EDIFACT D01B INVOIC

Competec Service AG

Version 1.1, 26-09-2024

Preface

This document describes the implementation of EDIFACT D01B for supplier invoice.

Changelog

Table 1. Changelog

Version	Date	Change	Author
1.0	01.05.2023	Initial definition	SEBR
1.1	25.07.2023	Corrections	DAO

Supplier Invoice Message

Status Codes

Table 2. Status Codes

Code	Description
M	Mandatory D01B Field
С	Conditional D01B Field
В	Mandatory by Competec

References

https://unece.org/trade/uncefact/introducing-unedifact https://www.stylusstudio.com/edifact/D96A/INVOIC.htm

Head Section

	Interchange Hea				
Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	S001	SYNTAX IDENTIFIER	M		
	0001	Syntax identifier	M	+UNOC	
	0002	Syntax version number	M	:3	
		Supported codes: 3, 4			
020	S002	INTERCHANGE SENDER	M		
	0004	Interchange sender identification	M	+7609999…	Sender Party GLN
	0007	Identification code qualifier	С	:14	14 = EAN International
030	S003	INTERCHANGE RECIPIENT	M		
	0010	Interchange recipient identification	M	+762440···	Receiver Party GLN
	0007	Identification code qualifier	С	:14	
		Supported codes: 14 = EAN International 59 = ODETTE			
040	S004	DATE AND TIME OF PREPARATION	M		
	0017	Date	M	+20220707	yyMMdd
	0019	Time	M	:1155	HHmm
050	0020	Interchange control reference	M	+123	
	•••				Not in use
110	0035	Test indicator	С	+1	1 = Test

Example:

UNB+UNOC:4+76099999999999:14+7601111111111:14+20240707:1155+123++++++1'

0010 | Segment | UNH | Message Header

A service segment starting and uniquely identifying a message. The message type code for the Invoice message is INVOIC.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	0062	MESSAGE REFERENCE NUMBER	M	+11	
020	S009	MESSAGE IDENTIFIER	M		
	0065	Message type	M	+INVOIC	
	0052	Message version number	M	:D	
	0054	Message release number	M	:01B	
	0051	Controlling agency, coded	M	:UN	
	0057	Association assigned code	С	:EAN010	
	•••		С		Not in use

Example:

UNH+11+INVOIC:D:01B:UN:EAN010'

0020 | Segment | BGM | Beginning of message

A segment by which the sender must uniquely identify the invoice by means of its type and number and when necessary its function.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	C002	DOCUMENT/MESSAGE NAME	С		
	1001	Document name code	С	+380	
		Supported code: 380 = Invoice			
			С		Not in use
020	1004	Document identifier	С	+22095031075	Invoice nbr.
030	1225	Message function, coded	С	+9	
		Supported code: 9 = Original			
040	4343	Response type, coded	С		Not in use

Example:

BGM+380+22095031075+9'

0030 | DTM | Date/time/period

A segment specifying general dates and, when relevant, times related to the whole message.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	C507	DATE/TIME/PERIOD	M		
	2005	Date/time/period qualifier	M	+137	
		Supported codes: 3 = Invoice Date 137 = Document date 35 = Delivery Date			
	2380	Date/time/period	С	:20220705	
	2379	Date/time/period format qualifier	С	:102	
		Supported code: 102 = CCYYMM	IDD		

Example:

DTM+137:20220705:102' DTM+35:20220705:102'

0120 | Segment Group 1 | References and Dates

A group of segments for giving references and where necessary, their dates, relating to the whole message.

SG1 Used Segment List				
Pos	Tag	Name		
0130	RFF	Reference		
0140	DTM	Date/time/period		

0130 | Segment | RFF | Reference

A segment to specify a reference by its number.

