

Appendix C

EDI Guideline

Supplier Guideline for
Electronic Data Interchange (EDI) and Packaging

EDI Guideline - Supplier Guideline for EDI and Packaging

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1 Purpose

This instruction regulates the EDI transfers between the companies belonging to the SMP Group and the suppliers for a reliable electronic communication of all parties affected. In general, this instruction includes:

- EDI for delivery note and transport data (VDA 4913)
- EDI goods receipt (VDA 4912)
- Material tag with barcode (VDA 4902)

Goal: To ensure a regular electronic communication between SMP plants and their suppliers.

2 Scope

The EDI Guideline applies to all SMP sites and affiliated companies of the SMP group according to § 15 AktG and must be implemented for all locations supplied by the supplier. Contact persons of the individual sites for the VDA messages (EDI), packaging planning and container management can be found in **PriSMa**.

3 Responsibilities

The responsibilities for the single processes can be found in the following chapters.

4 Terms and Definitions

Fig.	Figure
EDI	Electronic Data Interchange
DUNS	Data Universal Numbering System
ESP	External Service Providers
FQ	Filling Quantity
G-Label	Label for mixed loads
GLT	Large Load Carrier
HU	Handling Unit
IP	Inner Packaging
KLT	Small Load Carrier
LAB	Forecast Delivery Schedule
LU	Loading Unit
M-Label	Master Label
OFTP	Odette-File-Transfer-Protocol
SLRN	Shipment Load Reference number
S-Label	Single Label

VDA	German Association of the Automotive Industry
SU	Shipping Unit
diff.	different

5 Procedure

5.1 General information on Electronic Data Interchange

Electronic Data Interchange (EDI) enables an optimal coordination of the information flow between all business partners. All information about the cross-company business processes can be made available without loss of time and even in the case of increasing volumes without additional workload.

In order for the advantage of electronic communication to be maximized, the information interchange must be integrated into the application systems. Due to the extensive automated data transfer, new measures are necessary in order to ensure an error-free process. This includes automated plausibility tests as well as a revision of the communication structures. The electronic data interchange must be open to different application systems, transmission media and formats.

In the automotive industry, electronic data interchange for receipts is mainly carried out using the Odette-File-Transfer-Protocol (OFTP) transmission protocol. The following message formats are used:

- VDA (recommended by the German Association of the Automotive Industry)
- Odette (European standard for the data interchange in the automotive industry, migrates to EDIFACT)
- EDIFACT (global standard for EDI-messages in various industries)

All formats are character-oriented formats with segments structured hierarchically and grouped together. The VDA format is based on fixed length data fields, the other formats are variable.

5.1.1 EDI Data Sheet

In order to store the agreed parameters for EDI with SMP, the supplier must forward the EDI data sheet to the respective contact person in Purchasing at SMP.

5.1.2 Plants, Unloading Points and DUNS Numbers

The overview of the SMP plants, unloading points and DUNS numbers can be found in **PriSMa** and is available on the SMP homepage.

5.1.3 Packaging Overview

Packaging is required in the supply process in order to be able to transport the ordered goods undamaged to their destination. There are different types of containers; both standardized and specific. The supplier receives guidelines in form of packaging specifications, describing which part is to be packed in which packaging and with which quantity. SMP assigns a packaging number for automatic

identification of the respective packaging. The packaging number must not begin with a leading zero and must not be repeated within a year. The packaging number must be numeric. This packaging identification must correspond to the SMP material number of the packaging. For standard packaging, the SMP material number can be found in the Load Carrier Catalogue (= Ladungsträgerkatalog). For special load carriers or customized packaging, please check the Packaging Data Sheet (Corp-8.4.2-Packaging Data Sheet-00084) of the part. For further information ask the responsible packaging planner at the SMP recipient plant.

5.1.4 Part Number

Note: the specification of the part generation status is mandatory. If no part generation status is defined for a part, "STANDARD" must be entered.

The SMP part number can have up to 18 alphanumeric digits. SMP currently uses the following formats:

- 8-digit numeric
- 12-digit numeric
- x-digit alphanumeric

5.2 EDI of Delivery Note and Transport Data according to VDA 4913

The remote data transmission for delivery note and transport data defines the EDI of delivery notes and transport data between suppliers and customers and requires a high level of process quality. During this procedure, the data contained in the freight order / shipping order, delivery note and goods label for each shipment is edited by the supplier and transmitted to the customer or receiver directly.

5.2.1 Allocation of the Delivery Note Data

The delivery note data must be provided by EDI and must conform to VDA recommendation 4913, version 04 (edition V, March 04, 1996). When transmitting the data, attention must be paid to the direct relationship between the plant coding, the unloading point and the order number corresponding to the previous delivery schedule.

5.2.2 Time of Data Transfer

Each delivery is announced through a notification via EDI. The data must run ahead of the goods. The EDI must therefore be sent to the central SMP EDI system immediately when the transport is prepared by the supplier. In order to be able to guarantee early detection and efficient elimination of malfunctions in the information process, the data must be sent so that an immediate adjustment can be made in case of a fault. The data must be sent to the receiver of the goods no later than after the delivery handover.

5.2.3 Set-Up Phase for the EDI Delivery Note

The delivery notes EDI will not be used in the SMP goods receipt department during the test phase. As soon as the EDI processes have been set up, the EDI delivery notes can be sent. Since the EDI will first be sent to a test system, it is not necessary to generate specific test data; the sending of the productive data can start immediately. After the data check up in the test system, they are transferred to the productive system. During the set-up phase, the framework agreements must be adjusted, this adjustment can take place in one plant at a time.

5.2.4 Ongoing Operations of the EDI Delivery Note

5.2.4.1 Basic Principles

The data quality obtained during the set-up phase, as well as the correct point in time for the data transfer must be guaranteed during the productive use of the EDI delivery note. In productive use, all shipments must be notified by EDI delivery note. If this is not possible in exceptional cases, the SMP goods receipt department must be informed in advance.

When the goods are delivered, the EDI delivery note of the suppliers are activated in the SMP goods receipt department. The shipment reference number (or transport number) is the key term here. In case the EDI message is not available or has faults at this time, SMP must register the shipment and transport data manually. This manual registration is to be avoided; therefore, the prompt transfer of the data from the supplier must be ensured. ***The suppliers must make sure that each delivery to SMP is accompanied by an EDI goods receipt slip (VDA 4912) and a barcode-compatible goods tag (VDA 4902).*** The physical scope of shipment is then checked for compliance with the existing information. The scan of the barcode goods tag (VDA 4902) is part of the check-up. If deviations are noticed, a manual adjustment of the data must be made. ***SMP reserves its right to burden the supplier with additional work and expenses caused by non-existing or incorrect (EDI) messages (VDA 4902, 4912, 4913).***

5.2.4.2 EDI Adjustments and Malfunctions

If content changes are necessary after the sending of the data, these changes must be communicated to SMP. Immediate notification must be made.

The supplier must take the proper measure in order to be able to resend an EDI that has already been sent. SMP expects the last three transfers per recipient to be able to be resend.

In exceptional cases it could happen that the delivery note data cannot be transmitted via EDI (e.g. special trips, computer breakdown, administration problems, reception problems etc.). SMP must immediately be informed of this.

5.2.5 Message Structure

The message is described in detail in VDA recommendation 4913. SMP does not use any relevant special coding for the described fields.

SMP uses the following structure: for the record type 715, 1 record per M label (pallet) followed by further 715 records for the S label (inner packaging) and 715 record types for the packaging aid. The division of the S labels is done according to the VDA recommendation. The packaging aids for the pallet always follow the 715 record types of the pallet. The packaging aids for the inner packaging always follow the last 715 record types of the inner packaging.

The correct packaging structure conforming to the below described rules for each message format must be observed. The packaging structure will be checked by SMP when the message is received. Special attention needs to be paid to the identification of the individual packages (= Handling Units, HU). A unique identification (package number) must be assigned for each package of the inner and outer packaging (KLT and GLT).

5.2.6 Use and Description of the Record Types

The length of the individual records in VDA message 4913 is always 128 digits.

Record Type	Description	Must / Conditional
711	Header delivery note and transport data Version 03, 1 x per EDI operation	Must
712	Unique data elements of the transport Version 03, 1 x per sending	Must
713	Unique data elements of the delivery note (header data for delivery note) Version 03, 1 x per delivery note	Must
714	Delivery note position data Version 03, 1 x per delivery note	Must
715	Packaging data Version 03	Must
716	Text data on the position Version 02	Must
717	Individual packing piece data on position Version 01, 1 x per packing piece	Conditional
718	Data on the production numbers Version 02	Conditional
719	Trailer delivery note and transport data Version 02, 1 x per EDI operation	Must

When describing the record types, pay particular attention to the specific notes at the end of the respective chapter!

5.2.6.1 Record Type 711

The record type 711 identifies the partner and defines the purpose of the interchange.

Pos	Data Element	K M	Lg. Byte	A N	from	to	Verbal Description	
01	Record type	M	3	N	1	3	Constant '711'	
02	Version number	M	2	N	4	5	Constant '03'	
03	Data receiver number	M	9	A	6	14	Number given by the data sender (here: supplier) to the data receiver (SMP). Not processed by SMP.	
04	Data sender number / Supplier number	M	9	A	15	23	Number given by the data receiver (SMP) to the supplier. Left-aligned, 8-digits + a blank (will be transmitted during the delivery schedule according to VDA 4905 in the record type 511, field 04).	
05	Old transmission number	M	5	N	24	28	Transmission number per EDI operation 5-digits, with zeros in front.	
06	New transmission number	M	5	N	29	33	Transmission number per EDI operation 5-digits, with zeros in front.	
07	Transmission date	M	6	N	34	39	Form: YYMMDD	
08	Subcontractor number	K	9	A	40	48	Number given by the client to the subcontractor. Not processed by SMP.	
09	Freight carrier number	K	9	A	49	57	Number given by the client to the freight carrier (only with the VDA 4920 reference). Not processed by SMP.	
10	Stock keeper code	K	1	A	58		Stock keeper code (encoded). Not processed by SMP.	
11	Delivery identification	K	1	A	59		The use is to be defined bilaterally (encoded). Not processed by SMP.	
12	Empty	M	69	A	60	128	Filled in with blanks.	
				<i>K = Kann, Conditional</i> <i>M = Muss, Mandatory</i>				<i>A = Alphanumeric</i> <i>N = Numeric</i>

5.2.6.2 Record Type 712

The record type 712 describes the unique data elements of the transport.

Pos	Data Element	K M	Lg. Byte	A N	from	to	Verbal Description
01	Record type	M	3	N	1	3	Constant '712'
02	Version number	M	2	N	4	5	Constant '03'
03	Sending freight reference number	M	8	N	6	13	Reference numbers given by the <u>dispatcher</u> to the sending / freight / transport; right-aligned entry with lead zeros. Repeating the numbers during a year is not allowed.
04	Plant supplier	K	3	A	14	16	The plant of the supplier which sends the goods. Not processed by SMP.
05	Freight carrier	M	14	A	17	30	Name/Number of the freight carrier. Not processed by SMP.
06	Freight carrier transfer date	M	6	N	31	36	The date of the sending transfer to the freight carrier. Not processed by SMP.
07	Freight carrier time of transfer	M	4	N	37	40	Time of sending transfer to the freight carrier. Not processed by SMP.
08	Gross weight of the sending	M	7	N	41	47	Gross weight of the goods. Not processed by SMP.
09	Net weight of the sending	K	7	N	48	54	Net weight of the goods. Not processed by SMP.
10	Freight code	K	2	N	55	56	Defines who pays the freight costs and to which extent. Not processed by SMP.
11	Carrier EDI code	K	1	A	57		Carrier EDI code. Not processed by SMP.
12	Number of package pieces	K	4	N	58	61	The sum of all sending pieces included in the package. Not processed by SMP.
13	Transport Partner number	K	14	A	62	75	Number of the area contract freight carrier. Not processed by SMP.
14	Means of transport code	M	2	N	76	77	Code for the means of transport. Not processed by SMP.
15	Means of transport number	M	25	A	78	102	The number of the means of transport. Not processed by SMP.
16	Code for pos. 17	K	1	A	103		Not processed by SMP.
17	Content conforming with code in pos. 16	K	8	A	104	111	Not processed by SMP.
18	Arrival date - target	M	6	N	112	117	Date set by the client for the arrival of the sending. Form: YYMMDD.

Pos	Data Element	K M	Lg. Byte	A N	from	to	Verbal Description
19	Arrival time - target	K	4	N	118	121	Time set by the client for the arrival of the sending. Form: HHMM. Not processed by SMP.
20	Loading meter	K	3	N	122	124	Indication of the occupied meters in the loading area. Not processed by SMP.
21	Code for the type of truck	K	1	N	125		Encoded. Not processed by SMP.
22	Empty	M	3	A	126	128	Filled in with blanks.
<i>K = Kann, Conditional</i>				<i>A = Alphanumeric</i>			
<i>M = Muss, Mandatory</i>				<i>N = Numeric</i>			

5.2.6.3 Record Type 713

Record type 713 describes unique data elements of the delivery note (delivery note header) and contains the delivery note number, the unloading point etc.

