STARD-/ATLAS-EDI-Guidelines Version 2.4.1

For the core production plants in
Regensburg
Leipzig
Oxford
Dingolfing (series)
Munich
Rosslyn/South Africa*,
Berlin,
Component plants,
SKD Plant Duncan/USA)*
Central Distribution Center Dingolfing**

*** This Guideline are valid for all unloading points marked with 'W*' in the column 'EDI-Code' in the table of unloading points**

*** This Guideline is only valid for plant Rosslyn, if the EDI-connection is already via the EDI-Server in Munich**

**** This Guideline is only valid for suppliers and shipping companies during the test phase "Projektlager"**

Version 2011/2.4.1
Last modification: 14 February 2012

Changes made

New in Version 1.1:
- Adjustment in 712, Position 17: Target arrival date: necessary for STARD
- Adjustment in 715, Position 03: Packaging code-Customer: mandatory for STARD
- Adjustment in 715, Position 07: Filling quantity: mandatory for STARD
- Adjustment in 715, Position 13: Label identification: mandatory for STARD

New in Version 1.2:
- Adjustment in 713, Position 08: Purchase order number: 7 digits
- Adjustment in 715, Position 08 and 09: Handling unit number from ... to: mandatory for STARD

New in Version 1.3:
- Adjustment in 512, Position 03: Plant-customer: Leipzig = „070“
- Adjustment in 512, Position 11: Unloading point: Adjustments in the Unloading Points List
- Adjustment in 715, Position 07: Filling quantity: Label identification adjustments
- Adjustment in 715, Position 08 und 09: Handling unit number from ... to: must be numerical for BMW
- Instructions on label identification

New in Version 1.4:
- new Odette segments

New in Version 1.5:
- Implementation of a BMW specific ‚conditional/must record' column in specifications for EDI delivery notes (VDA 4913)
- Instructions on packaging information in electronic transmissions of delivery note and transport data.
- Adjustment of version numbers in delivery call off
- Additional “use flag”, 512, Position 17: Use flag: V=test parts
- Additional “use flag” SAD, Segment 7153: List of codes for parts' status: 15=test parts
- Unloading points: A complete unloading points List instead of individual lists
- Adjustment 711, Positions 05 and 06 Transmission number OLD and NEW: must be unique
- Update of the links to documents on the B2B portal
- Problem management via Hotline: EDI support

New in Version 1.6:
- Textual revision
- Specifications for Odette AVIEXP ASN
- New file names for Dingolfing und Oxford plants
- Information update on documents accompanying the goods
- Addition of EDI Packaging Guidelines

New in Version 1.7:
- Textual revision
- Update of EDI Packaging Guidelines (Loading units, mixed consignments)

New in Version 1.8:

- Explanation regarding the AI Change – Record type 515, Pos. 18
- Update of Odette AVIEXP
- Description of self billing invoice VDA4908

New in version 1.9:

- freight code required (Record type 712, Pos. 10 / segment DET, TAG 4110)
- packaging “E” not allowed any more (Record type 715, Pos. 03 / segment TCO, TAG 1906)

New in version 2.0:

- Update requests plant Munich (STARD)

New in version 2.1 (7th of July 2008):

- Information of the means of transport number required. (Record type 712, item 15 / segment DTR, TAG 8212)
- Information of Goods supplier / pick up place required (Record type 713, item 16)

New in version 2.2 (5th of August 2008).

- Update requests component plants (STARD)

New in version 2.3 (13th of October 2009).

- Editorial changes
- Example with mixed loading unit added for Odette AVIEXP (page 47)
- Detailing of chapter 4.3

Mixed loading have to be signed in record type 715, Pos. 14 with “B”

New in version 2.4 (17th of November 2011):

- **Extension for SKD Plant Duncan/USA for VDA messages (without ANSI variants)**
- **Extension for Plant Rosslyn/South Africa**
- **Extension for Plant Berlin (from Mid of October 2011)**
- **Transport route added (VDA 512/18 or rather AVIEXP DET)**
- **Waybill number added (VDA 711/12 or rather AVIEXP DTR)**
- **Forwarding agent number added (VDA 712/13 or rather AVIEXP DTR)**
- **Container number added (VDA 712/15 or rather AVIEXP DTR)**

New in version 2.4.1 (9th of February 2012):

- **Extension for Central Distribution Center Dingolfing**

(Changes in the opposite to the former versions are marked red!)

