SupplyOn

SupplyOn EDI
Information for RB Supplier@Net-Suppliers about communication types, EDIFACT format and connection process

Version: June 2016

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Contents

List of abbreviations

AS2	Applicability Statement 2 (= specification for data exchange)
EDI	Electronic Data Interchange
EDIFACT	EDI for Administration, Commerce and Transportation
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secure
ISDN	Integrated Services Digital Network
MDN	Message Disposition Notification
Odette	Organization for Data Exchange by Teletransmission in Europe
OFTP	Odette File Transfer Protocol
OFTP2	ODETTE File Transfer Protocol version2
SSL	Secure Socket Layer
VDA	Association of the Automotive Industry

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1   Communication types

After registration with SupplyOn the connection to SupplyOn EDI can be alternatively set up via two communication types:

- OFTP2 via TCP/IP
- AS2 via HTTPS

1.1   OFTP2 via TCP/IP

OFTP2 (= ODETTE File Transfer Protocol version 2)

OFTP2 is a further development of the ODETTE File Transfer Protocol.

OFTP2 can be set up on different transport layers: ISDN, X.25, TCP/IP. SupplyOn supports OFTP2 via TCP/IP (Internet).

OFTP2

Supplier   **SupplyOn**   **Customer**
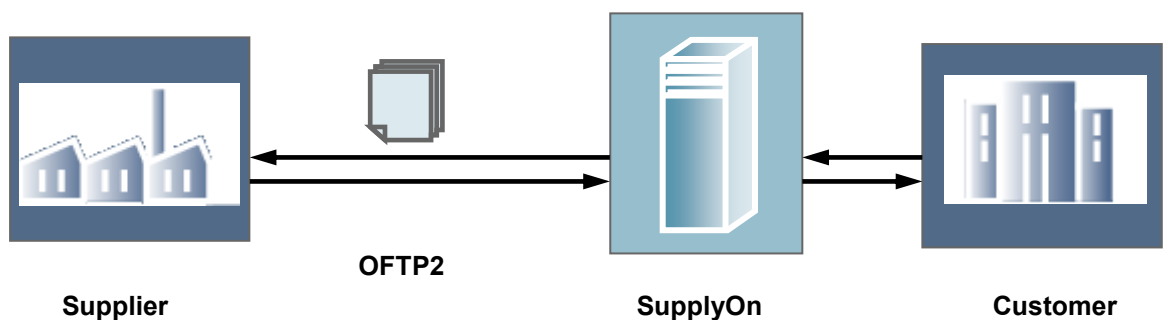
1.1.1   Process of the communication

The communication is initiated by one of the partners. After exchange of Odette IDs and passwords, files can be exchanged in both directions. The files receive a pre-configured virtual file name for the transmission. Files can be transmitted via OFTP2 either encrypted or unencrypted***. After the transmission a confirmation in form of an *End to End Response* (EERP = positive acknowledgment of receipt, EERN = negative acknowledgment) takes place. This *End to End Response* can take place either immediately after the transmission within the same connection, or the receiver dials in independently to the original sender for transmission.

***Hint: SupplyOn allows only an encrypted transmission.*

1.1.2   Strength of OFTP2

- OFTP2 allows a restart to the connection after abort. It is not necessary to send the entire file again.
- The implicit *End to End Response* guarantees correct transmission and processing of the file through the receiver.
- Secure data and connection due to encryption.

1.1.3   SupplyOn OFTP parameter sheet

Should you have decided to transmit your EDIFACT messages with OFTP2, and we have received the contract for this service, you will receive the OFTP parameter sheet with the SupplyOn OFTP parameters. Please fill out this parameter sheet carefully and send it to EDI-Connect@SupplyOn.com.

1.1.4   OFTP2 encryption

SupplyOn uses with OFTP2 the maximal security settings, including the latest cryptographic algorithms:
A symmetrical encryption using the AES/256 algorithm, the SHA1 digital signature algorithm, data compression and only a signed and encrypted receipt.