Pos	Data Element	K M	Lg. Byte	A N	from	to	Verbal Description
01	Record type	M	3	N	1	3	Constant '713'
02	Version number	M	2	N	4	5	Constant '03'
03	Delivery note number	M	8	A	6	13	Reference numbers given by the supplier to the delivery note; right-aligned entry with lead zeros. The delivery note number must not be repeated within a year and must not begin with a zero.
04	Delivery date	M	6	N	14	19	Form: YYMMDD
05	Unloading point	M	5	A	20	24	The unloading point must be communicated according to the details in EDI delivery schedule (VDA 4905, record type 512, field 11); left-aligned entry.
06	Type of dispatch	M	2	N	25	26	Type of dispatch (encoded). Not processed by SMP.
07	Client reference (LAB)	K	4	A	27	30	The client reference in the delivery schedule (VDA 4905, record type 512, field 12). Not processed by SMP.
08	Closing- / order number	M	12	A	31	42	Closing - / order number. Communicated in the EDI delivery schedule (VDA 4905, record type 512, field 10), 10-digit, with "55" in front, left-aligned entry.
09	Transaction code	K	2	N	43	44	Only with EDL use. Not processed by SMP.
10	Empty 1	M	4	A	45	48	Empty field, filled in with blanks.

Pos	Data Element	K M	Lg. Byte	A N	from	to	Verbal Description				
11	Client plant	M	3	A	49	51	The client plant to which delivery should be made. Encoded name of the client. Should be communicated according to the details in the EDI delivery schedule (VDA 4905, record type 512, field 03).				
12	Consignment	K	8	N	52	59	Consignment. Not processed by SMP.				
13	Number of receiver	K	9	A	60	68	Not processed by SMP.				
14	Empty 2	M	1	A	69		Empty field, filled in with blanks.				
15	Client's storage location	M	7	A	70	76	The storage location of the client, additional to the unloading point, will be communicated in the EDI delivery schedule (VDA 4905, record type 512, field 19), left-aligned entry.				
16	Supplier number	M	9	A	77	85	Not processed by SMP.				
17	Point of consumption	K	14	A	86	99	Point of consumption. Not processed by SMP.				
18	Call Off Number	K	4	A	100	103	Call Off Number. Not processed by SMP.				
19	Client reference	K	6	A	104	109	Detail from the individual order. Not processed by SMP.				
20	Client's document number	K	14	A	110	123	Not processed by SMP.				
21	Empty 3	M	5	A	124	128	Empty field, filled in with blanks.				
				<i>K = Kann, Conditional</i> <i>M = Muss, Mandatory</i>				<i>A = Alphanumeric</i> <i>N = Numeric</i>			

Note:

Field: Unloading point (Pos. 05) – the entry must conform with the current order (delivery schedule and short term call off); left-aligned. The unloading point at SMP has 4 or 5 digits (see also Chapter 5.1.2).

Field: Closing- / Order number (Pos. 08) – EDI dispatch notices are to be sent only for materials included in a frame contract (10-digit closing - and order number respectively with „55“ in front), i.e., no dispatch notice for „45-individual orders“.

Field: Client Plant (Pos. 11) – The entry must conform with the current order (delivery and short term call off schedule respectively). SMP uses a 3-digit plant description (see also Chapter 5.1.2).

5.2.6.4 Record Type 714

The record type 714 describes the delivery note positions (articles and delivered quantity).

Pos	Data Element	K M	Lg. Byte	A N	from	to	Verbal Description
01	Record type	M	3	N	1	3	Constant '714'
02	Version number	M	2	N	4	5	Constant '03'
03	Article code client	M	22	A	6	27	Number assigned by the client to an article, included in the EDI delivery schedule (VDA 4905, record type 512, field 08), left-aligned entry followed by blanks.
04	Article code supplier	M	22	A	28	49	Number assigned by the supplier to an article. Not processed by SMP.
05	Country of origin	M	3	N	50	52	Country of origin. Not processed by SMP.
06	Delivery quantity 1	M	13	N	53	65	Delivery quantity in the quantity unit of the delivery schedule, right-aligned with zeros in front, 3 decimals.
07	Quantity unit 1	M	2	A	66	67	ST = Piece KG = Kilogram L = Liter M = Meter
08	Delivery quantity 2	K	13	N	68	80	If applicable, delivery quantity in the quantity unit of the supplier, right-aligned with zeros in front, 3 decimals.
09	Quantity unit 2	K	2	A	81	82	See position 07.
10	VAT rate	K	3	N	83	85	VAT rate. Not processed by SMP.
11	Empty 1	K	1	A	86		Empty (filled in with one blank).
12	Position number delivery note	M	3	N	87	89	Position of delivery note, right-aligned entry with zeros in front and no decimal.
13	Demand code	K	1		90		Not processed by SMP.
14	Batch number	K	15	A	91	105	Identification number assigned by the supplier to a batch. Necessary only with parts „handled in batches“, otherwise empty (filled in with blanks). If delivery is made in several batches, a separate delivery note position is to be filled in for every batch including the number of batches and the batch number.
15	Use code	M	1	A	106		Use code (encoded). Not processed by SMP.

Pos	Data Element	K M	Lg. Byte	A N	from	to	Verbal Description
06	Position number delivery note	M	3	N	63	65	<p>This field should contain the position number of the record type 714 which refers to the package. Right-aligned entry with zeros in front.</p> <p>If the package refers to all the positions of the preceding delivery note number (record type 714), three zeros must be added to the entry.</p>
07	Capacity	M	13	N	66	78	<p>Actual amount of part codes in the package; right-aligned with zeros in front, 3 decimals.</p> <p>Quantity in the quantity unit according to record type 714, position 07.</p>
08	Package number from	M	9	N	79	87	<p>The number must not be repeated within a year. Left-aligned entry with no leading Zeros and if applicable is filled in with blanks.</p> <p>The packages receive no package numbers. This field is filled in with blanks.</p> <p>The packaging number must be numeric.</p>
09	Package number to	K	9	N	88	96	<p>If this element is used, the number sequence between „Package number from „Package number to“ must increase numerically with no gaps. Left-aligned entry with no leading Zeros and if applicable is filled in with blanks.</p> <p>The packaging number must be numeric.</p>
10	Package dimensions	K	12	N	97	108	<p>Details in millimetres</p> <p style="padding-left: 40px;">97 – 100 length</p> <p style="padding-left: 40px;">101 – 104 width</p> <p style="padding-left: 40px;">104 – 108 height</p> <p>Information not processed by SMP.</p>
11	Stacking factor	K	1	N	109		Information not processed by SMP.
12	Stock call-off number	K	15	A	110	124	Information not processed by SMP.

Pos	Data Element	K M	Lg. Byte	A N	from	to	Verbal Description
13	Label identification	M	1	A	125		Bar code identification of the goods tag (VDA 4902). Valid entry: G = Mixed packages (with sub-packages and different part codes). M = Master Label (with sub-packages and same part codes) S = Single Label (1 package) = Blank for the packages such as lid, underliner or empty KLT (for stabilization). Packaging aids have no numbers or goods tags.
14	Packaging identification	K	1	A	126		Information not processed by SMP.
15	Ownership identification	K	1	A	127		Information not processed by SMP.
16	Empty	M	1	A	128		Filled in with a blank.
<i>K = Kann, Conditional</i>				<i>A = Alphanumeric</i>			
<i>M = Muss, Mandatory</i>				<i>N = Numeric</i>			

Note:

The packaging record must be sent. Depending on the packaging structure, several packaging records may have to be transmitted for each position record (SA 714). The preparation of the packaging record is described in detail in Chapter 5.2.7. The connection to the goods tag VDA 4902 is also described.

Field: Capacity (Pos.07) – The capacity of the package must be shown depending on the use of the packaging aids (inner / outer packaging, packaging aid, etc.). Chapter 5.2.7.4 describes diverse packaging examples and their representation in the record types 713 – 715.

Field: Package number - Number from (Pos.09) – this field must be sent to SMP (different from the Can-clause in the VDA instruction). This entry is needed for the tracing of the package from sender to destination and must match the goods tag conforming with VDA 4902.

5.2.6.6 Record Type 716

The record type 716 describes the text data for a position.

Pos	Data Element	K M	Lg. Byte	A N	from	to	Verbal Description
01	Record type	M	3	N	1	3	Constant '716'
02	Version number	M	2	N	4	5	Constant '02'
03	Part Generation Level	M	40	A	6	45	Text field that can be used for conveying unformatted information. If a T is entered in record type 714, item 21, the part generation status must be entered here (left-aligned). If no part generation version is defined for a part, "STANDARD" must be entered.
04	Text 2	M	40	A	46	85	Best before date, assigned by the supplier to the material with limited storage life. Necessary only for the materials with limited storage life, otherwise empty (filled in with blanks). The following date formats are allowed: - DD.MM.YYYY - DD.MM.YY
05	Text 3	K	40	A	86	125	Text field which can be used for transmitting the unformatted information.
06	Empty	K	3	A	126	128	Filled in with blanks.
<i>K = Kann, Conditional</i>				<i>A = Alphanumeric</i>			
<i>M = Muss, Mandatory</i>				<i>N = Numeric</i>			

5.2.6.7 Record type 717

The record type 717 describes the unique package record for a position. Conditional record, used only with EDL transactions and not processed by SMP.

5.2.6.8 Record type 718

The record type 718 describes the production number data. Can-record, not used by SMP.

5.2.6.9 Record type 719

The record type 719 describes trailer record of the delivery note and transport data and contains statistics on the transmission.

Pos	Data Element	K M	Lg. Byte	A N	from	to	Verbal Description				
01	Record type	M	3	N	1	3	Constant '719'				
02	Version number	M	2	N	4	5	Constant '02'				
03	Counter record type 711	M	7	N	6	12	Number of transmitted record types 711. Right-aligned entry with zeros in the front.				
04	Counter record type 712	M	7	N	13	19	Number of transmitted record types 712. Right-aligned entry with zeros in the front.				
05	Counter record type 713	M	7	N	20	26	Number of transmitted record types 713. Right-aligned entry with zeros in the front.				
06	Counter record type 714	M	7	N	27	33	Number of transmitted record types 714. Right-aligned entry with zeros in the front.				
07	Counter record type 715	M	7	N	34	40	Number of transmitted record types 715. Right-aligned entry with zeros in the front.				
08	Counter record type 716	M	7	N	41	47	Number of transmitted record types 716. Right-aligned entry with zeros in the front.				
09	Counter record type 718	M	7	N	48	54	Number of transmitted record types 718. Right-aligned entry with zeros in the front.				
10	Counter record type 719	M	7	N	55	61	Number of transmitted record types 719. Right-aligned entry with zeros in the front.				
11	Counter record type 717	M	7	N	62	68	Number of transmitted record types 717. Right-aligned entry with zeros in the front.				
12	Empty	M	60	A	69	128	Empty, filled in with blanks.				
				<i>K = Kann, Conditional</i> <i>M = Muss, Mandatory</i>				<i>A = Alphanumeric</i> <i>N = Numeric</i>			

5.2.7 Visualization of Packages in the Transport and Delivery Note Data

For an efficient collection of the delivered goods the supplier must add good tags to all the packages in a delivery. Further information on the good tag conform with VDA 4902 can be found in Chapter 5.4 of this guideline.

In the incoming goods department at SMP, packages without sub-packages are individually recorded by scanning the good tag. For packages with sub-packages (handling units), only the main material tag (outer packaging) will be scanned and recorded. All the other packages belonging to this loading unit are referenced via its package number. A correct visualization of the packaging information in the EDI delivery note conforming with VDA 4913 is required. If the part numbers in identical containers with the same fill quantity are the same, it is advisable to use the specification "Package no. from - to" (see VDA 4913, record type 715, items 08 and 09). This only applies to packages with the label "S". In this way, the volume of the data to be recorded is reduced.

In the VDA 4913 visualization, the following logic in the record type 715 is to be followed when preparing the packaging structure in order to allow the assignment of the delivery units (numbers) to the loading unit (handling unit) or the identification of simplified loading units (single packing pieces).

The goods receipt is usually recorded for all packaging (incl. packaging aids) which must be managed in returnable packaging accounts. The quantities transmitted in the EDI (qty. of packaging, record type 715, pos. 05) must match the actually delivered quantities.

5.2.7.1 Visualization of Simplified Loading Units (individual packages)

Single or individual packages are packages with no sub-packaging. The description must include the label or package reference "S", the number of packages, the filling quantity per package and a unique package number (for each package).

If the part number is the same, but the packaging type and the filling quantities are different or if the package number sequence is interrupted, a separate 715 record must be created.

5.2.7.2 Visualization of Loading Units sorted by Part (Master Packages)

Correctly sorted handling units consist of an outer packaging, that is a basic carrier (e.g. Euro pallet or cage pallet), the inner packaging, that is a load carrier, e.g. KLT or handling units with the same content (same part number) and, if necessary, loading aids such as lids, layers or form inlays. Each master loading unit must be described individually.