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1 Call off - EDI

1.1 Definition

A call off is a message sent by BMW to its supplier. The message continuously updates the quantity and the delivery date depending on the plants' changing demands. BMW AG's call offs are based on the agreements stated in the framework orders.
This chapter includes the definition of call off massage based on „VDA 4905 Data transmission for call offs ", (4. Edition, 04/96) and the VDA 4905/2, based on ODETTE DELINS Version 3, as used by BMW AG for the electronic data exchange with its partners.

1.2 Principles

1.2.1 Call offs from BMW AG

Provide the supplier with demand information on the basis of valid orders of the last 6-10 months, allow the supplier to plan its future material demand, production and dispatch and synchronize processes between BMW AG and its suppliers.

1.2.2 Call offs

Are differentiated on the basis of part number/material number*, purchase order number and plant/unloading point, contain arrival dates for each plant/unloading point, are valid until the next call off replaces it.

)* Definition of the term:
Part number = 7 digits (1234567) - i.e. for 'not-series material' (NSM)
Material number = Part number + Change Index (1234567-01)

1.3 Scope of Application

The VDA 4905 (or Odette Delins) call off messages that are described in this chapter are valid for all series parts orders and special requests of core production plants in Dingolfing, Leipzig, Oxford and Regensburg (initial samples are processed through the orders from BMW).

Please note: Operating supplies' call offs have 7 digit part numbers!

For all other plants, please refer to the EDI guidelines at the Partner Portal of the BMW Group: https://b2b.bmw.com – departments – logistics – Exchange Logistical Data – delivery call offs and delivery notes - EDI Guidelines.

1.4 Material Planning /Issuing Call offs /Call off Transmission

Each day, at the end of the late shift, the central material planning system (MPS) calculates the demand of each BMW plant. On the basis of this demand data and depending on delivery control parameters, the call offs (differentiated on the basis of part number, purchase order number and plant/unloading point) are created in the SAP system of the plants.
In the process, all deliveries booked in the last shift are already allowed for.

The call off parameters - that are managed by material controlling at part number level - are for example:

- Call off identification
- Frequency of call off issuing
- Day of delivery
- The length of call off period
- Rounding factor of released call off quantity.

The delivery control parameter and the manual intervention through material controlling allows the delivery call offs to be issued depending on the circumstances. Thus, the transmissions can be carried out daily.

That is to say: BMW does not periodically issue call offs for the whole product spectrum of a supplier! Call off issuing takes place during the overnight batch processing via the SAP system of each BMW plant.
Right after that, the call off data transmission (EDI,Web EDI,Fax) and archiving are activated through the central gateway in Munich.

1.5 EDI Implementation

Suppliers who do not have an EDI connection receive their call offs automatically via fax or via Web EDI.
Both methods are suitable for low data exchange (< 10 call offs per week). EDI is basically a more advantageous method due to its computer processability.

If the supplier is able to receive call offs via EDI, a connection test is carried out, followed by a 4 week long **test phase** during which the supplier receives the call offs both via fax and EDI. The supplier can compare the call offs to see if there are any differences between the two methods. At the end of this phase, the supplier informs its BMW contact that he is ready to 'go-live'. BMW cancels the fax and Web EDI communication and the EDI data is then legally binding.

1.6 EDI Data Setup

BMW issues data for each "supplier" with the matching call off information. "Supplier" is a number given by BMW to its supplier and this number is defined in the order. The supplier number is given by BMW Purchasing Department and is made up of
-the actual supplier number (6 digits) and
-Count address (2 digits, numerical, signals the location of the supplier)

Call off EDI Data

is created on the basis of the 8 digit supplier number. Supplier allocation of the framework order is decisive.

