VOLKSWAGEN Konzernlogistik

Change Management Logistics Service Provider EDI 2023!

VDA 4933T1-T4 Transport Order-/-Confirmation VDA 4945 Transport Status Message Material/Empties (Packaging)

Fachbereich für digitale Zusammenarbeit

PUBLIC

DIGITA RMATION

Motivation for the changes!

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Why do we do this?

Standardization

- The definition and introduction of international standards by UN-CEFACT, Odette and VDA has created a common basis for digital communication.
- The target of these standards is providing the partner with the data in the defined message formats that it needs to perform its contractually agreed service <u>without having to intervene manually</u> and thus to enable and accelerate digitization.



KONZERN PRODUKTION

Digitization

- EDI supports standardized communication between process partners along the logistics supply chain and thus enables the **automation** of process steps.
- EDI decouples the provision of data between source and target system according to automotive standard and thus accelerates digitization.
- Manual process steps are eliminated step by step.



Paperless transport

- By consistently using the new global message formats in high quality, we create the prerequisite for paperless transport.
- By linking shipment data and transport data via the references used in the messages, the basis is set for paperless processes.



DIGITA RMATION

Basic knowledge to start with!

Important for correct implementation!

Important definitions of terms according to VDA and deviations at Volkswagen!

(Visualisation on the next page)

Shipment

- Shipment refers to the totality of material which are to be transported / shipped at a certain point in time from the ship from party of the goods (e.g. supplier's plant) to a certain (VDA) point of discharge of the ship to party of goods (e.g. customer's plant) on <u>one means of transport</u> (s.a. truck, coach...).Normally, each shipment is identified by a unique reference number, the shipment number (formerly shipment load reference number).
- **Conclusion:** The supplier should create <u>one VDA 4987 Despatch advice</u> and <u>one VDA 4939</u> shipment document per shipment.

Important

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Point of discharge

- The point of discharge according to the VDA definition represents the physical location at the ship to premises where the means of transport (truck, wagon, etc.) is unloaded and thus the transport process is terminated. For historical reasons, Volkswagen has so far deviated from this industry solution and used the term "delivery point" in its communication. In the VDA 4933 and VDA 4987 formats, this is header information that applies to the entire shipment.
- Conclusion: The VW delivery point corresponds to the VDA "point of discharge"! <u>One shipment is bundled to one point of discharge</u>!

Important

Internal place of destination

- The internal place of destination according to the VDA definition represents the internal location at the ship to where the goods are stored. For historical reasons, Volkswagen has so far deviated from this industry solution and used the term place of discharge in communication. In the VDA 4933 and VDA 4987 formats, this is item information zhat is assigned to the material. A shipment can therefore contain several internal places of destination.
- Conclusion: The "VW place of discharge" corresponds to the VDA "place of internal destination" in the VDA standard! <u>One shipment can contain one or more</u> places of internal destination as it is related to the article!!

Important

Delivery Note

- The delivery note is the classic goods accompanying document. There is no form requirement for the delivery note. Depending on the contractual agreement or the structure of the supplier's ERP system, a delivery note can be created per Material, package or per entire shipment and must be transmitted on item level.
- Conclusion: A shipment can contain <u>one or more delivery notes</u>

Important

The use case according to automotive standard Place of Discharge and internal Place of Destination



Volkswagen name and value		Meaning inside the process		VDA name and value
VW Place of destination: 54S	=	Physical place of unloading of means of transport	=	VDA Place of discharge 54S
VW Place of discharge: P0105	=	Internal place of destination e.g. storage location	=	VDA Internal place of destination P0105

RODUKTION

Why is this important! Impact on the transport process

	TLU 1 PID P0105 DN 899	TLU 4 PID P0108 DN 899	TLU 7 PID P0111 DN 900	TLU 10 PID P0114 DN 899	
Ship from A is loading a shipment to Ship to plant Wolfsburg Shipment 1 PD 54S = 1 Place of Discharge	TLU 2 PID P0106 DN 897	TLU 5 PID P0109 DN 899	TLU 8 PID P0112 DN 899	TLU 11 PID P0115 DN 898	
	TLU 3 PID P0107 DN 899	TLU 6 PID P0110 DN 899	TLU 9 PID P0113 DN 900	TLU 12 PID P0116 DN 899	
000	5	= 12 intern destin	al places of nation		6

