

CIVICA

EDI Requirements/notes for vendors

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Message types

EDIFACT

Spydus supports the following EDIFACT message types:

1. Quotes
2. Orders
3. ORDRSP (fulfilment messages only)
4. INVOIC

Spydus can also send Claims and Cancellations via EDI.

Tradacomms

This is not currently supported. However, if you are not able to supply EDIFACT messages, but can supply MARC records, it is possible for Spydus customers to create orders from MARC records containing order information in locally defined fields in the 960-965 tags.

Transmission methods

The preferred transmission method for most Spydus customers is ftp. This method is used to pick up EDI Quotes, Fulfilments, and Invoices and to send EDI Purchase Orders.

You will need to create an account for each Spydus customer and send them login details plus your ftp server address so that files can be retrieved and transmitted.

Alternatively, messages can be sent to you via email (embedded) or sites can choose to send them as email attachments.

File renaming

Spydus renames files that have been picked up from your ftp site using standard file naming conventions as specified at:

<http://www.editeur.org/files/FTP%20filenaming/080519-ftp-filenaming-issue-4.pdf>

Typically, vendors will send files with extensions beginning with e.g. '.cei' for invoice (EDIFACT INVOIC) messages.

Status Byte Codes

The following values are currently assigned as *Status Byte* codes. The party responsible for setting the code value is shown in the right-hand column.

Code	Description	Party responsible
C	Creation/transmission complete – ready for pick-up, unzipped	Supplier (Vendor)
A	Processing complete – ready to remove from server and archive	Receiver (Buyer)

Format Indicator codes

The format indicator codes are as follow:

E – EDitEUR EDIFACT (international standard)

Transaction type codes

Code	Description	Used with file type
D	Order Fulfilment	EDIFACT ORDRSP when used in Library supply for 'order fulfilment' messages sending copy details added by the supplier.
I	Invoice/Credit Note	EDIFACT INVOIC
P	Purchase Order (Including Order cancellation)	EDIFACT ORDERS
Q	Quote	EDIFACT QUOTES when used in library supply for supplier initiated quotation message

EDI File syntax reference

The full specification for the different types of EDI files can be found here:

<https://www.editeur.org/31/Library-Book-Supply/>

These are the main segments that are required in each EDI message types (QUOTES, ORDRSP and INVOIC.)

- UNB
- UNH
- BGM
- NAD
- LIN
- GIR
- RFF

UNB – Interchange header (File header)

The UNB segment contains sender and receiver identifiers and optionally specifies the type of messages contained in the file. For incoming files (Quotes, Order Responses and Invoices) the sender is Vendor and receiver is Library. For outgoing files (Purchase Orders) these are reversed.

UNB+UNOC:3+VENDOR_SAN+LIBRARY_SAN+210505:1133+88888-M005555++QUOTES '

UNB+UNOC:3+VENDOR_SAN:31B+LIBRARY_SAN:31B+210507:1735+00076296++INVOIC '

UNB+UNOC:3+VENDOR_SAN:31B+LIBRARY_SAN:31B+150318:1000+04 '

UNH – Message Header

The UNH segment indicates a section of the file comprising an entire EDI message (a file can contain more than one message). It specifies the message type.

UNH+M0576+QUOTES:D:96A:UN:EAN002'

UNH+401+ORDERS:D:96A:UN:EAN008'

UNH+238076+INVOIC:D:96A:UN'

UNH+121+ORDRSP:D:96A:UN'

BGM – BEGINNING OF MESSAGE

The BGM segment contains the identifier that Spydus uses to ensure that processing of EDI files is not duplicated. Typically, Spydus will store this number in the record(s) created from processing the message.

BGM+31S::28+829827+9'

BGM+380+3135377+43'

NAD – NAME AND ADDRESS

The NAD segment specifies the supplier (SU) and the buyer (BY) which remain constant regardless of the direction of the file transmission. The supplier is the Vendor and the buyer is the Library.

