC+A++++DI' PCD+3:10' Allowance as a monetary amount (Currency, see the CUX-Segment) ALC+A++++DI' MOA+8:20' - Collection and recycling service (DE 7161 = AEO); Optional; A/N 3 ALC+C++++AEO' MOA+8:20' Remark: These data do not affect the line item amount, the line item amount remains = the net price(AAA), specified in the PRI-Segment X Quantity. ALC and MOA segments give only an additional information that helps to determine the amount after applying allowances and before adding collection and recycling service charge.				

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39				
SG39 - C 15 - ALC-SG41-SG42				
SG41 - C 1 - PCD				
PCD - M 1 - Percentage details				
Function : To specify percentage information.				
Segment number : 27				
Data element group/Data element	EDIFACT	ANW	*	Description
C501 Percentage details	M	M		
5245 Percentage type code qualifier	M an..3	M	*	3 = Allowance or charge
5482 Percentage	C n..10	R		Percentage
5249 Percentage basis identification code	C an..3	N		
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
4405 Status description code	C an..3	N		
<u>Segment notes</u>				
- Percentage discount; Optional; N 2+2; (see ALC-Segment)				
PCD+3:10'				

SG26 - M 9999999 - LIN-PIA-IMD-QTY-ALI-SG27-SG28-SG29-SG34-SG39				
SG39 - C 15 - ALC-SG41-SG42				
SG42 - C 2 - MOA				
MOA - M 1 - Monetary amount				
Function : To specify a monetary amount.				
Segment number : 28				
Data element group/Data element	EDIFACT	ANW	*	Description
C516 Monetary amount	M	M		
5025 Monetary amount type code qualifier	M an..3	M	*	8 = Allowance or charge amount 25 = Charge/allowance basis
5004 Monetary amount	C n..35	R		Amount
6345 Currency identification code	C an..3	N		
6343 Currency type code qualifier	C an..3	N		
4405 Status description code	C an..3	N		
<u>Segment notes</u> - Monetary allowance; Optional; N 7+3 MOA+8:2000' - Charge/Allowance Basis (DE5025 = 25); Optional; N 7+3 MOA+25:798.336'				

UNS - M 1 - Section control				
Function : To separate header, detail and summary sections of a message.				
Segment number : 29				
Data element group/Data element	EDIFACT	ANW	*	Description
0081 Section identification	M a1	M		S = Detail/summary section separation
<u>Segment notes</u> This segment is used to separate the detail and summary sections of the message. Example: UNS+S'				

SG50 - M					6 - MOA
MOA - M					1 - Monetary amount
Function : To specify a monetary amount.					
Segment number : 30					
Data element group/Data element		EDIFACT	ANW	*	Description
C516	Monetary amount	M	M		36E = Goods and services total amount (EAN Code) 35E = Total returnable items deposit amount (EAN Code) 79 = Total line items amount 176 = Message total duty/tax/fee amount 52 = Discount amount 77 = Invoice amount
5025	Monetary amount type code qualifier	M an..3	M	*	
5004	Monetary amount	C n..35	R		
6345	Currency identification code	C an..3	N		
6343	Currency type code qualifier	C an..3	N		
4405	Status description code	C an..3	N		
<u>Segment notes</u> - Total line items amount, the sum of goods and services total amount and total returnable items deposit amount (DE5025 = 79); Mandatory *); N 11+2: MOA+79:4000' - Goods and services total amount (DE5025 = 36E); Mandatory *); N 11+2 MOA+36E:3500' - Total returnable items deposit amount (DE5025 = 35E); Mandatory *); N 11+2 MOA+35E:500' - Message total duty/tax/fee amount (DE5025 = 176); Optional; N 11+2 MOA+176:4000' - Invoice amount (Total line items amount plus charges and VAT, minus allowances) (DE5025 = 77); Mandatory; N 11+2 MOA+77:4000' - Discount amount, only on base of the gross calculation price (incl. VAT) (DE5025 = 52); Optional; N 11+2 MOA+52:200' *) The total line item amount is obligatory. Goods and services total amount and Total returnable items deposit amount should be always displayed when the invoice contains returnable items. Otherwise they can be skipped.					