Below file names are used:

Dingolfing Core Production*

VDA 4905	W2.VDA4905.OUT.SCHED
Odette DELINS	W2.DELINS.OUT.SCHED

Leipzig

VDA 4905	WL.VDA4905.OUT.SCHED
Odette DELINS	WL.DELINS.OUT.SCHED

Oxford

VDA 4905	W8.VDA4905.OUT.SCHED
Odette DELINS	W8.DELINS.OUT.SCHED

Regensburg Core Production*

VDA 4905	W6.VDA4905.OUT.SCHED
Odette DELINS	W6.DELINS.OUT.SCHED

Munich

VDA 4905	W1.VDA4905.OUT.SCHED
Odette DELINS	W1.DELINS.OUT.SCHED

Component plants

VDA 4905	WK.VDA4905.OUT.SCHED
Odette DELINS	WK.DELINS.OUT.SCHED

Rosslyn/South Africa

VDA4905	W9.VDA4905.OUT.SCHED
Odette DELINS	W9.DELINS.OUT.SCHED

Duncan/USA

VDA4905	WCX.VDA4905.OUT.SCHED
Odette DELINS	WCX.DELINS.OUT.SCHED

Berlin

VDA4905	W3.VDA4905.OUT.SCHED
Odette DELINS	W3.DELINS.OUT.SCHED

Central Distribution Center Dingolfing

VDA4905	WA.VDA4905.OUT.SCHED
Odette DELINS	WA.DELINS.OUT.SCHED

* other file names are used for call offs from Wackersdorf Supply Centre (Plant group Regensburg)

Key terms

- BMW part/material number
- BMW purchase order number
- BMW plant/unloading point (Digits 1 and 2)

Please note: The **unloading point** is managed by Material Flow Management and the last 3 digits may change in the course of a material number's life cycle. Such a change in unloading point of a plant does not mean a change of key terms. A new call off with a new unloading point replaces the previous call off if the call off numeration continues to increase (please see 1.8). In such a case, information can be found in record 518.

1.7 Information on material number

A 22 digit long 'supplier-part-identification-number' can be assigned to the framework order by the Purchasing Department. In this case, 'part number-supplier' will be transmitted in record 512, position 9.
To increase the efficiency of BMW's internal material flow processes, some call offs include additional information such as warehouse location and point of consumption (please see 'Structure of a Call Off Message').

1.8 Processing by Supplier

A new call off replaces the previous one only when the following key terms are identical:

- BMW part number/material number,
- Purchase order number
- BMW plant/unloading point (in case of a change in unloading point within a plant, the call off period and the ‚cumulative quantity received' will be continued. Please see 1.6.)

and the „call off number-NEW' of the previous call off and ‚call off number-OLD' of the current call off.

In order to make sure that all call off transmissions sent by BMW are received, the transmission number (that increases without any gaps) must be checked. This number is in record 511 (VDA 4905).

The call off includes for the series a new code (512/18) which indicates whether the Change Index date is fix or variable. A specific date will only be specified (fix date) in necessary cases. In most cases, the date is „variable". In this case, you will receive a call off (for 'Change Index 1') with a period of 6 months and you can decide when you want to start delivering with 'Change Index 2'. After you start delivering with 'Change Index 2', you will receive a call off for 'Change Index 1' with a 'zero' quantity as well as a call off for 'Change Index 2' that includes the outstanding delivery quantities of 'Change Index 1' call offs.

1.9 Structure of a Call Off Message - EDI (VDA 4905)

The data interchange is done in accordance with **VDA 4905** standards (April 1996, 4. Edition). The following is a description of a VDA 4905 message. If required, VDA 4905/2 can also be used (based on ODETTE[1] message DELINS, Version 3.

An overview of Record Types

Record 511:	Header record of call off data (1 x per data)
Record 512:	Call off master data
Record 513:	Variable data
Record 514:	Variable data of the subsequent records
Record 515:	Additional call off information
Record 518:	Call off text data

[1] Organisation for Data Exchange by Tele Transmission in Europe

Record 519: Trailer record of call off data (1 x per data)
Record „517“ (packaging data) is not used at the moment.

Order of EDI records

Record 511: first record in a transmission.
Record 512: follows 511 und can also follow 513, 514, 515 and 518.
Record 513: follows 512.
Record 514: follows 513 or 514.
Record 515: follows 513 or 514
Record 518: follows 513 or 514 or 515 or 518.
Record 519: follows 513 or 514 or 515 or 518 and is the last record in a transmission.