The first 715 record of a handling unit describes the load carrier and contains the label "M", the number of packages (= 1), the filling quantity (= null) and the package number.

The description of the individual packages is valid for the small load carriers. Label or package identification "S", number of packages, the filling quantity and a clear package number (for each package).

The 715 record for package aids contains no package identification or package number, but only the number of packaging aids for each type > 0 and the filling quantity (= null).

5.2.7.3 Visualization of Mixed Packages

Mixed packages consist of an outer packaging, that is a basic carrier (e.g. Euro pallet or cage pallet), the inner packaging, that is a load carrier, e.g. KLT, with different part numbers and extra packaging aids such as lid or inlays. Each package must be described individually.

The first 715 record of a handling unit describes the load carrier and contains the label "G", the number of packages (= 1), the filling quantity (= 0) and a unique package number.

After the load carrier, both 715 records for the delivery units as well as for the packaging aids assigned to the load carrier can follow. The individual packages description (see 5.2.7.1) is valid for the delivery units in the mixed packages. The 715 record contains the label or package identification "S", the number of containers > 0, the filling quantity for each container and a unique package number per container. If the part number is the same, but the packaging type and the filling quantities are different or if the package number sequence is interrupted, a separate 715 record must be created.

The 715 record for packaging aids in mixed packages contains no label identification and no package number; the number of packaging aids for each type is > 0, with a filling quantity = 0.

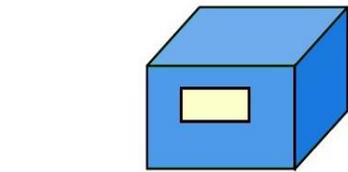
After each part number change within a package, the 715 record for the load carrier must be repeated. The repeating record for the load carrier contains the label "G", the number of packages (= 0 as repeating label), the filling quantity (= 0) and the package number from the first 715 record for the load carrier of the delivery. The description of the individual packages applies again for the other delivery units in the mixed package after the repeating record for the load carrier (see 5.2.7.1).

5.2.7.4 Description of By-Pack in Mixed Loading Units

A by-pack is a quantity of items, which is reconciled without its own standard packaging in a delivery unit. This separate package in a simplified loading unit is described as a delivery unit in a mixed loading unit. By-pack in a mixed loading unit cannot be accurately described due to lack of structuring options in the VDA 4913. The 715 record for the by-pack must follow directly the 715 record for the packaging of the delivery unit (package identification "S"), to which the separate package was enclosed. „BEIPO“ must be entered as customer packaging number. For separate packages, the description of individual packaging is essential. Therefore, the 715 record contains the package identification "S", the number of containers "by-pack" > 0, the filling quantity per "by-pack" and a unique package number for each packaging.

5.2.7.5 Packaging Examples and their Visualization in EDI Messages

Legend of the packaging examples



Inner Packaging or delivery unit:

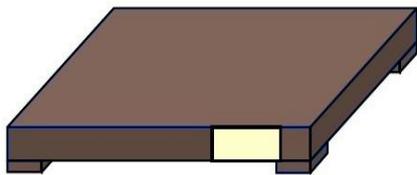
a package (packaging aid) without sub-packaging.

Load carrier

The part is in “contact” with the inner packaging.



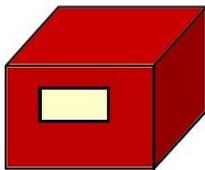
Simplified loading unit: is an exception to the delivery unit / inner packaging, the outer packaging is missing.



Outer packaging: A packaging aid to carry the sub-packages / delivery units – but with no further outer packaging.

Package carrier

The outer packaging and the delivery units make a **delivery unit**.



Logical packaging intermediate layer:

a package with sub-packaging and more outer packaging. The intermediate layer is an **outer packaging**, since the part is not in contact with the inner packaging.



Lid and intermediate layer:

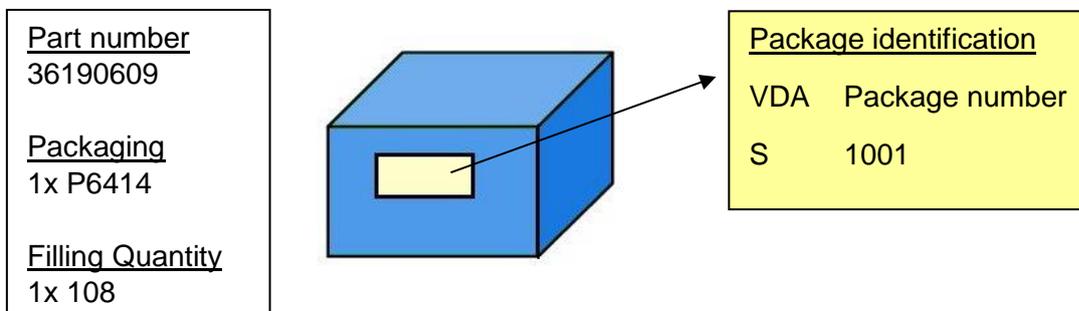
A packaging aid for physical protection, as closure for the delivery unit, stacking aid and/or to stabilize diverse small load carriers.

Legend of the data elements in the record types

<p>SA713 delivery note number, Delivery note date, unloading point,</p>	<p>SA714 part number (reference number), delivery quantity, position on delivery note, order number, batch number</p>
---	---

SA715 packaging type,
Packaging description,
number of packages,
position on delivery note,
filling quantity,
package number from,
package number to,
package identification (M, G, S)

5.2.7.5.1 Simplified Loading Unit – Small Load (KLT)



Record type	No. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS
713		123456								
714			1	36190609			108			
	715		1	KLT	P6414	1	108	1001		S

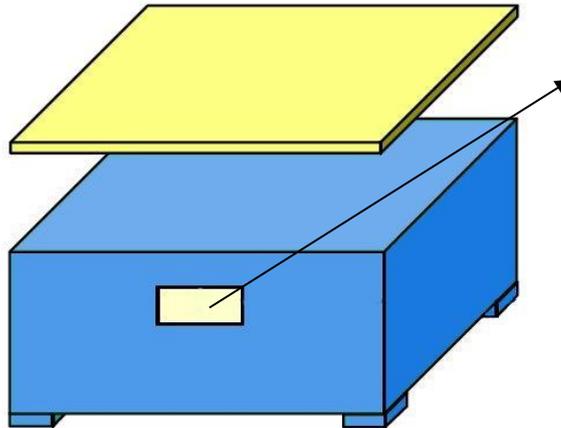
5.2.7.5.2 Simplified Loading Unit – Big Load (GLT)

For example, cage pallet with lid

Part number
36190610

Packaging
1x P5756
1x P1208

Filling Quantity
1x 20



Package identification

VDA Package number
S 1006

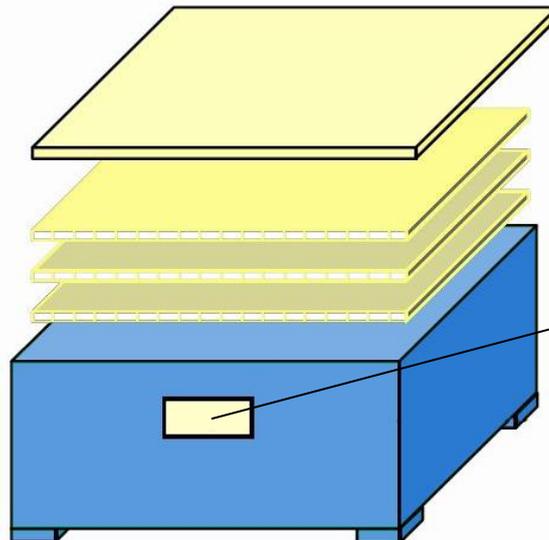
Record type	No. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS
713		123456								
714			36190610				20			
	715			GLT	P5756	1	20	1006		S
	715			Lid	P1208	1	0			

5.2.7.5.3 Simplified Loading Unit - Big Load (GLT) with intermediate layers

Part number
36190611

Packaging
1x P110848
3x POBM4802
1x P1208

Filling Quantity
1x 80



Package identification

VDA Package number
S 1006

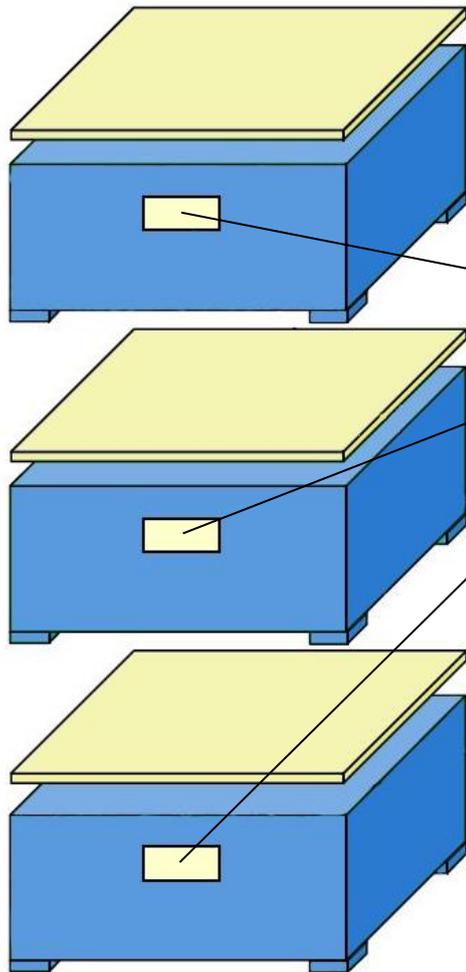
Record type	Nr. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS
713			123456							
↑ 714		1	36190611				80			
	715	1		GLT	P110848	1	80	1006		S
	715	1		Lid	P1208	1	0			
	715	1		Interm. layer	POBM4802	3	0			

5.2.7.5.4 SU with 3 Simplified LU - Big Load (GLT), same packaging, same FQ

Part number
36190612

Packaging
3x P110848
3x P1208

Filling Quantity
3x 80



<u>Package identification</u>	
VDA	Package number
S	2001
S	2002
S	2003

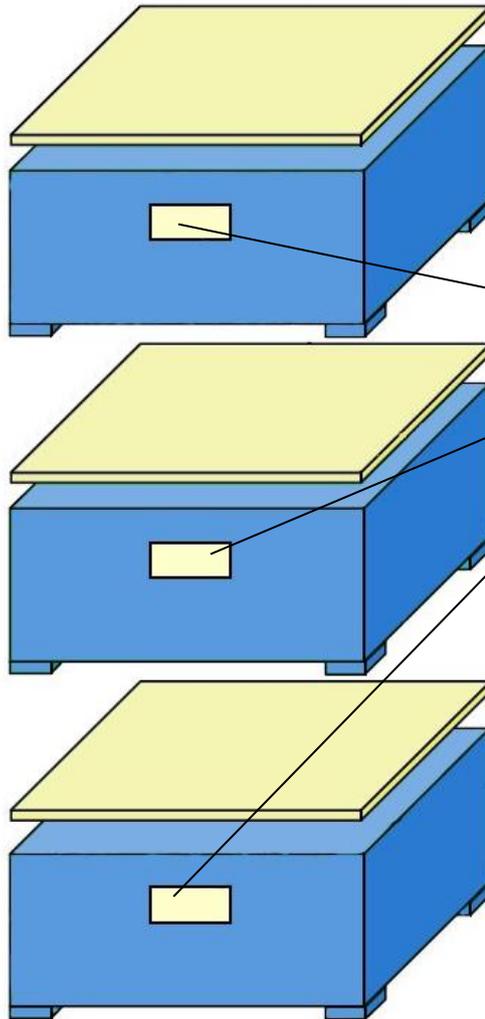
Record type	No. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS
713			123456							
↑ 714		1	36190612				240			
	715	1		GLT	P110848	3	80	2001	2003	S
	715	1		Lid	P1208	3	0			

5.2.7.5.5 SU with 3 Simplified LU - Big Load (GLT), same packaging, diff. FQ

Part number
36190613

Packaging
3x P110848
3x P1208

Filling Quantity
2x 120
1x 90



<u>Package identification</u>	
VDA	Package number
S	3004
S	3005
S	3006

Record type	No. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS	
713			123456								
↑	714		36190613				330				
		715		1	GLT	P110848	2	120	3004	3005	S
		715		1	GLT	P110848	1	90	3006		S
		715		1	Lid	P1208	3	0			

The package number relationship “from – to” may be used only for identical part numbers, packaging type and filling quantities.

