

# **Starter pack for EDI connection of business partners to MAN Truck & Bus**

Author  
Version  
as of

EDI Team  
2.2  
18.4.2019



## Contents

1	EDI with the MAN Truck & Bus .....	5
2	EDI connection process.....	6
2.1	Flow chart .....	6
2.2	Technical infrastructure .....	9
2.3	File names .....	11
2.4	Overview of the plants of the MAN Truck & Bus .....	14
3	Delivery call-offs .....	15
3.2	Delivery call-offs with EDI.....	16
3.3	Delivery call-offs from SAP plants .....	17
3.4	Production-synchronous call-offs (JIT / JIS) .....	18
3.5	Individual Order – Odette EDIFACT ORDERS .....	18
4	Delivery notes / delivery notices.....	19
4.2	Delivery-note EDI - VDA 4913.....	19
4.3	Delivery-note – Odette EDIFACT DESADV/AVIEXP V5R1 .....	22
4.4	EDI goods receipt/issue slip - VDA 4912 .....	23
4.5	Delivery notes to SAP plants .....	23
4.6	Faulty data transfer .....	25
5	Invoicing/payment notice .....	26
5.2	Invoice EDI - VDA 4938 .....	28
5.3	Payment notices – VDA 4907.....	28
5.4	Faulty data transfer .....	28
6	MAN WebEDI-Portal.....	29
7	Contact persons .....	30
8	Plant codes.....	31
9	Delivery address and invoicing address.....	32
10	Appendices.....	35

### Online version at:

<http://www.corporate.man.eu/en/company/purchasing/man-truck-and-bus-ag/supplier-applications-/Supplier-applications.html>



## List of figures

- Figure 1 Overview of data exchange with EDI ..... 5
- Figure 2 Test/productive connection..... 7
- Figure 3 EDI connection procedure ..... 8
- Figure 4 Transfer.....10
- Figure 5 Overview of the plants .....14
- Figure 6 Message exchange for material management .....15
- Figure 7 Differences in SLA between an SAP plant and a non-SAP plant .....17
- Figure 8 Mixed packaging .....21
- Figure 9 Segregated packaging.....21
- Figure 10 Message exchange for accounting/payment.....27
- Figure 11 Overview of data exchange with the MAN WebEDI-Portal.....29



## Glossary

Item	
DELFOR	EDIFACT call-off
DESADV	EDIFACT delivery note
DFÜ	abbreviation for the german word "Datenfernübertragung" - long-distance data transmission
EDI	Electronic Data Interchange
EDIFACT	Electronic Data Interchange For Administration, Commerce and Transport - international format for the exchange of business data via EDI
GLOBAL INVOIC	EDIFACT global invoice
JIS	Just in Sequence
JIT	Just in Time
LIAB	abbreviation for the german word "Lieferabruf" = call-off
LIEF	abbreviation for the german word "Lieferschein" = delivery note
LP	abbreviation for the german word "Lieferplan" = delivery schedule
MN	abbreviation for MAN Nutzfahrzeuge (company name of MAN Truck & Bus till 2010)
MTB	abbreviation for MAN Truck & Bus
Odette-ID	Identifier for an automotive company. Is assigned by the VDA: <a href="http://www.vda.de/de/publikationen/publikationen_downloads/index.html">http://www.vda.de/de/publikationen/publikationen_downloads/index.html</a> "OSCAR explained"
OFTP	Odette File Transfer Protocol
ORDERS	EDIFACT order
SCP	Supply Cockpit
SFID	Start File ID
SLB	loading reference number (Sendungs-Ladungs-Bezugsnummer)
SNR	part number (Sachnummer)
SSID	Start Session ID
VDA	Verband deutscher Automobilindustrie publisher of the VDA-reference for EDI-communication
VDA 4905	VDA call-off
VDA 4907	VDA payment notice
VDA 4912	VDA issue slip
VDA 4913	VDA delivery note
VDA 4915	VDA JIT call-off
VDA 4916	VDA JIS call-off
VDA 4938	EDIFACT Global Invoice
VDA 4983	Container (EDIFACT Global Invoice incl. appendices)

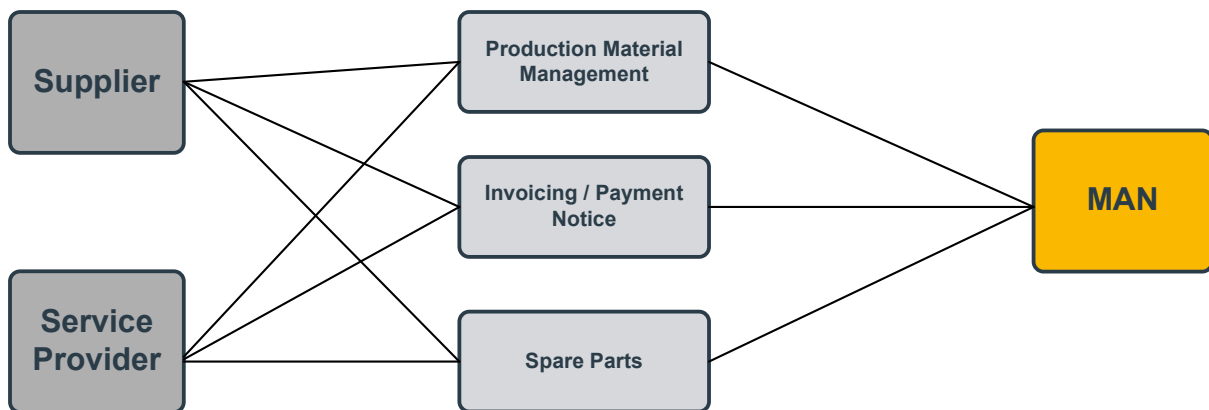


# 1 EDI with the MAN Truck & Bus

The structured electronic data interchange with business partners supports the provision of MAN with material, parts, services and information that guarantees both continuous production and the constant supply of spare parts.

This document describes the handling of the electronic data exchange between MAN and external partners and acts as a manual for setting up such connections and transferring data with suitable quality.

Both material management and accounting/payment notices are covered in this starter pack. The focus of this starter pack is on the procurement side of production material for MAN, i.e., on the connection of suppliers and service providers.



**Figure 1 Overview of data exchange with EDI**

The target of MAN is to integrate as many suppliers and service providers as possible in the automated data exchange, and at the same time to cover the entire process that is relevant for each respective supplier (e.g., call-offs following the delivery notes and invoices) (cf. Figure 1).



## 2 EDI connection process

This chapter describes the process for connecting a supplier to the MAN Truck & Bus. The procedure is covered in chapter 2.1 and the technical infrastructure is described in chapter 2.2.

### 2.1 Flow chart

The EDI connection is divided into four phases:

- Prearrangement
- Set-up of the communications connection
- Test operation
  - Delivery call-offs (incoming messages at the supplier) and subsequent release for productive operation
  - Delivery notes and invoices (outgoing messages from the supplier) with subsequent release for productive operation
- Productive release

The potential partners for an EDI connection are selected by MAN and contacted specifically by the EDI Team. Regardless of this, suppliers may also take the initiative in setting up EDI connections by contacting the EDI Team or the responsible material manager themselves.

MAN dispatches the EDI starter pack, which gives the supplier comprehensive information about supported processes and formats. The supplier checks the possibilities for implementing EDI according to the technical procedures and formats specified by MAN.

As the first step, the line is set up and tested. This requires the completed EDI parameter sheet (appendix 1). Please note that this is the only form accepted by the MAN Truck & Bus.

In parallel, the supplier adapts its data preparation and data processing, if necessary, to the particular characteristics of the data exchange with MAN, in order to guarantee complete compatibility with the requirements of MAN.