SG52 - M 10 - TAX-MOA				
TAX - M 1 - Duty/tax/fee details				
Function : To specify relevant duty/tax/fee information.				
Segment number : 31				
Data element group/Data element	EDIFACT	ANW	*	Description
5283 Duty or tax or fee function code qualifier	M an..3	M	*	7 = Tax 6 = Fee
C241 Duty/tax/fee type	C	R		
5153 Duty or tax or fee type name code	C an..3	R	*	VAT = Value added tax GST = Goods and services tax
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
5152 Duty or tax or fee type name	C an..35	N		
C533 Duty/tax/fee account detail	C	D		
5289 Duty or tax or fee account code	M an..6	M		BIE = Beer fees TAB = Tobacco fees BRA = Brandy fees GLA = Gambling fees
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
5286 Duty or tax or fee assessment basis value	C an..15	N		
C243 Duty/tax/fee detail	C	D		
5279 Duty or tax or fee rate code	C an..7	N		
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
5278 Duty or tax or fee rate	C an..17	R		actual tax rate
5273 Duty or tax or fee rate basis code	C an..12	N		
1131 Code list identification code	C an..17	N		
3055 Code list responsible agency code	C an..3	N		
5305 Duty or tax or fee category code	C an..3	O		E = Exempt from tax S = Standard rate
3446 Party tax identifier	C an..20	N		
1227 Calculation sequence code	C an..3	N		

Segment notes

- VAT - tax rate; Mandatory; N 2+2 (to be repeated for each tax rate)
TAX+7+VAT+++:::20'

- Producer fees (beer, sparkling wine) as percentage; Mandatory - when fees are available; N 2+2; (to be repeated for each fee type)
TAX+6+GST+BIE'

Remark to DE 5278 and DE 5305:

By exempt from tax amounts or tax free amounts DE 5278 must always be filled with value 0 (Zero).

Tax rate, taxable amount and tax amount should be defined for each tax respectively fee type.

Mapping of beer fees on position:

UNS+S'

MOA+79:245' The total position amount is calculated out of the single positions (=the beer fee is already included)

MOA+176:49' The total tax amount is mapped without the beer fee, because the fee is already included in the value of the position..

MOA+77:294' Total amount of the invoice (incl. taxes and fees)

TAX+7+VAT+++:::20'

MOA+125:245' Tax basis of every position amounts (incl. beer fee)

MOA+124:49' Tax basis = Total position amounts(incl. beer fee) x VAT rate

TAX+6+GST+BIE' Description of the included beer fee in the invoice

MOA+125:0' Tax basis = 0 (Mandatory in the invoice)

MOA+124:38' Included beer fee amount in this invoice = Sum of all separate positions

Important: The beer fee is already included in the net price. The indication about the value of the beer fee is just for information and is not considered in the price calculation!

SG52 - M 10 - TAX-MOA				
MOA - M 9 - Monetary amount				
Function : To specify a monetary amount.				
Segment number : 32				
Data element group/Data element	EDIFACT	ANW	*	Description
C516 Monetary amount	M	M		
5025 Monetary amount type code qualifier	M an..3	M	*	125 = Taxable amount 124 = Tax amount
5004 Monetary amount	C n..35	R		Amount
6345 Currency identification code	C an..3	N		
6343 Currency type code qualifier	C an..3	N		
4405 Status description code	C an..3	N		
<u>Segment notes</u> - Taxable amount (DE5025 = 125); Mandatory; N 11+2 MOA+125:8000' - Tax amount (DE5025 = 124); Mandatory; N 11+2 MOA+124:800'				

SG53 - C		15 - ALC-MOA			
ALC - M		1 - Allowance or charge			
Function :		To identify allowance or charge details.			
Segment number :		33			
Data element group/Data element		EDIFACT	ANW	*	Description
5463	Allowance or charge code qualifier	M an..3	M	*	A = Allowance C = Charge

SG53 - C					15 - ALC-MOA				
MOA - C					1 - Monetary amount				
Function :					To specify a monetary amount.				
Segment number :					34				
Data element group/Data element			EDIFACT	ANW	*	Description			
C516	Monetary amount		M	M					
5025	Monetary amount type code qualifier		M an..3	M	*	8 = Allowance or charge amount			
5004	Monetary amount		C n..35	R					
6345	Currency identification code		C an..3	N					
6343	Currency type code qualifier		C an..3	N					
4405	Status description code		C an..3	N					
<u>Segment notes</u>									
- Allowance or charge amount; Optional; N 11+2									
MOA+8:250'									

UNT - M 1 - Message trailer				
Function : To end and check the completeness of a message.				
Segment number : 35				
Data element group/Data element	EDIFACT	ANW	*	Description
0074 Number of segments in a message	M n..10	M		Sum of all segments
0062 Message reference number	M an..14	M		Reference number from the UNH-Segment is to be repeated.
<u>Segment notes</u>				
This segment is a mandatory UN/EDIFACT segment.				
Example: UNT+35+ME000001'				