	Consolidation of shipment based on point of discharge	Consolidation of shipment based on internal place of destination
Amount of VDA4987 Despatch Advices	1 Despatch Advice	12x Despatch Advices
Amount of VDA4939 Shipping Documents	1 Shipping document	12x Shipping document
 Process steps validation of document with one x-dock: 1. Despatch at ship from 2. Pick up by forwarder at ship from 3. Delivery at x-dock by forwarder 4. Goods Receipt at x-dock 5. Goods issue at x-dock 6. Pick up by forwarder at x-dock 7. Delivery at ship to by forwarder 8. Goods receipt at ship to 	 8 Process Steps 1 x Despatch confirmed 1 x Pick up confirmed 1 x Delivery at x-dock confirmed 1 x Goods Receipt at x-dock 1 x Goods issue at x-dock 1 x Pick up by forwarder at x-dock 1 x Delivery at ship to by forwarder 1 x Goods receipt at ship to 	 96 Process Steps 12 x Despatch confirmed 12 x Pick up confirmed 12 x Delivery at x-dock confirmed 12 x Goods Receipt at x-dock 12 x Goods issue at x-dock 12 x Pick up by forwarder 12 x Delivery at ship to by forwarder 12 x Goods receipt at ship to

- LU = Transport Loading Unit
- Place of discharge (old: VW Place of destination)
 Internal place of destination (old: VW Place of

discharge)

N = Delivery Note

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How do supply chain messages build on each other?



KL-MD | CDC K- MSU KGBSe 25 U-Klashe 200 blic Jahre public

Changes or needs to be considered

What changes or needs to be considered...!

Explained by means of examples

VDA 4933 T3/T4 Transport Order Confirmation Material/Empties Change of transmission file head and message header

Transmission file head – changes based on ISO 9735

 The ISO essentially regulates which character sets may be used. ISO 9735 version 11 ("Application rules for the structuring of data in the exchange of electronic messages in an open system") only permits EDIFACT Syntax 4 as a valid standard in the future. Therefore, the user data header segment changes

Message header – change of directory

 In order to be able to use new content of the UN/CEFACT Directory, the current version of the message was created on the basis of Directory 20B. Therefore, the message header segment changes

The following example shows the change

VDA 4933 T3 Transport Order Confirmation (Guideline Version VDA 1.5 VW 2.0) old Transmission file head information (envelope transmission file) UNB+UNOC:3+00012345670XYZ01+00013000001VW KOI+220301:1340+16393' Message header (envelope message) up to Version UNH+9+DESADV:D:07A:UN:GAVL15

VDA 4933 T4 Transport Order Confirmation Leergut (Guideline Version VDA 1.4 VW 1.0) old Transmission file head information (envelope transmission file) UNB+UNOC:**3**+O001234567OXYZ01+O0013000001VW KOI+220301:1340+16393' Message header (envelope message) up to Version

UNH+9+DESADV:D:07A:UN:GAV014



VDA 4933 T3 Transport Order Confirmation Material (Guideline Version VDA 2.0 VW 3.0) New					
Transmission file head information (envelope transmission file)					
UNB+UNOC: <u>X</u> +O001234567OXYZ01+O0013000001VW KOI+ <u>20</u> 220301:1340+16393'					
Message header (envelope message) starting with Version					
UNH+9+DESADV: <u>D:20B:UN:GAVL20</u>					

VDA 4933 T3 Transport Order Confirmation Empties (Guideline Version VDA 2.0 VW 2.0 New Transmission file head information (envelope transmission file) UNB+UNOC:<u>X</u>+O001234567OXYZ01+O0013000001VW KOI+<u>20</u>220301:1340+16393' Message header (envelope message) starting with Version

UNH+9+DESADV:D:20B:UN:GAVO20

VDA 4945 Transport Status Message – Change of transmission file head and message header

Nutzdaten Kopfsegment - Änderungen auf Basis ISO 9735

 Die ISO regelt im Wesentlichen, welche Zeichensätze genutzt werden dürfen. Die ISO 9735 Version 11 (Anwendungsregeln für die Strukturierung von Daten im Austausch elektronischer Nachrichten in einem offenen System) lässt zukünftig nur EDIFACT Syntax 4 als gültigen Standard zu. Deshalb ändert sich das Nutzdaten Kopfsegment