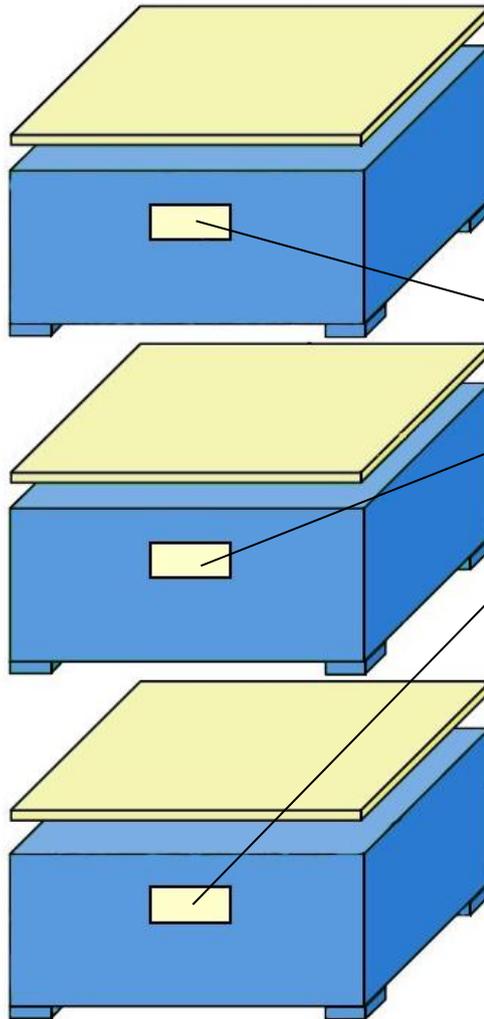
5.2.7.5.6 SU with 3 Simplified LU - Big Load (GLT), same packaging, same FQ, diff. batches

Part Number
36190614

Packaging
3x P110848
3x P1208

Batch Number
CN001
CN002

Filling Quantity
3x 120



<u>Package identification</u>	
VDA	Package number
S	23004
S	23005
S	23006

Record type	No. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS
713	123456									
↑	714	1	36190614 CN001				240			
	715	1		GLT	P110848	2	120	23004	23005	S
	715	1		Lid	P1208	2	0			
↑	714	2	36190614 CN002				120			
	715	2		GLT	P110848	1	120	23006		S
	715	2		Lid	P1208	1	0			

If the batch numbers are different within a shipping unit (or in a loading unit), every batch must be given a delivery note position which consists of a 714 record and the associated 715 records. The entire delivery quantity must be distributed over individual delivery note positions.

5.2.7.5.7 SU with 3 Simplified LU - Big Load (GLT), diff. packaging, diff. FQ

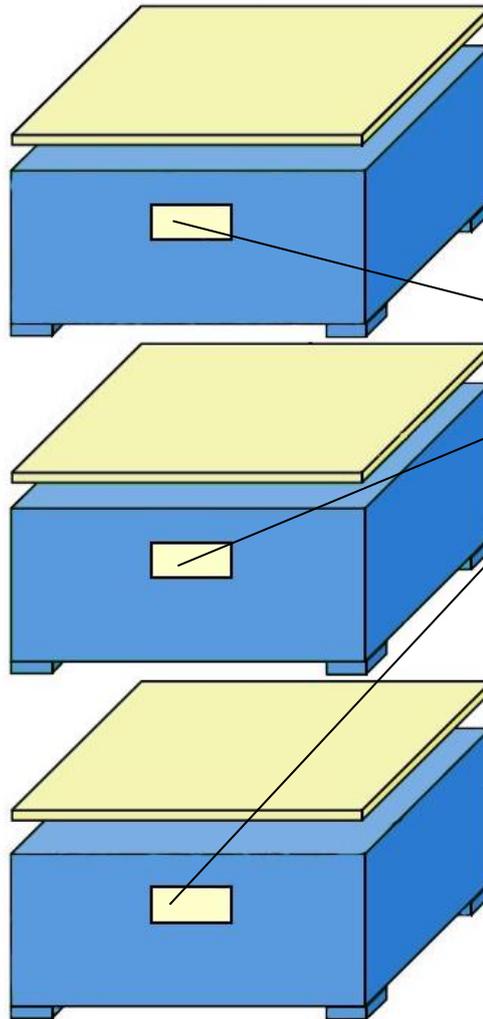
Part number
36190616

Packaging
1x P111822
1x P1208

Filling quantity
1x 90

Packaging
2x P110848
2x P1208

Filling quantity
2x 120



<u>Package identification</u>	
VDA	Package number
S	4001
S	4005
S	4006

Record type	No. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS
713			123456							
	714						330			
	715	1	36190616							
	715	1		GLT	P110848	2	120	4005	4006	S
	715	1		GLT	P111822	1	90	4001		S
	715	1		Lid	P1208	3	0			

Packaging records with package numbers and label identification “S” may be combined only under the following conditions (see for example 5.2.7.4.4):

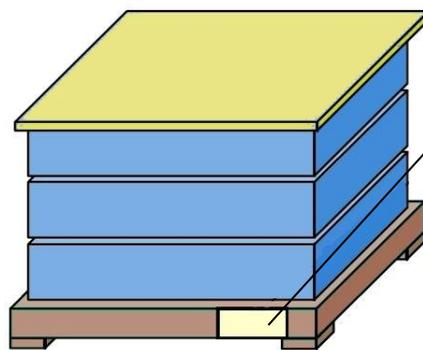
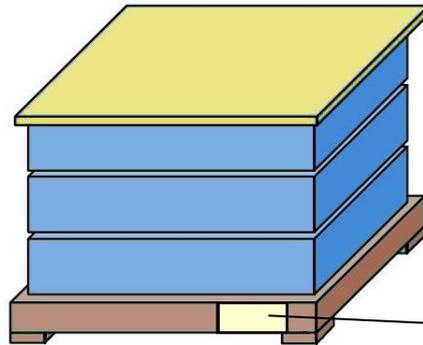
- same part number
- same package type
- identical filling quantity
- package numbers are numeric and increasing with no interruptions

5.2.7.5.8 SU with 2 LU - Pallets (each with 3 layers)

Part number
36190617

Packaging
2x P1208
6x P110810
2x PDB011

Filling quantity
2x 108 or
6x 36



Package identification

VDA	Package number
S	5005
S	5006

Record type	No. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS
713	123456									
714		1	36190617				216			
	715	1		Pallet	PDB011	2	108	5005	5006	S
	715	1		GLT	P110810	6	0			
	715	1		Lid	P1208	2	0			

If simplified loading units with packaging aids (e.g. inlays on a base pallet) are delivered, they must be listed after the packaging record for the pallet (with package number and label "S", since only one material tag per loading unit is used), in order to assign the book entry for the packaging aid.

The packaging P110810 is an aid frame with bottom, similar to the one used when packing headlights. It should be described as a lid in the packaging structure. In this example, the package numbers 5005 and 5006 are assigned to the filling quantity (108) and the package numbers of the two pallets PDB011 (as load carrier). Both loading units 5005 and 5006 constitute a sending unit. The packaging must be fully stocked by the receiver.

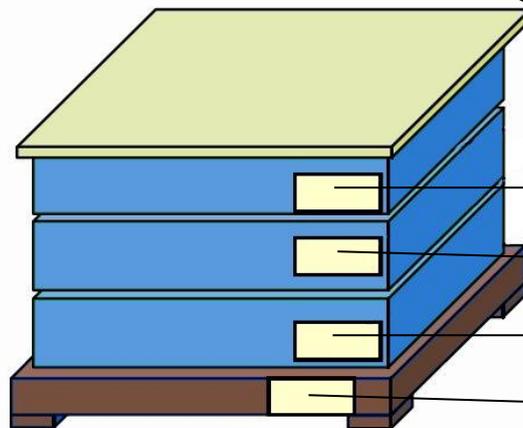
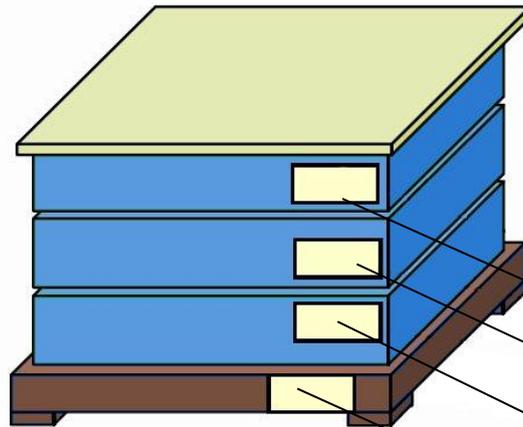
Whether visualization type format 5.2.7.4.8 or 5.2.7.4.9 is to be selected is to be agreed with each receiver plant!

5.2.7.5.9 SU with 2 LU - Containers sorted by Part, Pallets (each with three layers)

Part number
36190618

Packaging
2x P1208
6x P110810
2x PDB011

Filling quantity
2x 108 or
6x 36



<u>Package identification</u>	
VDA	package number
S	5501
S	5502
S	5503
M	5005
S	5504
S	5505
S	5506
M	5006

Record type	No. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS	
713			123456								
	714						216				
↓		715		1	36190618						
↑		715		1	Pallet	PDB011	1	0	5005	M	
↑		715		1	Lid	P1208	1	0			
↓		715		1	GLT	P110810	3	36	5501	5503	S
↓		715		1	Pallet	PDB011	1	0	5006	M	
↑		715		1	Lid	P1208	1	0			
↑		715		1	GLT	P110810	3	36	5504	5506	S

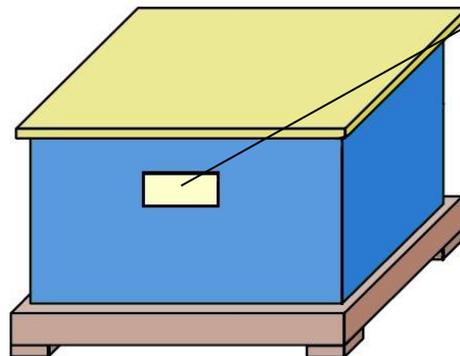
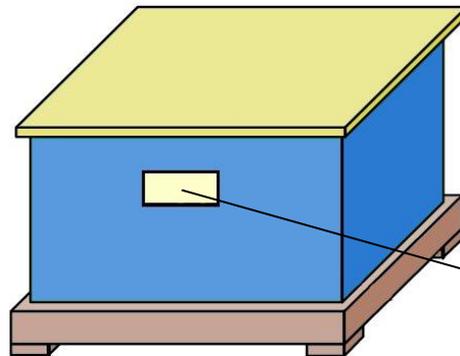
The packaging structure is shown here as single material packaging (loading unit) with package numbers (M label) on the inlays. This visualization may be necessary if the packaging is not stocked entirely by the receiver, but taken apart before being stored.

5.2.7.5.10 SU with 2 LU, Pallets (each with one Single Container)

Part number
36190619

Packaging
2x P1208
2x P110848
2x PDB011

Filling quantity
2x 300



Package identification

VDA	Package number
S	6005
S	6006

Record type	Nr. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS
713		123456								
	714		36190619				600			
		715		GLT	P110848	2	300	6005	6006	S
		715		Pallet	PDB011	2	0			
		715		Lid	P1208	2	0			

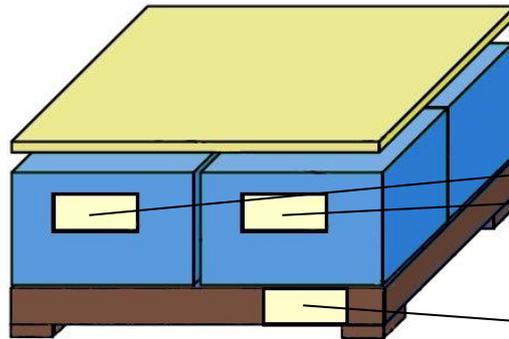
The main packaging aid in this packing example is Packaging P110848 (container) to which the package numbers has been assigned. The pallet is used as packaging aid.