1.1.5   OFTP2 parameter & explanations

OFTP2 Parameter		SupplyOn Communication	Explanation
Security	Communication Certificate	trusted	**One certificate for communication and signature** **Trusted:** Certificate Authority assigns, administrates and controls certificates. There are Class 2 and Class 3 certificates. **Certificates have to be updated at least after 5 years.**

	Digital signature	SHA1	Before the data is dispatched a signature is generated and attached to the transmission. With the receipt of the message the receiver verifies the signature. This guarantees that the message really comes from the sender. SHA1 is an option of the signature algorithm and is recommended.
	Encryption	AES/256	Advanced Encryption Standard is a symmetrical encryption method that is considered to be the new encryption standard. It is used to encrypt data and the transmission connection.
Transport layer	Internet connection	- permanent internet connection - fixed and public URL or IP address mandatory	A permanent Internet connection has to be granted.
	Transport Protocol	OFTP2 via HTTPS	HTTPS is a special form of the HTTP Protocol offering increased security via SSL (128 Bit encryption). HTTPS is used to prevent the „monitoring" during the transmission of sensitive data.
Client Authentication	Authentication	HTTPS Basic authentication with username and password	Authentication of the sending interface system during the receipt.

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1.2   AS2 via Internet (HTTPS)

AS2 (Applicability Statement 2) is a new communication protocol for secure data transfer via the Internet. Electronic business documents of any format that are sent to the business partners are compressed and if necessary provided with an electronic signature.

AS2

Supplier   **SupplyOn**   **Customer**
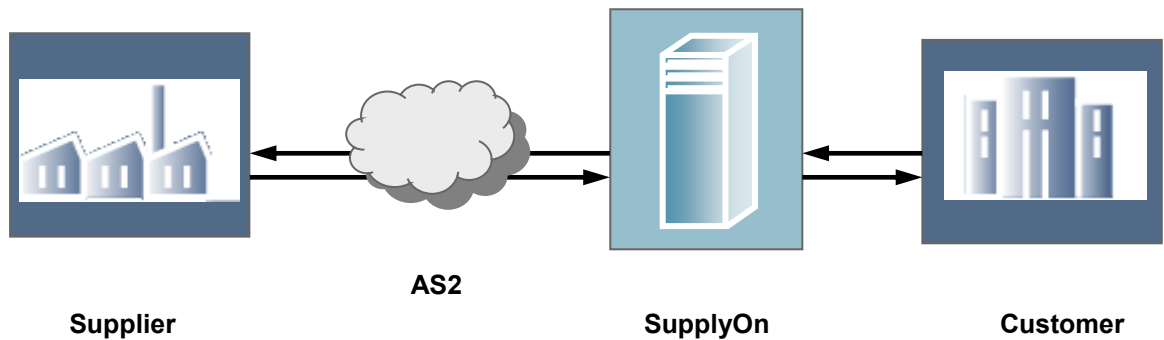
1.2.1   Process of the communication

AS2 works with an "envelope" in which the EDI data is embedded. The data is transmitted with the Hypertext Transfer Protocol (HTTP), the core technology of the World Wide Web.
The server of the receiver waits for messages that are addressed to it. As soon as the server recognizes that a message addressed to it "knocks", the server examines the certificates/Authorization of the message. After the examination it lets the message enter.

Similarly as a telephone without a mailbox, the server acquires the message only if the server is available. Therefore the server has to keep a permanent connection to the internet.

1.2.2   Strength of AS2

The implementation of AS2 enables the user to send and receive data securely and reliably with the Internet protocol HTTPS. The cost advantage, which results from the use of the Internet, is passed on directly to the AS2 user. If you have decided to use an AS2 software solution, no additional costs will arise, even when sending a larger data volume. By the rising number of EDI messages this is, apart from the security aspect, for many companies the decisive factor to implement AS2.

Digital certificates ensure for example, that messages only reach the desired receiver and that the sender can be verified. AS2 works with encryption and signature algorithms, so that the security of the documents is ensured.

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1.2.3   Conditions for the AS2 communication

A condition for the data exchange with other AS2 compatible companies is an Internet access and AS2 compliant software. Please pay attention that your AS2 software has to support HTTP Basic Authentication for data transmission to SupplyOn (see 1.2.5).

