

# **EDI- Implementation Guidelines of VOLKSWAGEN AG**

**Informational document for the suppliers of VOLKSWAGEN AG  
in the delivery process for productive material, original parts, stockable A-  
material and others in the area of e-invoicing**

This document and news-specific EDI guides  
can be found in the current version on the Internet at:

[http://www.vwgroupsupply.com/one-kbp-pub/de/kbp\\_public/information/electronic\\_data\\_interchange/electronic\\_data\\_interchange.html](http://www.vwgroupsupply.com/one-kbp-pub/de/kbp_public/information/electronic_data_interchange/electronic_data_interchange.html)

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## **EDI at Volkswagen and Audi**

### **Preface**

This documentation and other news-specific guides only contain supplementary information about the VDA [German Association of the Automotive Industry] recommendations and ODETTE [Organisation for Data Exchange by Tele Transmission in Europe] standards. Therefore, the availability of relevant VDA recommendations and ODETTE descriptions is an essential prerequisite for implementing EDI technology and messages.

From our non-EDI capable suppliers, we expect the use and operation of the web-based WebEDI application for conventional delivery call-offs and delivery note data.

All brands and locations belonging to the VW Group are counted under VOLKSWAGEN, which are connected via the central EDI processing of the group. At the time of publication, exceptions are, for example, MAN, Volkswagen do Brasil and others. If you have any questions, please contact EDI Support [edi-support@volkswagen.de](mailto:edi-support@volkswagen.de) .

Item

.. **Overview of EDI Application at VOLKSWAGEN**

The following information provides an overview of the state of the EDI implementation at VOLKSWAGEN. Further regulations for the delivery process at Volkswagen and Audi (e.g. general shipping instructions, packaging instructions) must be observed at the same time.

... **Material call off**

In the standard procedure, suppliers receive a **EDI delivery call-off as VDA 4984 – Global DELFOR**.

CALDEL is used to control direct-from-supplier original parts deliveries and in this case supplements the delivery instruction.

The **Call-off in Production Sequence (PAB-Produktionssynchrone Abrufe)** is used at VOLKSWAGEN only in the specific cases where vehicle components are ordered and delivered in sequence of production (JiT). In the latest JiT installations, the ODETTE/EDIFACT subset **SYNCRO/DELJIT** is used for PAB and for module-specific forecast data.

Suppliers in the new logistics process (NLK) receive a **release order preview as VDA 4984 – Global DELFOR**. It is used for the supplier's production planning.

The mandatory call-off order in the NLK process occurs with the **delivery instruction (VAB)** in the **GLOBAL DELJIT** format as an electronic pick-up sheet.

... **Material delivery**

We require EDI dispatch and transport data for the traditional supply cycle to VOLKSWAGEN material receiving points and for deliveries to consignment stores or external supplier warehouses. The VDA 4987 –Global DESADV is expected.

When transferring EDI delivery note and transport data, we expect **transport and shipment documents in accordance with VDA 4939** to accompany the delivery. **VDA 4939 from version 3.1 will replace version 2 starting in 2019.**

The labelling of the goods on the packages delivered to VOLKSWAGEN AG is done with the **Global Transport Label, GTL according to VDA 4994.**

A **daily collection delivery note (TSL) in the format 4913** or EDIFACT-**RECADAV** is created in the JiS standard process at VOLKSWAGEN. The TSL is always transferred from VOLKSWAGEN to the supplier. However, there are exceptions, such as Lamborghini and Porsche Osnabrück. A delivery note message in the format VDA 4987 is also expected for JiS deliveries here.

Our regional freight forwarders are included in the information network. freight forwarders receive a copy of the ASN from the supplier to VOLKSWAGEN.

The regional freight forwarder sends **delivery data in the format VDA 4921** to Volkswagen for each freight forwarder specifying all shipments / delivery notes. We use the delivery data pursuant to VDA 4921 that we receive from our freight forwarders to simplify the receiving routine for direct shipments, i.e. the total shipment on a particular freight forwarder.