1.9.1 Record 511 (Header record of call off data)

Record 511 / a ‚must' record / once per transmission

Pos.	Field name VDA	K/ M	Lg. Byte	AN/ N	Digit	Data content in accordance with VDA AKVD 4905	BMW Requirements
01	Record type	M	3	N	1-3	Record 511 is a header record that is sent only once in every data transmission. It contains master data of the transmission.	Fixed value „511"
02	Version number	M	2	N	4-5	Indicates the update status of a record	Version ‚01'
03	Customer number	M	9	AN	6-14	Identification number given by supplier (e.g. Hella) to a customer (e.g. BMW). Left-justified. Field subject to data protection.	Customer number, which supplier use for BMW. **BMW-AG is used by default.** For each SAP BMW plant it is possible to transfer one customer number. If required you have to request for it by IT-Support.
04	Supplier number	M	9	N	15-23	Identification number given by customer (e.g. BMW) to a supplier (e.g. Hella). Left-justified.	Supplier number and its count address. **The account address from the corresponding framework order is used.**
05	Transmission number-OLD	M	5	N	24-28	A sequential number is given to every data transmission. Transmission number-OLD is the transmission number of the last call off.	Is saved for every data generation
06	Transmission number-NEW	M	5	N	29-33	A sequential number is given to every data transmission. Transmission number-NEW is the transmission number of the current call off.	Is given to every data generation.
07	Transmission date	M	6	N	34-39	Is the date of data processing (YYMMDD).	Is given to every data generation.
08	Date of „Zero position" (cumulative quantity received)	K	6	N	40-45	Format YYMMDD	not used
08	Blank	M	89	AN	40-128	Reserved digit	Reserved digit

Example of a record 511 transmission:

Digit	1	4	6	15	24	29	34	40 45	46 - 128
Content	5 1 1	0 1	9 1 3 2 2 _ _ _ _	2 5 8 9 1 8 1 0 _	0 0 0 1 3	0 0 0 1 4	040109	040101	_ _ _ _ _ _
Position	01	02	03	04	05	06	07	08	09

Explanation of the example:

Pos. 03: Customer number 91332 has been given by supplier to BMW plant Regensburg. It's transmitted on request.
Pos. 04: Supplier number „25891810" - according to the frame work order. Valid for all delivery call offs
Pos. 05: The number of the last call off transmission = „13"
Pos. 06: The number of the current call off transmission = „14".
Pos. 07: Data processing date of the current call off = „09.01.2004".
Pos. 08 Date of „zero position" (setting back ‚cumulative quantity received' to zero) = 01.01.2004

1.9.2 Record 512 (Call off master data)

Record 512 / a ‚must' record / once per part number, plant/unloading point and purchase order number.

