# DIGITAL TRANSFORMATION

EDI-Change-Management – Short guide VDA 4933T1 Transport Order, VDA 4987 Despatch Advice KL-GMD/A Digital Solutions – Transport management and Partner Collaboration

## DIGITAL TRANSFORMATION

Motivation for the changes! Why do we do this?

## Why are changes in the messages necessary?

### **Standardization** *"Speaking the same language"*

- 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.



### **Digitalisation** *"How to accelerate daily business"*

- 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 has established itself as a robust solution for data exchange



**Paperless transport** *"How to reduce the ecological footprint"* 

- By consistently using the new global message formats in high quality, we create the prerequisite for paperless transport.
- By connecting shipment and transport data using the standard reference model over the used messages, the basis is set for paperless processes.



## DIGITAL TRANSFORMATION

Basic knowledge about the business process Important for correct implementation!

Important

## Important definitions of terms according to VDA

## ...and deviations at Volkswagen!

- 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) place of discharge of the ship to party of goods (e.g. customer's plant) on one means of transport (s.a. truck, coach...). Normally, each shipment is identified by a unique reference number, the shipment number (formerly shipment load reference number). Important
- Conclusion: The supplier should create one VDA 4987 Despatch advice and one VDA 4939 shipment document per shipment.

#### **Place of discharge**

- The place 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. Important
- Conclusion: The VW delivery point corresponds to the VDA "point of discharge"! One shipment is bundled to one point of discharge!

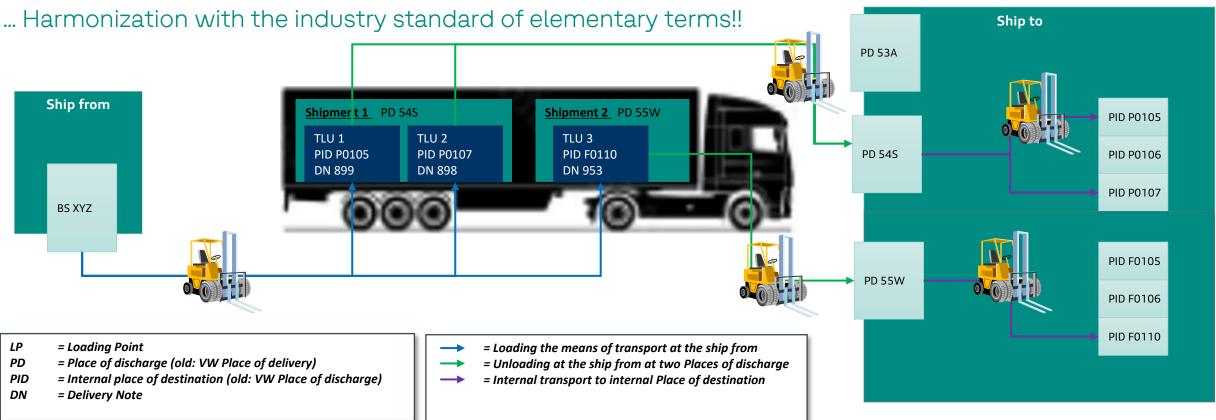
#### Place of internal destination

- The place of internaltdestination 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 that 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! One shipment can contain one or mo places of internal destination as it is related to the article!!

#### **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. Important
- Conclusion: A shipment can contain one or more delivery notes

## Important precondition...



Volkswagen name and value		Meaning inside the process		VDA name and value
VW Unloading point: 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