We use the EDI message Loading Device Data in **VDA 4927** format to control the stock status and movements of our **loading devices**. We expect our suppliers to be able to receive and print out the messages sent by us. Each month suppliers receive a stock consolidation report from us with movement notifications.

All container information can be retrieved (alternatively) in the LISON web application of our packaging management. The call for empty loading device (empties) may only be sent via the **WEB application**. Loading device corrections may also only be sent via WEB application.

... EDI message implementation matrix at Volkswagen\*

Process/message	VDA (old structure )	EDIFACT/ODETTE Subsets	VDA – Global Messages
Delivery call-offs Daily Call-off JIS forecast data			VDA 4984 – Global DELFOR
NLK delivery instruction VAB	–	GLOBAL DEJIT JAI EDIFACT D.04B; 2006	VDA 4985 – Global DELJIT
Original parts direct delivery for direct-from-supplier original parts shipments	–	DELJIT CALDEL V1R0 DELJIT D96 A	
JiT call-off data Production-synchronised call-off, forecast data PAB, REF, SEV	–	DELJIT D96A SYNCRO V3R1	VDA 4986
<b>Delivery note and transport data, ASN</b>			VDA 4987
Pearl chain monitoring (PC monitoring)	–	DESADV 98 A	
Consignment store and JiS processing: daily collection delivery note (TSL)	VDA 4913/2	RECADV D97A	
Stock information VW/AudiEDL(external service provider)/consignment store – VW/Audi - supplier	MAT VDA 4913/2		
Transport and shipment document TSB	VDA 4939, from version 3.1		
Credits and commercial invoices		-	VDA 4938 – Global INVOIC
Transport Label			VDA 4994 Global Transport Label
Packaging data	VDA 4927		
<b>Fulls</b> Transport order			VDA 4933 T1
Transport order confirmation			VDA 4933 T3
Transport status			VDA 4945

<b>Empties</b>			
Transport order			<b>VDA 4933 T2</b>
Order confirmation			<b>VDA 4943 T2</b>
Transport status			<b>VDA 4945</b>
Acknowledgements and error messages			<b>VDA 4937 Email</b>

*\*Not all messages in the table are already productively in use. However, if they are listed there, they must be used in the short-term.*

**.. WebEDI and DISCOVERY at Volkswagen**

The use of WebEDI makes delivery call-offs available to non-EDI capable suppliers. Delivery note data can also be generated via WebEDI and the corresponding shipping documents and transport labels can be generated.

The DISCOVERY application can be used to create transport orders pursuant to VDA 4933 ff for fulls and empties.

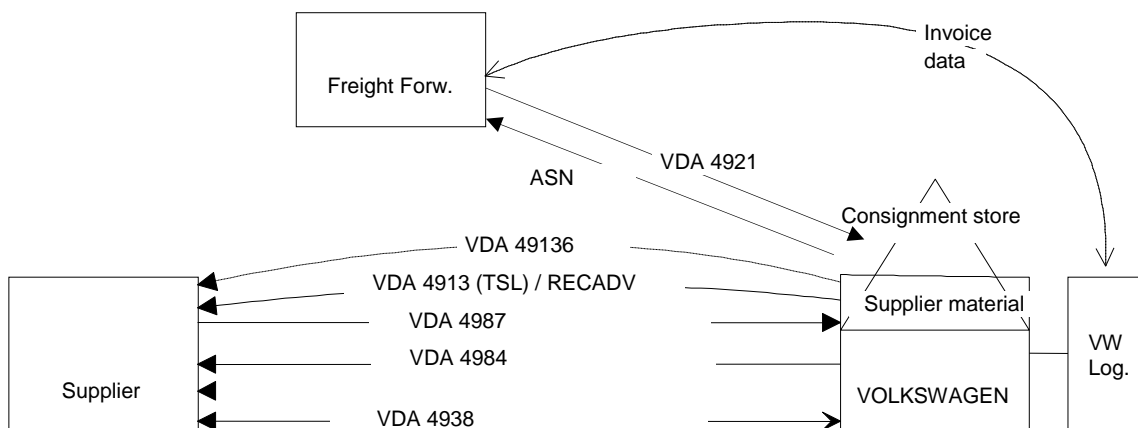
**... Deliveries to consignment stores (supplier's material)**