Pos.	Field name VDA	K/ M	Lg. Byte	AN /N	Digit	Data content in accordance with VDA AKVD 4905	BMW Requirements
01	Record type	M	3	N	1-3	Contains the master data of the call off.	Fixed value „512“
02	Version number	M	2	N	4-5	Indicates the update status of a record	Version „01“
03	Plant-customer	M	3	N	6-8	The plant the parts should be delivered to. In coded format.	010 = Munich 020 = Dingolfing / Central Distribution Center Dingolfing 030 = Berlin 040, 041, 047, 048, 049 = Component plants Landshut 060 = Regensburg / Wackersdorf 070 = Leipzig 080 = Oxford 092 = Rosslyn/South Africa CX1 = Duncan/USA
04	Call off number -NEW	M	9	AN	9-17	Sequential number given to call off (per part number, purchase order number and BMW unloading point). The NEW number is the number belonging to the current call off. Left- justified.	Call off number of the current call off
05	Call off date-NEW	M	6	N	18-23	The date of the ‚call of number-NEW' (YYMMDD).	Call off date of the current call off. Shows the current date of the call off data processing.
06	Call off number -OLD	M	9	AN	24-32	Sequential number given to call off (per part number, purchase order number and BMW unloading point). The OLD number is the number belonging to the previous call off. Left- justified.	Call off number of the previous call off
07	Call off date-OLD	M	6	N	33-38	The date of the ‚call of number-OLD' (YYMMDD).	Call off date of the previous call off.
08	Part number-customer	M	22	AN	39-60	Material number BMW: Format xxxxxxx-xx H&B materials 7 digit part number	Composed of 7 digit part number (old) and –Change Index (9 digit material number)
09	Part number-Supplier	K	22	AN	61-82	Identification number given by supplier to a certain part. Left-justified.	In accordance with BMW purchase order, provided it is available there.
10	Purchase order number	M	12	AN	83-94	Identification number of the order number based on the call off. Left-justified.	7 digit BMW purchase order number without the version number.
11	Unloading point	M	5	AN	95-99	Identification number of the BMW point where the parts are delivered to. Left-justified.	5 digit BMW unloading point. Please see ‚Unloading Point List' document on BMW group partner portal.
12	Code of customer	M	4	AN	100-103	Identification number of call off issuer. Left-justified.	3 digit Material planner number is used at BMW e.g.: „893“
13	Unit of measurement	M	2	AN	104-105	Encoded format (see List of Codes in chapter 1.9.8)	
14	Delivery interval	M	1	AN	106-106	Gives information about the subsequent quantity to be delivered in encoded format (see List of Codes in chapter 1.9.8)	„L“ is generally used
15	Inclusive Production release	K	1	N	107-107	Number of months excluding monthly due date	1 month starting from the call off date
16	Material release	K	1	N	108-108	Number of months excluding monthly due date	0 months after production release
17	Use flag	M	1	N	109-109	Shows if it is a series parts, spare parts, sample or test call off. Encoded format. (see List of Codes in chapter 1.9.8)	E: Spare M: Initial sample S: Series

							V: Test
18	Allocation	K	7	AN	110-116	Position 110: Shows part number/Change Index change (Change Index indicator). Left-justified. Position 111-112 Transport route: 1. It is only needed for German plants if the special case air freight has to be transmitted. 2. For branch Rosslyn/South Africa the Route of Transport will be generally transmitted.	Position 110: V = Variable F = Fix date Position 111-112: 10 = air freight 11 = sea freight If a transmitting of the Transport route is necessary in the ASN, indicate it in record 713/field 06
19	Warehouse location	K/ M	7	AN	117-123	Left justified	In most cases transmitted. If transmitted, the warehouse location has to be filled in the ASN in item record type 713/ Pos. 15
20	Blank	M	5	A	124-128	Reserved digits.	Reserved digits.

Example of a record 512 transmission:

Digit	1	4	6	9	18	24	33
Content	5 1 2	0 1	0 6 0	0 0 0 0 0 0 0 0 2	0 4 0 1 0 9	0 0 0 0 0 0 0 0 1	0 4 0 1 0 7
Position	01	02	03	04	05	06	07

Digit	39	61	83
Content	1 2 2 4 7 7 6 -0 2 _ _ _ _	F 9 3 4 3 6 _ _ _ _	8 0 2 1 2 8 7 _ _
Position	08	09	10

Digit	95	100	104	106	107	108	109	110	117	124 ... 128
Content	6 1 0 0 8	8 9 3_	S T	L	1	0_	S	V__10 _ _ _ _	6 5 0 0 0_ _	_ _ _ _ _
Position	11	12	13	14	15	16	17	18	19	20

Explanation of the example:

Pos. 03: Plant – Customer= „060“= Plant Regensburg (SAP).
Pos. 04: Call off number „10“ to material number, purchase order number, plant / unloading point.
Pos. 05: Data processing date of call off number 2 is 09.01.2004.
Pos. 06 Call off number-old is „9“.
Pos. 07: Data processing date of call off number 1 was 07.01.2004.
Pos. 08: BMW material number = „1224076-02“.
Pos. 09: Part number-supplier = „F 93 436“. Part number-supplier is processed if it is available in BMW’s order.
Pos. 10: Purchase order number= „8021287“. The 7 digit purchase order number is a part of the ‘call off instruction code’. It must be included in the information accompanying the parts.
Pos. 11: Unloading point = „61008“.
Pos. 12: The number of the material planner at BMW = „893“.
Pos. 13: Unit of measurement = „ST“ = Piece.
Pos. 14: Call off code is always „L“= in accordance with call off date.
Pos. 15: Production release= 1 Month.
Pos. 16: Material release= 0 month
Pos. 17: Use of code= „S“ = Series.
Pos. 18 Part number / Change Index change = “V” = variable
The delivery call off includes for the series a new data (512/18), by means of which you can identify whether the AI change has a fixed date or a variable one.
As before, the exact deployment day of the new change index will only be specified in necessary cases (“fix”).
In most cases the deployment point is “variable”. In these cases you receive a planning schedule for 6 months into the future in the delivery schedule for change index (1), and you can determine yourself when you would like to begin delivering change index (2).
Once you have delivered change index (2) for the first time, you receive a delivery schedule for change index (1) with a quantity of “zero” and a delivery schedule for change index (2) which now also contains the release