## Why is this important?

## Impact on the participants of the transport process...

	PID P0105	PID P0108	TLU 7 PID P0111 PN 900	TLU 10 PID P0114 DN 899	E	
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	PID P0109 F	TLU 8 PID P0112 DN 899	TLU 11 PID P0115 DN 898		
	TLU 3 PID P0107 DN 899	PID P0110 F	TLU 9 PID P0113 DN 900	TLU 12 PID P0116 DN 899		
000		= 12 internal p destinati shipment based on	Consolidation	n of shipment based on e of destination		0
Amount of VDA4987 Despatch Advices	1 Despatch Adv	<i>,</i> ice	12x Despatch Advices		TLU	= Transport Loading Unit
Amount of VDA4939 Shipping Documents	1 Shipping docu	ument	12x Shipping document		PD PID	= Place of discharge (old: VW Place of destination) = Internal place of destination (old: VW Place of
<ul> <li>Process steps validation of document with one x-dock:</li> <li>1. Despatch at ship from</li> <li>2. Pick up by forwarder at ship from</li> <li>3. Delivery at x-dock by forwarder</li> <li>4. Goods Receipt at x-dock</li> <li>5. Goods issue at x-dock</li> <li>6. Pick up by forwarder at x-dock</li> <li>7. Delivery at ship to by forwarder</li> <li>8. Goods receipt at ship to</li> </ul>	1 x Despatch co 1 x Pick up con 1 x Delivery at x 1 x Goods Rece 1 x Goods issue 1 x Pick up by fo 1 x Delivery at s forwarder	<ul> <li>8 Process Steps</li> <li>1 x Despatch confirmed</li> <li>1 x Pick up confirmed</li> <li>1 x Delivery at x-dock confirmed</li> <li>1 x Goods Receipt at x-dock</li> <li>1 x Goods issue at x-dock</li> <li>1 x Pick up by forwarder at x-dock</li> <li>1 x Delivery at ship to by forwarder</li> <li>1 x Goods receipt at ship to</li> </ul>		<ul> <li>96 Process Steps</li> <li>12 x Despatch confirmed</li> <li>12 x Pick up confirmed</li> <li>12 x Delivery at x-dock confirmed</li> <li>12 x Goods Receipt at x-dock</li> <li>12 x Goods issue at x-dock</li> <li>12 x Pick up by forwarder</li> <li>12 x Delivery at ship to by forwarder</li> <li>12 x Goods receipt at ship to</li> </ul>		discharge) = Delivery Note

## DIGITAL TRANSFORMATION

What is changing or needs to be considered Explanation based on examples!

## VDA 4933 T1 Transport Order - Material

## 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 T1 Transport Order Version (Guideline Version VDA 2.6 VW 1.9) <u>old</u> Transmission file head information (envelope transmission file) UNB+UNOC:<u>3</u>+00012345670XYZ01+00013000001VW KOI+220301:1340+16393' Message header (envelope message) up to Version UNH+9+DESADV:D:07A:UN:GAVI26 (up to this version)

VDA 4933 T1 Transport Order Version (Guideline Version VDA 3.0 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) up to Version					
UNH+9+DESADV:D:20B:UN:GAVI30 (starting with this Version)					

## VDA 4933 T1 Transport Order - Material

Harmonization with the industry standard  $\rightarrow$  Place of discharge/internal destination

In the **old version** of the guideline, the VW place of delivery and the VW place of discharge was transmitted at the header level of the message, which resulted that <u>two messages</u> were generated for <u>one shipment</u> with different VW places of discharge

VDA 4933 T1 Transport Order Version (Guideline Version VDA 2.6 VW 1.9) old					
Transmission fi	le head informat	ion (envelope	transmission fil	e)	
UNB+UNOC: <u>3</u> +0	00012345670XYZ	201+00013000	0001VW KOI+	-220301:1340+16393'	
Message heade	r (envelope mes	sage) up to Ve	rsion		
UNH+9+DESAD	/: <mark>D:07A:UN:GAV</mark>	<mark>I26 (up to this</mark>	version)		
Message conte	nt				
Segment-		VDA			
Group	Level	Segment	e. g. value	Description	
SG2	Header	LOC+7	54S	place of delivery	
SG2	Header	LOC+11	P0105	Place of discharge	

VDA 4933 T1 Tr	VDA 4933 T1 Transport Order Version (Guideline Version VDA 2.6 VW 1.9) old					
Transmission fi	le head informat	ion (envelope	transmission f	ile)		
UNB+UNOC: <mark>3</mark> +0	00012345670XY	Z01+O0013000	0001VW KOI	+220301:1340+16393'		
Message heade	r (envelope mes	sage) up to Ve	rsion			
UNH+9+DESAD	/: <mark>D:07A:UN:GAV</mark>	126 (up to this	version)			
Message conter	nt					
Segment-		VDA				
Group	Level	Segment	e. g. value	Description		
SG2	Header	LOC+7	54S	place of delivery		
SG2	Header	LOC+11	P0107	Place of discharge		

In the **new version** of the guideline, the message structure is transferred to the VDA industry standard:

- The VW place of delivery corresponds to the VDA place of discharge and is transmitted at header level in segment LOC+11.
- 2. The VW place of discharge corresponds to the VDA Internal place of destination and is transmitted at item level in the LOC+7 segment of the message.