Delivery to consignments stores or to supplier warehouses managed by external logistics service providers is one of VOLKSWAGEN's logistics concepts. Consignment stores are stores in or close to VW plants which are operated and supplied with material by the suppliers, but are controlled by VW. Material remains property of the supplier until it is issued at the production location. The transfer of ownership and the quantitative transfer into Volkswagen stock always takes place at 0 hours for all withdrawals of the previous day. The material is logistically received by Volkswagen without change of title/ownership but by applying the same material receiving routines as are used for material receipts in a Volkswagen store.

The special characteristic of this processing is that the delivery notes used for the shipment from the supplier location to the consignment store are not the basis for financial settlement by VOLKSWAGEN, but rather the delivery notes determined by the consignment store.

The process requires a close coordination of information with the supplier. The EDI delivery note provides the information for the material advice from the supplier to the consignment store. If the material receiving process "Consignment Store" is supported by EDI, the supplier sends dispatch advice to Volkswagen. The EDI information on material entering and leaving the store and material in stock is sent from Volkswagen to the supplier in the format VDA 4913-2/3 and is to be used by the supplier to monitor stores, deliveries and payment.

Removal from the consignment store is initiated with an internal message.



**Fig. 7: EDI and shipments utilising consignment stores (supplier's material)**

In VDA 4913-2/3 dispatches are reported in transaction code 36 (VA 36), receipts in VA 30 and stock status in VA 35. Depending on agreement, this confirmation will occur either on the morning following the day on which the transactions took place or always on Monday morning for all the transactions of the previous week. Despatches, receipts and stock status figures will



be combined in one data file, however, the supplier may choose individual transaction types in co-ordination with Volkswagen.

The following information is part of the data which Volkswagen transmits to the supplier to confirm stock movements related to the VW-consignment store: Switching to new EDIFACT formats, such as the VDA 4987, is not yet specifically planned.

- Dispatch notification to Volkswagen: VDA 4913 – transaction code (VA) 36  
Is transmitted daily from Volkswagen to the supplier to inform of material which was despatched from the consignment store to Volkswagen during the preceding day and to indicate the resulting change of ownership.
- Confirmation of receipt: VDA 4913 - VA 30  
The receipt notification is transmitted daily from Volkswagen to the supplier to provide information about the material that was received in the consignment store during the preceding day.
- Stock consolidation report: VDA 4913 - VA 35  
The stock consolidation report is sent simultaneously with the transfer of warehouse dispatch or inbound data.

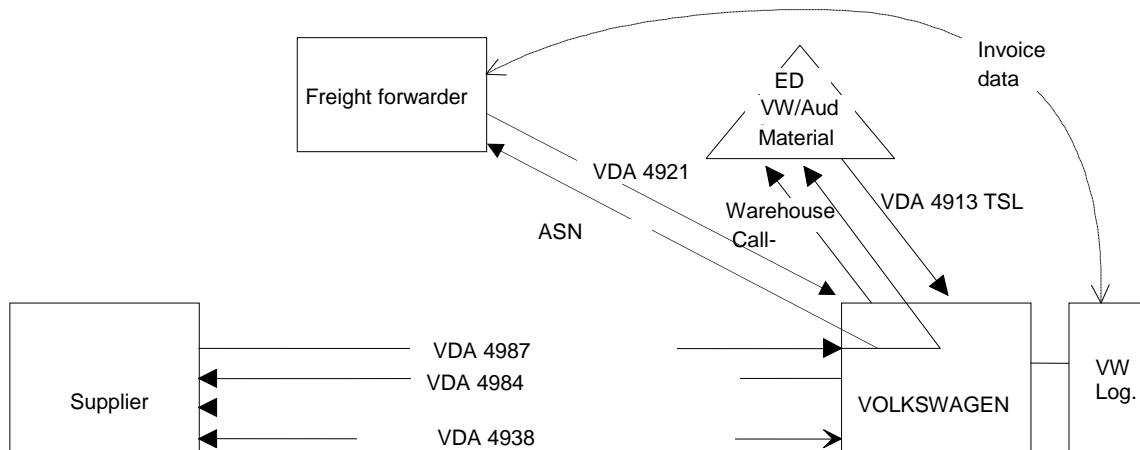
When material is transferred from consignment stock to Volkswagen a NEW delivery note number is assigned. This will then be the reference key for all following operations, including the invoice and the self-billing invoice procedures. In addition, we transfer the delivery note numbers (alt) originally provided by the supplier in the dispatch notification, for VDA 4913: Record type 714, field 22.