UNZ - M 1 - Interchange trailer				
Function : To end and check the completeness of an interchange.				
Segment number : 36				
Data element group/Data element	EDIFACT	ANW	*	Description
0036 Interchange control count	M n..6	M		Number of messages or functional groups within an interchange.
0020 Interchange control reference	M an..14	M		Identical to DE 0020 in UNB segment.
<u>Segment notes</u> This segment is used to provide the trailer of an interchange. DE 0036: If functional groups are used, this is the number of functional groups within the interchange. If functional groups are not used, this is the number of messages within the interchange. Example: UNZ+5+12345555'				

5. Example INVOIC

UNA:+.?*'	Service string information
UNB+UNOC:4+9099999300476:14+9099999300414:14+20060629:0801+234+++++EANCOM-DISI'	Interchange Header
UNH+142+INVOIC:D:01B:UN:EAN010'	Message Header
BGM+380+106+9'	Invoice number
DTM+137:20060831:102'	Document date
DTM+35:20060828:102'	Delivery date
RFF+ON:987456'	Reference order number
DTM+171:20060827:102'	Order date
RFF+DQ:6542'	Delivery note number
DTM+171:20060828:102'	Delivery note date
NAD+SU+9099999300476::9++FLEISSIG GMBH+REINGASSE 5+WIEN++1140+AT'	Supplier, GLN and text address
RFF+VA:ATU111111111'	Supplier's VAT registration number
NAD+BY+9004108000000::9++HANDELS AG+GUDRUNSTR. 23+WIEN++1010+AT'	Buyer, GLN and text address
RFF+VA:1234567890123'	Buyer's VAT registration number
NAD+DP+9099999300483::9'	Delivery party, GLN
NAD+IV+9004108000000::9++HANDELS AG+GUDRUNSTR. 23+WIEN++1010+AT'	Invoicee, GLN and text address
RFF+VA:1234567890123'	Invoicee's VAT registration number
NAD+OB+9099999300414::9'	Ordered by, GLN
CUX+2:EUR:4'	Invoice currency
LIN+1++9099999236683:SRV'	1. Article
IMD+A++::LIMO 1L'	Article description
QTY+47:50'	Quantity
MOA+203:300'	Line item amount

PRI+AAA:6'	Net price
TAX+7+VAT+++:::20'	VAT
LIN+2++9099999566629:SRV'	2. Article
IMD+A++:::MILCHRIEGEL SUN'	Article description
QTY+47:100'	Quantity
MOA+203:150'	Line item amount
PRI+AAA:1.5'	Net price
TAX+7+VAT+++:::20'	VAT
UNS+S'	Begin of the summary section
MOA+79:450'	Total line items amount
MOA+176:90'	Message total duty/tax/fee amount
MOA+77:540'	Invoice amount
TAX+7+VAT+++:::20'	VAT
MOA+125:450'	Taxable amount
MOA+124:90'	Tax amount
UNT+37+142'	Message Trailer
UNZ+1+234'	Interchange Trailer

6. Message structure Security segments

SG1		M	99	USH-USA-SG2
USH	2	M	1	Security header
USA	3	M	3	Security algorithm
SG2		M	2	USC-USA
USC	4	M	1	Certificate
USA	5	M	3	Security algorithm
SG4		M	99	UST
UST	6	M	1	Security trailer
SG4		M	99	UST
USR	7	M	1	Security result

7. BUSINESS TERMS Security Segments

Business term	Description	Status	Format	Segment		Data element	
Security reference number		M	A/N 14	SG1	USH	0534	Security reference number
Filter function		M	A/N 3	SG1	USH	0505	Filter function, coded
Original character set encoding		M	A/N 3	SG1	USH	0507	Original character set encoding, co
Creation date		M	D 8	SG1	USH	S501 0517	Date and time qualifier
Creation time		M	T 6	SG1	USH	S501 0338	Event date
Hash-Algorithm		M	A/N 3	SG1	USA	S502 0527	Algorithm, coded
Certificate serial number		M	A/N 35	SG2	USC	0536	Certificate reference
Security party identification, GLN		M	N 13	SG2	USC	S500 0511	Security party identification
Certificate-Syntax		M	A/N 3	SG2	USC	0545	Certificate syntax and version, cod
Signature-Algorithm		M	A/N 3	SG2	USA	S502 0527	Algorithm, coded
Padding mechanism		M	A/N 3	SG2	USA	S502 0591	Padding mechanism, coded
Security reference number (End)		M	A/N 14	SG4	UST	0534	Security reference number
Signature value		M	A/N 51	SG4	UST	0588	Number of security segments