This has the consequence that in this example the transport order of **one shipment** with material for several places of internal destination is to be transmitted in **one message** and thus corresponds to the <u>same structure</u> <u>as the VDA 4987 Despatch Advice.</u>

VDA 4933 T1 Transport Order Version (Guideline Version VDA 2.9 VW 2.0) <u>new</u>					
Transmission fil	e head informat	ion (envelope	transmission f	ile)	
UNB+UNOC: <u>X</u> +C	0001234567OXY	Z01+O001300	0001VW KO	+ <u>20</u> 220301:1340+16393'	
Message heade	r (envelope mes	sage) up to Ve	rsion		
UNH+9+DESAD\	/:D:20B:UN:GAV	130 (starting w	ith this Versio	n)	
Message conter	nt				
Segment-		VDA			
Group	Level	Segment	e. g. value	Description	
SG2	Header	LOC+11	54S	Place of discharge	
SG22	ltem	LOC+7	P0105	Internal destination	
SG22	Item	LOC+7	P0107	Internal destination	

## VDA 4933 T1 Transport Order - Material

## New information about movement type

According to the old version of the Guideline, the data of the forwarder already had to be transmitted in the segment NAD+FW for European transports for shipments with the Incoterms "EXW" (ex works) and "FCA" (free carrier).

In the new version of the Guideline, a new segment TMD+ has been included in segment group 6 to transmit the movement type. This information must now also be transmitted in order to make the consignment data available digitally to the logistics service providers involved in the transport.

Please use:

- 1. For ordering the area freight forwarder:
- X05 Distribution by area contract freight forwarder
- 2. For contracting direct load forwarders:
- X01 Full Truck Load with separate tender

Attention! In this context, we would also like to point out once again that the message must be transmitted with the correct process indicator (segment BGM data element 1000), as errors have often occurred here in the past!

For the ordering of:

- 1. Area freight forwarder
- LTL BGM+343:::LTL+12345678:1+9
- 2. Direct freight forwarders
- FTL BGM+343:::FTL+12345678:1+9

/DA 4933 T1 Transport Order Version (Guideline Version VDA 3.0 VW 3.0) <u>new</u>						
Transmission fi	ile head informat	tion (envelope	transmission fil	e)		
JNB+UNOC: <mark>X</mark> +	O001234567OXY	Z01+O001300	0001VW KOI+	- <u>20</u> 220301:1340+16393'		
Message head	er (envelope mes	sage) up to Ve	rsion			
JNH+9+DESAD	V:D:20B:UN:GAV	/I30 (starting w	vith this Version	)		
Message conte	nt					
Segment-		VDA				
Group	Level	Segment	e.g. value	Description		
5G2	Head	LOC+11	54S	VDA place of discharge		
GG6	Head	TMD+	X01	Movement Type		
5G22	ltem	LOC+7	P0105	VDA int. Place of destination		
5G22	Item	LOC+7	P0107	VDA int. Place of destination		

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## VDA 4987 Despatch Advice - Material

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 transmission file head 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 4987 Despatch Advice (Guideline Version VW 3.3) 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:GAVF24 VDA 4987 Despatch Advice ( Guideline Version VW 4.0) **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+1234+DESADV: **D:20B:UN:GAVF30** 

## VDA 4987 Despatch Advice - Material

Harmonization with the industry standard  $\rightarrow$  Place if discharge/internal destination

### In the **old version** of the guideline:

- 1. The VW place of delivery in segment LOC+7 was transmitted at header level of the message and corresponds to the VDA place of discharge.
- 2.
- 3. The VW place of discharge in segment LOC+11 was transmitted at item level of the message and corresponds to the VDA place of internal destination.