1.2.4   SupplyOn AS2 parameter sheet

Should you have decided to transmit your EDIFACT messages via AS2, and we have received the contract for this service, you will receive the AS2 parameter sheet with the SupplyOn AS2 parameters. Please fill out this parameter sheet carefully and send it to EDI-Connect@SupplyOn.com.

1.2.5   AS2 parameter & explanations

AS2 Parameter		SupplyOn Communication	Explanation
Security	Communication Certificate	- trusted or self-signed - maximum validity 5 years	**One certificate for communication and signature** **Trusted:** Certificate Authority assigns, administrates and controls certificates. There are Class 2 and Class 3 certificates. **Self-Signed:** Self-Signed certificates reduce the administration effort. **Certificates have to be updated at least after 5 years.**
	Digital signature	SHA1	Before the data is dispatched a signature is generated and attached to the transmission. With the receipt of the message the receiver verifies the signature. This guarantees that the message really comes from the sender. SHA1 is an option of the signature algorithm and is recommended.

Transport layer	Encryption	–	No additional encryption of the data is necessary, since the communication is already SSL encrypted (HTTPS)!
	Internet connection	- permanent internet connection - fixed and public URL or IP address mandatory	A permanent Internet connection has to be granted.
	Transport Protocol	AS2 via secure HTTP (HTTPS)	HTTPS is a special form of the HTTP Protocol offering increased security via SSL (128 Bit encryption). HTTPS is used to prevent the „monitoring" during the transmission of sensitive data.
Client Authentication	Authentication	HTTP Basic authentication with username and password	Authentication of the sending interface system during the receipt.
Message Disposition Notification=MDN	MDN	Mandatory	The MDN is an instrument for transaction security. The MDN is sent back by the recipient. It confirms the message receipt and provides proof that the correct recipient was reached, since he was in the possession of the private key.
	MDN signed	Synchronously signed if necessary	Signing of the message receipt
	MDN encryption	–	No additional encryption of the data is necessary, since the communication is already SSL encrypted (HTTPS)!

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2   SupplyOn EDIFACT marketplace format

SupplyOn acts as marketplace and therefore agreed with all customers on a standardized EDIFACT marketplace format for the individual business processes.
All buy-side companies attached to the SupplyOn marketplace have been using this uniform format for a long time. Due to the marketplace effect it is therefore necessary also for all sell-side companies to follow the standardized marketplace format.
For you as a sell-side company, the major advantage is that you send and receive always the same format for a business process, regardless to which of your customers you exchange data with via SupplyOn.

You receive the EDIFACT format guideline for the respective business process of your customer from SupplyOn and implement this in your internal IT system in a mapping.
If a further customer would like to transmit data with you via SupplyOn EDI, the multiplier effect takes place: that means a new maintenance work of the format guidelines in your inhouse system is no longer necessary.

2.1   EDIFACT versions and format guideline for RB Supplier@Net

In order to transmit messages to SupplyOn, the messages have to correspond with the SupplyOn EDIFACT marketplace format. Messages that SupplyOn transmits to the supplier correspond to the SupplyOn EDIFACT marketplace format as well.
The format guideline for the respective business process is attached with this info package.

The following EDIFACT versions are used on the SupplyOn marketplace:

Purchase order or Order change:	ORDERS D99.B or ORDCHG D.99B in VDA container
Order response:	ORDRSP D99.B
Invoice:	GlobalINVOIC D07.A in VDA Container

2.2   EDIFACT Routing and syntax check, error emails

If you send EDIFACT message to SupplyOn, these are checked first for the routing information needed for the SupplyOn market place (see table 2.2.3). Afterwards the message is checked for the correct syntax analog to the SupplyOn EDIFACT format guideline.

If your message contains a routing or a syntax error an automatically generated email with the appropriate error description is sent to you by SupplyOn (sender: WebEDIAdmin@SupplyOn.com). The original message that caused the error is attached to this email. The message was not processed in this case and was not transmitted to the customer.

SupplyOn uses the recipient email address for routing and syntax errors you mentioned together with the UNB sender ID in the parameter sheet (see also 1.1.4 and/or. 1.2.4).