8. Segment description - Security Segments

SG1 - M		99 - USH-USA-SG2			
USH - M		1 - Security header			
Function :		To specify a security mechanism applied to an EDIFACT structure (i.e.: message/package, group or interchange).			
Segment number :		2			
Data element group/Data element		EDIFACT	ANW	*	Description
0501	Security service, coded	M an..3	M	*	1 = Non-repudiation of origin
0534	Security reference number	M an..14	M		Unique reference number assigned by the security originator to the security header group and security trailer group
0541	Scope of security application, coded	C an..3	R	*	1 = Security header und Message body
0503	Response type, coded	C an..3	N		
0505	Filter function, coded	C an..3	R	*	6 = UN/EDIFACT EDC Filter 7 = Base6
0507	Original character set encoding, coded	C an..3	R	*	2 = ASCII 8 bit
0509	Role of security provider, coded	C an..3	N		
S500	Security identification details	C	N		
0577	Security party qualifier	M an..3			
0538	Key name	C an..35			
0511	Security party identification	C an..512			
0513	Security party code list qualifier	C an..3			
0515	Security party code list responsible agency, coded	C an..3			
0586	Security party name	C an..35			
0586	Security party name	C an..35			
0586	Security party name	C an..35			
0520	Security sequence number	C an..35	N		
S501	Security date and time	C	R		
0517	Date and time qualifier	M an..3	M	*	1 = Security Timestamp 5 = EDIFACT-Structure, creation date and time
0338	Event date	C n..8	R		Creation date, CCYYMMTT
0314	Event time	C an..15	R		Creation time, HHMMSS
0336	Time offset	C n4	N		

Segment notes

A segment specifying a security service applied to the referenced EDIFACT structure.

- Security reference number (DE0534); Mandatory; A/N 14
- Filter Function; Mandatory; A/N 3
- Original character set encoding (DE0507); Mandatory; A/N 3
- Signature creation date (DE0338); Mandatory; D 8
- Signature creation time (DE0314); Mandatory; D 6

USH+1+323+1++6+2++++5:20060831:105531'

SG1 - M 99 - USH-USA-SG2				
USA - M 3- Security algorithm				
Function : To identify a security algorithm, the technical usage made of it, and to contain the technical parameters required.				
Segment number : 3				
Data element group/Data element	EDIFACT	ANW	*	Description
S502 Security algorithm	M	M		
0523 Use of algorithm, coded	M an..3	M	*	1 = Owner hashing
0525 Cryptographic mode of operation, coded	C an..3	N		
0533 Mode of operation code list identifier	C an..3			
0527 Algorithm, coded	C an..3	R	*	16 = SHA1 48 = SHA-256
0529 Algorithm code list identifier	C an..3	R	*	1 = UN/CEFACT
0591 Padding mechanism, coded	C an..3	N		
0601 Padding mechanism code list identifier	C an..3	N		
S503 Algorithm Parameter	C	N		
0531 Algorithm parameter qualifier	M an..3			
0554 Algorithms parameter value	M an..512			
<u>Segment notes</u> This segment is used to identify a security algorithm, the technical usage made of it, and contains the technical parameters required in order to generate the hash value. - Hash Algorithm (DE0527); Mandatory; A/N 3 USA+1:::16:1'				

SG1 - M 99 - USH-USA-SG2				
SG2 - M 2 - USC-USA				
USC - M 1 - Certificate				
Function : To convey the public key and the credentials of its owner.				
Segment number : 4				
Data element group/Data element	EDIFACT	ANW	*	Description
0536 Certificate reference	C an..35	R		Certificate serial number
S500 Security identification details	C	R		
0577 Security party qualifier	M an..3	M	*	4 = Authenticating party
0538 Key name	C an..35	N		
0511 Security party identification	C an..512	R		Coded(see USH/DE505) Distinguished Name (DN) of the certificate issuer (CA)
0513 Security party code list qualifier	C an..3	R	*	ZZZ = Bilaterally agreed
0515 Security party code list responsible agency, coded	C an..3	N		
0586 Security party name	C an..35	N		
0586 Security party name	C an..35	N		
0586 Security party name	C an..35	N		
0545 Certificate syntax und version, coded	C an..3	M		3 = X.509
0505 Filter Function, coded	C an..3	N		
0507 Original character set encoding, coded	C an..3	N		
0543 Certificate original character set repertoire, coded	C an..3	N		
0546 User authorisation level	C an..35	N		
S505 Service character for signature	C	N		
0551 Service character for signature, Qualifier	M an..3			
0548 Service character for signature	M an..4			
S501 Security date and time	C	N		
0517 Date and time, Qualifier	M an..3			
0338 Event date	C n..8			
0314 Event time	C an..15			