Nachrichten Kopfsegment – Änderung Directory

 Um neue Inhalte des UN/CEFACT Directories nutzen zu können wurde die aktuelle Version der Nachricht auf Basis des Directory 20B erstellt. Deshalb ändert sich das Nachrichten Kopfsegment

Das folgende Beispiel zeigt exemplarisch die Änderung auf:



VDA 4945 4945 Transport Status Message (Guideline Version VDA 2.5 VW 1.0) alt Transmission file head information (envelope transmission file) UNB+UNOC:**3**+O001234567OXYZ01+O0013000001VW KOI+220301:1340+16393' Message header (envelope message) up to Version UNH+1+IFTSTA:**D:16A:UN:GAVP25**'

VDA 4945 Transport Status Message (Guideline Version VDA 3.0 VW 2.0) New						
Transmission file head information (envelope transmission file)						
UNB+UNOC:X+00012345670XYZ01+00013000001VW	KOI+20220301:1340+16393'					
(envelope message) starting with Version						
UNH+1+ IFTSTA:D:20B:UN:GAVP30'						

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VDA 4945 Transport Status Message – Changes in message content

The **old version** of the guideline had structural errors in the UN-CEFACT message type IFTSTA, on which the VDA or VW guideline is also based, which is why the adjustments in the **new version** were necessary!

The technical contents were already part of the message, but must be transferred in the new version at a different place or in other segments. In the **new version** of the guideline, the message structure is adapted according to the current VDA industry standard:

- 1. The status location of the transport is transmitted above SG1.
- 2. The transport number (LSP) Bordereau number is no longer transmitted in SG3 but in SG1.
- 3. The DUNS number of the partner roles are as in DESADVbased formats - transmitted in SG3 to the partner segments NAD+MS, NAD+MR and NAD+FW in the segment RFF+ANK.
- 4. The VDA place of discharge is transmitted in LOC+11 at shipment level.

Message Content				Message Content							
Segment-	Level	Segment	Example	Process description		Segr	nent-	Level	Segment	Example	Process description
Group						Grou	ир				
SG1	Transport	NAD+MS	NAD+MS+8888888888::16'	DUNS	8 — , , , , , , , , , , , , , , , , , ,	► 0 S	egme	Transport	LOC+172	LOC+172+4999999999::16'	Status location
SG1	Transport	NAD+MR	NAD+MR+999999999::16'	DUNS	4	2 S	G1	Transport	RFF+AFC	RFF+AFC:12345678'	The transport number (LSP) - Bordereau number
SG1	Transport	NAD+FW	NAD+FW+555555557::16'	DUNS	6	B S	G3	Transport	RFF+ANK	RFF+ANK:8888888888'	DUNS
SG1	Transport	LOC+172	LOC+172+4999999999::16'	Status location	0 ── ╞╞═┝╺	► 4 S	G3	Transport	RFF+ANK	RFF+ANK:999999999'	DUNS
				The transport number (LSP) -	⊢⊢	► 5 S	G3	Transport	RFF+ANK	RFF+ANK:555555557'	DUNS
SG3	Transport	RFF+AFC	RFF+AFC:12345678'	Bordereau number	2						The transport number (LSP) - Bordereau
SG17	Shipment	LOC+7	54S	с	6	► 6 S	G17	Shipment	LOC+11	54S	number

Tools for the changeover...

- 1. The complete version of the current guidelines can be found on the ONE Group Business Platform: <u>Electronic Data Interchange</u>
- 2. You can find a self-service for the validation of test messages at <u>Self Service Validation</u>
- 3. Virtual File Name and transmission parameters do not change!



DIGITAL should be paid particular attention to?