Pos	Segment/Elem ent	Description	Status	Example	Remarks	
010	C506	REFERENCE	M			
	1153	Reference qualifier	M	+ON		
		Supported codes: ON = Order nr. (buyer) VN = Order nr. (supplier) IV = Invoice nr. AAK = Despatch advice nr. PQ = Payment reference (QR Reference)				
	1154	Reference number	С	:1990845089'		
					Not in use	

Example:

RFF+0N:1990845089'

0140 | Segment | DTM | Date/time/period

A segment specifying the date/time related to the reference.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	C507	DATE/TIME/PERIOD	M		
	2005	Date/time/period qualifier	M	+171	
		Supported code: 171 = Refer	171 = Reference date/time		
	2380	Date/time/period	С	:20230419	
	2379	Date/time/period format qualifier	С	:102	
		Supported code: 102 = CCYY	MMDD		

Example:

DTM+171:20230419:102'

0220 | Segment Group 2 | Invoice Parties

A group of segments identifying the parties with associated information.

SG2 Used Segment List				
Pos Tag Name				
0230	NAD	Name & Address		
0250	FII	Financial institution information		
0270	SG3	Party References and Dates		

0230 | Segment | NAD | Name and address

A segment identifying names and addresses of the parties and their functions relevant to the invoice.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	3035	Party qualifier	M, B	+SU	
		Supported codes: SU = Supplier (mandatory) BY = Buyer (mandatory) DP = Delivery Party			
020	C082	PARTY IDENTIFICATION DETAILS	С		
	3039	Party id. identification	M	+760999···	
030	C058	NAME AND ADDRESS	С		Not in use
040	C080	PARTY NAME	С		
	3036	Party name	M	+Sample Company	Address name
	3036	Party name	С	:John Doe	Address name
050	C059	STREET	С		
	3042	Street and number/p.o. box	M	+Streetname 1	Street name 1
	3042	Street and number/p.o. box	С	:Building 10b	Street name 2
060	3164	City name	С	+Zürich	
070	3229	Country sub-entity identification	С		Not in use
080	3251	Postcode identification	С	+8005	PLZ
090	3207	Country, coded	С	+CH	

Exampe:

NAD+SU+7609999111111::9++Company AG+Musterstrasse 11+Musterhausen++1234+CH'

0250 | Segment | FII | Financial institution information

A segment identifying the financial institution (e.g. bank) and relevant account numbers for the seller, buyer and where necessary other parties.

Pos	Segment/Elem ent	Description	Status	Example	Remarks	
010	3035	Party qualifier	M	+RB		
		Supported code: RB = Receiving financial institution				
020	C078	ACCOUNT IDENTIFICATION	С			
	3194	Account holder number	С	:CH94307···	QR IBAN	
030	C088	INSTITUTION IDENTIFICATION	С		Not used	
040	3207	Country, coded	С		Not used	

Exampe:

FII+RB+CH9430761016097605323'

0270 | Segment Group 3 | Party References and Dates

A group of segment for giving references only relevant to the specified party rather than the whole invoice.

SG3 Used Segment List				
Pos	Pos Tag Name			
0280	RFF	Reference		

0280 | Segment | RFF | Party Reference

A segment identifying a party reference by its number.

Pos	Segment/Elem ent	Description	Status	Example	Remarks	
010	C506	REFERENCE	M			
	1153	Reference qualifier	M	+VA		
		Supported code: VA = VAT registration number				
	1154	Reference number	С	:CHE191398369		
		The declaration of the VAT number of the invoicing party/renderer of service (code II from NAD) is mandatory. The UID number has to be submitted in the format CHE999999999				

Exampe:

RFF+VA: CHE191398369'

0360 | Segment Group 6 | Tax information

A group of segments specifying tax related information.

SG6 Used Segment List					
Pos Tag Name					
0370	TAX	Reference			
0380 MOA Monetary amount					

0370 | Segment | TAX | Duty/tax/fee details

A segment specifying a tax type, category and rate or exemption, relating to the whole invoice e.g. Value Added Tax at the standard rate is applicable for all items.