5.2.7.5.11 LU with 1 Container, sorted by Part, IP - Small Load (KLT) with Label, same packaging, same FQ

Part number
36190622

Packaging
1x P1208
4x P6428
1x PDB011

Filling quantity
4x108



<u>Package identification</u>	
VDA	Package number
S	8005
S	8006
S	8007
S	8008
M	8102

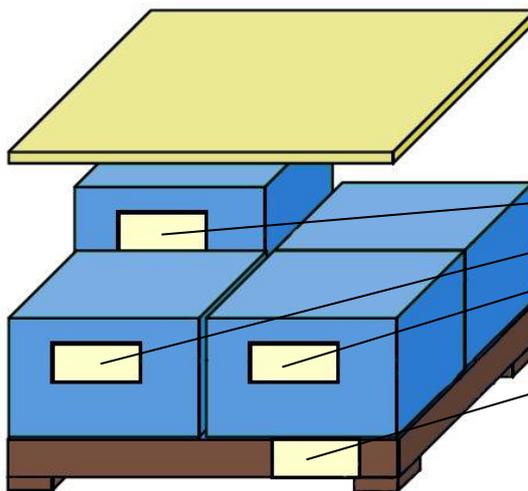
Record type	No. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS
713		123456								
	714		36190622				432			
		715		Pallet	PDB011	1	0	8102		M
		715		Lid	P1208	1	0			
		715		KLT	P6428	4	108	8005	8008	S

5.2.7.5.12 LU with 1 Container, sorted by Part, IP - Small Load (KLT) with Label, same packaging, diff. FQ

Part number
36190623

Packaging
1x P1208
4x P6428
1x PDB011

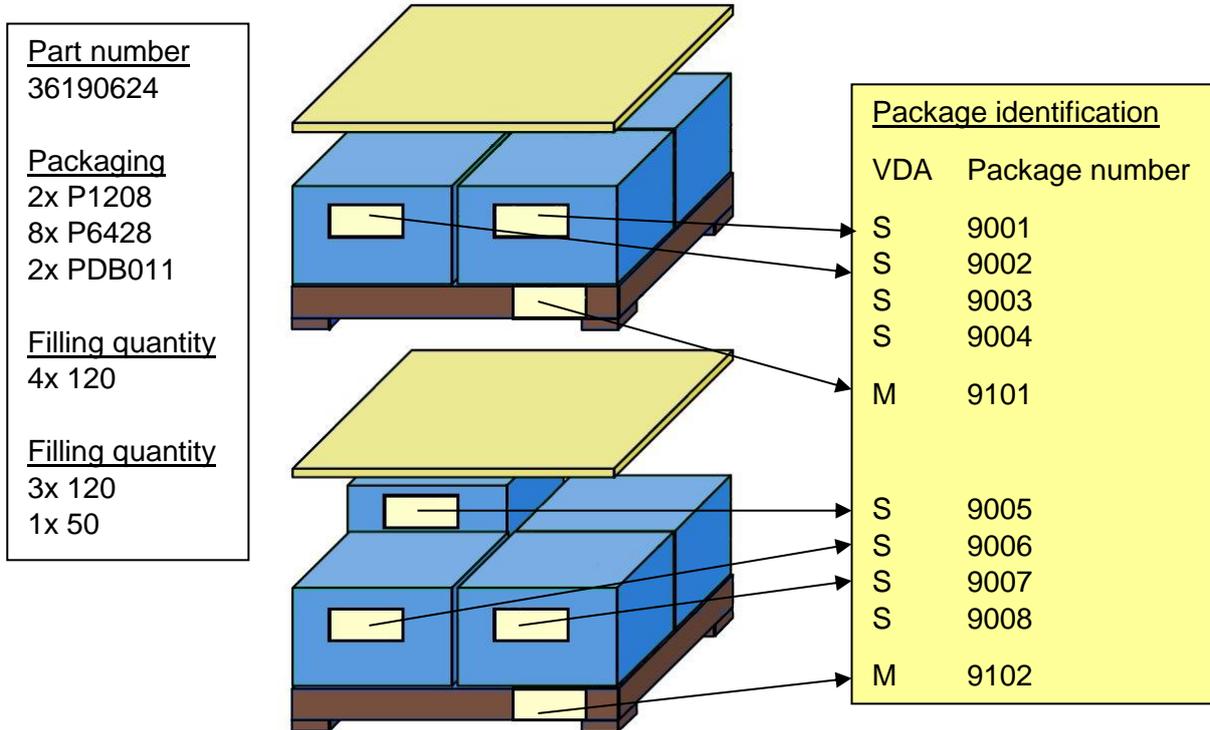
Filling quantity
3x108
1x96



<u>Package identification</u>	
VDA	Package number
S	8001
S	8002
S	8003
S	8004
M	8011

Record type	No. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS	
713			123456								
	714						420				
		715		1	36190623						
		715		1	Pallet	PDB011	1	0	8011	M	
		715		1	Lid	P1208	1	0			
		715		1	KLT	P6428	1	96	8001	S	
		715		1	KLT	P6428	3	108	8002	8004	S

5.2.7.5.13 SU with 2 LU, Container sorted by Part, same packaging, diff. FQ



Record type	No. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS	
713			123456								
	714						890				
		715		1	36190624						
		715		1	Pallet	PDB011	1	0	9101	M	
		715		1	Lid	P1208	1	0			
		715		1	KLT	P6428	4	120	9001	9004	S
		715		2	Pallet	PDB011	1	0	9102	M	
		715		2	Lid	P1208	1	0			
		715		2	KLT	P6428	1	50	9005		
		715		2	KLT	P6428	3	120	9006	9008	S

5.2.7.5.14 SU with 3 LU sorted by Part, 2 Containers & 1 Big Load (GLT), diff. packaging, diff. FQ

Part number
36190625

Packaging
1x P110848

Filling quantity
1x100

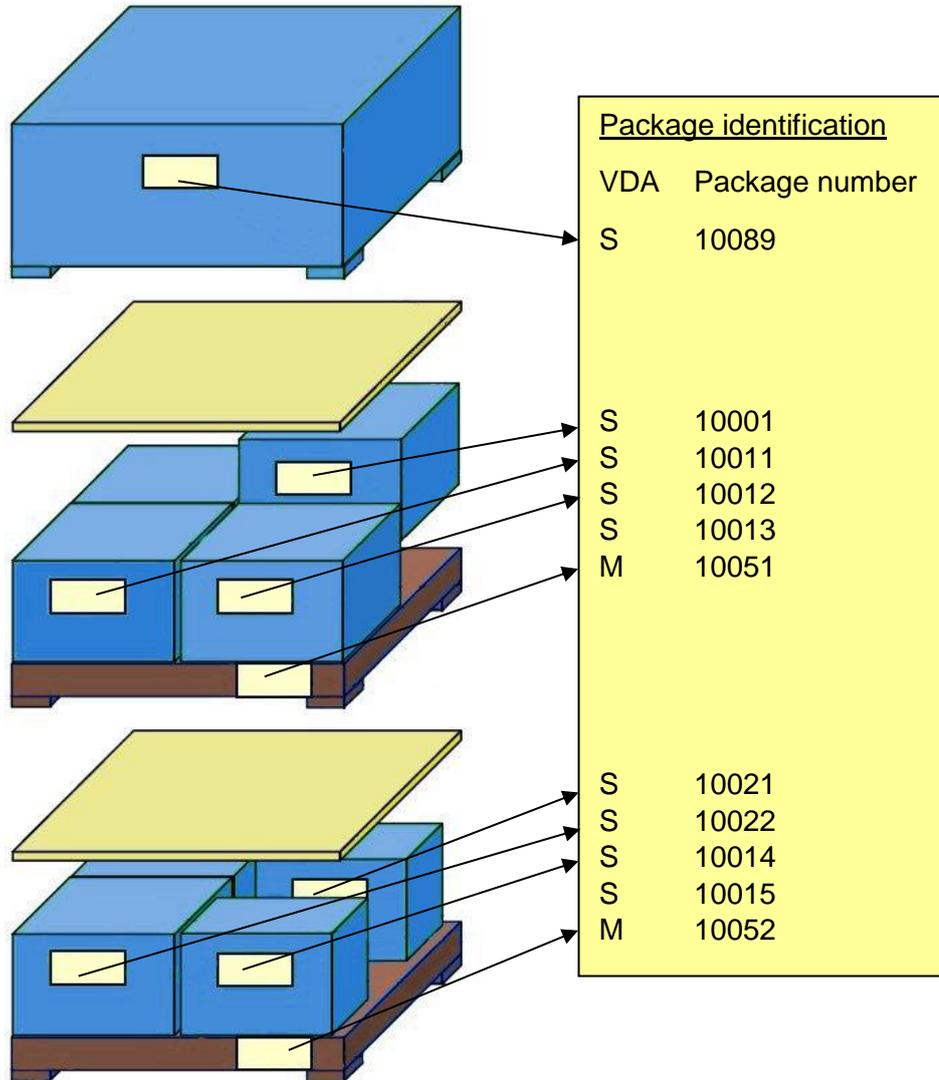
Packaging
1x P1208
4x P6428
1x PDB011

Filling quantity
4x 30

Packaging
1x P1208
2x P6428
2x P4328
1x PDB011

Filling quantity
2x 30

Filling quantity
2x 25



<u>Package identification</u>	
VDA	Package number
S	10089
S	10001
S	10011
S	10012
S	10013
M	10051
S	10021
S	10022
S	10014
S	10015
M	10052

Satzart	Nr. LS	Pos. LS	Nr. Art.	Typ PM	Bez. PM	Anzahl PM	Menge	Nummer PS > von	Nummer PS < bis	Kennung PS
713		123456								
↑	714		1	36190625			330			
↓		715	1	GLT	P110848	1	100	10089		S
↓		715	1	Palette	PDB011	1	0	10051		M
↑		715	1	Deckel	P1208	1	0			
↑		715	1	KLT	P6428	1	30	10001		S
↑		715	1	KLT	P6428	3	30	10011	10013	S
↓		715	1	Palette	PDB011	1	0	10052		M
↓		715	1	Deckel	P1208	1	0			
↑		715	1	KLT	P6428	2	30	10021	10022	S
↑		715	1	KLT	P4328	2	25	10014	10015	S

5.2.7.5.15 LU with one Mixed Container, three diff. Parts, same packaging

Packaging
1x P1208
1x PDB011

Part number
36190626

Packaging
4x P6428

Filling quantity
2x 30
2x 20

Part number
36190627

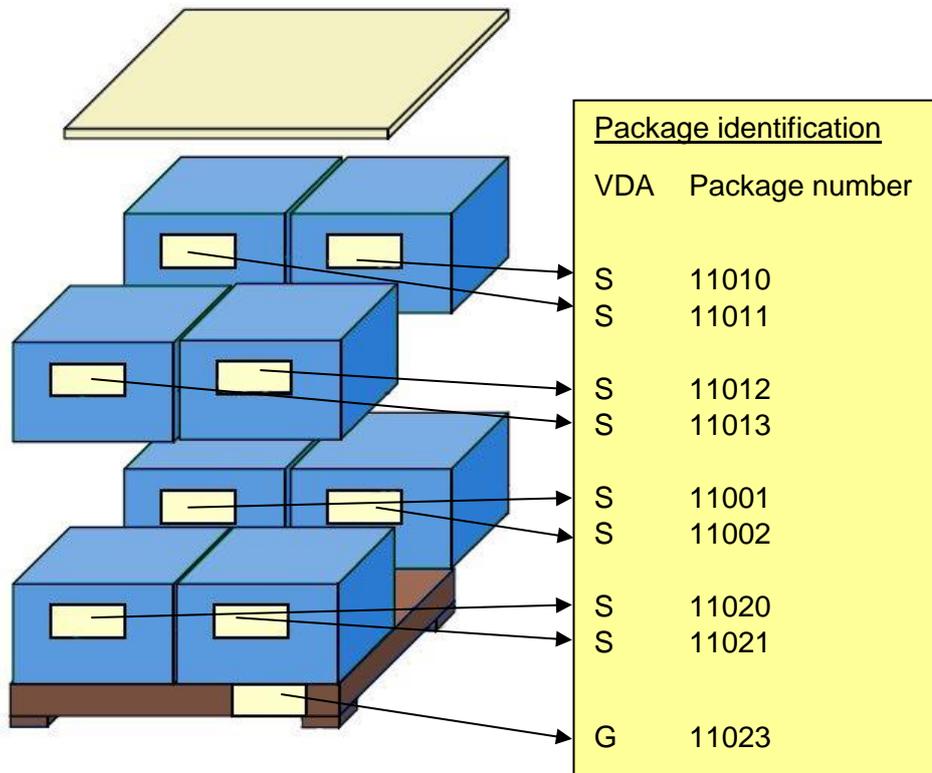
Packaging
2x P6428

Filling quantity
1x 40
1x 20

Part number
36190628

Packaging
2x P6428

Filling quantity
2x 40



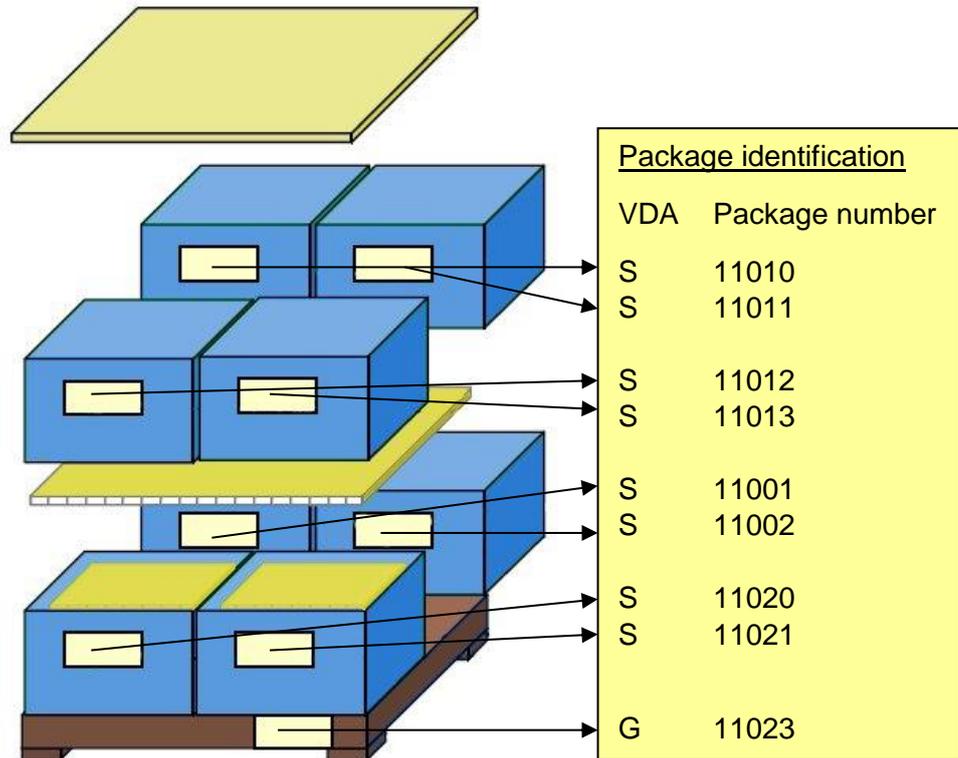
Record type	No. LS	Pos. LS	No. Art.	Type PM	Description PM	Number PM	Amount	Number PS > from	Number PS < to	Identif. PS
713			123456							
	714						100			
		715		Pallet	PDB011	1	0	11023		G
		715		Lid	P1208	1	0			
		715		KLT	P6428	2	30	11010	11011	S
		715		KLT	P6428	2	20	11012	10013	S
713			123457							
	714						60			
		715		Pallet	PDB011	0	0	11023		G
		715		KLT	P6428	1	40	11001		S
		715		KLT	P6428	1	20	11002		S
713			123458							
	714						80			
		715		Pallet	PDB011	0	0	11023		G
		715		KLT	P6428	2	40	11020	11021	S