Data element group/Data element	EDIFACT	ANW	*	Description
0336 Time offset	C n4			
0567 Security status, coded	C an..3	N		
0569 Revocation reason, coded	C an..3	N		
<u>Segment notes</u> This segment identifies the security party, certificate serial number and certificate syntax. - Certificate serial number (DE0536); Mandatory; A/N 35 - Coded (see USH/DE0505) Distinguished Name (DN) of the certificate issuer (CA) (DE0511); Mandatory; N 516 - Certificate syntax (DE0545); Mandatory; A/N 3 USC+3053E29993FB+4::MIGpMQswCQYDVQQGEwJBVDFIMEYGA1UECgw/QS1UcnVzdCBHZXMuIGYuIFNpY2hlc mhlaXRzc3lzdGVtZSBpbSBlbGVrdHIuIERhdGVudmVya2VociBHbWJIMScwJQYDVQQQLDB5hLXNpZ24tY29ycG9yY XRILUxpZ2h0LVRIc3QtMDIxJzAlBgNVBAMMHmEtc2lnbi1jb3Jwb3JhdGUtTGlnaHQVVGZzdC0wMg==:ZZZ+3'				

SG1 - M 99 - USH-USA-SG2					
SG2 - M 2 - USC-USA					
USA - M 3 - Security algorithm					
Function :		To identify a security algorithm, the technical usage made of it, and to contain the technical parameters required.			
Segment number :		5			
Data element group/Data element		EDIFACT	ANW	*	Description
S502	Security algorithm	M	M		
0523	Use of algorithm, coded	M an..3	M	*	6 = Owner signing
0525	Cryptographic mode of operation, coded	C an..3	R	*	16 = DSMR
0533	Mode of operation code list identifier	C an..3	R	*	1 = UN/CEFACT
0527	Algorithm, coded	C an..3	R	*	10 = RSA
0529	Algorithm code list identifier	C an..3	R	*	1 = UN/CEFACT
0591	Padding mechanism, coded	C an..3	R	*	11 = PKCS #1 signature padding 16 = RSASA-PKCS-v1_5 17 = Encryption Block Formatting
0601	Padding mechanism code list identifier	C an..3	R	*	1 = UN/CEFACT
S503	Algorithm parameter	C	O		
0531	Algorithm Parameter Qualifier	M an..3	M		14 = Modulus length
0554	Algorithm parameter value	M an..512	M		
S503	Algorithm parameter	C	O		
0531	Algorithm Parameter Qualifier	M an..3	M		12 = Modulus
0554	Algorithm parameter value	M an..512	M		
S503	Algorithm parameter	C	O		
0531	Algorithm Parameter Qualifier	M an..3	M		13 = Exponent
0554	Algorithm parameter value	M an..512	M		

Segment notes

This segment is used to identify a security algorithm and its specifications.

- Signature algorithm (DE0527); Mandatory; A/N 3
- Padding mechanism (DE=591); Mandatory; A/N 3

It is possible to send optionally also the public key:

- Modulus length (public key length DE0554); Optional; A/N 512
- Modulus (Parameter value of the algorithm as public key modulus, DE0554); Optional; A/N 512
- Exponent (Parameter value of the algorithm as public key exponent, DE0554); Optional; A/N 512

USA+6:16:1:10:1:16:1+14:1024*12: CF8516555*13:7E7406D7'

As the Component Data Element Group S503 appears 3 times, it must be separated by the repetition separator (*) !

SG4 - M 99 - UST				
UST - M 1 - Security trailer				
Function : To establish a link between security header and security trailer segment groups.				
Segment number : 6				
Data element group/Data element	EDIFACT	ANW	*	Description
0534 Security reference number	M an..14	M		Security reference number from USH Segment
0588 Number of security segments	M n..10	M		The number of security segments in a security header/trailer group pair.
<u>Segment notes</u> A segment establishing a link between security header and security trailer segment group. UST+323+6'				

SG4 - M 99 - UST					
USR - M 1 - Security result					
Function : Identification of the security result.					
Segment number : 7					
Data element group/Data element		EDIFACT	ANW	*	Description
S508	Inspection value	C	M		
0563	Inspection value, Qualifier	M an..3	M	*	1 = Unique inspection value
0560	Inspection value	C an..512	R		Value determined by the hash value and the private key of the sender.
<u>Segment notes</u> This segment contains the digital signature respectively the result from the applied hash- and signature algorithms in the referred interchange (USH,USA,USC, USA, BGM ...MOA). - Signature value (DE0560); Mandatory; A/N 512 USR+1:C7DIEW6655'					

