Short Information for Suppliers
about minimum requirements on communication types, EDIFACT format and connection process

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Your Supply Chain
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Content

1 Minimum requirements Checklists

All EDI connections must comply with our security and operational concept for the SupplyOn platform. Here is an excerpt from the Key Measures:

"**Confidentiality:** SupplyOn protects data transmission by means of strong encryption (at least 128-bit TLS) and protects access to the SupplyOn Services by means of user-specific accounts with user ID and password. The individual users are governed by a role concept that grants each and every user specific rights to use individual services and to access certain data. The role concept is defined for each of the services. SupplyOn deploys a multi-level firewall architecture to protect the systems and the data stored in the platform databases against unauthorized access from the outside."

1.1 AS2

- ☑ URL must be at least HTTPS incl. TLS 1.2 (minimum)
- ☑ Basic Authentication for data transmission to SupplyOn (Username and PW will be hand over with the customized parameter sheet)
- ☑ The AS2 message subject must be filled with the agreed values for "Message Subject / Subject".

1.2 OFTP2 via TCP

- ☑ OFTP2 only via TCP/IP (Internet)
- ☑ encrypted transmission (outbound AES/256)
- ☑ digital signature (outbound with SHA1 algorithm)
- ☑ The VFN must be filled with the agreed values for "Message Subject / Subject".

1.3 Additional requirements independent from transmission way

- ☑ Our systems are protected by a firewall. Communication is therefore only possible if we whitelist the IP address of the partner. It is therefore essential that you give us all possible IP addresses from which you want to send to/receive from our systems. Not only for users of a cloud solution can several IP addresses or ranges (within a reasonable area) be authorized.
- ☑ For each message type which you want to send to SupplyOn, we need a different message subject.
- ☑ If using a provider connection, we would prefer an unique AS2-ID/SFID for your company to secure the error notification directly to you.
- ☑ We recommend starting a project with a new connectivity and an outbound message. If you want to send a message to SupplyOn, please make sure that you have successfully processed the demand message via EDI or manually. This is because several values from the demand message are needed for a message to be booked.

2   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 (with TLS 1.2)

2.1   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, but SupplyOn supports OFTP2 only via TCP/IP (Internet).

2.1.1   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, while SupplyOn allows only an encrypted transmission. After the transmission a confirmation in form of an End to End Response (EERP, EERN) 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.

2.1.2   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.

2.1.3   OFTP2 encryption

SupplyOn uses with OFTP2 a symmetrical encryption (AES/256 algorithm), the SHA1 digital signature algorithm, data compression and only a signed and encrypted receipt.

2.2   AS2 via Internet (HTTPS)

AS2 (Applicability Statement 2) is a 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..

2.2.1   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.

2.2.2   AS2 Header – Message Subject

The AS2 Client from SupplyOn does not open the EDI messages but only reads information from the HTTP header.
Important for our AS2 Client and the Partner / Entity Finding is the AS2 message subject (depending on the process, e.g.: SO_ORDRSP, SO-DESADV-D07A).
Please populate the AS2 message subject of your respective AS2 client configuration with the agreed values for "Message Subject / Subject".

3 Message Subject

Independent of the transmission path, the SupplyOn system requires an agreed string in the message subject (AS2-subject or VFN). This subject is used to select the mapping for further processing. Therefore, it is recommended to specify a value according to the message type. Wildcards can be used (additionally), but the field cannot remain empty.

4 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 sellside 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 can find the updated EDIFACT format guideline in our M2M-Infoportal.

4.1 Routing of Error notification

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. 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.

On SupplyOn, an connection can be used for any number of partner relations.

But in case of error (e.g. syntax, routing or booking) SupplyOn will send an email to one contact per technical connection. The technical connection, in case if AS2, is determined by the AS2 ID, in case of OFTP2 by the SFID. The real relation in the message on error is not considered. In these constellations we usually have two options:

- Use partner-specific AS2-ID/SFID in case of provider connections, means for each partner one ID
- Or the error message is not sent to the suppliers directly, but to the involved EDI partner, in this case provider, who than has to filter and forward the notification immediately.

The 2nd option is usually not favored by EDI partners, since they have this additional task of distributing the error messages to the correct partner. This is why the first option is usually favored.

We may be able to offer another alternative: If the EDI partner can process this message type more easily, there is a possibility to use EDIFACT APERAK messages instead of an error e-mail notification.

4.2 EDIFACT Routing, syntax or booking check

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

4.2.1 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 3 segments (so called Routing Triple)
• Customer organization code NAD+BY
• Customer plant code in NAD+CN resp. NAD+ST
• Supplier number in NAD+SU resp. NAD+SE

4.2.2 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.

4.2.3 Booking check

All incoming messages from supplier organizations must be a response to a demand message in the corresponding system (QAS or PRD). Means for every ORDRSP there has to be a corresponding ORDERS in SupplyOn-System (whether via EDI or only in WebEDI). For every DESADV you need a (confirmed) ORDERS or a DELFOR in the system. And INVOICEs are only accepted if there is at least a (confirmed) ORDERS.

For the system to match the incoming message to the appropriate DEMAND, the following information is required:

- In the **ORDRSP** the corresponding ORDER-No. must be in BGM-segment, and order position in LIN-segment must the same in both messages. And the plant code in the NAD+CN must be the same.
- In the **ASN** the complete RFF+ON segment (including Order No and position) must be returned from the DELFOR or it must be built with Order No and position. And the plant code in the NAD+BY must be the same as NAD+BY in DELFOR or NAD+CN in ORDERS.
- In the **INVOIC** the complete RFF+ON segment must be built with Order No and position. And the plant code in the NAD+ST must be the same as in NAD+CN in the ORDERS.

5   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 SupplyOn.

6   List of abbreviations

AS2	Applicability Statement 2 (= specification for data exchange)
ANSI	American National Standards Institute
EDI	Electronic Data Interchange
EDIFACT	EDI for Administration, Commerce and Transportation
EERP	positive acknowledgment of receipt via OFTP2
EERN	negative acknowledgment
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
TLS	Transport Layer Security
VFN	Virtual File Name (for messages via OFTP2)
VDA	Association of the Automotive Industry