Each part in the mixed container must have a new delivery note number (SA 713). After the change of the part number, the mixed container will be displayed by repeating the 715 record for the ground pallet (here: "PDB011"), by repeating the package number "11023" and the label identification "G". In the repeated row for the ground pallet the package number must be 0, otherwise this package will be counted

several times. The packages which belong to the ground pallet / exterior packaging (e.g. lid "P1208") or which cannot be assigned clearly to another inner packaging (see also 5.2.7.5.19) are listed together with the ground pallet / exterior packaging. In general, the number of individual packages must match the actual number of packages.

5.2.7.5.16 LU with one Mixed Container with Layer, 3 diff. Parts, same packaging

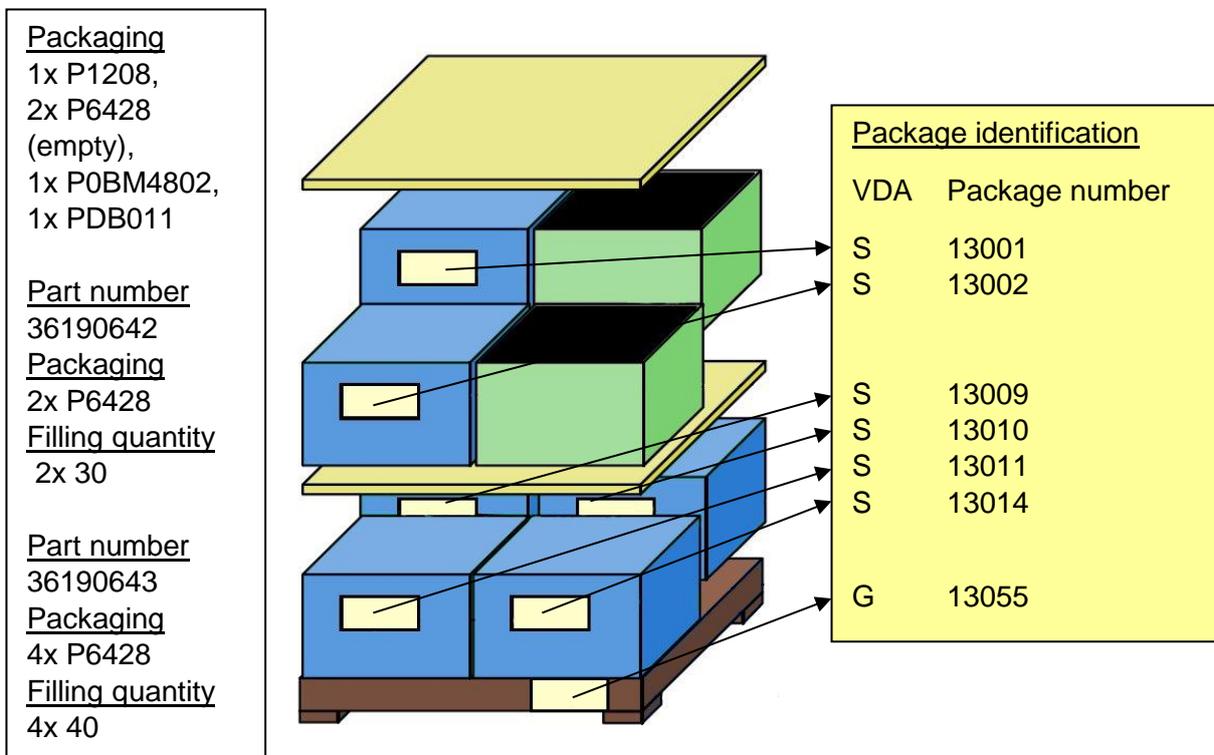
<u>Packaging</u>
1x P1208
1x P0BM4802
1x PDB011
<u>Part number</u>
36190629
<u>Packaging</u>
4x P6428
<u>Filling quantity</u>
2x 30
2x 20
<u>Part number</u>
36190630
<u>Packaging</u>
2x P6428
<u>Filling quantity</u>
1x 40
1x 20
<u>Part number</u>
36190631
<u>Packaging</u>
2x P1019
2x P6428
<u>Filling quantity</u>
2x 40



Satzart	Nr. LS	Pos. LS	Nr. Art.	Typ PM	Bez. PM	Anzahl PM	Menge	Nummer PS > von	Nummer PS < bis	Kennung PS	
713			123456								
↓	714		1	36190629			100				
		715	1		Palette	PDB011	1	0	11023	G	
		715	1		Zwischenlage	P0BM4802	1	0			
↑		715	1		Deckel	P1208	1	0			
↑		715	1		KLT	P6428	2	30	11010	11011	S
		715	1		KLT	P6428	2	20	11012	11013	S
713			123457								
	714		1	36190630			60				
↑		715	1		Palette	PDB011	0	0	11023	G	
↑		715	1		KLT	P6428	1	40	11001	S	
		715	1		KLT	P6428	1	20	11002	S	
713			123458								
	714		1	36190631			80				
		715	1		Palette	PDB011	0	0	11023	G	
↑		715	1		Formeinlage	P1019	2	0			
		715	1		KLT	P6428	2	40	11020	11021	S

The interlayer of the container P0BM4802 must be shown as packaging aid right behind the ground pallet. The small load interlayer P1019 for the small load (KLT) has to be shown between the repetition set of the ground pallet and the set for the small load (KLT) and the interlayer.

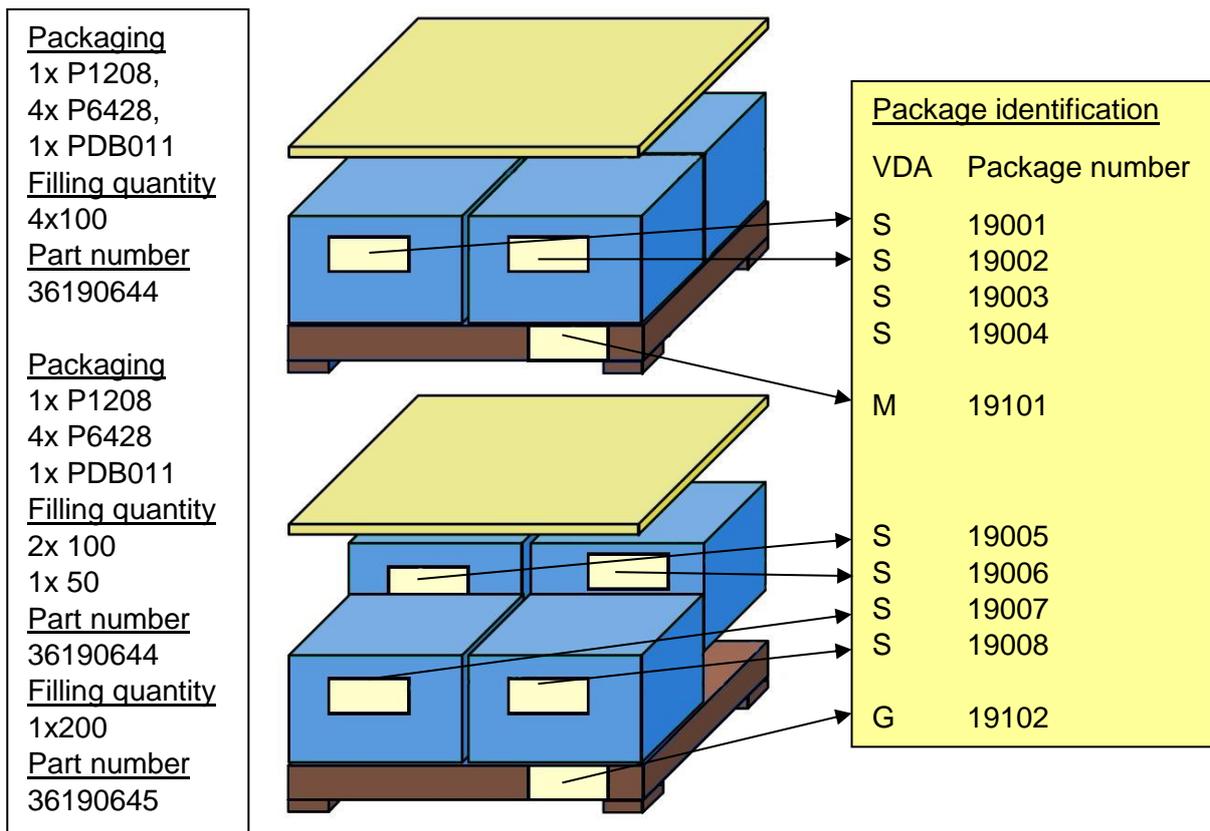
5.2.7.5.17 LU with one Mixed Container with Empty Containers to stabilize the Load



Satzart	Nr. LS	Pos. LS	Nr. Art.	Typ PM	Bez. PM	Anzahl PM	Menge	Nummer PS > von	Nummer PS < bis	Kennung PS	
713			123456								
	714		1	36190642			60				
		715	1		Palette	PDB011	1	0	13055	G	
		715	1		KLT	P6428	2	0			
		715	1		Zwischenlage	P0BM4802	1	0			
		715	1		Deckel	P1208	1	0			
		715	1		KLT	P6428	2	30	13001	13002	S
713			123457								
	714		1	36190643			160				
		715	1		Palette	PDB011	0	0	13055	G	
		715	1		KLT	P6428	3	40	13009	13011	S
		715	1		KLT	P6428	1	40	13014		S

Both empty containers P6428 must be marked as packaging aid (filling quantity = 0) and must be assigned to the outer packaging as packaging aid.

5.2.7.5.18 SU with 2 LU, 1 Container sorted by Part, one mixed Container with Parts from a Container sorted by Part



Satzart	Nr. LS	Pos. LS	Nr. Art.	Typ PM	Bez. PM	Anzahl PM	Menge	Nummer PS > von	Nummer PS < bis	Kennung PS	
713			123456								
	714		1	36190644			400				
		715	1		Palette	PDB011	1	0	19101	M	
		715	1		Deckel	P1208	1	0			
		715	1		KLT	P6428	4	100	19001	19004	S
	714		2	36190644			250				
		715	2		Palette	PDB011	1	0	19102	G	
		715	2		Deckel	P1208	1	0			
		715	2		KLT	P6428	2	100	19006	19007	S
		715	2		KLT	P6428	1	50	19005	S	
713			123457								
	714		1	36190645			200				
		715	1		Palette	PDB11	0	0	19102	G	
		715	1		KLT	P6428	1	200	19008	S	

In this visualization, the delivery quantity of part 36190644 is divided up into two delivery note positions with single quantities. Each pallet has one SA 715, number of packaging = 1 for the outer packaging. The second pallet 19102 is a mixed container.