9. Example Security Segments

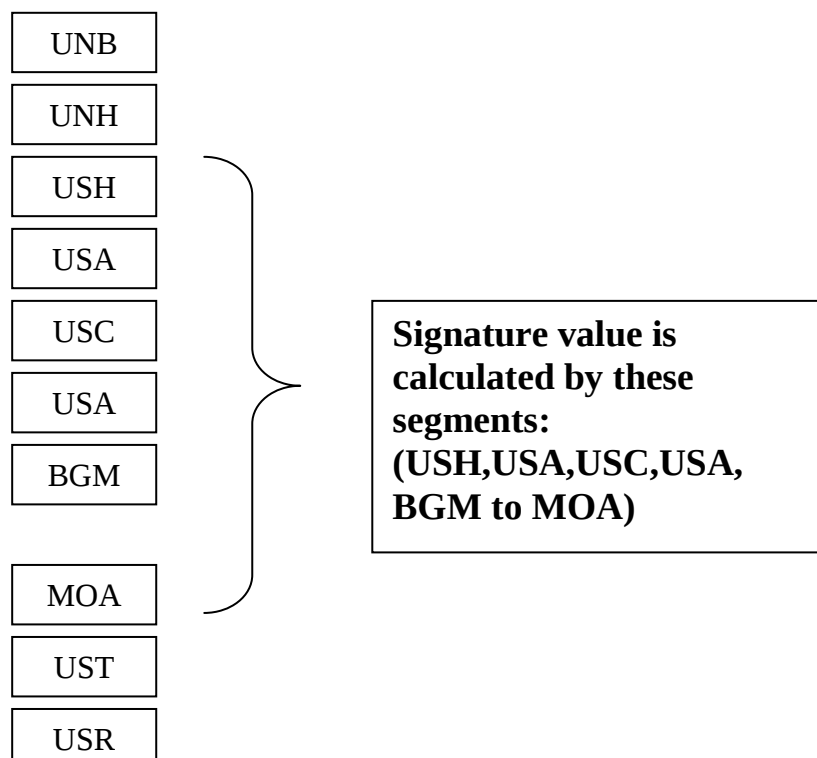
USH+1+323+1++6+2++++5:20060831:105531'	Filter, Date/Time
USA+1:::16:1'	Hash algorithm
USC+3053E29993FB+4::MIGpMQswCQYDVQQGEwJBVDFIMEYGA1UECgw/QS1UcnVzdCBHZXMuIGYuIFNpY2hlcmlhlaXRzc3lzdGVtZSBpbSBlbGVrdHIuIERhdGVudmVya2VociBHbWJIMScwJQYDVQQLEDB5hLXNpZ24tY29ycG9yYXRILUxpZ2h0LVRlc3QtMDIxJzAlBgNVBAMMHmEtc2lnbi1jb3Jwb3JhdGUtTGlnaHQtdGVzdC0wMg==:ZZZ+3'	Security party, certificate serial number
USA+6:16:1:10:1:16:1'	Signature algorithm
UST+323+6'	Segment counter
USR+1:N3L7Ss5SLpQkrXt6gTny5V24lviWO0WeQu0bYcj1WOQBSeMyo5dthuDzTTU5i2TWs	Signature value

FSdMkb9gBkOChyN8AnzCpIVdKTONQ?+xu?+ BMPVDnkbMWEf84nnSgSoIp3w?+N3gpSE dq3ULiZSB6YylPRjgkNMpC?+xEtLUkopun Va/5bnZSjveXry0iT3oh?+ZMix1gj/TPrv4Nq13 To1cim9XGuM1Xb4w?+S7g?+5VSOC6cuxP zcqaLSh3ni8XfTN1Up?+XFWgpSfgeqOgM1 zCl13lp6vxR0diI3mnJ6YYp7jG2fxvwUsCS5r DPpX52fUb?+efX7jv/pvqaALaM4zSoNX/5JKG Q0ni7pY57T4Dk?+xtQvVsQ8S?+KjFD8pFneFX ceLD7gZTtsD/4oYHBvSleYFDRmtIfHRMXLpze J3reqQDI0bRZ27XIE?+Ai8ThLwlwzMpqnP5an 2pxhW3sm3nQ6pk9ncYTsnYOmZBNASBYx6SkU? +O1uYT8?+r9L4fNQ1DTjgH8a/Hp3RrUAT2fW31 K8qo2iNRVYsBxD2NnyHYFzffwg03TOAT0sir2n ZAPk2rOiazuVOXnvXB8G3ytQfGh0OVgP8jp7?+ TWaMDDc7rpyZghX6VDAPm8X1L9P3MH/yj OTKC/jD84e71xgrBBnV/?+KiNao8gkUsvQt7Xhz Y4iL8q64TUJLU='	
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10. Entire example Interchange (INVOIC und Security Segments)

After the INVOIC is created in the converter, the security segments are added and the signature value is generated, after which the INVOIC is sent to the business partner together with the security segments!