Pos	Segment/Elem ent	Description	Status	Example	Remarks	
010	5283	Duty/tax/fee function qualifier	M	+7		
		Supported code: 7 = Tax				
020	C241	DUTY/TAX/FEE TYPE	С			
	5153	Duty/tax/fee type, coded	С	+VAT		
		Supported code: VAT = Value added tax				
030	C533	DUTY/TAX/FEE ACCOUNT DETAIL	С		Not used	
040	5286	Duty/tax/fee assessment basis	С		Not used	
050	C243	DUTY/TAX/FEE DETAIL	С			
	5278	Duty/tax/fee rate	С	:8.1	VAT rate	
060	5305	Duty/tax/fee category, coded	С	+S		
		Supported code: S = Standard rate				
070	3446	Party tax identification number	С		Not used	

Exampe:

TAX+7+VAT+++:::8.1+S'

0380 | Segment | MOA | Monetary amount

A segment specifying the amount for the identified tax/fee.

Pos	Segment/Elem ent	Description	Status	Example	Remarks	
010	C516	MONETARY AMOUNT	M			
	5025	Monetary amount type qualifier	M	+1		
	Supported codes: 1 = VAT, 1st value					
	5004	Monetary amount	С	:0.62		
	6345	Currency, coded	С	:CHF		
		Supported code: CHF				
	•••					

Exampe:

MOA+1:0.62:CHF'

0400 | Segment Group 7 | Currencies

A group of segments specifying the currencies and related dates/periods valid for the whole invoice.

SG7 Used Segment List			
Pos	Tag	Name	
0410	CUX	Currencies	

0410 | Segment | CUX | Currencies

A segment identifying the invoice currency.

	, ,	,			
Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	C504	CURRENCY DETAILS	С		
	6347	Currency details qualifier	M	+2	
		Supported code: 2 = Reference currency			
	6345	Currency, coded	С	:CHF	
		Supported code: CHF			
	6343	Currency qualifier	С	:4	
	Supported code: 4 = Invoicing currency				

Example:

CUX+2:CHF:4'

0430 | Segment Group 8 | Terms of payment

A group of segments specifying the terms of payment applicable for the whole invoice.

SG8 Used Segment List				
Pos	Tag	Name		
0440	PAT	Payment term basis		

0440 | Segment | PAT | Payment terms basis

A segment identifying the payment terms and date/time basis.

Pos	Segment/Elem ent	Description	Status	Example	Remarks	
010	4279	Payment terms type qualifier	M	+1		
		Supported code: 1 = Basic				
020	C110	PAYMENT TERMS	С		Not used	
030	C112	TERMS/TIME INFORMATION	С			
	2475	Payment time reference, coded	M	+5		
		Supported code: 5 = Date of invoice				
	2009	Time relation, coded	С	:3		
		Supported code: 3 = After reference				
	2151	Type of period, coded	С	:D		
		Supported code: D = Day				
	2152	Number of periods	С	:20	Due date as absolute number of days after invoicing	

Example:

PAT+1++5:3:D:20'

Detail Section

Segment Group 26

1090 | Segment Group 26 | Lines

A group of segments providing details of the individual invoiced items.

SG25 Used Segment List			
Pos	Tag	Name	
1100	LIN	Line item	
1110	PIA	Additional product id	
1130	IMD	Item description	
1150	QTY	Quantity	
1200	GIR	Related identification numbers	
1030	SG27	Line item monetary amounts	
1330	SG29	Line item prices	
1310	SG34	Line item Tax information	

1100 | Segment | LIN | Line item

A segment identifying the line item by the line number and configuration level, and additionally, identifying the product or service ordered.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	1082	Line item number	С	+1	
020	1229	Action request	С		Not used
030	C212	ITEM NUMBER IDENTIFICATION	С		
	7140	Item number	С	+9120072855368	EAN
	7143	Item number type, coded	С	:SRV	
		Supported codes: SRV = EAN.UCC Global Trade Iter EN = International Article Numb			
040	C829	SUB-LINE INFORMATION	С		Not used
050	1222	Configuration level	С		Not used
060	7083	Configuration, coded	С		Not used