2.2.1   Routing check

Due to the SupplyOn marketplace it is necessary that you transmit certain routing information in certain segments in the EDIFACT message, so that we can identify your customer and transmit the message to the correct recipient.

We identify your customer with the help of the following 4 segments (see table 2.2.3):

- Recipient ID of the customer in UNB
- Customer organization code NAD+BY
- Customer plant code in NAD+CN resp. NAD+ST (for invoice)
- Supplier number in NAD+SU resp. NAD+SE (for invoice)

Example of a Routing error email due to wrong recipient ID:

Von: WebEDIadmin@SupplyOn.com
Betreff: Routing Error SO_DESADV; P: WerksCode; S: 4711
Wichtigkeit: Hoch

Fehleranalyse DESADV-UN-D07A
lfd.Segmentnr:0072   Kein Routingeintrag in der Tabelle PO_EMAILUPD für Empfaenger [BUYER002], ORGCode [Buy01]gefunden.

Example of a Routing error email due to wrong organization code:

Von: WebEDIadmin@SupplyOn.com
Betreff: Routing Error SO_DESADV; P: WerksCodefalsch; S: 4711
Wichtigkeit: Hoch

Fehleranalyse DESADV-UN-D07A
lfd.Segmentnr:0072   Es konnte keine CP-Buyer-ID mit ORGCode [Buy01] und Plant [WerksCodefalsch] in der Tabelle tControlPoint_SCD gefunden werden.

Example of a Routing error email due to wrong plant code:

Von: WebEDIadmin@SupplyOn.com
Betreff: Routing Error SO_DESADV; P: WerksCodefalsch; S: 4711
Wichtigkeit: Hoch

Fehleranalyse DESADV-UN-D07A
lfd.Segmentnr:0072   Es konnte keine CP-Buyer-ID mit ORGCode [Buy01] und Plant [WerksCodefalsch] in der Tabelle tControlPoint_SCD gefunden werden

Example of a Routing error email due to wrong supplier number:

Von: WebEDIadmin@SupplyOn.com
Betreff: Routing Error SO_DESADV; P: WerksCode; S: 4711falsch
Wichtigkeit: Hoch

Fehleranalyse DESADV-UN-D07A
lfd.Segmentnr:0072   Es konnte keine CP-Seller-ID mit CP-Buyer-ID [10000842], Lieferantennummer [4711falsch] und SellerPlant [] in den Tabellen tNetworkLink_SCD_NEW und tNetworkSupplierInfo_SCD gefunden werden.

2.2.2   Syntax check

Due to the standardized message format on the SupplyOn market place the messages are checked for correct syntax analog to the SupplyOn format guideline, before they are transmitted to your customer. This syntax check takes place also in reverse direction, i.e. customer messages are also checked for correct syntax before they are transmitted from SupplyOn to the supplier.

Example of a syntax error email due to incorrect date format in DTM+137:

Von: WebEDIadmin@SupplyOn.com
Betreff: Syntax Error SO_DESADV; P: WerksCode; S: 4711
Wichtigkeit: Hoch

Fehleranalyse DESADV-UN-D07A
lfd.Segmentnr:0005 UNB.UNH.DTM   Überlauf im Feld UNB.UNH.DTM:C507.2380 [2003100300] , nur 8 Zeichen erlaubt. Zugehöriger Qualifier UNB.UNH.DTM:C507.2379 [102]. Zugehöriger Qualifier UNB.UNH.DTM:C507.2005 [137].

2.2.3   Segments for message routing

In order to ensure a correct message flow to your customer, the following EDIFACT segments have to be considered for the routing of the messages:

! IMPORTANT segments for message routing !