NAD+BY+LIBRARY_SAN::9'

NAD+SU+VENDOR_SAN::9'

LIN – LINE ITEM

In the context of EDI, the LIN section describes the basic unit of goods being processed: a title, quantity of items, and details about how and where those items will be processed.

The LIN segment itself contains the title identifier (ISBN).

Accompanying the LIN will be other segments that can be treated conceptually as a group. Not all of these are used by Spydus when processing incoming files.

LIN+1++9780877018995:EN'

IMD+L+009+:::Perry, Sara'

IMD+L+050+:::The complete coffee book?: a gourm'

IMD+L+050+:::et guide to buying, brewing, and co'

IMD+L+050+:::oking'

IMD+L+230+:::641.6373 PER'

QTY+21:5'

GIR+001+2:LQT+ABB:LLO+ABT:LSQ+641.6373 PER:LSM+000001_AQ_Y:LFN'

GIR+002+1:LQT+ABCYNN:LLO+ABT:LSQ+641.6373 PER:LSM+000001_AQ_Y:LFN'

GIR+003+1:LQT+ADE:LLO+ABT:LSQ+641.6373 PER:LSM+000001_AQ_Y:LFN'

GIR+004+1:LQT+AIX:LLO+ABT:LSQ+641.6373 PER:LSM+000001_AQ_Y:LFN'

GIR – RELATED IDENTIFICATION NUMBERS

The GIR segment is used to provide Item-specific allocation, funding and classification information for a Line Item. Some of the elements are optional and some are mandatory. These basically match the same mandatory/optional fields in a Spydus Order Line Item.

Some of the GIR elements require matching data in Spydus.

GIR Element	Name
LQT	Quantity
LAC	Accession (Barcode) Number
LCL	Classification
LSM	Call number (complete)
LLO	Location
LSQ	Collection
LSL	Sublocation
LSC	Item Category 1
RIC	Item Category 2
LFN	Funds
LRP	Rotation Plan
LST	Material Type
LVT	Servicing Code

GIR segments are numbered and can span multiple lines in the file as long as they are indexed correctly by their number.

Please note that within the GIR segment, the elements are paired backwards to what most systems would use (*value:key* instead of *key:value*).

```
GIR+001+2:LQT+ABB:LLO+ABBFD:LSL+ABT:LSQ+641.6373 PER:LSM+000001_AQ_Y:LFN'
GIR+001+RP1:LRP'
GIR+002+1:LQT+SAN:LLO+SANISS:LSL+ABT:LSQ+641.6373 PER:LSM+000001_AQ_Y:LFN'
GIR+002+RP1:LRP'
```

RFF – REFERENCE

For Quotes messages, RFF is used by the Vendor for their own internal tracking.

For Order Response and Invoice messages, RFF is used to identify the Line Item being fulfilled or invoiced (using the Spydus record's Order ID):

```
RFF+LI:ORD15733'
```

Spydus Orders

Confirmed orders generated from Quotes messages and sent from Spydus via EDI will contain the unique quotation line reference in RFF segment 51, DE 1154, with the code QLI or SLI (depending on which was used in the QUOTES message) in DE 1153, to facilitate tracking of quotes by the supplier.

Quotes

Mandatory information

All segments are used as defined in the EDIFACT standards, but Spydus requires the following elements in each GIR segment in a Quotes message, as a minimum:

LLO	Spydus location code
LSQ	Spydus collection code
LFN	Spydus fund name which consists of two or more concatenated elements for fund control and fund ID. E.g. CURRENTFUNDS_CEN_AF_BK.
LST	Spydus material type

Optional information

LCL	Spydus local classification (this will take precedence over any bibliographic classification)
LRP	Spydus stock rotation plan
LVT	Spydus servicing code

GIR segments should contain a maximum of 5 elements per line.