Example:

LIN+1++4047443223210:SRV'

1110 | Segment | PIA | Additional product id

A segment providing either additional identification to the product specified in the LIN segment.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	4347	Product id. function qualifier	M	+1	
		Supported codes: 1 = Additional identification 5 = Product identification			
020	C212	ITEM NUMBER IDENTIFICATION	M		
	7140	Item number	С	+1451693	
	7143	Item number type, coded	С	:SA	
		Supported codes: SA = Supplier article nr. IN = Buyer's item nr.			
030	C212	ITEM NUMBER IDENTIFICATION	С		Not used
040	C212	ITEM NUMBER IDENTIFICATION	С		Not used
050	C212	ITEM NUMBER IDENTIFICATION	С		Not used
060	C212	ITEM NUMBER IDENTIFICATION	С		Not used

Exampe:

PIA+1+1451693:SA' PIA+1+18906117:IN'

1130 | Segment | IMD | Item description

A segment for describing the product or service being ordered.

Pos	Segment/Elem ent	Description	Status	Example	Remarks		
010	7077	Item description type, coded	С	+F			
		Supported codes: A = Free-form long description F = Free form					
020	7081	Item characteristic, coded	С		Not in use		
030	C273	ITEM DESCRIPTION	С				
					Not in use		
	7008	Item description	С	:Buttergipfel	First 35 description chars		
	7008	Item description	С	:Extra Knusprig	Second 35 description chars		
		Descriptions longer than 70 chars will be trimmed					
040	7383	Surface/layer indicator, coded	С		Not in use		

Example:

IMD+F++:::Buttergipfel:Extra Knusprig'

1150 | Segment | QTY | Quantity

A segment identifying the invoiced quantity.

	, ,	1 ,				
Pos	Segment/Elem ent	Description	Status	Example	Remarks	
010	C186	QUANTITY DETAILS	M			
	6063	Quantity qualifier	M	+47		
		Supported code: 47 = Invoiced quantity				
	6060	Quantity	M	:2	Only integer values supported	
	6411	Measure unit qualifier	С	:PCE		
		Supported code: PCE = Piece	9			

Example:

QTY+47:2:PCE'

1200 | Segment | GIR | Related identification numbers

A segment providing sets of related identification numbers for a line item, e.g. serial numbers, if available.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	7297	Set identification qualifier	M	+1	
		Supported code: 1 = Product			
020	C206	IDENTIFICATION NUMBER	M		
	7402	Identity number	M	+GPKBD1102A123 456	
	7405	Identity number qualifier	С	:BN	
		Supported code: BN = Serial number			

Example:

GIR+1+GPKBD1102A123456:BN'GIR+1+GPKBD1102A678910:BN'

1250 | Segment Group 27 | Line Amounts

A group of segments specifying any monetary amounts relating to the products and when necessary a currency.

SG27 Used Segr	nent List	
Pos	Tag	Name
1260	MOA	Monetary amount

1260 | Segment | MOA | Monetary amount

A segment specifying any monetary amounts relating to the product.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	C516	MONETARY AMOUNT	M		
	5025	Monetary amount type qualifier	M	+203	
		Supported codes: 203 = Line item amount 66 = Goods item total (Net price t	imes qu	antity for the line	e item)
	5004	Monetary amount	С	:11.78	

Example:

MOA+203:11.78'

1330 | Segment Group 29 | Price

A group of segments identifying the relevant pricing information for the goods or services invoiced.