What should be paid particular attention to? "Common sources of errors"

Explained by means of examples

Please Keep in mind! most important information inside the message

Role	Process Step	Status description VW	Transport status STS+1	Shipment status STS+X2	Transport- leg from TDT 8051	Licence plate TDT C222 8213	Licence plate EQD C237 8260	Access code ID from LKWcontrol RFF+AAO	Bordero RFF+AFC	Prozesskennzeichen BGM DE 1000**
Forwarder	Pick up at ship from	Pick up completed	24	13	10 or 3*	asap	asap	asap	asap	MAT-PICKSF EMPTY-PICKSF
Forwarder	Delivery at x-dock	X-Dock Delivery completed	1	29	10 or 3*	asap	asap	asap	asap	MAT-TRANSIT EMPTY-TRANSIT
X-Dock LSP	Receipt at x-dock	X-dock receipt confirmed	n. a.	74	X02	asap	asap	asap	asap	MAT-XDOCK EMPTY-XDOCK
X-dock LSP	issue at x-dock	X-dock issue confirmed	n. a.	48	X02	asap	asap	asap	asap	MAT-XDOCK EMPTY-XDOCK
Forwarder	Pick up at x-dock	Pick up completed	24	13	3	asap	asap	asap	asap	MAT-ARRIVAL EMPTY-ARRIVAL
Forwarder	Arrival at ship to	Arrival at gate	1	1	3	asap	asap	asap	asap	MAT-ARRIVAL EMPTY-ARRIVAL
Forwarder	Delivery at ship to	Delivered at ship to	1	21	3	asap	asap	asap	asap	MAT-ARRIVAL EMPTY-ARRIVAL
Forwarder	Truck in Transit	In transit	31	31	all	asap	asap	asap	asap	MAT-GEOLOC

* 10 only applies for the transport leg to the x-dock. For direct shipments the pick up is already part of the last transport leg and therefore 3

Please keep in mind: VDA 4945 Transport status message - information around the means of transport

The following table is to be interpreted as follows.

- The "must" information must be transmitted for these events in the corresponding transport leg for the means of transport and equipment.
- If LKW control is used for the time slot booking, the trip ID is to be transmitted from the time of the time slot booking in each subsequent status message, irrespective of the event in segment RFF+AAO.

Process Step	<i>License Plate Means of Transport Segment TDT DEG C222 DE 8213</i>	License Plate Equipment (Trailer, Swap body etc.) Segment EQD DEG C237 DE 8260	The transport number (LSP) - Bordereau number RFF+AFC	Access Code ID LKW Control X* RFF+AAO
Pick up at ship from	mandatory	mandatory	mandatory	ASAP
Delivery at x-dock	mandatory	mandatory	mandatory	ASAP
Receipt at x-dock	n. a.	n. a.	n.a.	ASAP
issue at x-dock	n. a.	n. a.	n.a.	ASAP
Pick up at x-dock	mandatory	mandatory	mandatory	ASAP
Arrival at ship to	mandatory	mandatory	mandatory	ASAP
Delivery at ship to	mandatory	mandatory	mandatory	ASAP
Truck in Transit	mandatory	mandatory	mandatory	ASAP

Bitte beachten Sie: VDA 4945 Transportstatusmeldung – Statusposition "LOC+172"



The requirement for segment LOC+172 → Status location "The specification of C517 or of C519 is mandatory", is to be interpreted as follows.

- If the status position is the place where the goods are loaded/unloaded onto/transferred from/to the means of transport, the Duns number and the address of the partner must be transmitted in C517 and the geolocation of this address in C519!
 E. g. → LOC+172+999999999::16:Warenversender;;Strasse1;Stadt;99999;;DE+51.54402,7.12967'
- If the status position is the current location of the means of transport, only the C519 is to be transmitted.
 E. g. → LOC+172++51.54402,7.12967'

Status event	Status location (DUNS und Adresse) Segment LOC+172 DEG C517	Status location (Geolokation) Segment LOC+172 DEG C519
Abholung erfolgt	Warenversender	Warenversender
Anlieferung erfolgt	Umschlagspunkt	Umschlagspunkt
Umschlag Eingang bestätigt	Umschlagspunkt	Umschlagspunkt
Umschlag Ausgang bestätigt	Umschlagspunkt	Umschlagspunkt
Abholung erfolgt	Umschlagspunkt	Umschlagspunkt
Angekommen am Tor	Warenempfänger	Warenempfänger
Abgeliefert beim Warenempfänger	Warenempfänger	Warenempfänger
Spediteur	entfällt	Aufenthaltspunkt des Transportmittels

DIGITAL PROBATION

Thank you for your attention!

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