quantities from change index (1) that are still outstanding.
In the delivery note EDI as well as the electronic goods accompanying document or TSB (transport and delivery accompanying document) and VDA goods tag, we expect the new display format (xxxxxxx-xx) and the unloading point in new format (5 digits).
Transport route = air freight
The material planner send, for example for an already existing call off, (which goods by default are already on the way via sea freight) a further call off in which the Transport route is dictated for air freight. This label is 10 and also to indicate into the ASN so that the different ASN can be distinct.

Pos. 19 Warehouse location = 65000

1.9.3 Record 513 (Variable data)

Record 513 / A ‚must' record / once per record 512.

Pos	Field name VDA	K/ M	Lg. Byte	N/ AN	Digit	Data content in accordance with VDA-AKVD 4905	BMW Requirements
01	Record	M	3	N	1-3	Record 513 contains the variable data of every call off; i.e. order analysis data and call off data	Fixed value „513“
02	Version number	M	2	N	4-5	Indicates the update status of a record	Version „01“
03	Date of data entry	M	6	N	6-11	Date of latest delivery to the customer (Format: YYMMDD).	Date of latest delivery note booked in at BMW.
04	Delivery note number	M	8	N	12-19	Latest delivery note number booked in at BMW Arrivals	delivery note number of latest booked in delivery at BMW
05	Delivery note date	M	6	N	20-25	Date of latest delivery note booked in at BMW Arrivals	Date of latest delivery note booked in at BMW
06	Quantity- last delivery	M	12	N	26-37	Quantity of last delivery received by customer.	The last booked in quantity (with 3 digits after the decimal point).
07	Cumulative quantity received	M	10	N	38-47	Cumulative quantity= All positively booked in deliveries starting from a certain date to the date of the current call off processing	‘Zero position’ is first day of the year
08	Call off date 1	M	6	N	48-53	Date of call off (quantity). Format: see below.	Arrival date
09	Released call off quantity 1	M	9	N	54-62	Released quantity of delivery call off	No decimal points
10	Call off date 2	K	6	N	63-68	.	
11	Released call off quantity 2	K	9	N	69-77		
12	Call off date 3	K	6	N	78-83		
13	Released call off quantity 3	K	9	N	84-92		
14	Call off date 4	K	6	N	93-98		
15	Released call off quantity 4	K	9	N	99-107		
16	Call off date 5	K	6	N	108-113		
17	Released call off quantity 5	K	9	N	114-122		
18	Blank	M	6	AN	123-128	Reserved digit	Reserved digit

Data entry in the following format:

Data entry (Arrival Date)		Coded Format
Day	YYMMDD/040901 = 01.09.2004	000000 : the last call off field of a part/material number in the transmitted call off. The corresponding quantity field and further fields are blank.
Weeks (as limits)	YYWWWW/042528 = 25.-28. KW 2004	222222 : No demand from the customer for this part/material number/purchase order number. Other fields are blank.
Week (as target date)	YY00WW/040025 = 25. calendar week 2004	333333 : corresponding quantity is back order. 444444 : corresponding quantity is immediate demand.
Month (as target date)	YYMM00/040500 = May 2004	555555 : All following date entries should be interpreted as weeks/months. Corresponding quantity field is blank. No relation to forecast period.