Sender ID (UNB.S002.0004) + Recipient ID (UNB.S003.0010)	The Sender ID of the customer has to be copied out of the inbound message and be sent back as Recipient ID in the outbound message to SupplyOn (see example). From SupplyOn to supplier: UNB+UNOC:3+<mark>BUYER-XY</mark>+RecipientID+031003:1947+0471104812' From supplier to SupplyOn: UNB+UNOC:3+SenderID+<mark>BUYER-XY</mark>+031003:1947+0471104812'
SupplyOn's organisation Code (NAD.C058.3124#1)	The SupplyOn organization code has to be copied out of the inbound message and be sent back in the outbound message to SupplyOn (see example). From SupplyOn to supplier: NAD+BY+00700800::91+<mark>Buy01</mark>:Buyer GmbH+Buyer GmbH & Co.KG+Schlossallee 100+Neustadt++12345+DE' From supplier to SupplyOn: NAD+BY+00700800::91+<mark>Buy01</mark>:Buyer GmbH+Buyer GmbH & Co.KG+Schlossallee 100+Neustadt++12345+DE'
Number of customer's plant (NAD.C082.3039)	The number of customer's plant has to be copied out of the inbound message and be sent back in the outbound message to SupplyOn (see example). From SupplyOn to supplier: NAD+CN+<mark>2222</mark>::92+Buy01:Buyer GmbH+Buyer GmbH & Co.KG+Schlossalle 100+Neustadt++12366+DE' From supplier to SupplyOn: NAD+CN+<mark>2222</mark>::92+Buyer GmbH+Buyer GmbH & Co.KG+ Schlossalle 100+Neustadt++12345+DE' NAD+ST+<mark>2222</mark> (for message type invoice)

Supplier number (NAD.C082.3039)	The supplier number has to be copied out of the inbound message and be sent back in the outbound message to SupplyOn (see example). From SupplyOn to supplier: NAD+SU+009999875::92++Supplier GmbH & Co.KG+Kastanienweg 12+Bremen++45678+DE' From supplier to SupplyOn: NAD+SU+009999875::92++Supplier GmbH & Co. KG+Kastanienweg 12+Bremen++45678+DE' NAD+SE+009999875 (for message type invoice)

2.3   Structure of EDIFACT messages

Please take notice of the following references to the EDIFACT structure if you send messages to SupplyOn:

Line breaks (CRLF = Carriage Return Line Feed) at the end of segments:
You can send EDIFACT messages with or without CRLF to SupplyOn. In case of use CRLF, CRLF has to be used at the end of every segment.
SupplyOn transmits the messages with CRLF

Multiple messages within one transmission file:
You can send multiple messages within one transmission file. Please take notice the single messages match one UNH-UNT. SupplyOn does not support functional groups.

```
UNA
UNB
        ┌─  UNH
        │   ....segments
        │   ....segments
        └─  UNT
        ┌─  UNH
        │   ....segments
        │   ....segments
        └─  UNT
UNZ
```

3   Further technical and organizational pre-requisites

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Bosch sends purchase orders to SupplyOn. SupplyOn is validating the invoice and matching it with master data & the corresponding purchase order. In case of validation errors regarding the orders information, the invoice processing is stopped and an e-mail alert is sent back to the supplier with a detailed error description. Only in case of a successful validation, the invoice is processed and transferred to Bosch, who will receive and perform the booking of the invoice.

From Bosch side there is a clear decision, that all suppliers using Supplier@Net with SupplyOn-EDI must be able to use the VDA4983 Container for inbound and outbound messages. If the supplier is not able the VDA4983, which is part of the demand message, he can use Supplier@Net INVOIC only via SupplyOn WebEDI or other formats, e.g. ZUGFeRD.

The VDA container transmitted with the demand message will contain, beneath the demand message as EDIFACT file, up to 5 documents with max. size 5MB per document and 10 MB overall attachment size. Allowed are the following document endings: txt, rtf, xml, csv, xls, xlsx, doc, docx, png, ppt, pptx, bmp, gif, jpeg, jpeg, tif, tiff and zip.

In the VDA container from the supplier has to be attached an original Invoice document in format pdf.

For the INVOIC messages RB Supplier@Net sends APERAK messages for the status of processing. The current approach is that all suppliers independent on the used invoice inbound channel (WebEDI, ZUGFeRD, EDI etc.) are able to check the processing status on the SupplyOn platform. (The status is not transferred to the supplier via the same transmission protocol like the invoice inbound channel.). This means, that there will always be the necessity to use WebEDI to check the status indication to the INVOIC messages.