The delivery call-offs via EDI are released first. The supplier receives a call-off fax in parallel with the call-off via EDI, in order to check the data received by EDI. The supplier uses suitable measures to ensure that the electronic call-offs are processed correctly and stored in its system. After the test phase, the data are only transmitted electronically.



In the next step, the delivery-note and invoice test phase is initiated. MAN operates two parallel systems (see Figure 2). One is for test operation and the other is for productive data. Initially, the supplier is set up in the MAN test system. If a transfer is made, the message is automatically forwarded to the relevant system. In the test phase, the supplier sends his delivery notes/invoices to MAN via EDI and receives feedback about any possible error. Once fault-free transfer has been secured, the supplier is released for productive operation and entered into the productive system.

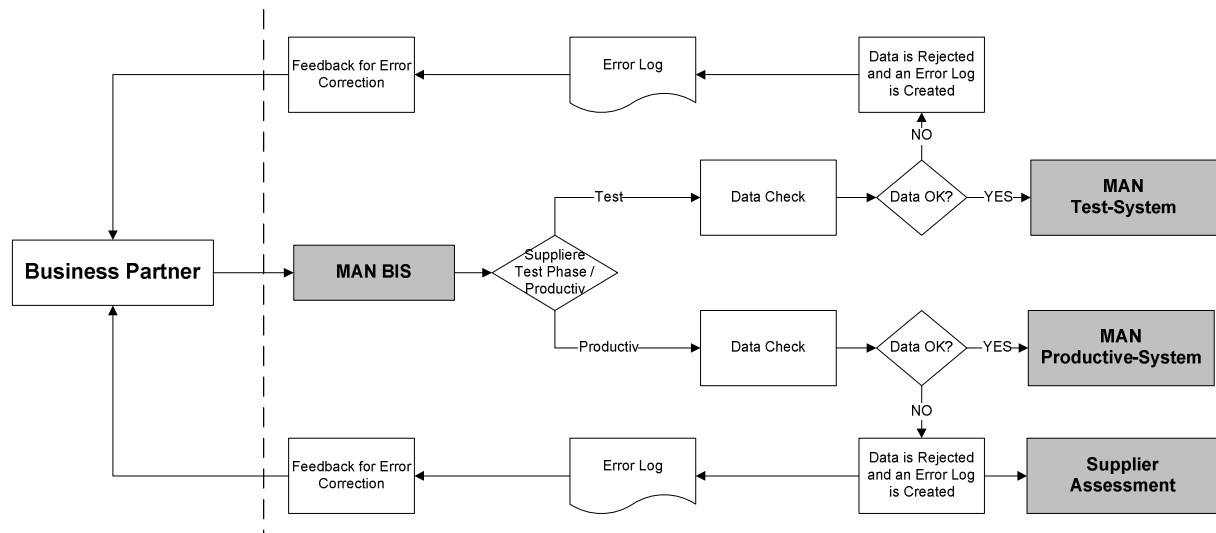


Figure 2 Test/productive connection

In the test phase, there is intensive contact between the EDI Team at MAN and the supplier to solve any possible remaining problems both quickly and efficiently.

If further messages for productive operations with the supplier are intended, the test-operation phase must be repeated for these messages.

The entire procedure is shown in diagram form in Figure 3.

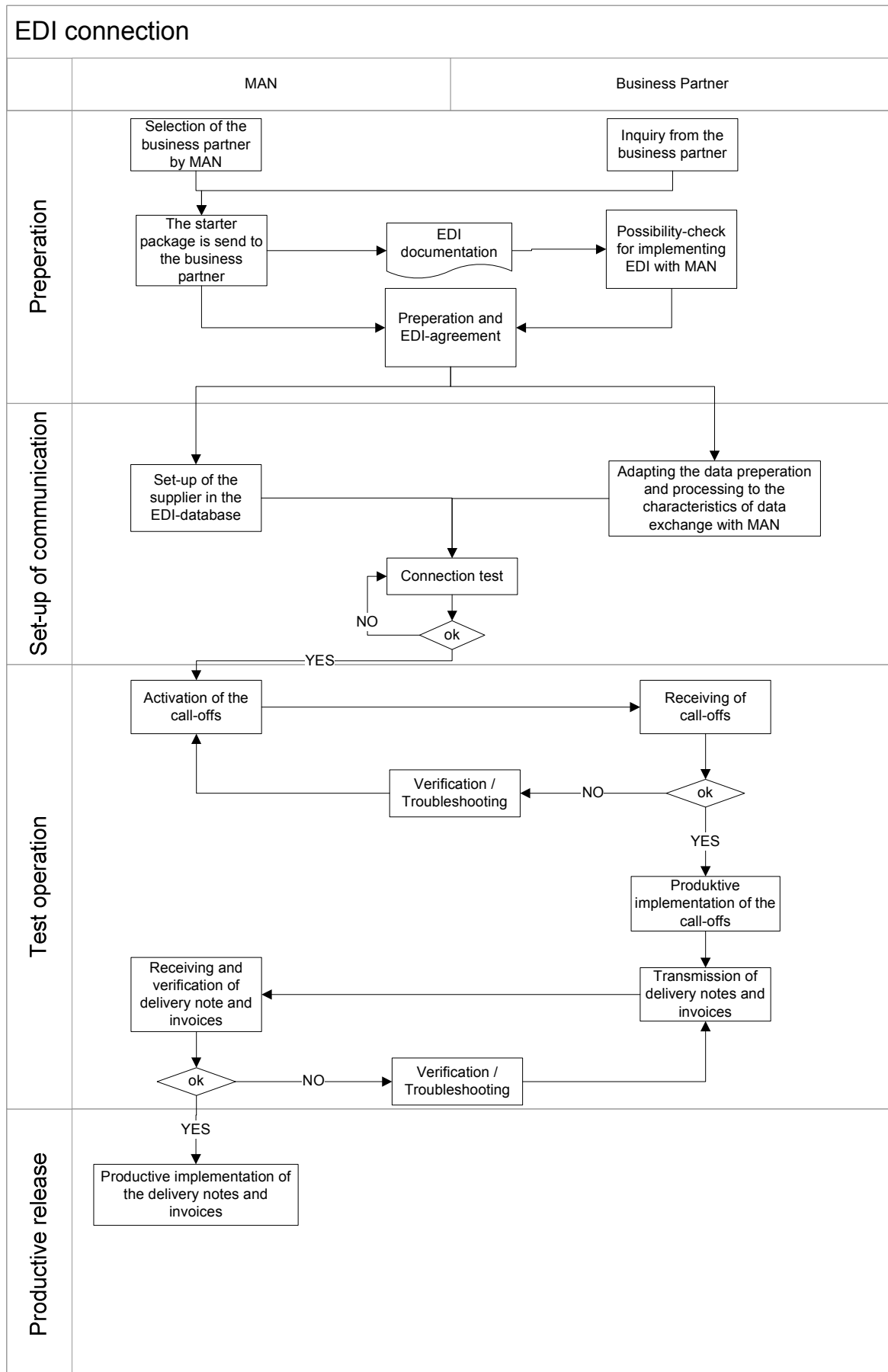


Figure 3 EDI connection procedure





## 2.2 Technical infrastructure

The technical parameters of the connection set-up between MAN and the supplier are mutually defined through the use of the "EDI parameter sheet" (appendix 1).

MAN uses an OFTP communication to send and to receive files. To ensure that received files can be assigned to the correct processing system, it is necessary to maintain certain naming conventions (see chapter 2.3).

The supplier may use any system that is compatible with OFTP. However, the file naming convention is specified by MAN.