For example:

```
GIR+001+2:LQT+ABB:LLO+ABBFD:LSL+ABT:LSQ+641.6373 PER:LSM+000001_AQ_Y:LFN'
GIR+001+RP1:LRP'
```

Order Response (Fulfilments)

Mandatory information

All segments are used as defined in the EDIFACT standards, but Spydus requires the following mandatory elements in each GIR segment in a fulfilments message:

LLO	Spydus location code
LSQ	Spydus collection code
LAC	Spydus barcode number

Optional information

LCL	Spydus local class mark (this will take precedence over any bibliographic class mark)
LRP	Spydus stock rotation plan
LCV	Spydus unit price
LCO	(This is not stored in Spydus items although it can be generated and sent out on orders if required)

GIR segments should contain a maximum of 5 elements; if more are required, a repeat GIR should be added.

Spydus also requires the following segments:

RFF+LI

Spydus unique order number (note that this is required even if a unique copy identifier has been provided in LCO)

Invoice Messages

An invoice EDI message may contain multiple invoices, with each invoice containing one or more invoice line items. The invoice file message type is 'INVOIC'.

The structure is shown below:

<p>HEADER One per message UNH BGM DTM RFF NAD-RFF TAX-MOA CUX PAT-DTM TDT ALC-QTY-PCD-MOA-RTE-TAX-MOA</p>
--

<p>DETAIL</p> <table border="1"> <tr> <td style="text-align: center;"> <p>Invoice line Repeated as required LIN PIA IMD MEA QTY ALI GIR FTX MOA PRI-DTM RFF LOC-QTY TAX-MOA ALC-PCD-MOA-RTE-TAX-MOA</p> </td> </tr> </table>	<p>Invoice line Repeated as required LIN PIA IMD MEA QTY ALI GIR FTX MOA PRI-DTM RFF LOC-QTY TAX-MOA ALC-PCD-MOA-RTE-TAX-MOA</p>
<p>Invoice line Repeated as required LIN PIA IMD MEA QTY ALI GIR FTX MOA PRI-DTM RFF LOC-QTY TAX-MOA ALC-PCD-MOA-RTE-TAX-MOA</p>	

<p>SUMMARY One per message UNS CNT MOA-RFF-DTM TAX-MOA ALC-MOA UNT</p>
--

The summary section carries control totals and repeats the unique identification of the message for purposes of integrity checking. It also carries various summary figures required for tax calculation, as well as the final total to be paid by the invoicee.

Refer to the [EDifact standard for invoices](#) for more details.

Header

The header section specifies the message type, gives the message a unique identification and date, carries any general references, names the sender and addressee, and may give tax, currency, charging and shipping detail which applies to the invoice as a whole.

The header should be unique for each invoice.

1. UNH – Header

UNH+{sender's unique message reference number}+INVOIC:D:96A:UN:EAN008'

2. BGM – Beginning of Message

(e.g. BGM+380+{invoice number}+43')

- DTM – Date time fields. The invoice must contain at least one DTM+137 which is the invoice date.

e.g. DTM+137:20210921:102'

- NAD (Name and address) of the buyer and supplier
- Each **NAD** record may be followed by an **RFF** (reference) record
- API** = additional party identification (EAN code). Use with a NAD segment coded BY in DE3035 for a coded identification, which is additional to the linked NAD segment. This may be a supplier's own code for a library account or customer department (EAN code).

RFF+API:XYZCODE'

- IA** – internal vendor number. Use with a NAD segment coded SU in DE 3035 when a library has multiple vendor references which apply to different types of business with the same supplier.

RFF+IA:30004'

- VA** - If there is a VAT number, there will be an RFF+VA record.

RFF+VA:{VAT number}'

- PAT** - If there is a payment instruction there will be a PAT record.

PAT+1++5:3:D:{payment term}'

Detail

The detail section consists of a group of twenty-two segments which together constitute a single invoice line.