These are the possible Status information to be transmitted on eInvoicing application side:
- Received/ Invoice is to be paid/ Invoice is paid/ Invoice is posted (booked)/ Invoice is prevalidated/ Invoice is rejected

For the efforts on SupplyOn side to establish and test the EDI connection the supplier has to sign a contract with SupplyOn with an average amount of 3.1 k € for all mentioned processes.

4   Bosch - Company Rules

SupplyOn offers certain customer specific rule sets, which take care that the correct data will be sent towards Bosch. The following topics are important for an invoice. If company rules are not fulfilled, the invoice is rejected and an error information is sent to the supplier.

4.1   Purchase Order (PO or MM) check

* PO number syntax check (e.g. correct number range and length). If validation failed, the invoice is rejected and an error information is sent to the supplier.
* The PO line item number length is no longer than five digits.
* If PO number and PO line item number exists then following invoice data are validated based on PO data:
* Check currency is the same as on PO

* Check line item quantity fits to quantity of PO line item

* Unit of measure correlates to unit of measure of PO line item

* Check unit price on line item level fits to unit price of PO line item

4.2 Invoice without PO reference (FI Check)

In case no PO number is available in the invoice other data (buyer contact person AND at least one of this following references like cost center, WBS, network ID asset or internal order) are required.

On invoice for each reference a label (unique keyword), e.g. "cost center" must be available.

4.3 Zero invoice and calculated zero invoices

In case of the total invoice amount is zero, a warning is created but the invoice will be processed. In future, zero invoices might be rejected.

5 Rules for validation of invoices

SupplyOn is performing certain validation of the invoice data before the document is processed further. The validations are done based on rules, which can be country or customer specific. In case of validation errors, the further processing is stopped and an error e-mail is sent out to the seller contact e-mail address provided in the invoice. The invoice has to be corrected and sent again by the supplier.

5.1 Country Rules

Country-specific legal requirements are configured in country specific validation rules. SupplyOn combines the individual country rules in country specific rule sets. The correct rule set is applied based on the Seller country code or VAT ID.

5.2 Bosch - Company Rules

SupplyOn offers certain customer specific rule sets, which take care that the correct data will be sent towards Bosch. The following topics are important for an invoice. If company rules are not fulfilled, the invoice is rejected and an error information is sent to the supplier.

5.2.1 Purchase Order (PO or MM) check

- **PO number** syntax check (e.g. correct number range and length). If validation failed, the invoice is rejected and an error information is sent to the supplier.
- The **PO line item number** length is no longer than five digits.
- If **PO number** and **PO line item number** exists then following invoice data are validated based on PO data:
  - Check **currency** is the same as on PO
  - Check **line item quantity** fits to quantity of PO line item
  - **Unit of measure** correlates to unit of measure of PO line item
    - A list of possible units of measure can be found in appendix B.
  - Check **unit price** on line item level fits to unit price of PO line item

5.2.2 Invoice without PO reference (FI Check)

In case no PO number is available in the invoice other data (buyer contact person AND at least one of this following references like cost center, network ID, WBS, asset or internal order) are required.

On invoice for each reference a label (unique keyword), e.g. "cost center" must be available.

5.2.3   Credit Note

For credit notes the same validation rules are applied given in point 5.2.1 and 5.2.2.

5.2.4   Zero invoice and calculated zero invoices

In case of the total invoice amount is zero, a warning is created but the invoice will be processed. In future, zero invoices might be rejected, if this has not been agreed with Bosch.

5.2.5   VAT Calculation

Rounding differences in VAT calculations on **total level** are within limitations allowed.
Rounding differences in VAT calculations on **line level** are not allowed - the invoice is rejected and an error information is sent to the supplier.

1. Allowed rounding differences in VAT calculations on total level <= 0,01 EUR
2. Allowed rounding differences in VAT calculations on line level = 0,00 EUR

5.2.6   Reason for 'no tax' applied

A reason for 'no tax' applied has to be provided in case of
- Tax exemption
- Reversed charge

5.2.7   Invoice number has to be unique

Every invoice number has to be unique per supplier organization

5.2.8   Address data

The following information about partner addresses are required: Name, street/post box, postal code, city and country for each
- Buyer
- Seller
- Invoicee
- Consignee
- Payee

5.2.9   Prepayment

In case of prepayments, a **prepayment document reference** is expected.