MAN supports the following communications path: <sup>1</sup>

### Productive-System:

OFTP2 DNS Name	edi.mn.man.de
OFTP2 Port	6619
SSID	O0013000005MAN*MN**BPN
SFID	O0013000005MAN*MN**BPN

### Test-System:

OFTP2 DNS Name	tedi.mn.man.de
OFTP2 Port	6619
SSID	O0013000005MAN*MN**BKN
SFID	O0013000005MAN*MN**BKN

---

<sup>1</sup> The indicator \* for Odette ID corresponds to blank

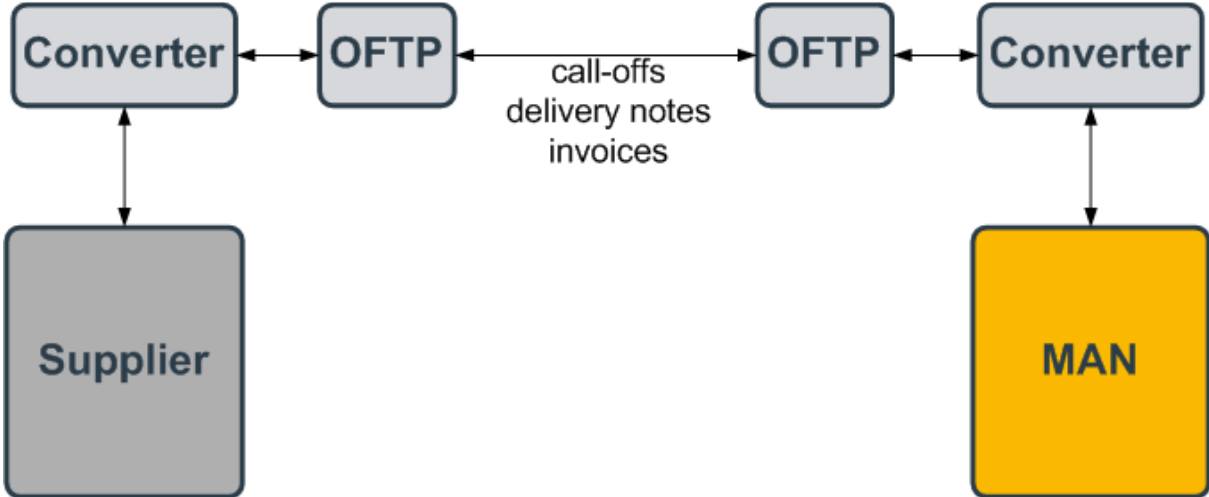


Figure 4 Transfer

Figure 4 shows the technical structure of the file transfer. The building of the filenames is shown in chapter 2.3.



## 2.3 File names

The file names for delivery call-offs, delivery notes and invoices are generally determined according to a fixed set of rules:

Delivery call-offs (VDA 4905 or EDIFACT DELFOR):

DVA.BPN<Station-ID>.MN.LIAB<Company-ID>

Delivery call-offs for all MAN plants will be generated and transmitted in one file name (MN is used as plant code).

Orders (EDIFACT ORDERS):

DVA.BPN<Station-ID>.MN.ORDER<Company-ID>

Orders for all MAN SAP-plants will be generated and transmitted in one file name (MN is used as plant code).

Delivery notes (VDA 4913 or EDIFACT DESADV):

DVA.BPN<Station-ID>.<plant code>.LIEF<Company-ID>

Delivery notes for some MAN plants have to be merged in one file:

M for Munich (M), PDC South (EM), Plauen (S), Nuremberg (N),  
Salzgitter (W), Salzgitter Spare Parts (ES), Cracow (C),  
Starachowice (F), Wittlich TMC (I), Munich TMC (Q)  
Y for Steyr (Y) and Steyr KUL (K)

DVA.BPNZEN.TR.LIEF (fix virtual file name for all suppliers)

TR for Ankara (TR)

Invoices (EDIFACT GLOBAL INVOIC):

DVA.BPN<Station-ID>.<plant code>.GLI

Invoices for some MAN plants have to be merged in one file:

M for Munich (M), PDC South (EM), Plauen (S), Nuremberg (N),  
Salzgitter (W), Salzgitter Spare Parts (ES), Cracow (C), Wittlich  
TMC (I), Munich TMC (Q)  
Y for Steyr (Y) and Steyr KUL (K)

Companies with several branches or service-providers have to add the <Company-ID> after .GLI

DVA.BPN<Station-ID>.PL.RECH<Firmen-ID>

F for Starachowice (F)



Station-ID and Company-ID of the supplier are assigned by MAN when setting up the line. Plant codes are found in chapter 8.

In the case of transmitting VDA files the data will be transmitted in ASCII format and with a fixed blocked record length of 128 bytes. Messages in Edifact format have to be sent in unformatted text format. Do not send Edifact messages with a fixed blocked record length of 128 bytes.

#### Examples of file names:

Station-ID = **ZEB** (defined for supplier when EDI connection is configured)

Company-ID = **AEF**

Example 1 (Delivery call-offs general)

→ File name: DVA.BPN**ZEB**.**MN**.LIAB**AEF**

Example 2 (Orders general)

→ File name: DVA.BPN**ZEB**.**MN**.ORDER**AEF**

Example 3 (Delivery notes to Munich)

→ File name: DVA.BPN**ZEB**.**M**.LIEF**AEF**

Example 4 (Delivery notes to Starachowice)

→ File name: DVA.BPN**ZEB**.**M**.LIEF**AEF**

Example 5 (Delivery notes to Steyr and Steyr KUL)

→ File name: DVA.BPN**ZEB**.**Y**.LIEF**AEF**

Example 6 (Delivery notes to Ankara)

→ File name: DVA.BPN**ZEN**.**TR**.LIEF (fiy virtual file name for all suppliers)

Example 7 (Invoices to Steyr and Steyr KUL)

→ File name: DVA. BPN**ZEB**.**Y**.GLI

Example 8 (Invoices to Munich)

→ File name: DVA. BPN**ZEB**.**M**.GLI

Example 9 (Invoices to Nuremberg)

→ File name: DVA. BPN**ZEB**.**M**.GLI

Example 10 (Invoices to Starachowice)

→ File name: DVA. BPN**ZEB**.**PL**.RECH**AEF**



For test-messages to our systems please use **TEST.** at the beginning of the file:

Example 11 (Test-Delivery notes to Munich)

→ File name: **TEST.BPNZEB.M.LIEFAEF**

Example 12 (Test-Invoice to Munich)

→ File name: **TEST.BPNZEB.M.GLI**



## 2.4 Overview of the plants of the MAN Truck & Bus

Various different IT systems are used at the plants of the MAN Truck & Bus. This leads to a variety of requirements for the EDI communications of the respective plants. An overview can be found in Figure 5

MAN Truck & Bus AG Overview					
Serial Parts plants					
	Munich	Salzgitter	Cracow / Niepolomice	Steyr	Nuremberg
Plant Code	M	W	C	Y	N
Part of the MAN Truck & Bus AG	MAN Truck & Bus AG	MAN Truck & Bus AG	MAN Trucks Sp.z.o.o.	MAN Truck & Bus Österreich GesmbH	MAN Truck & Bus AG
SAP-plant	X	X	X		X
55-scheduling agreement (one dimensional)	X	X	X		X
B-scheduling agreement				X	
different processing of invoices				X	
Serial Parts plants					
	Plauen	TMC Munich	TMC Wittlich	Starachowice	Ankara
Plant Code	S	I	Q	F	TR
Part of the MAN Truck & Bus AG	MAN Truck & Bus AG	MAN Truck & Bus AG Truck Modification Center	MAN Truck & Bus AG Truck Modification Center	MAN Bus Sp. z o.o.	MAN Türkiye A.S.
SAP-plant	X	X	X		
55-scheduling agreement (one dimensional)	X	X	X		
B-scheduling agreement				X	
different processing of invoices				X	not possible
		Serial Parts plants	Spare Parts plants		
	Steyr-KUL	PDC South	Salzgitter		
Plant Code	K	EM	ES		
Part of the MAN Truck & Bus AG	MAN Truck & Bus Österreich GesmbH	MAN Truck & Bus AG	MAN Truck & Bus AG		
SAP-plant	X	X	X		
55-scheduling agreement (one dimensional)	X	X	X		
B-scheduling agreement					
different processing of invoices					

Figure 5 Overview of the plants

The material management of the SAP plants differs from the other plants. In these cases, a one-dimensional scheduling agreement is used (55-SLA number). On this subject, please note the information in the chapters 3.3 and 4.5.