SG28 Used Segr	nent List	
Pos	Tag	Name
1340	PRI	Price details

1340 | Segment | PRI | Price details

A segment to specify the price type and amount.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	C509	PRICE INFORMATION	С		
	5125	Price qualifier	M	+AAA	
		Supported code: AAA = Calcula	tion net		
	5118	Price	С	:5.89	
020	5213	Sub-line price change, coded	С		Not in use

Example:

PRI+AAA:5.89'

1390 | Segment Group 30 | References

A group giving references and where necessary, their dates, relating to the line item.

SG30 Used Segr	nent List			
Pos Tag Name				
1400	RFF	Order ID and Line number		

1400 | Segment | RFF | Reference

A segment to specify the price type and amount.

Pos	Segment/Elem ent	Description	Status	Example	Remarks	
010	C506	REFERENCE	С			
	1153	Reference code qualifier	M	+0N		
		Supported codes: ON = Order nr. (buyer) VN = Order nr. (supplier) LI = Line item reference nr.				
	1154	Referenz identifier	С	:1990845089	Order nr.	
	1156	Document line identifier	С	:1		
	•••		С		Not in use	

Example:

RFF+0N:1990845089:1'

RFF+LI:10000'

1550 | Segment Group 34 | Line item tax

A group of segments specifying tax related information for the line item

SG34 Used Segr	SG34 Used Segment List			
Pos	Pos Tag Name			
1560	TAX	Duty/tax/fee details		
1570	MOA	Monetary amount		

1560 | Segment | TAX | Duty/tax/fee details

A segment specifying a tax type, category and rate, or exemption, relating to the line item.

Pos	Segment/Elem ent	Description	Status	Example	Remarks	
010	5283	Duty/tax/fee function qualifier	M	+7		
		Supported code: 7 = Tax				
020	C241	DUTY/TAX/FEE TYPE	С			
	5153	Duty/tax/fee type, coded	С	+VAT		
		Supported code: VAT = Value added tax				
030	C533	DUTY/TAX/FEE ACCOUNT DETAIL	С		Not used	
040	5286	Duty/tax/fee assessment basis	С		Not used	
050	C243	DUTY/TAX/FEE DETAIL	С			
	5278	Duty/tax/fee rate	С	:2.6	VAT rate	
060	5305	Duty/tax/fee category, coded	С	+S		
		Supported code: S = Standard ra	ate			
070	3446	Party tax identification number	С		Not used	

Exampe:

TAX+7+VAT+++:::2.6+S'

1570 | Segment | MOA | Monetary amount

A segment specifying the amount for the identified tax/fee.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	C516	MONETARY AMOUNT	M		
	5025	Monetary amount type qualifier	M	+124	
		Supported codes: 124 = Tax amount 125 = Taxable amount			
	5004	Monetary amount	С	:0.62	
	6345	Currency, coded	С	:CHF	

Exampe:

MOA+125:410.6:CHF' MOA+124:31.62:CHF'

Summary section

2170 | Segment | UNS | Section control

A service segment placed at the start of the summary section to avoid segment collision.

Pos	Segment/Elem ent	Description	Status	Example	Remarks	
010	0081	Section identification	M	+S		
		Supported codes: S = Detail/summary section separation				

Example:

UNS+S'

2190 | Segment Group 50 | Total amounts

A group of segments giving total amounts for the whole invoice and - if relevant -detailing amounts pre-paid with relevant references and dates.

SG50 Used Segment List				
Pos	Tag	Name		
2200	MOA	Monetary amount		
2240	SG52	A group of segments specifying taxes totals for the invoice.		

2200 | Segment | MOA | Monetary amount

A segment giving the total amounts for the whole invoice message.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	C516	MONETARY AMOUNT	M		
	5025	Monetary amount type qualifier	M	+77	
		Supported codes: 47 = Delivery fee 77 = Invoice amount 79 = Total line items amount 86 = Total monetary amount 124 = Tax amount 125 = Taxable Amount			
	5004	Monetary amount	С	:13.37	

Example:

MOA+77:13.37' MOA+86:500.91'

2240 | Segment Group 52 | Taxes and Totals

A group of segments specifying taxes totals for the invoice.