5.2.7.5.19 LU with 1 mixed Container with separate Packaging in Small Load (KLT), diff. Parts, diff. Packaging (PM)

Packaging
1x P1208,
1x P0BM4802,
1x PDB011

Part number
36190634

Packaging
3x P6428

Filling quantity
2x 30, 1x 20

Packaging
1x P6428

Part number
36190635

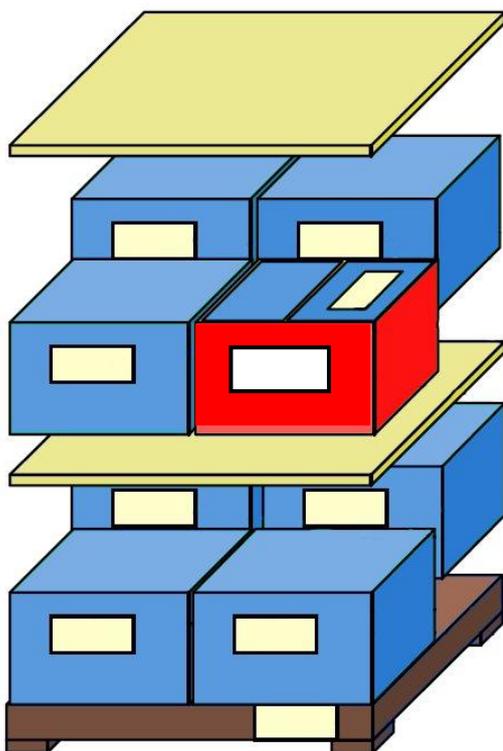
Packaging
1x P0001SC

Filling quantity
1x20

Part number
36190636

Packaging
4x P6428

Filling quantity
3x 40, 1x20



Packaging identification

VDA	Packaging Number
S	12001
S	12002
S	12007
S	12112 Separate Packaging
S	12113 !!!
S	12009
S	12010
S	12011
S	12012
G	12020

Part Number
36190637

Packaging
1x P0002SC

Filling Quantity
1x 60 **Separate Packaging**

Record Type	Bill of delivery	LS-Pos.	Part-number	Packaging Type	Packaging Number	Quantity	Packaging no. >from	Packaging no. < till	Pack. identifi.
713	123456								
↓	714		36190634			140			
	715	1		PDB011	1	0	12020		G
	715	1		P0BM4802	1	0			
	715	1		P1208	1	0			
↑	715	1		P6428	3	40	12009	12011	S
↑	715	1		P6428	1	20	12012		S
	714	123456	36190635			100			
↑	715	2		PDB011	0	0	12020		G
↑	715	2		P6428	2	30	12001	12002	S
↑	715	2		P6428	1	20	12007		S
↑	715	2		P6428	1	20	12113		S
↓	714	123456	36190636			60			
↑	715	3		PDB011	0	0	12020		G
↑	715	3		BEIPO	1	60	12112		S

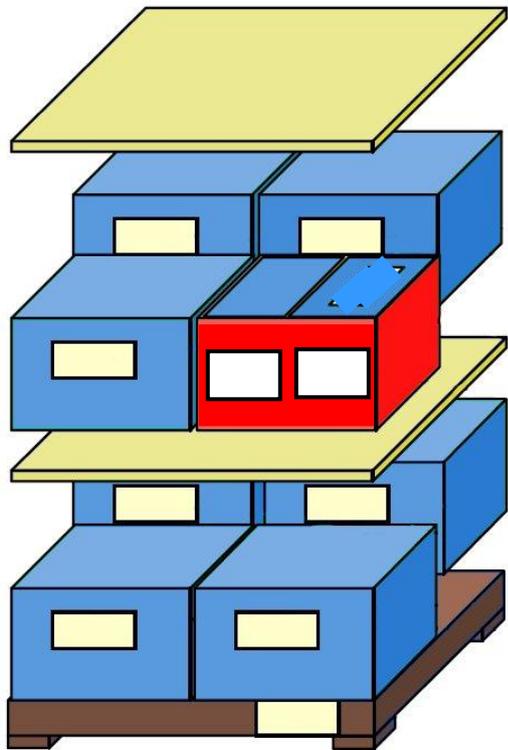
Separate Packaging

If a part is reconciled without a separate inner packaging (loose, plastic bags, boxes) in a delivery unit with another part, this is referred as a separate packaging in mixed containers. This separate packaging should be avoided and therefore is occurred seldom only.

In this example, the container 12020 contains two different parts in a total of eight small loads. In a small load of 6428, the third part was reconciled. Both parts are packed in each box, but are not classified as packaging.

The separate packaging is to be displayed in a mixed container (in the VDA4913) in the two-level packaging hierarchy, an intermediate level cannot be displayed. All parts in a mixed container are appeared possibly under the same delivery note number. A part number should be appeared only under a delivery note position.

5.2.7.5.20 LU with 1 mixed Container with Batched or Paired Parts in Small Load (KLT), diff. Parts, diff. Packaging (PM)



Packaging
1x P1208,
1x P0BM4802,
1x PDB011

Part number
36190634

Packaging
3x P6428

Filling Quantity
2x 30, 1x 20

Packaging
1x P6428

Part number
36190635

Packaging
1x P0001SC

Filling Quantity
1x20

Part number
36190636

Packaging
4x P6428

Filling Quantity
3x 40, 1x20

<u>Packaging Identification</u>	
VDA	Packaging number
S	12001
S	12002
S	12007
S	12112 Separate Packaging
S	12113 !!!
S	12009
S	12010
S	12011
S	12012
G	12020

Part Number
36190637

Packaging
1x P0002SC

Filling Quantity
1x 60

Separate Packaging

	Record Type	Bill of delivery	LS-Pos.	Part number	Packaging type	Packaging number	Quantity	Packaging number <from	Packaging number <till	Pack. Identi.
	713	123456					140			
	714		1	36190634						
		715	1		PDB011	1	0	12020		G
		715	1		P0BM4802	1	0			
		715	1		P1208	1	0			
		715	1		P6428	3	40	12009	12011	S
		715	1		P6428	1	20	12012		S
	714	123456	2	36190635			100			
		715	2		PDB011	0	0	12020		G
		715	2		P6428	2	30	12001	12002	S
		715	2		P6428	1	20	12007		S
		715	2		P6428	1	20	12113		S
	714	123456		36190636			60			
		715	3		PDB011	0	0	12020		G
		715	3		BEIPO	1	60	12112		S

Separate Packaging

If a part is reconciled without a separate inner packaging (loose, plastic bags, boxes) in a delivery unit with another part, this is referred as a separate packaging in mixed containers. This separate packaging should be avoided and therefore is occurred seldom only.

In this example, the container 12020 contains two different parts in a total of eight small loads. In a small load of 6428, the third part was reconciled. Both parts are packed in each box, but are not classified as packaging.

The separate packaging is to be displayed in a mixed container (in the VDA4913) in the two-level packaging hierarchy, an intermediate level cannot be displayed. All parts in a mixed container are appeared possibly under the same delivery note number. A part number should be appeared only under a delivery note position.

5.2.7.5.21 LU with 1 Mixed Container with 2 separate Packaging in Small Load (KLT), diff. Parts, diff. Packaging (PM)

Packaging: 1x P1208, 1x P0BM4802, 1x PDB011

Part number: 36190638

Packaging: 2x P6428

Filling quantity: 2x 30

<u>Packaging</u> 1x P6428 <u>Part number</u> 36190639 <u>Filling quantity</u> 1x20	<u>Packaging</u> 1x P6428 <u>Part number</u> 36190641 <u>Filling quantity</u> 1x20		<u>Packaging identification</u> VDA Packaging number S 12002 S 12007 S 12112 Separate packaging S 12001 Separate packaging S 12113 S 12114 S 12009 S 12010 S 12011 S 12012 G 12020
<u>Part number</u> 36190640 <u>Packaging</u> 1x P0001SC <u>Filling quantity</u> 1x 60 Separate Packaging 1	<u>Part number</u> 36190641 <u>Packaging</u> 1x P0002SC <u>Filling quantity</u> 1x 60 Separate Packaging 2		
<u>Part number</u> 36190638 <u>Packaging</u> 4x P6428 <u>Filling quantity</u> 4 x 40			

	Record Type	Bill of delivery	LS-Pos.	Part number	Packaging Type	Packaging number	Quantity	Packaging No. > from	packaging No. < till	Pack.. Ident.
	713	123456								
	714		1	36190638			160			
↓	715		1		PDB011	1	0	12020		G
	715		1		P0BM4802	1	0			
↑	715		1		P1208	0	0			
	715		1		P6428	4	40	12009	12012	S
	714	123456	2	36190639			100			
↑	715		2		PDB011	0	0	12020		G
↑	715		2		P6428	2	30	12002		S
↑	715		2		P6428	2	30	12007		S
	715		2		P6428	2	20	12113	12114	S
↓	714	123456	3	36190640			60			
↑	715		3		PDB011	0	0	12020		G
↓	715		3		BEIPACK	1	60	12112		S
↑	714	123456	4	36190641			60			
↑	715		4		PDB011	0	0	12020		G
	715		4		BEIPACK	1	60	12001		S

In this example, the container of 12 020 contains four different parts in a total of 8 small loads. In two small loads of 12113/12114, each part was reconciled. Both parts are packed in each box (no value), which in this context are not classified as packaging.

5.3 EDI Accompanying Document according to VDA 4912

The EDI accompanying document according to VDA 4912 serves both as a single document when applying the VDA recommendation 4913 and for manual entry of delivery and transport data if the EDI for the delivery and transport data is not available when the delivery arrives.

By using EDI accompanying document according to VDA 4912, paper work is reduced. The delivery note form according to DIN 4994 is then no longer needed.

5.3.1 Document and Information Flow

EDI accompanying document has to be issued by the supplier and passed to the carrier. If deliveries are not carried by truck, the EDI accompanying document must be enclosed with the product.

5.3.2 Format and Design

According to Sample 4 of the VDA recommendation 4912, the supplier must use the portrait format DIN A4 with 15 characters per inch (see **Annex 2**). For further information on the content of the EDI accompanying document, see VDA recommendation 4912.

5.4 Material Tag according to VDA 4902, Version 4

The material tag is used to label product and packaging in the internal material flow and while transporting the goods between supplier, carrier and goods receiver. The material tag also complements the delivery and transport data as an information

carrier on the goods. The supplier must use the material tag VDA 4902 version 4 for all deliveries to SMP.

5.4.1 Format and Design

All suppliers must ensure that all packaging (= load = packing material) carries the latest material tag with all data and barcodes (Code 39) needed according to VDA 4902 version 4. Pallets and inner packaging must have a standardized label which meets the requirements of the SMP shipping instructions. The information on the material tag must match the contents of EDI delivery and transport data submitted before.

Depending on the type of packaging, different types of material tags are available to identify the goods. The format 210 mm x 148 mm must be used for big loads - GLT - (cage pallets, closed plastic containers, ...) or as collective material tag used per unit load. The format 210 mm x 74 mm is used for labelling small loads (KLT) and boxes. Samples for both formats can be found in Annex 2 and 3.

The formal and structural design of the material tag corresponds to the trailer requirements of the VDA recommendation. The requirements of the VDA recommendation for the format and the execution of material tags as well as the technical requirements for bar code must be observed.

The data content and format of the data fields on the material tag must be taken from the delivery schedule or call offs unless this is data that must be gathered or supplied by the supplier. The information on the material tags must match the contents of the EDI delivery and transport data and the EDI accompanying documents.

5.4.2 Overview of the Data Elements

5.4.2.1 Data Segments & Description of the Big Load Label (Format 210mm x 148mm)

Pos	Data Segment	K M	Qty. char acter	Font size mm	Bar code yes/no	Description
01	Goods Receiver	M	2x20	7	no	Complete delivery postal address of the goods receiver must be entered
02	Unloading Point / Point of delivery	M	5 7	5 5	no no	Unloading point as shown in delivery schedule must be entered
03	Delivery note number	M	8	7	yes	Number must match the date on delivery note or EDI message
04	Supplier address short	M	29	5	no	Address of the loader (supplier) in short form
05	Net weight	K	4	5	no	Net weight of the carrier [kg]
06	Gross weight	K	4	5	no	Gross weight including packaging per loading unit / container
07	Number of packages	K	3	5	no	Number of packages delivered per delivery note number or delivery

Pos	Data Segment	K M	Qty. char acter	Font size mm	Bar code yes/no	Description
08	Article number customer	M	22	13	yes	Article number assigned by SMP to the part as shown in the call off
09	Quantity per package	M	7,3	13	yes	Number of pieces in the package
10	Delivery description	M	30	5	no	Part description agreed between recipient and supplier
11.1	Article number of the supplier	K	22 10	7 13	yes	Internal article number of the supplier
11.2	Article number supplier of the packaging type	M	10	13	yes	Number of the packaging type according to the latest packaging agreement must be entered
12	Supplier ID	M	9	5	yes	ID SMP assigns to a supplier
13	Date	K	7	7	no	Production Date (P_JJ.MM.TT), Delivery Date (D_JJ.MM.TT) or Expiry Date (U_JJ.MM.TT). To be distinguished by prefixed P, D or U.
14	Engineering change status	M	14	7	no	ID number SMP assigns to a design change status
15	Package ID and Package No. (S/M/G)	M	9	5	yes	Package ID is numerical and identifies the packages. Package ID is assigned by the supplier and must not be repeated within a year. The packing unit numbers must be shown in, and be identical with, the VDA 4913 and the EDI accompanying documents note.
16	Batch Number	K	10	5	yes	ID assigned by the manufacturer to the batch
<i>K = Kann, Conditional</i> <i>M = Muss, Mandatory</i>						

Note:

Field: Design change status (Pos. 14) – This field must be submitted to SMP (in derogation of VDA-recommendation 4902 - Conditional).