In order to avoid overlaps of NEW and OLD delivery note number sequences, every supplier who despatches to a consignment store will have to define one specific delivery note number sequence NEW which covers all plants and which is to be used for the "VW consignment store" procedure. The number sequence has to be made known to the material follow-up analyst who is responsible for the consignment store. The unique shipment identification (SLB) number in the dispatch report is a control identifier used by VW internally. The delivery notes of one day are bundled under this SLB number. Both numbering sequences are managed by Volkswagen and are specific to an individual supplier.

The specifications for the delivery concept "Delivery to VW unloading points" for the EDI transfer of the delivery note and transport data, the VDA 4939 transport and shipment document and the GTL transport label apply in full to the delivery to consignment stores.

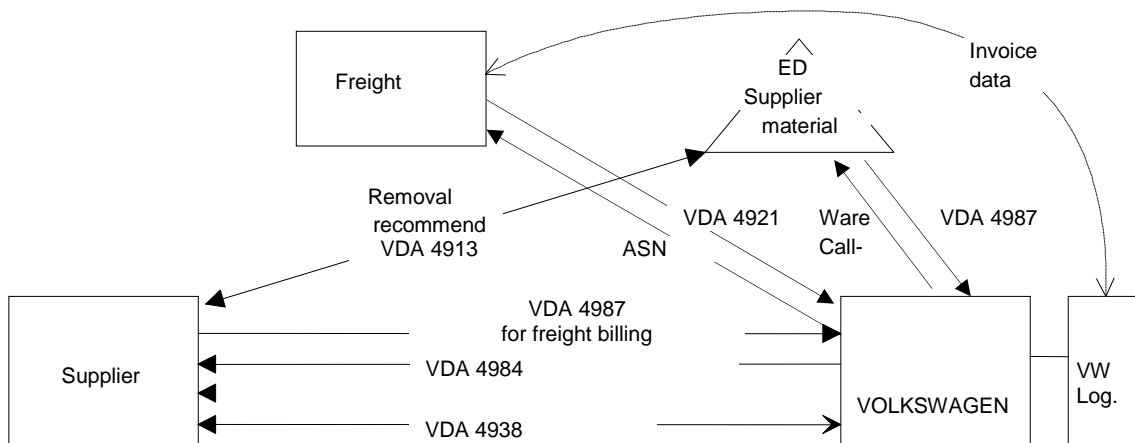
.... Deliveries via external supplier warehouses (external service providers)

External service providers (EDLs) maintain warehouse facilities which are situated within or outside the VW plant area. From here deliveries to factory and assembly units are made according to actual requirements. The material flow to manufacturing is controlled by sending delivery orders to the EDL, using the proprietary INEAS standard at present. Thus it becomes possible to forward smaller lots into manufacturing than direct shipments from the supplier would allow for.



**Fig. 8: EDI and the EDL material receiving process, material owned by VW (e.g. to ELZ, plant XC)**

The process involving EDLs when the material is property of the supplier follows is in principle the same as the process for consignment stores. The main difference to consignment stores is that an EDL store and its information systems are operated by the a third party (the EDL).