SG52 Used Segment List				
Pos	Tag	Name		
2250	TAX	Duty/tax/fee details		
2260	MOA	Monetary Amount		

2250 | Segment | TAX | Duty/tax/fee details

A segment specifying a tax type, category and rate or exemption, relating to the whole invoice e.g. Value Added Tax at the standard rate is applicable for all items.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	5283	Duty/tax/fee function qualifier	M	+7	
		Supported code: 7 = Tax			
020	C241	DUTY/TAX/FEE TYPE	С		
	5153	Duty/tax/fee type, coded	С	+VAT	
		Supported codes: VAT = Value a	dded tax	ζ	
030	C533	DUTY/TAX/FEE ACCOUNT DETAIL	С		Not used
040	5286	Duty/tax/fee assessment basis	С		Not used
050	C243	DUTY/TAX/FEE DETAIL	С		
	5278	Duty/tax/fee rate	С	:8.1	VAT rate
060	5305	Duty/tax/fee category, coded	С	+S	
		Supported code: S = Standard ra	ate		
070	3446	Party tax identification number	С		Not used

Exampe:

TAX+7+VAT+++:::8.1+S'

2260 | Segment | MOA | Monetary amount

A segment giving the total amounts for the whole invoice message.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	C516	MONETARY AMOUNT	M		
	5025	Monetary amount type qualifier	M	+124	
		Supported codes: 124 = Tax amount 125 = Taxable amount			
	5004	Monetary amount	С	:35.81	

Example:

MOA+124:35.81' MOA+125:465.1'

2320 | Segment | UNT | Message trailer

A service segment ending a message, giving the total number of segments in the message and the control reference number of the message.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	0074	Number of segments in a message	M	+39	
020	0062	Message reference number	M	+2021052008364	Message reference number from UNH segment

Example:

UNT+39+11'

UNZ | Interchange trailer

To end and check the completeness of an interchange.

Pos	Segment/Elem ent	Description	Status	Example	Remarks
010	0036	Interchange control count	M	+1	
020	0020	Interchange control reference	M	+123	Interchange control reference from UNB segment

UNZ+1+123'

Example INVOIC Message

```
UNA:+.? '
      UNB+UNOC: 4+7609999999999: 14+7601111111111: 14+20240707: 1155+123++++++1'
      UNH+11+INVOIC:D:01B:UN:EAN010'
      BGM+380+22095031075+9'
      DTM+3:20230419:102'
      DTM+137:20210520:102'
                                                                                       SG1
Η
      RFF+0N:P01337'
Ε
      DTM+171:20220614:102'
Α
      RFF+AAK:31036674'
D
Ε
                                                                                       SG2
      NAD+SU+7609999123456::9++Test Supplier AG+Teststreet
R
      1+City++1234+CH'FII+RB+CH9430761016097605323'
      RFF+VA: CHE101234567'
      NAD+BY+7609999129308::9'
      RFF+VA: CHE105991234'
      NAD+DP+7613081000000::9++Alltron AG+Rossgassmoos 10+Willisau++6131+CH'
                                                                                       SG7
      CUX+2:CHF:4'
```

	LIN+1++4047443223210:SRV' PIA+1+345087:IN' PIA+1+00111363:SA' IMD+F++CU::9:Zwischenbausatz Waschmaschinen::DE' QTY+47:10:PCE'	SG26
D E	MOA+203:410.6'	SG27
A T A	PRI+AAA:41.06'	SG29
I L	RFF+ON:1990845089:17' RFF+LI:10000'	SG30
	TAX+7+VAT+++:::8.1' MOA+125:410.6' MOA+124:31.62'	SG34
	UNS+S'	
S U	MOA+86:500.91'	SG50
M M A R	TAX+7+VAT+++:::7.7' MOA+124:35.81' MOA+125:465.1'	SG52
Y	UNT+46+11' UNZ+1+123'	