- LIN+ and the line number within the message

LIN+1'

- PIA – Additional Product ID. Product code other than EAN number

PIA+5+ 9781842993569:IB' – ISBN as the main identification of the item supplied and invoiced

PIA+5+1234-45567 IS' – ISSN as the main identification of the item supplied and invoiced

- IMD (Optional) – Brief text description of the invoiced item. Up to 10 repeats of IMD segment 335 may be used to give limited bibliographic details of the item to which the order response line refers to. This is mandatory if the item is not identified by a code in RFF+LI. Otherwise a description is not normally sent in an invoice line.

IMD+L+009+:::Harris, Robert' – **Author name, recommended form**

IMD+F+BAU+:::Harris, Robert' – equivalent using EDItEUR alpha codes, not recommended for new implementations

- MEA – Physical description of the item (e.g. dimensions, weight, number of pages etc.)
- QTY – Refers to the number of items being invoiced.

QTY+47:9' – refers to 9 copies

- MOA (Monetary amount) – line item amount

MOA+203:66.44'

16. PRI (Price) – item price

PRI+AAE:3.33'

17. RFF+LI – buyer's order line number (unique Spydus order ID).

18. GIR – Provides details of the item /allocation of what is being invoiced.

19. PRI-DTM states the unit price in the invoicing currency

20. RFF – References specific to the line item (e.g. RFF+LI refers to the unique order ID in Spydus.)

RFF+LI:L87445'

Other optional fields:

21. LOC-QTY – this pair may have details of the different delivery locations for the invoiced items

22. TAX-MOA –specifies the tax which applies to the line item.

23. ALC-MOA – Details the charges or allowances at the line level

Mandatory information

The key elements required in an INVOIC message in the Detail section are:

- a) Unique identifier of the order line. This will be the LIN segment.
- b) Spydus order number (in the RFF+LI segment)
- c) Quantity invoiced (QTY+47)
- d) Unit price (e.g. PRI+AAB)
- e) Optional brief description of the title (IMD+L+050)

All segments are used as defined in the EDIFACT standards, but Spydus requires the following fields in each GIR segment in an invoice message (if used), as a minimum:

LLO	Spydus location code
LSQ	Spydus collection code
LAC	Spydus barcode number (optional)
LQT	Quantity (for Partial invoices)

Example of an Invoice message

UNH+INV001235+INVOIC:D:96A:UN:EAN008'	Header
BGM+380+SU445+43'	Copy of invoice number SU445
DTM+131:210921:102'	Tax point date 21 September 2021
DTM+137:210921:102'	Message date 21 September 2021
NAD+BY+5412345000176::9'	Buyer's EAN code
NAD+SU+4012345000094::9'	Supplier's EAN code
RFF+VA:123456789'	VAT number 123456789
PAT+1++5:3:D:30'	30 day payment terms

LIN+1'	Line 1
PIA+5+0862102634:IB'	ISBN as product identification
QTY+47:9'	Nine copies invoiced
MOA+203:56.62'	Line item amount
PRI+AAE:6.99'	Information price
RFF+LI:LI99374'	Buyer's order line number
TAX+7+GST+++:::10.00+S'	GST 10%
ALC+A++++DI'	Discount applicable
PCD+3:10'	at 10 per cent
LIN+2'	Line 2
PIA+5+0140374132:IB'	ISBN as product identification
QTY+47:3'	Three copies invoiced
MOA+203:10.77'	Line item amount
PRI+AAE:3.99'	Information price
RFF+LI:BY99375'	Buyer's order line number
TAX+7+GST+++:::10.00+S'	GST 10%
ALC+A++++DI'	Discount applicable
PCD+3:10'	at 10 per cent
UNS+S'	Summary section
CNT+2:2'	No of line items = 2
MOA+79:67.39'	Total line item amounts
MOA+129:67.39'	Total before tax and payment discount
MOA+176:6.74'	Total tax amount
MOA+86:74.13'	Total after tax before payment discount
MOA+9:74.13'	Total amount payable
TAX+7+GST+++:::10.00+S'	GST 10%
MOA+125:67.39'	Amount taxable at 10%
MOA+124:6.74'	Amount of tax payable
UNT+37+INV001235'	Message trailer: 37 segments