In the **new version** of the guideline, the message structure is transferred to the **VDA industry standard**:

- 1. As VW place of delivery corresponds to the VDA place of discharge and is transmitted in segment LOC+11 at header level
- 2. As the VW place of discharge corresponds to the VDA place of internal destination and is transmitted in segment LOC+7 at item level

VDA 4987 Despatch Advice (Guideline Version VW 3.3) old					
Transmissior	n file head informat	tion (envelope	transmission f	file)	
UNB+UNOC:	<mark>3</mark> +00012345670XY	Z01+O001300	0001VW KO	I+220301:1340+16393'	
Message hea	ader (envelope mes	sage) up to Ve	ersion		
UNH+9+DESA	ADV: <mark>D:07A:UN:GAV</mark>	/F24 (up to thi	<u>s version))</u>		
Message cor	ntent	····:			
Segment-					
Group	Content level	Segment	e.g.value	Description VW	
SG2	Head	LOC+7	54S	Place of Delivery	
SG20	ltem	LOC+11	P0105	Place of Discharge	
SG20	Item	LOC+11	P0107	Place of Discharge	

VDA 4987 Despatch Advice (Guideline Version VW 4.0) new				
Transmission	file head informat	tion (envelope	transmission	file)
UNB+UNOC:	<u>(</u> +00012345670XY	Z01+O001300	0001VW КС	I+ <u>20</u> 220301:1340+16393'
Message hea	der (envelope mes	sage) starting	with Version	
UNH+9+DESA	DV: D:20B:UN:GA	<b>VF30</b> (starting	with version)	
Message con	tent			
Segment-				
Group	Content level	Segment	e.g. value	Description VDA
SG2	Head	LOC+11	54S	Place of discharge
SG22	ltem	LOC+7	P0105	Internal destination
SG22	ltem	LOC+7	P0107	Internal destination

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## VDA 4987 Despatch Advice - Material

## New information about movement type

According to the old version of the Guideline, the data of the forwarder already had to transmitted in the segment NAD+FW for European transports for shipments with the Incoterms "EXW" (ex works) and "FCA" (free carrier).

In the new version of the Guideline, a new segment TMD+ has been included in segment group 6 to transmit the movement type. This information must now also be transmitted in order to make the consignment data available digitally to the logistics service providers involved in the transport.

#### Please use:

- 1. For ordering the area freight forwarder:
- X05 Distribution by area contract freight forwarder
- 2. For contracting direct load forwarders:
- X01 Full Truck Load with separate tender



VDA 4987 Despatch Advice ( Guideline Version VW 4.0) new				
Transmission	n file head informat	tion (envelope	transmission	file)
UNB+UNOC:	<u>×</u> +00012345670XY	Z01+O001300	0001VW KC	) + <u>20</u> 220301:1340+16393'
Message hea	ider (envelope mes	sage) starting	with Version	
UNH+1234+D	DESADV: D:20B:UN:	GAVF30		
Message con	itent			
Segment-				
Group	Content level	Segment	e. g. value	Description VDA
SG2	Head	LOC+11	54S	Place of discharge
SG6	Head	TMD+	X01	Movement Type
SG22	Item	LOC+7	P0105	int. Place of destination
SG22	ltem	LOC+7	P0107	int. Place of destination

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## VDA 4987 Despatch Advice - Material

Transport order Reference

Already requested with the previous version of the guideline but often "forgotten", transmission of the transport order reference in the segment RFF+TIN

- 1. If VDA 4933 T1 transport order message was created by the partner the transport order reference is to be taken from segment BGM data element 1004 document identifier from the original transport order message.
- 2. If the partner uses the **web portal solution** of VW or forwarder for transport notification the transport order number is created by the portal and **must be taken over** in this message.

This information is important to connect notification of planned shipment and despatched shipment and to support shipment tracking !