5.2.10   Line items

Line items must contain:
- Quantity
- Quantity unit
- Unit price
- Pricing unit
- Line amount
- Item description

Line items can contain:
- Buyer part number
- Discount / Charges

5.2.11   Bank data

The preferred bank account is required within the minimum information:
- Bank name
- IBAN
- BIC

5.3   References

The references given in chapter 5.2.1 und 5.2.2 can be indicated with the following qualifiers:

Type	Description	Element	Qualifier
MM Check	Purchase Order	RFF - C506 - 1154	ON
FI Check	Asset Number	RFF - C506 - 1154	AEN
	WBS-Element		AOL
	Network-ID		AWJ
	Internal Order		IL
	Cost Center		AWE
	Buyer Contact	CTA - C056 - 3412	

5.4   Formats

The indication for country codes, units of Measure and currencies should be indicated as follows:

- Country codes→ Format ISO 3166
- Units of measure→ Code Appendix a
- Currencies→ Format ISO 4217 3 alpha Code

6   Technical connection
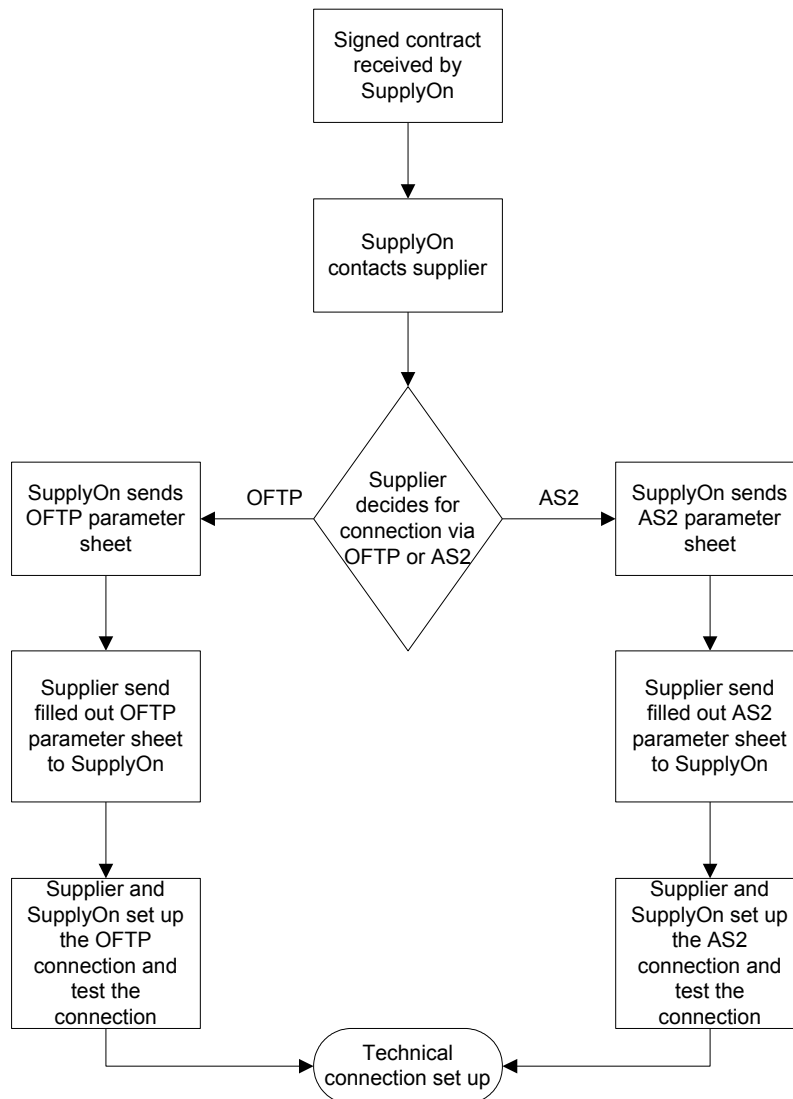
7   Test process

After the successful establishment of the technical connection test messages between SupplyOn and the supplier will be exchanged. During the test phase a SupplyOn test customer will transmit and receive test messages. After completion of the test phase SupplyOn will productively switch the connection to your customer.