### 3 Delivery call-offs

#### 3.1.1 Application area

The process described here applies to suppliers who continuously supply material for production. The supplier is continuously informed about the anticipated demand (according to the deadline and the volume).

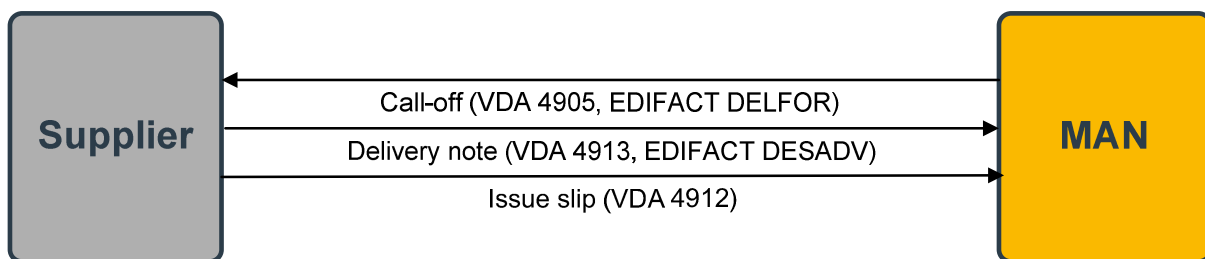
When a defined point in time is reached, these unbinding preview dates become binding call-offs. For just-in-time processes with unmixed call-offs, JIT call-offs (detailed call-offs) are used and, if necessary for production-synchronous delivery, corresponding JIS call-offs (production-synchronous call-offs). For suppliers connected via the Supply Cockpit, detailed call-offs or production-synchronous call-offs are created and optimised for the containers.

Receipt of the call-off must be confirmed with an EERP. The response containing this EERP (confirmation of receipt) must be sent immediately, either in the same transfer session or in a session of its own. Sending the EERP days or weeks later is not permitted!

The supplier announces its deliveries with the delivery-note by EDI. These data act as the basis for posting the goods receipt when the delivery arrives.

#### 3.1.2 Message exchange

Initially, the following message scenario is covered in this starter pack:



**Figure 6 Message exchange for material management**

MAN sends the supplier delivery call-offs that are subject to the provisions of the Service Level Agreement in terms of volume and due date. The time horizons for this type of call-off may be up to one year. Delivery call-offs are regenerated regularly according to the production planning and completely replace any previous delivery call-offs.



The supplier plans and carries out its deliveries in accordance with the volume / due date combinations specified in the call-offs. The deliveries are announced electronically with delivery notices (also referred to as delivery-note EDI). The delivery-note must be transmitted when the goods are dispatched at the latest, so that it is possible to make a proper posting when the goods arrive.

The EDI goods receipt/issue slip must be enclosed with the delivery according to VDA 4912. The production of delivery notes according to DIN 4994 is omitted.

### 3.1.3 Formats in use

Delivery call-off	VDA 4905, Odette EDIFACT Subset DELFOR/DELINS V4R1
Delivery note	VDA 4913, Odette EDIFACT Subset DESADV/AVIEXP V5R1

## 3.2 Delivery call-offs with EDI

### 3.2.1 Definition and application area

The delivery-note EDI includes at present the delivery call-offs of all the plants in the MAN Truck & Bus for a specific supplier. The key criteria are the MAN item number, the contract number, the order number (for the specific item number and plant), the plant and the delivery location.

The deadlines specified in the call-offs must be regarded as arrival times at the respective plant.

The frequency of the transfer depends on the relevant needs; delivery call-offs may be transferred every day, if necessary.

The precise field description for the delivery call-off in accordance with VDA 4905 can be found in the appendix 2. Appendix 4 describes the delivery call-offs in the format Odette DELFOR/DELINS V4R1.

The reception of the call-off has to be confirmed in the form of an EERP.

For technical system reasons, only one customer number is transferred in the delivery call-off (in most cases, from the Munich plant). The plant code (see chapter 8) permits sorting by plant, and it is transferred in record type 512, field 03 "Customer plant".

Example:

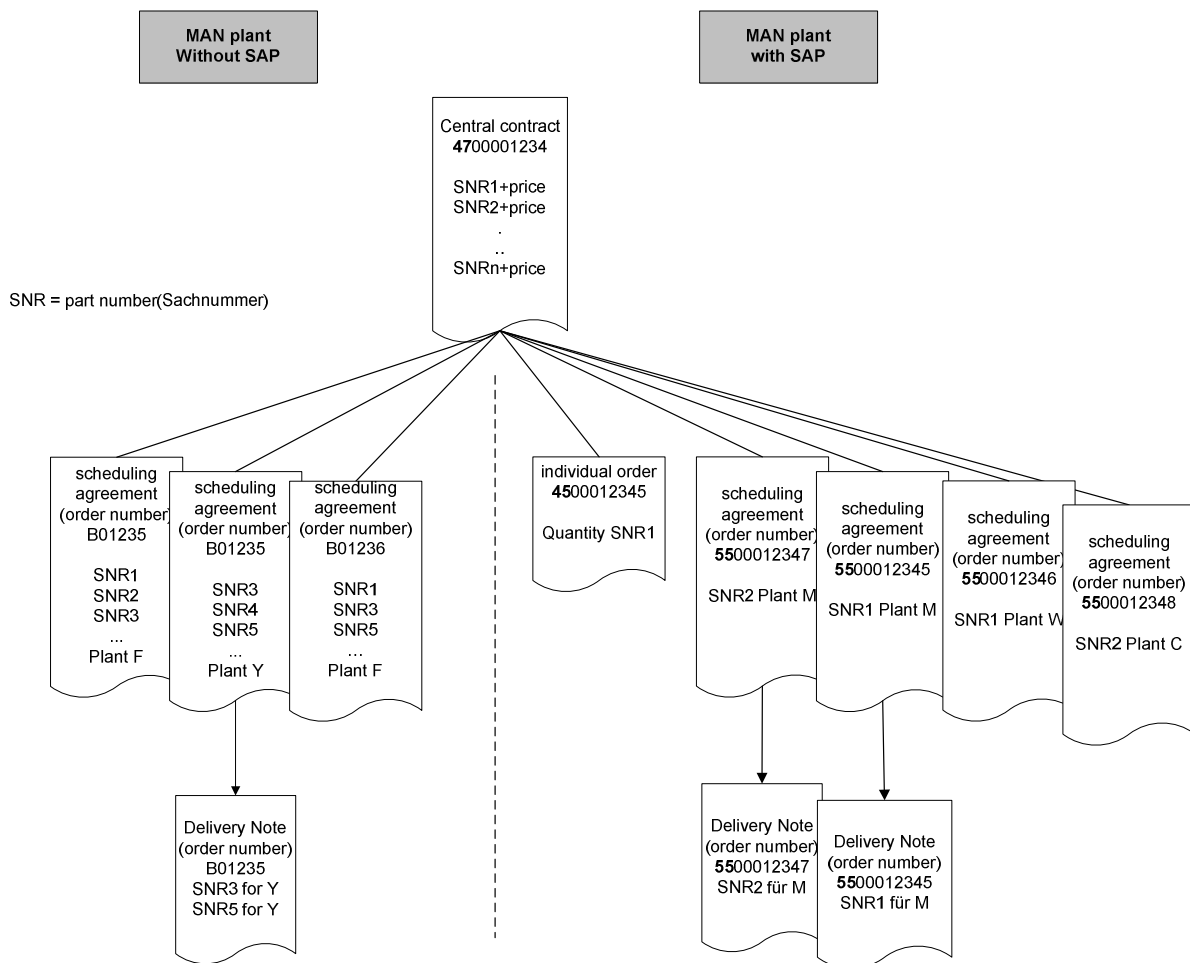
```
511021234567891234567890000100002080101071231
    Customer number of the Munich plant
51201M 00000000208010100000000107123181.12345.1234          P0.00000-001...
    Plant code
51301...
```