Signature value calculation (hash value calculation and application of the private key) is executed by the following segments:



UNT

UNZ

UNA:+.?*'	Service string information
UNB+UNOC:4+9099999300476:14+9099999300414:14+20060629:0801+234+++++EANCOM-DISI'	Interchange Header
UNH+142+INVOIC:D:01B:UN:EAN010'	Message Header
USH+1+323+1++6+2++++5:20060831:105531'	Filter, Date/time
USA+1:::16:1'	Hash algorithm
USC+3053E29993FB+4::MIGpMQswCQYDVQQGEwJBVDFIMEYGA1UECgw/QS1UcnVzdCBHZXMuIwYyIFNpY2hlcmlhlaXRzc3lzdGVtZSBpbSBlbGVrdHIdIERhdGVudmVya2VociBHbWJIMScwJQYDVQQLD B5hLXNpZ24tY29ycG9yYXRlUxpZ2h0LVRIc3QtMDIxJzAlBgNVBAMMHmEtc2lnbi1jb3Jwb3JhdGUtTGlnaHQQtVGVzdC0wMg==:ZZZ+3'	Security party, Certificate serial number
USA+6:16:1:10:1:16:1'	Signature algorithm
BGM+380+106+9'	Invoice number
DTM+137:20060831:102'	Document date
DTM+35:20060828:102'	Delivery date
RFF+ON:987456'	Order reference number
DTM+171:20060827:102'	Order date
RFF+DQ:6542'	Delivery note number
DTM+171:20060828:102'	Delivery note date
NAD+SU+9099999300476::9++FLEISSIG GMBH+REINGASSE 5+WIEN++1140+AT'	Supplier, GLN and text address

RFF+VA:ATU111111111'	Supplier's VAT registration number
NAD+BY+9004108000000::9++HANDELS AG+GUDRUNSTR. 23+WIEN++1010+AT'	Buyer, GLN and text address
RFF+VA:1234567890123'	Buyer's VAT registration number
NAD+DP+9099999300483::9'	Delivery party, GLN
NAD+IV+9004108000000::9++HANDELS AG+GUDRUNSTR. 23+WIEN++1010+AT'	Invoicee, GLN and text address
RFF+VA:1234567890123'	Invoicee's VAT registration number
NAD+OB+9099999300414::9'	Ordered by, GLN
CUX+2:EUR:4'	Invoice currency
LIN+1++9099999236683:SRV'	1. Article
IMD+C++SG::9'	Qualifier for mixed assortment
IMD+A++::LIMO 1L'	Article description
QTY+47:50'	Quantity
MOA+203:300'	Line item amount
PRI+AAA:6'	Net price
TAX+7+VAT+++::20'	VAT
LIN+2++9099999566629:SRV+1:1'	Article from the mixed assortment
QTY+45E:100'	2 articles per mixed assortment: 50x2=100
LIN+3++9099999300476:SRV+1:1'	Article from the mixed assortment
QTY+45E:50'	1 article per mixed assortment: 50x1=50
LIN+4++9099999566629:SRV'	2. Article
IMD+A++::MILCHRIEGEL SUN'	Article description
QTY+47:100'	Quantity
MOA+203:150'	Line item amount
PRI+AAA:1.5'	Net price