For more information on overview and description of data elements, see VDA recommendation 4902, Version 4, Item 3, pages 3 et seq.

5.4.2.2 Data Segments & Description of the Small Load Label (Format 210mm x 74mm)

Pos	Data Segment	K M	Qty. char acter	Font size mm	Bar code yes/no	Description
01	Goods Receiver short	M	2x20	2	no	Short form of delivery postal address of the goods receiver must be entered
02	Unloading Point / Point of delivery	M	5 7	5 5	no no	Unloading point as shown in delivery schedule must be entered
03	Delivery note number	M	8	5	yes	Number must be the same as shown on delivery note or EDI message
08	Article number customer	M	22	5	yes	Article number assigned by SMP and shown in the call off
09	Quantity per package	M	7,3	5	yes	Number of pieces in the package
10	Delivery description	M	30	5	no	The part description agreed between recipient and supplier
11.1	Article number of the supplier	K	22 10	7 13	yes	Supplier's internal article number
11.2	Article number supplier of the packaging type	M	10	13	yes	Number of the packaging type according to the latest packaging agreement must be entered
12	Supplier ID	M	9	5	yes	ID assigned by SMP to supplier
13	Date	K	7	5	no	Production Date (P_JJ.MM.TT), Delivery Date (D_JJ.MM.TT) or Expiry Date (U_JJ.MM.TT). To be distinguished by prefixed P, D or U.
14	Design change status	M	14	5	no	ID number SMP assigns to a design change status
15	Package ID and Package No. (S/M/G)	M	9	5	yes	Package ID is numerical and identifies the packages. Package ID is assigned by the supplier and must not be repeated within a year. The packing unit numbers must be shown in, and be identical with, the VDA 4913 and the EDI accompanying documents note.
16	Batch Number	K	10	5	yes	ID assigned by the manufacturer to the batch

K = Kann, Conditional
M = Muss, Mandatory

Note:

Field: Design change status (Pos. 14) – This field must be submitted to SMP (in derogation of VDA recommendation 4902 - Conditional).

For more information on the other special features of VDA small load label (KLT), see VDA recommendation 4902, Version 4, Item 6, page 13 et seq.

5.4.3 Applying the Material Tag

Each loading unit, load and package must be labelled with a material tag. On principle, each container must be labelled with only one material tag. Consequently, internal labels of the supplier must be removed before sending the goods to SMP.

Material tags must be visibly and legibly affixed to the loading unit and must be attached with four adhesive fixing points or in the document bags (as described in the VDA recommendation). Placing the material tag on the rim of the lid is not permitted. Labelling the material tag over its entire surface on the packaging is only permitted if the material tag can be removed without sticky residue. Also, care must be taken to ensure that the tags or labels are not damaged during loading during the load.

SMP reserves the right to charge the supplier for errors caused by missing, incomplete or illegible material tags.

6 Records

There is no documentation for the processes in the classic sense. The documentation is the goods movements and label histories recorded in the system.

7 References

Corp-8.4.2-Packaging Data Sheet-00084

VDA 4902

[Link](#)

VDA 4905

[Link](#)

VDA 4912

[Link](#)

VDA 4913

[Link](#)

8 List of annexes

Annex 1:

Communication process

Overview of Plants and Unloading Points at SMP

Annex 2:

Example for an Accompanying Document according to VDA 4912

Annex 3:

Example for Material Tag VDA 4902, Version 4, Big Load Label, Format 210mm x 148mm

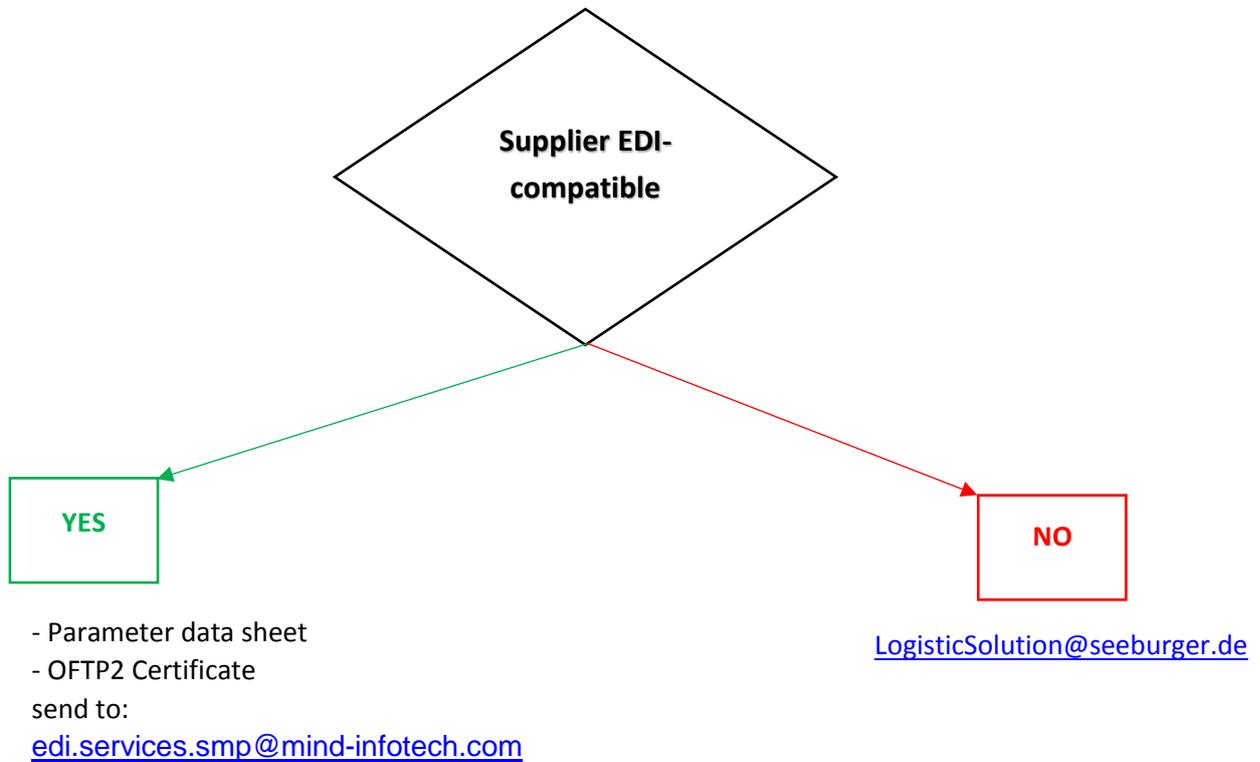
Annex 4:

Example for Material Tag VDA 4902, Version 4, Small Load Label, Format 210 mm x 74 mm

9 Change log

Issue Date		Change
F	09.05.2018	Adaptation of the document to the global scope Full review of the document
G	30.06.2020	Supplement to Annex 1: Contact person Supplement to Annex 2: Overview of unloading points Full review of the document
8	07.10.2021	Transfer to motherSON format Change of version number to numeric due to system change (B.A.SE) Incorporation of changes in terms of part generation status Inclusion of change "leading zeros" Update annex 1 – annex 4 Correction of some translation mistakes

Annex 1: Communication process



The use of EDI standards as a means of communication is an important part of our logistics standard.

The required VDA messages 4913 (delivery note), VDA4902 (product label) and VDA4912 (consignment note) can alternatively be created on the Seeburger WebEDI Automotive solution via the Internet portal and transmitted to SMP Germany. Please refer to the linked current version of our EDI guideline for the exact specification of each EDI message.

The costs for the Seeburger WebEDI Automotive solution depend on the applications you support and are paid directly to Seeburger. SMP Germany requires the use of EDI procedures as part of the standard supply concepts and therefore does not assume any cost sharing.

If you do not have the prerequisite to use the EDI standard formats, please contact Seeburger immediately. For this purpose, please contact the following hotline: LogisticSolution@seeburger.de.

Annex 2:

Example for an Accompanying Document according to VDA 4912

DFUE-WARENBEGLEITSCHIN		SENDUNGS-NR 300022		27.03.2012 - 13:49		
		ÜBERTRAGUNGS-NR 24		Blatt 1.		
LIEFERANTEN -WERK 42		EMPFAENGER -WERK KUNDE 107		Abladestelle 0703		
-NR 33000598		-NUMMER 12600		Lagerort 0003		
Test Lieferant		SMP Deutschland GmbH		Verbrauchsstelle		
Hauptstraße 11		Werk Neustadt		Versandart 03		
D 61123 Im Wäldle		D 93333 Neustadt		FRACHTFUEHRER		
				-NUMMER 6001		
				SENDUNGS-BRUTTOGEWICHT 72		
=====						
LS-Nr.	SACHNUMMER KUNDE	Menge	ME	V/G	BEZEICHNUNG DER LIEFERUNG	Bestell-Nr
Datum	SACHNUMMER LIEFERANT				ZUSATZDATEN LIEFERANT	
-POS	PACKMITTEL -MENGE	-NUMMER KUNDE			FUELLMENGE -NUMMER LIEFERANT	KONSIGNATION
-Chargen-Nr.		GEFAHRGUT				
=====						
200022	36118200		200	ST S/	Halter PDC, STF hinten	5500055633
27.03.2012	36118200					
001	VP	1 - PDB011		X	0 PDB011	
001	VP	4 - P6428		X	50 P6428	
001	VP	1 - P1208		X	0 P1208	
Text P/EPDM TV10						

200022	36118501		300	ST S/	36118501	5500059138
27.03.2012	36118501					
002	VP	1 - PDB011		X	0 PDB011	
002	VP	3 - P6428		X	100 P6428	
002	VP	1 - P1208		X	0 P1208	
Text Zeichnungs-Nr.: 7 204 032 ,, Zeichnungs- Index: AI 04 KD-ZSB-Nr: 7 204 032 Abmess ung: Werkstoff/Farbe: PP EPDM						

200023	36118502		240	ST S/	36118502	5500059139
27.03.2012	36118502					
001	VP	4 - P6428200022		X	60 P6428	
Text Zeichnungs-Nr.: 7 204 029 ,, Zeichnungs- Index: AI 03 KD-ZSB-Nr: 7 204 029 Abmess ung: Werkstoff/Farbe: PP-EPDM						

***** Ende *****						

Annex 3:

Example for Material Tag VDA 4902, Version 4, Big Load Label, Format 210mm x 148mm

(1) Empfänger SMP Neustadt - Werk 107 93333 Neustadt		(2) Abladestelle-Lagerort-Verwendungsschlüssel 0703		S
(3) Lieferschein-Nr. (N) 21227408 		(4) Lieferant (Kurzname,Werk,PLZ,Ort) petz industries, Teuschnitz		
(8) Sach-Nr.Besteller (P) 36211534 		(5) Gewicht netto 5	(6) Gewicht brutto 8	(7) Anzahl Packstuecke 1
(9) Füllmenge (Q)  160 Stück		(10) Bezeichnung Lieferung,Leistung 8W0 955 275 B		
(12) Lieferanten-Nr.(V) 33260243 		(11) Sach-Nr.Lief. 8W0 955 275 B Packmittel Kunde P6280		
(15) Packstück-Nr.(S/M/G) 151547 		(13) Datum 08.02.2021	(14) Aenderungstand Konstruktion 11S	
		(16) Chargen-Nr.(H) 1000444796 		

Sample M-Label for sorted loads

(1) Warenempfänger SMP Deutschland GmbH NeustadtStorage Umbertshausener Weg 7 DE 93333 Neustadt		(2) Abladestelle Lagerort - verwendung 0703K 0003		
(3) Lieferschein-Nr.(N)		(4) Lieferantenanschrift, Werk - Nr., PLZ, Ort JMP Plast, s.r.o. 071 01 Michalovce		
(8) Sach-Nr. Kunde (P) MISCHSENDUNG 		(5) Gewicht netto	(6) Gewicht brutto 0	(7) Anzahl Packstücke 0
(9) Füllmenge (Q)		(10) Bezeichnung Lieferung Leistung		
(12) Lieferanten-Nr. (V) 33263534 		(11.1) Sach-Nr. Lieferant(305)		
(15) Packstück-Nr. (S,M,G) G10816 		(11.2) Sach-Nr. Kunde für Packmittel(B) PDB011 		
		(13) Datum 17.02.2021	(14) Aenderungstand Konstruktion	
		(16) Chargen-Nr (H)		

Sample G-Label for mixed loads

Annex 4:

Example for Material Tag VDA 4902, Version 4, Small Load Label, Format 210 mm x 74 mm

CSGE	SMP Deutschland GmbH	DOCK	0703K	CSGR	VDL Parree B.V., Nederland
O/No (1K)	109169			DEST PT	0703K - 0003
PROD CDE (P)	36212860			NET WGT	200
				GR WGT	2,8
				DATE	D210209
SER No (S)	209121			NB	2
				DESC	Aufnahme Sensor APS aussen Basis
				SUP REF	36212860
				BATCH (H)	
				EC No	S3
				SUP CDE (V)	33261350
					

Sample S-Label