### 3.3 Delivery call-offs from SAP plants

At the SAP plants (see Figure 5) Munich (M), PDC South (EM), Nuremberg (N), Salzgitter (W) , Salzgitter Spare Parts (ES), Cracow (C), Wittlich TMC (I), Munich TMC (Q), Plauen (S) and Steyr KUL (K) MAN works with one-dimensional scheduling agreements. The scheduling agreements are generated for each specific plant on the basis of a central contract. Each scheduling agreement contains precisely one item with the item number 10. The scheduling-agreement number contains 10 digits and begins with 55\* (e.g., 5500123456) (see Figure 7). This number indicates specific requirements for the delivery-note (see chapter 4.5).



**Figure 7 Differences in SLA between an SAP plant and a non-SAP plant**

As a rule, there is a 1:1 relation between the central contract 47XXXXXXXX and the order number BXXXXX; however, in special cases there may be different order numbers for specific MAN plants (e.g., B01235 and B01236).



### 3.4 Production-synchronous call-offs (JIT / JIS)

For just-in-time processes with unmixed call-offs, JIT call-offs (detailed call-offs) are used and, if necessary for production-synchronous delivery, corresponding JIS call-offs (production-synchronous call-offs). For suppliers connected via the Supply Cockpit, detailed call-offs or production-synchronous call-offs are created and optimised for the containers.

For detailed information on the EDI connection for JIS call-offs, please refer to the documentation "EDI manual - EDI process description for JIT / JIS deliveries following the trailer-Kanban principle at MAN Truck & Bus AG". This manual is available on request.

Alternative containers shall be stated accordingly in EDI. In the case of boxed handling units (HU), as a minimum the small load carriers (KLT) must be stated.

### 3.5 Individual Order – Odette EDIFACT ORDERS

For all SAP-plants (see

Figure 5) of the MAN Truck & Bus SE individual orders can also be sent (e.g. 42xxxxxxx or 45xxxxxxx). But this applies only for the purchasing document "Normalbestellungen (NB, standard order), because only here the material part numbers can always be given. Beside the EDI-message there will be always a printout of the individual order.

Receipt of the order must be confirmed with an EERP. The response containing this EERP (confirmation of receipt) must be sent immediately, either in the same transfer session or in a session of its own. Sending the EERP days or weeks later is not permitted!

The supplier announces its deliveries with the delivery-note by EDI.

The precise field description of the individual Order can be found in the appendix 6 Order-EDI.



## 4 Delivery notes / delivery notices

### 4.1.1 Application area

This message exchange involves the exchange of delivery-note and transport data between the supplier – and, if necessary, external service providers – and MAN.

### 4.1.2 Data transfer

The delivery-note EDI must be transmitted at the latest upon dispatch of the goods.

The following general conditions must be observed for deliveries that are linked to individual orders. Delivery notes by EDI for individual orders from SAP plants (order numbers 42XXXXXXXX and 45XXXXXXXX) can be processed. At present, it is not possible to process any other individual orders (order numbers MXXXX and FXXXX).

## 4.2 Delivery-note EDI - VDA 4913

The EDI transfer of delivery-note data is implemented on the basis of the VDA standard 4913 Version 03. The mandatory fields must be filled. MAN allows only one dispatch loading reference number (SLB) per truck load. If the delivery to MAN is segregated by type, the packaging-material data in the record type 715 are all expected n-times after the record type 714 (item number). In the case of mixed load carriers, the packaging-material data are allocated to a suitable record type 714 (item number).

...

714 Item number = 984711, volume = 2000

715 Packaging-material type = 0002, number of packaging materials = 2, volume per packaging material = 1000

714 Item number = 980815, volume = 500

715 Packaging-material type = 0003, number of packaging materials = 1, volume per packaging material = 500

...



For mixed packaging, the packaging materials are allocated to one of the contained item numbers. For the example from, this means:

either

...

714 Item number = 984711, volume = 3000

715 Packaging-material type = 0002, number of packaging materials = 3, volume per packaging = n/a

714 Item number = 984711, volume = 1500

...

or

...

714 Item number = 984711, volume = 3000

714 Item number = 984711, volume = 1500

715 Packaging-material type = 0002, number of packaging materials = 3, volume per packaging = n/a

...

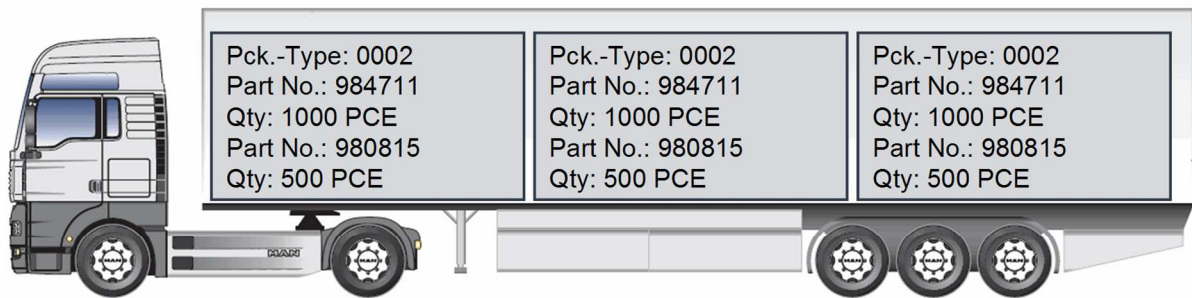
MAN container reference numbers must be used when stating container details (packing material no. customer / packing material type). The following formats are permissible.

- Four-digit container code, e.g. "0002".
- Eleven-digit container reference no., e.g. "09840190002".
- Eleven-digit container reference no. with point and hyphen, e.g. "09.84019-0002".

Only "EW" or "E" must be stated for disposable packaging.

Alternative containers shall be stated accordingly in EDI. In the case of boxed handling units (HU), as a minimum the small load carriers (KLT) must be stated.