TAX+7+VAT+++:::20'	VAT
UNS+S'	Begin of the summary section
MOA+79:450'	Total line items amount
MOA+176:90'	Message total duty/tax/fee amount
MOA+77:540'	Invoice amount
TAX+7+VAT+++:::20'	VAT
MOA+125:450'	Taxable amount
MOA+124:90'	Tax amount
UST+323+6'	Segment counter
USR+1:N3L7Ss5SLpQkrXt6gTny5V24lviWO0 WeQu0bYcj1WOQBSemyo5dthuDzTTU5i2TW s FSdMkb9gBkOChyN8AnzCpIVdKTONQ?+xu? + BMPVDnkzbMWEf84nnSgSoIp3w?+N3gpSE dq3ULiZSB6YylPRjgkkNMpC?+xEtLUpkopun Va/5bnZSjveXry0iT3oh?+ZMix1gj/TPrv4Nq13 To1cim9XGuM1Xb4w?+S7g?+5VSOC6cuxP zcqaLSh3ni8XfTN1Up?+XFWgpSfgeqOgM1 zCl13lp6vxR0diI3mnJ6YYp7jG2fxvwUsCS5r DPpX52fUb?+efX7jv/pvqaALaM4zSoNX/5JKG Q0ni7pY57T4Dk?+xtQvVsQ8S?+KjFD8pFneF X ceLD7gZTtsD/4oYHBvSleYFDRmtlfHRMXLp ze J3reqQDI0bRZ27XIEx?+Ai8ThLwlwzMpqnP5a n 2pxhW3sm3nQ6pk9ncYTsnYomnZBNASBYx6 SkU? +O1uYT8?+r9L4fNQ1DTjgH8a/Hp3RrUAT2f W31 K8qo2iNRVYsBxD2NnyHYFzffwg03TOAT0si r2n ZAPk2rOiazuVOXnvXB8G3ytQfGh0OVgP8jp7 ?+ TWaMDDc7rpyZghX6VDAPm8X1L9P3MH/yj OTKC/jD84e71xgrBBnV/?+KiNao8gkUsvQt7X hz Y4iL8q64TUJLU='	Signature value
UNT+42+142'	Message Trailer

UNZ+1+234'	Interchange Trailer
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Examples for the mapping of discounts:**Variant: one step discount / only one discount for the position**

LIN+1++9099999300476:SRV'	Article
IMD+A++:::Salzstangerl500g'	Articletext
IMD+C++CU::9'	Consumer unit
QTY+47:70'	Invoiced quantity
MOA+203:40.74'	Line item amount
MOA+131:-1.26'	Total charges/allowances
PRI+AAB:0.60'	Gros price
PRI+AAA:0.582'	Net price
TAX+7+VAT+++:::10+S'	VAT
ALC+A+++1+DI'	Allowance (1st costing level)
PCD+3:3'	Percent rate

Variant: one step discount with percent discount and value discount

LIN+1++9099999300476:SRV'	Article
IMD+A++:::Salzstangerl500g'	Articletext
IMD+C++CU::9'	Consumer unit
QTY+47:70'	Invoiced quantity
MOA+203:38.74'	Line item amount
MOA+131:-3.26'	Total charges/allowances
PRI+AAB:0.60'	Gros price
PRI+AAA:0.553'	Net price
TAX+7+VAT+++:::10+S'	VAT
ALC+A+++1+DI'	Allowance (1st costing level)
PCD+3:3'	Percent rate
ALC+A+++1+DI'	Allowance (1st costing level)
MOA+25:42'	Allowance Basis
MOA+8:2'	Amount

Variante: one step discount with two different percent rates

LIN+1++9099999300476:SRV'	Article
IMD+A++:::Salzstangerl500g'	Articletext
IMD+C++CU::9'	Consumer unit
QTY+47:70'	Invoiced quantity
MOA+203:40,32'	Line item amount
MOA+131:-1,68'	Total charges/allowances
PRI+AAB:0.60'	Gros price
PRI+AAA:0.576'	Net price
TAX+7+VAT+++:::10+S'	VAT
ALC+A+++1+DI'	Allowance (1st costing level)
PCD+3:3'	Percent rate
ALC+A+++1+DI'	Allowance (1st costing level)
PCD+3:1'	Percent rate
MOA+25:42'	Allowance Basis

Variante: two step discount with two percent rates

LIN+1++9099999300476:SRV'	Article
IMD+A++:::Salzstangerl500g'	Articeltext
IMD+C++CU::9'	Consumer unit
QTY+47:70'	Invoiced quantity
MOA+203:40.13'	Line item amount
MOA+131:-1.87'	Total charges/allowances
PRI+AAB:0.60'	Gros price
PRI+AAA:0.573'	Net price
TAX+7+VAT+++:::10+S'	VAT
ALC+A+++1+DI'	Allowance (1st costing level)
PCD+3:3'	Percent rate
ALC+A+++2+DI'	Allowance (2nd costing level)
PCD+3:1.5'	Percent rate

Variante: two step discount with percent discount and value discount

LIN+1++9099999300476:SRV'	Article
IMD+A++:::Salzstangerl500g'	Articeltext
IMD+C++CU::9'	Consumer unit
QTY+47:70'	Invoiced quantity
MOA+203:38.74'	Line item amount
MOA+131:-3.26'	Total charges/allowances
PRI+AAB:0.60'	Gros price
PRI+AAA:0.553'	Net price
TAX+7+VAT+++:::10+S'	VAT
ALC+A+++1+DI'	Allowance (1st costing level)
PCD+3:3'	Percent rate
ALC+A+++2+DI'	Allowance (2nd costing level)
MOA+8:2'	Amount