Please note that the test messages have to correspond to the SupplyOn EDIFACT guideline.

Usually the following test runs will be relevant for you. It naturally depends on the process your customer has registered you and/or the process you would like to use with SupplyOn EDI.

8   Example message GlobalINVOIC:

UNA:+.? '
UNB+UNOC:3+0000017604:1+2050:1+160621:1620+386'
UNH+386+INVOIC:D:07A:UN:GA0131'
BGM+380+TSH20160621-2+9'
DTM+137:20160621:102'
DTM+1:20160621:102'
FTX+AAB++Y+30 Tage netto'
FTX+REG+++TestTest'
FTX+ZZZ+++PRDR:FI'
NAD+BY+0110::92+BOSCH:BOSCH GROUP+Robert Bosch GmbH+Postfach
1615+Magdeburg++39006+DE'
RFF+VA:DE811128135'
CTA+IC+:SO-Test'
NAD+ST+0110::92+BOSCH:BOSCH GROUP+Robert Bosch GmbH:Werk
Feuerbach+Wernerstr. 31+Stuttgart++70469+DE'
NAD+SE+0000012345::92++SupplierName+SupplierStreet+SupplierCity++SupplierZipCode+
DE'
RFF+VA:FR223073938'
RFF+XA:RCSParis123'
CTA+IC'
COM+tim.schumacher@supplyon.com:EM'
NAD+PE+0000012345::92++SupplierName+SupplierStreet+SupplierCity++SupplierZipCode+
DE'
NAD+IV+2050::92++Robert Bosch GmbH+Postfach 1615+Magdeburg++39006+DE'
RFF+VA:DE811128135'
CUX+2:EUR:4'
PYT+1++5+3+D+30'
DTM+140:20160721:102'
FII+RH+DE00000000000000000123:SupplierName+BYLABEM1::17::::Bank'
ALC+C+Frachtkosten+++FC'
MOA+8:20.00:EUR:4'
ALC+C+Verpackungskosten+++PC'
MOA+8:10.00:EUR:4'
LIN+1++Test01:IN'
PIA+1+4711-001:SA'
IMD+++:::Kugelschreiber'
QTY+47:1500.00:PA'
DTM+1:20160621:102'
MOA+203:7500.00:EUR:4'

MOA+38:7500.00:EUR:4'
PRI+AAA:5.00:::1'
PRI+AAB:5.00:::1'
RFF+DQ:10616-12'
RFF+IL:A0000002'
TAX+7+VAT+++:::20+S'
UNS+S'
CNT+2:1'
MOA+77:9036.00:EUR:4'
MOA+125:7530.00:EUR:4'
MOA+176:1506.00:EUR:4'
MOA+79:7500.00:EUR:4'
MOA+136:30.00:EUR:4'
TAX+7+VAT+++:::20+S'
MOA+124:1506.00:EUR:4'
MOA+125:7530.00:EUR:4'
UNT+50+386'
UNZ+1+386

9   Appendix UoM

Code	Name
ANN	year
BG	bag
BO	bottle
CA	can
CMK	square centimetre
CMT	centimetre
CR	crate
CT	carton
DAY	day
DMQ	cubic decimetre
DR	drum
DZN	dozen
EA	each
FTQ	cubic foot
GLL	gallon (US)
GRM	gram
HUR	hour
KGM	kilogram
KMQ	kilogram per cubic metre
KMT	kilometre
KT	kit
LBR	pound
LE	lite
LTR	litre
M1	milligram per litre

SUPPLY**ON**

MIL	thousand
MIN	minute [unit of time]
MLT	millilitre
MMK	square millimetre
MMT	millimetre
MON	month
MTK	square metre
MTQ	cubic metre
MTR	metre
MWH	megawatt hour (1000 kW.h)
OA	panel
PA	packet
PCE	piece
PF	pallet (lift)
PK	pack
PR	pair
RO	roll
SET	set
SMI	mile (statute mile)
ST	sheet
STN	ton (US) or short ton (UK/US)
TNE	tonne (metric ton)

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