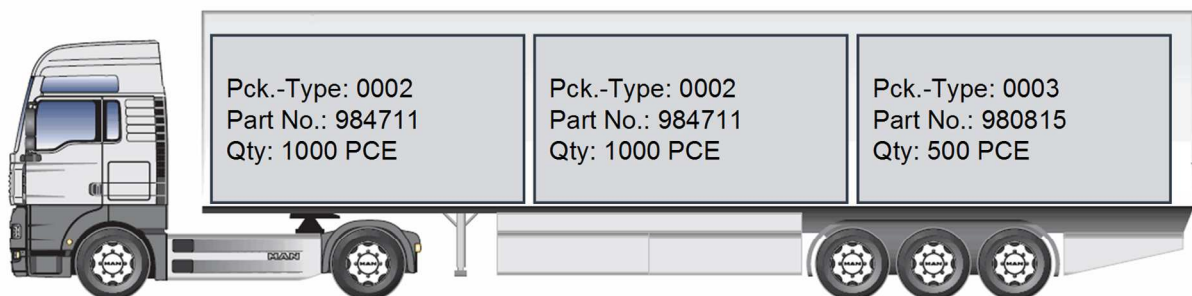
One Truck load = one loading reference number, e.g. 08736922



1 Consignment with  
 3 x Package 0002, each containing 1000 pieces of part number 984711, and 500 pieces of part number 980815  
 -Total quantity part number 984711 = 3000  
 - Total quantity part number 980815 = 1500  
 Mixed load packages: each package contains various part numbers

**Figure 8 Mixed packaging**

One Truck load = one loading reference number, e.g. 08736922



1 Consignment with  
 2 x Package 0002, each containing 1000 pieces of part number 984711, total quantity 2000  
 1 x Package 0003, containing 500 pieces of part number 980815, total quantity 500  
 Homogeneous packages: each package contains only parts of the same type

**Figure 9 Segregated packaging**

The precise field description of the delivery-note according to VDA 4913 can be found in the appendix 3.



### 4.3 Delivery-note – Odette EDIFACT DESADV/AVIEXP V5R1

The data transfer of delivery-note data is carried out on the basis of the Odette EDIFACT message DESADV/AVIEXP. The data elements and segments that are defined as "M = must" have to be filled in.

A data exchange (UNB...UNZ) may contain 1..n DESADV. Each DESADV message represents a dispatch, typically a truck load, which is designated by the dispatch-loading reference number (SLB). Only one SLB per truck load is supported at MAN.

In the case of deliveries to MAN with segregated packaging, the packaging details are expected in the SG11 (PAC-MEA...), which precedes the SG15 (LIN-PIA...) with the specifications of the item number, volume, etc. The dispatch from Figure 9 as an EDIFACT message appears as follows:

```

...
CPS+1++1'           Packaging hierarchy, item 1, inner packaging
PAC+2++0002::92'    2 packages of the type 0002
QTY+52:1000:PCE'    1000 parts per package
LIN+++984711:IN'    MAN item number: 984711
QTY+12:2000:PCE'    Delivery volume 2000 units
CPS+2++1'           Packaging hierarchy, item 2, inner packaging
PAC+1++0003::92'    1 package of the type 0003
QTY+52:500:PCE'     500 parts per package
LIN+++980815:IN'    MAN item number: 980815
QTY+12:500:PCE'     Delivery volume 500 units
...
    
```

For mixed packaging, the packaging-material specifications must be made in the SG11 that precedes the part items (SG15); the example from Figure 8 would lead to the following EDIFACT structure:

```

...
CPS+1++1'           Packaging hierarchy, item 1, inner packaging
PAC+3++0001::92'    3 packages of the type 0001
QTY+52:1000:PCE'    Not used in this scenario
LIN+++984711:IN'    MAN item number: 984711
    
```



QTY+12:3000:PCE'	Delivery volume 3000 units
LIN+++980815:IN'	MAN item number: 980815
QTY+12:1500:PCE'	Delivery volume 1500 units
...	

Appendix 6 contains the application description by MAN for the use of Odette EDIFACT DESADV/AVIEXP.

#### 4.4 EDI goods receipt/issue slip - VDA 4912

MAN requires the print-out of the goods receipt/issue slip in accordance with VDA standard 4912. The goods receipt/issue slip must be included in duplicate with the freight documents and submitted to the goods receipt department upon delivery. The delivery note according to DIN 4994 does not apply here. The EDI goods receipt/issue slips must be segregated according to the different delivery locations.

In order to reduce the volume of delivery paperwork, several delivery-note numbers should be included on each sheet. Alternatively, each delivery-note number must be shown with the relevant headers on one sheet each.

Appendix 8 provides details about generating the EDI goods receipt/issue slip from EDIFACT DESADV; with regard to generating slips from VDA 4913, we refer the reader to the VDA 4912 documentation.

#### 4.5 Delivery notes to SAP plants

##### Delivery-note number

Due to the one-dimensional scheduling agreements used in the SAP plants, one delivery note is produced for each item number due to the VDA 4913 order/scheduling-agreement allocation on the delivery-note level. When working with purchase orders, it is possible to list several item numbers (depending on the purchase order) on a single delivery note. Even in the case of delivery notes based on orders, it is only possible to group together delivery-note items with the same delivery location.

##### Transport

The situation described in chapter 3.2 would result in a large number of delivery notes for a physical delivery. Moreover, the comprehensive SLB number must be disclosed in the record type 712 field 03. This contains the "n" various delivery-note numbers. In this way, MAN can quickly register the transport with all the delivery notes involved.



**Examples**

Transport: 4711

LSNR. 1	→	Scheduling agreement 1	Delivery location 1
	→	SNR 1	Volume 12
LSNR. 2	→	Scheduling agreement 2	Delivery location 1
	→	SNR 2	Volume 8
LSNR. 3	→	Scheduling agreement 3	Delivery location 2
	→	SNR 3	Volume 6

Example for delivery note according to VDA 4913:

713	LS-NR	Completion/order number = Scheduling-agreement number1
714	SNR1	Total volume of SNR1
713	LS-NR	Completion/order number = Scheduling-agreement number2
714	SNR2	Total volume of SNR2
713	LS-NR	Completion/order number = Scheduling-agreement number3
714	SNR3	Total volume of SNR3
:	:	:

**Example**

```
713 0815 5500123456
714 81.12201-5686 12 ST
713 0816 5500234567
714 81.12201-5690 08 ST
```

...

In an EDIFACT DESADV, this is represented as follows:

...	
LIN+++81.12201-5686:IN'	MAN item number 81.12201-5686
QTY+12:12:PCE'	Delivery volume 12 units
RFF+AAU:0815:1'	Delivery-note number 0815, item 1
RFF+AAN:5500123456'	Delivery call-off 5500123456
...	
LIN+++81.12201-5690:IN'	MAN item number 81.12201-5690
QTY+12:8:PCE'	Delivery volume 8 units
RFF+AAU:0816:1'	Delivery-note number 0815, item 1
RFF+AAN:5500123457'	Delivery call-off 5500123457
...	





## 4.6 Faulty data transfer

If the data transfer is faulty, the data are not accepted. In this case, an error log is sent to the supplier, which contains the EDI sequential number with the faulty delivery-note data. The revised delivery note has to be resent prior the arrival of the shipment at the plant. Please note: Sequential numbers are not verified.

In the case of frequent error messages occurring after the test phase, MAN will charge for the increased level of work and the related costs.

All error logs are incorporated in the supplier assessment.

### Common errors:

- Plant code inexistent / missing:  
The MAN plant identification code must be used in the delivery note EDI for "Plant customer" (VDA 4913 Record type 713 Field 11) / "Party identification details" (EDIFACT DESADV). Please also see section 8.
- Freight forwarder transfer date/time missing:  
This value must be filled in. The values "0000" for transfer time or "000000" for transfer date are not valid.
- Freight forwarder missing:  
The freight forwarder carrying out the transport must be stated.
- Record type 716 Field 03 „Text1“ missing:  
Whenever Record type 716 is transferred by EDI, Field 03 "Text1" must also be filled in. This is a must whenever Field 21 ("Amended execution key") is used in Record type 714. In such cases, the design alteration level must be transmitted in the "Text1" field. If there is no separate agreement then this record type may be omitted from the transfer.
- Incorrect usage key/ usage key missing:  
The usage key is transferred in the call-off (Record type 512 Field 17). This must be correspondingly entered in the delivery note EDI (Record type 715 Field 14).