**Fig. 9: EDI and the EDL material receiving process (material owned by supplier)**

In the EDI process the supplier sends EDI dispatch and transport data either to Volkswagen or direct to the EDL, depending on agreement with the EDL, and receives information from the EDL in the form of acknowledgement of material receipt, stock status and dispatch advice. The self-billing invoice sent to the supplier will then reflect the deliveries from the EDL to the Volkswagen material receiving area and show the specific delivery note number as assigned by the EDL. Therefore it is important that the supplier receives this number with advice of deliveries to Volkswagen/Audi. VDA 4913-2/3 format is used for information from the EDL to the supplier. As an alternative, the information can be faxed. The EDL sends a VDA 4913-2/3 to notify VW of deliveries to a Volkswagen material receiving point.

The EDI dispatch and transport data from the suppliers are sent either direct to the EDL or to Volkswagen, if the EDL has requested a message forwarding arrangement from the responsible factory logistics department or system manager. For shipments from a supplier containing both material for a Volkswagen material receiving area and material for an EDL, both parts of the shipment may be included in one EDI file sent to Volkswagen. Volkswagen forward the relevant sections to the EDL. This method simplifies the dispatch process at the supplier and material registration process at the EDL.

The following rules must be followed for forwarding dispatch and transport data:

- Only those dispatch advice data (record types / segments) that can be identified as being for an EDL material receiving point should actually be forwarded to the EDL.
- Those data records and segments which concern the EDL should be forwarded to the EDL unchanged.
- Record types 711 and 719 should be sent by Volkswagen to the EDL with the version number as sent by the supplier unchanged.
- The data transmission number old/new from Volkswagen to the EDL should be taken directly from the supplier's transmission.
- The transmission file from VW to the EDL has file name "DFR.R11sid.FR2300A", in which 'sid' stands for the StationID of the EDL.
- It is forwarded to the EDL immediately on receipt from the supplier.

All specifications valid for the delivery process via Volkswagen receiving points regarding the TSB VDA 4939 and the transport label GTL also apply to delivery to external service providers.

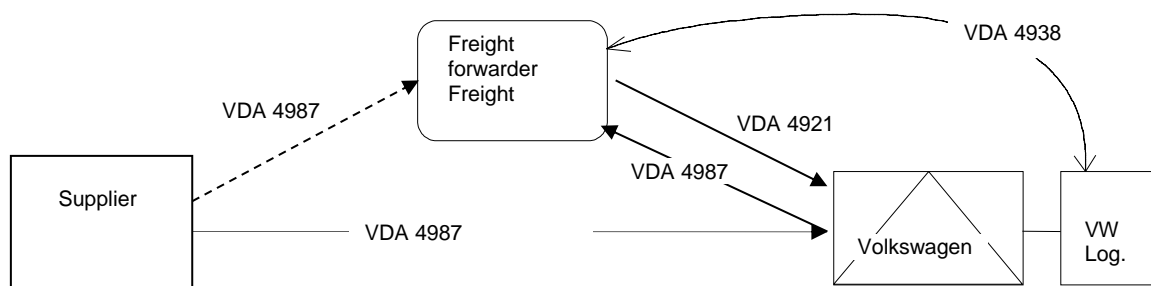
... **JIS Deliveries**

The JIS delivery at Volkswagen is only practised in specific cases, for order-related sequence control of components. JiS processes are installed according to the processing concept "Purchased part processing in the event of JIS delivery". For a description of the JIS process and with the EDI procedures and message types used see the document "Kaufteile-Abwicklung bei JiT-Anlieferung von einfachen und variantenreichen JiT-ZSBs" (Processing of supplier parts in JiT deliveries of simple and multi-variant assemblies).

... **Incorporating freight forwarders in the traditional delivery process**

In the event of transport commissioning, the request for transport originates from the supplier by notifying the freight forwarder the day before. Supplement VDA 4933

VOLKSWAGEN expects the transport and **delivery data as VDA 4921** (delivery data of freight forwarder to customer) from the freight forwarder for each delivery shipment. The delivery data specifying all delivery notes of a freight forwarder are automatically generated by the freight forwarder from the delivery note and transport data of the supplier and are supplemented by transport data of the carrier. The delivery data and the despatch and transport data are also used for direct computer controlled settlement of freight charges.



**Fig. 10: Freight forwarder involvement in EDI (e.g. to plant 11)**