VDA 4987 Despatch Advice ( Guideline Version VW 4.0) new							
Transmission file head information (envelope transmission file)							
UNB+UNOC:X+	UNB+UNOC:X+00012345670XYZ01+00013000001VW K0I+20220301:1340+16393'						
Message head	er (envelope	message) starting	with Versio	n			
UNH+1234+DE	SADV: D:20E	UN:GAVF30					
Message Content							
Segment-		VDA					
Group	Level	Segment	e.g.value	Description			
SG1	Head	RFF+TIN	12345678	Transport order reference			

## 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 your messages at <u>Self Service Validation</u>
- 3. Virtual File Name and transmission parameters do not change!
- 4. In addition, you have the option of sending the message with a test indicator for a productive test.



## FAQ Delivery Coll off

Will there be a new version of the VDA 4984 call off?

#### → No, no plans to change so far!

It must be ensured that the use of the segments LOC+7 and LOC+11, which deviates from the industry standard, is taken into account when processing the currently valid version of VDA 4984 of the Volkswagen Group (with the exception of Porsche) in the target system!

VDA 4984 Del	VDA 4984 Delivery Call Off (Guideline Version VDA 2.1 VW 1.8)					
Transmission	file head inforn	nation (envel	ope transmiss	ion file)		
UNB+UNOC:3	UNB+UNOC: <mark>3</mark> +00012345670XYZ01+00013000001VW KOI+220301:1340+16393'					
Message head	der (envelope m	nessage) up t	o Version			
UNH+9+DELFC	UNH+9+DELFOR:D:04A:UN:GAVB11					
Message cont	ent					
Segment- Group	Content level	Segment	e. g. value	Description VW		
SG6	Kopf	LOC+7	54S	Place of discharge		
SG6	Kopf	LOC+11	P0105	Internal destination		



## FAQ: Are there changes in the documents?

### VDA 4939 Shipment document -> No changes in the document!

- If you create the shipment document with Volkswagen TSB Generator Software from VDA 4987 Despatch advice → <u>Use the current version</u> <u>of TSB Generator</u> to automatically create the correct document!
- If you create the shipment document in the Volkswagen portal solutions WEBSCM or Discovery, nothing changes.

Aus der alten Version der Nachricht

VDA 4939 Shipment document						
If Source VDA4987 old			➔ Document does not change			
	Segment Group	Quelle	Beispielwert	Fachliche Bezeichnung		
Master	SG2	LOC+7	54S	Place of discharge		
Item	SG20	LOC+11	P0105	Warehouse		
Item	SG20	LOC+11	P0107	Warehouse		

Aus der neuen Version der Nachricht

VDA 4939 Shipment document					
If Source VDA4987 <b>new</b>			➔Document does not change		
Segment-		Segment			
Group	Segment Group		e.g.value	Description VDA	
Masterblatt	SG2	LOC+11	54S	Place of discharge	
Positionsblatt	SG20	LOC+7	P0105	Internal destination	
Positionsblatt	SG20	LOC+7	P0107	Internal destination	

## FAQ: Gibt es Änderungen an den Dokumenten?

## VDA 4994 Global Transport Label (GTL) → Keine Änderungen am Dokument!

- Wenn Sie das GTL mit Volkswagen TSB Generator aus der VDA 4987 Lieferavis erstellen → <u>Nutzen Sie die aktuelle Version des</u> <u>TSB Generators</u>, um automatisch das richtige Dokument zu erstellen!
- Wenn Sie das GTL in den Volkswagen Portallösungen WEBSCM oder Discovery erstellen ändert sich nichts!

### Aus der **alten Version** der Nachricht

VDA 4994 Global Transport Label					
Wenn Quelle 4987 <mark>old</mark>		➔Document does not change			
Segment-			Fachliche		
Gruppe	Quelle 4987	Beispielwert	Bezeichnung		
SG2	LOC+7	H54	Abladestelle		
SG20	LOC+11	101K4	Lager		

Aus der neuen Version der Nachricht

VDA 4994 Global Transport Label						
Wenn Quelle 4987 <b>neu</b>		<ul> <li>Dokument ändert sich nicht</li> </ul>				
Segment-	Segment	Beispielwert	Fachliche			
Gruppe			Bezeichnung			
SG2	LOC+11	H54	Abladestelle			
SG22	LOC+7	1ABCD	Lager			

## DIGITAL TRANSFORMATION

Thank You for your attention!