## 5 Invoicing/payment notice

### 5.1.1 Area of application

Suppliers can electronically transfer invoice data to MAN Truck & Bus SE (MTB AG) and MAN Truck & Bus Deutschland GmbH in order to settle deliveries and services within the agreed time intervals. The invoice verification at MAN Truck & Bus SE and MAN Truck & Bus Deutschland GmbH is carried out on the basis of existing contracts, agreed prices and entered incoming goods.

Any corrections or modifications are communicated in the form of credit or debit memos.

If required, payments initiated by MTB SE can be declared to the supplier in the form of electronic payment notices (EDI) which contain not only the payment amount but also the references to the relevant invoices and so simplify the internal booking procedure for the supplier.

It is absolutely essential to produce separate invoices for the individual business units of the MTB SE Group and their respective divisions. For this purpose, the supplier must set up separate current account numbers for the business units and separate EDI sequential number cycles must be used for the EDI invoice data transfers.

Each group of invoices (one invoice EDI in each case) may only contain individual invoices with the same value added tax rate. If parts or services that are subject to different value-added tax rates need to be invoiced, separate groups of invoices must be generated. A separate EDI procedure must take place for each customer number.

Upon receipt, each group of invoices is checked before it is processed in bookkeeping. The requirements of VDA 4938 (EDIFACT GLOBAL INVOIC) / VDA4983 (invoices with invoice relevant attachments) must be fulfilled (syntactic check)

See also: <https://www.vda.de/en/services/Publications>

(Search for VDA 4938 remote data transmission of invoices)

In addition, logical verification is carried out according to the regulations of VDA4938 / VDA4983. In the event of errors, the supplier must correct the data and resend them.

The supplier shall ensure that the responsible tax office and auditors are informed about the use of the invoice EDI.

At the onset of productive data exchange (EDI), as the invoice recipient, MAN Truck & Bus SE and MAN Truck & Bus Deutschland GmbH must inform the relevant tax authority in writing.

### 5.1.2 Data transfer

The transfer of all invoices will be based on material supplies and services, for which the "customer order no." is present.

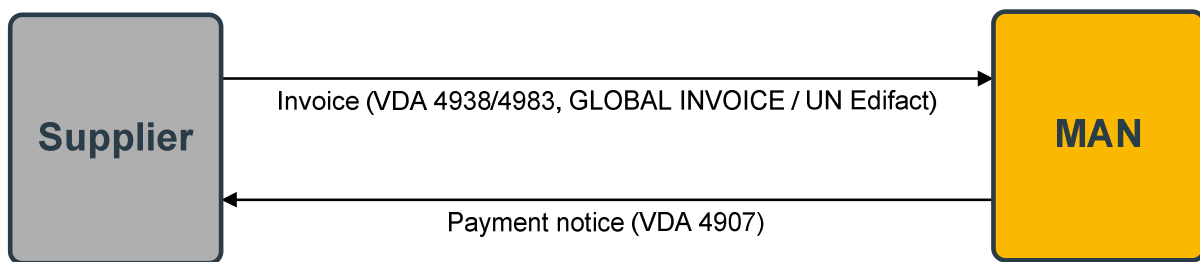
Corresponding order with the customer article number provided; if not available, with the MTB SE order number, are to be taken into account for the EDI in segment LIN+1.

Coupling the order data per EDI with the invoice EDI is not a prerequisite for the remote data transfer.

Prior to the test phase, the supplier must have assigned a customer number to each supplied business unit and have informed MAN Truck & Bus about these numbers.

The respective contacts for invoices can be found in the table in chapter 6.

### 5.1.3 Exchange of messages



**Figure 10 Message exchange for accounting/payment**

VDA4983 container consists of:

- Standard Business Document Header (additional segment "SBDH")
- EDIFACT message(s). (VDA4938 data).
- Attachment(s) + Image.

Every Invoice-EDI based on VDA4983 must contain above things.

### 5.1.4 Used formats

Invoice	VDA 4938 / VDA4983 (invoices with invoice relevant attachments), Odette EDIFACT INVOIC V5R1/V5R2
Payment notice	VDA4907



## 5.2 Invoice EDI - VDA 4938

The Global Invoice / UN Edifact format meets all the requirements of the law on value-added tax for use WITHOUT a totals sheet.

For electronic invoicing, all legally relevant criteria as per §14 UStG must be fulfilled.

Invoices without VAT are expected on the basis of tax exemption in segment FTX+TXD.

Suggested text: Tax-exempt intra-Community supply  
Tax-exempt supply from a third country

Possible fee reductions must be shown in segment FTX+CHG.

Suggested text: Fee reductions resulting from an agreement reached as of  
XX.XX.XXXX (date)

Sample messages for a commercial invoice for production material can be taken from Guideline Version 1.0 UN D.07A S4, page 137 – 140.

## 5.3 Payment notices – VDA 4907

In connection with the payment, MAN Truck & Bus SE can produce a payment notice according to VDA 4907 and refer in it to the invoices to be settled with each respective payment.

For the precise field description of the payment-notice EDI, we refer the reader to the VDA 4907 documentation.

(See also: <http://www.vda.de/de/service/bestellung/downloads/4907.pdf>)

## 5.4 Faulty data transfer

The invoicing check procedure at MTB SE and MAN Truck & Bus Deutschland GmbH leads to the assessment whether the group of invoices was passed "OK" or was rejected due to errors.

In the event of rejection, every error is documented and communicated in writing, by email.

The system differentiates between structural errors and content errors (e.g., no individual amounts or net amounts transmitted, missing tax guidelines).

For each error, the faulty invoices can be transferred again, after correction.

**Please note:** For security reasons (in case a corrected repeat run is necessary), please retain the transferred data for at least four weeks.

## 6 MAN WebEDI-Portal

In addition to the traditional EDI, MAN also provides a WebEDI-Portal for the electronic exchange of business data. With this portal we can connect our suppliers without an own EDI-infrastructure.

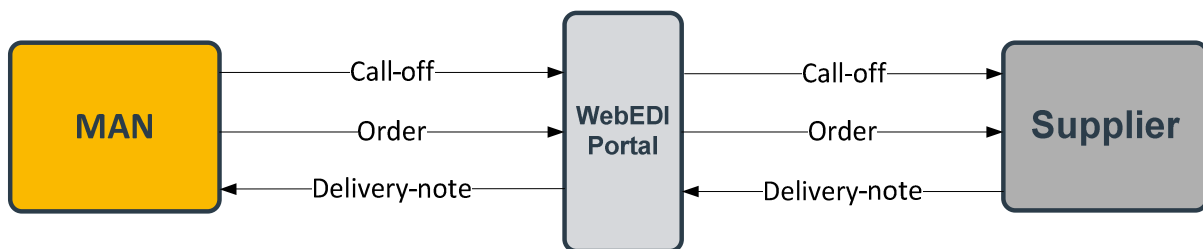


Figure 11 Overview of data exchange with the MAN WebEDI-Portal

Advantages for suppliers:

- No investment costs for hard- and software
- No effort for implementation
- Improved production and logistics planning
- Up- and download functions for documents
- Supporting barcode labeling

**Procedure:**

1. The supplier (Key-User) receives an e-mail which enables to register his company on the MAN WEBEDI portal.
2. The Key-User can create and manage further access (user, password). Training material and videos are "online" available.
3. MAN imports the call-offs and orders (standard order) into the WebEDI-Portal
4. Thereafter the supplier gets an alert-mail that a delivery is available on the portal
5. Now the partner can create manually a shipment on the portal and add a printout of the delivery-note and the barcode to the transport.



## 7 Contact persons

### General contact persons

MAN Truck & Bus SE	EDI-Team	Phone: +49(0)89 1580-4021
		E-mail: EDI-Team@man.eu

### Contact persons for technical communications

EDI connection set-up EDI trouble-shooting	EDI-Team	Phone: +49(0)89 1580-4021
		E-mail: EDI-Team@man.eu

### Contact persons for delivery call-offs

MAN Truck & Bus SE	EDI-Team	Phone: +49(0)89 1580-4021
		E-mail: EDI-Team@man.eu

### Contact persons for delivery notes / delivery notices

MAN Truck & Bus SE	EDI-Team	Phone: +49(0)89 1580-4021
		E-mail: EDI-Team@man.eu

### Contact persons for WebEDI portal

MAN Truck & Bus SE	EDI-Team	Phone: +49(0)89 1580-4021
		E-mail: EDI-Team@man.eu

### Contact persons for invoices

All MAN plants except plants Steyr and Ankara	Ms. Oster	Phone: +49(0)89 1580-2156
		Fax: +49(0)89 1580-912156
		E-mail: Marianne.Oster@man.eu
Plant Steyr MAN Truck & Bus Österreich GesmbH (incl. Steyr KUL)	Ms. Ganglbauer	Phone: +43(0)7252 585-2226
		Fax: +43(0)7252 585-733
		E-mail: Roswitha.Ganglbauer@man.eu
Plant Ankara	Ms. Yildiz	Phone: +90 (0) 312 556 17 35
		E-mail: Seda.Yildiz@man.eu



## 8 Plant codes

<b>Plant code</b>	<b>City</b>	<b>Country</b>
M	Munich	Germany
W	Salzgitter Trucks	Germany
ES	Salzgitter Spare Parts	Germany
N	Nuremberg	Germany
EM	PDC South	Germany
C	Niepolomice	Poland
F	Starachowice	Poland
S	Plauen	Germany
I	TMC Wittlich	Germany
Q	TMC Munich	Germany
Y	Steyr	Austria
K	Steyr KUL *)	Austria
TR	Ankara	Turkey

\*) concerns MAN plant Steyr, division Kunststoffteilelackierung



## 9 Delivery address and invoicing address

Delivery address	Plant code	Unloading site	Invoicing address
MAN Trucks Sp. z o.o. Ul. Rudolfa Diesla 1 32-005 Niepolomice Polen	C	*)	MAN Trucks Sp. z o.o. Ul. Rudolfa Diesla 1 32-005 Niepolomice Polen Umsatzsteuer ID-Nr. PL5262851977
MAN Truck & Bus AG Bus Modification Center Leuchtmühlenweg 12 08523 Plauen	S	*)	MAN Truck & Bus AG Bus Modification Center Postfach 50 06 04 80976 München Umsatzsteuer ID-Nr. DE811125281
MAN Truck & Bus AG Dachauer Straße 667 80995 München	M	*)	MAN Truck & Bus AG Zentralbereiche/GE H - München Postfach 50 06 04 80976 München Umsatzsteuer ID-Nr. DE811125281
MAN Truck & Bus AG Vogelweiherstraße 33 90441 Nürnberg	N	*)	MAN Truck & Bus AG GE Motoren - Nürnberg Postfach 50 06 06 80976 München Umsatzsteuer ID-Nr. DE811125281
MAN Truck & Bus AG Heinrich-Büssing-Straße 1 38239 Salzgitter	W	*)	MAN Truck & Bus AG GE H - Salzgitter Postfach 50 06 05 80976 München Umsatzsteuer ID-Nr. DE811125281
MAN Truck & Bus AG Truck Modification Center Otto-Hahn-Straße 31 54516 Wittlich	I	*)	MAN Truck & Bus AG Truck Modification Center Postfach 50 06 04 80976 München Umsatzsteuer ID-Nr. DE811125281
MAN Truck & Bus AG Truck Modification Center Dachauer Straße 667 80995 München	Q	*)	MAN Truck & Bus AG Truck Modification Center Postfach 50 06 04 80976 München Umsatzsteuer ID-Nr. DE811125281

\*) Applies to all unloading sites of this MAN plant.





<b>Delivery address</b>	<b>Plant code</b>	<b>Unloading site</b>	<b>Invoicing address</b>
MAN Truck & Bus AG PDC Deutschland Süd Max-Planck-Straße 1 85221 Dachau	EM	VZD	MAN Truck & Bus AG PDC Deutschland Süd Postfach 50 06 24 80976 München Umsatzsteuer ID-Nr. DE811125281
MAN Truck & Bus AG Heinrich-Büssing-Straße 1 38239 Salzgitter	ES	ES1	MAN Truck & Bus AG GE After Sales Ersatzteile Postfach 50 06 24 80976 München Umsatzsteuer ID-Nr. DE811125281
MAN Truck & Bus AG Industriestrasse Mitte 2 38239 Salzgitter	ES	ES2	MAN Truck & Bus AG GE After Sales Ersatzteile Postfach 50 06 24 80976 München Umsatzsteuer ID-Nr. DE811125281  MAN Truck & Bus Deutschland GmbH GE After Sales Ersatzteile Postfach 50 06 10 80976 München Umsatzsteuer ID-Nr. DE811125407



Delivery address	Plant code	Unloading site	Invoicing address
MAN Bus Sp. z o.o. Ul. 1 Maja 12 27-200 Starachowice Polen	F	*)	MAN Bus Sp. z o.o. Ul. 1 Maja 12 27-200 Starachowice Polen Umsatzsteuer ID-Nr. PL5342082736
MAN Türkiye A.S. Esenboga Havalimani Yolu 22. km Akyurt 06750 Ankara Türkiye	TR	*)	MAN Türkiye A.S. Esenboga Havalimani Yolu 22. km Akyurt 06750 Ankara Türkiye Umsatzsteuer ID Nr. Çubuk - 6110048927
MAN Truck & Bus Österreich GesmbH Schönauer Str. 5 A-4400 Steyr Österreich	Y	*)	MAN Truck & Bus Österreich GesmbH Postfach 222 A-4400 Steyr Umsatzsteuer ID-Nr. ATU23457202
MAN Truck & Bus Österreich GesmbH Schönauer Str. 5 A-4400 Steyr Österreich	K	*)	MAN Truck & Bus Österreich GesmbH Postfach 222 A-4400 Steyr Umsatzsteuer ID-Nr. ATU23457202

**\*) Applies to all unloading sites of this MAN plant.**



## 10 Appendices

1. Form "EDI-Parameter sheet for Call-offs / Delivery Notes / Invoices"
2. Delivery call-off EDI of MAN SE acc. to VDA 4905
3. Delivery-notice EDI to MAN SE acc. to VDA 4913
4. Delivery call-off EDI of MAN SE acc. to Odette EDIFACT DELFOR/DELINS V4R1
5. Order EDI of MAN SE acc. to Odette EDIFACT ORDERS
6. Delivery-notice EDI to MAN SE acc. to Odette EDIFACT DESADV/AVIEXP V5R1/V5R2
7. Invoice EDI to MAN SE acc. to VDA 4938 (Global Invoic/UN Edifact)
8. Invoice EDI to MAN SE acc. to VDA 4983 (Global Invoic/UN Edifact incl. appendices)
9. EDI – goods receipt/issue slip and allocation to EDIFACT DESADV
10. Example messages