Example of a record 513 transmission:

Digit	1	4	6	12	20	26
Content	5 1 3	0 1	0 4 0 8 1 7	0 0 2 4 1 4 3 4	0 4 0 8 1 6	0 0 0 0 0 0 1 6 4 0 0 0
Position	01	02	03	04	05	06

Digit	38	48	54	63	69	78
Content	0 0 0 0 0 0 2 7 3 6	3 3 3 3 3 3	0 0 0 0 0 0 0 2 4	0 2 0 8 2 9	0 0 0 0 0 0 1 2 0	0 4 0 8 3 1
Position	07	08	09	10	11	12

Digit	84	93	99	108	114	123 ... 128
Content	0 0 0 0 0 0 0 9 6	0 4 0 9 0 5	0 0 0 0 0 0 1 4 4	0 4 0 9 0 7	0 0 0 0 0 0 0 9 6	_ _ _ _ _ _
Position	13	14	15	16	17	18

Explanation of the example:

Pos. 03: Booking in date of the part/material number's last delivery = „17.08.2004".
Pos. 04: Delivery note number of the last booked in delivery = „241434".
Pos. 05: Creation date of delivery note 241434 = „16.08.2004".
Pos. 06: Booked in quantity of delivery note 241424 = „164" pieces.
Pos. 07: Cumulated quantity received from 07.01.2004 until call off processing date = „2736" pieces.
Pos. 08: Following quantity is back order.
Pos. 09: Back order quantity = „24" pieces.
Pos. 10: Delivery date = „29.08.2004".
Pos. 11: Corresponding quantity = „120" pieces.

Positions 12 to 17 should be interpreted like position 10 and 11.

1.9.4 Record 514 (Variable data of the following records)

Record 514 / a ‚conditional' record / is sent if required / repeated until all call off dates are indicated

Pos	Field name VDA	K/ M	Lg. Byte	N/ AN	Digit	Data content in accordance with VDA-AKVD 4905	BMW Requirements
01	Record	M	3	N	1-3	Record 514 contains further call off data related to record 513. Can occur as often as wanted.	Fixed value „514". Maximum 8 times at BMW.
02	Version number	M	2	N	4-5	Indicates the update status of a record	Version „01"
03	Call off date 6	M	6	N	6-11	Date of call off (quantity). (Please see record 513 Pos.8)	Arrival date
04	Released call off quantity 6	M	9	N	12-20	Released quantity of delivery call off	No decimal points
05	Call off date 7	K	6	N	21-26		
06	Call off quantity 7	K	9	N	27-35		
07	Call off date 8	K	6	N	36-41		
08	Call off quantity 8	K	9	N	42-50		
09	Call off date 9	K	6	N	51-56		
10	Call off quantity 9	K	9	N	57-65		
11	Call off date 10	K	6	N	66-71		
12	Call off quantity 10	K	9	N	72-80		
13	Call off date 11	K	6	N	81-86		
14	Call off quantity 11	K	9	N	87-95		
15	Call off date 12	K	6	N	96-101		
16	Call off quantity 12	K	9	N	102-110		
17	Call off date 13	K	6	N	111-116		
18	Call off quantity 13	K	9	N	117-125		
19	Blank	M	3	N	126-128	Reserved digit	Reserved digit

Please see record 513 regarding date entry.

Example of a record 514 transmission:

Digit	1	4	6	12	21	27	36
Content	5 1 4	0 1	0 4 0 9 1 2	0 0 0 0 0 0 0 9 6	0 4 0 9 1 4	0 0 0 0 0 0 1 2 0	5 5 5 5 5 5
Position	01	02	03	04	05	06	07

Digit	42	51	57	66	72	81
Content	_ _ _ _ _ _ _ _ _	0 4 0 0 3 8	0 0 0 0 0 0 2 1 6	0 4 0 0 3 9	0 0 0 0 0 0 2 4 0	0 4 0 0 4 0
Position	08	09	10	11	12	13

Digit	87	96	102	111	117	126 .. 128
Content	0 0 0 0 0 0 2 6 4	0 4 4 1 4 4	0 0 0 0 0 0 9 6	0 0 0 0 0 0	_ _ _ _ _ _ _ _ _	_ _ _
Position	14	15	16	17	18	19

Explanation of the example:

Pos. 03: Delivery date = „12.09.2004".
Pos. 04: Corresponding quantity = „96" pieces.
Pos. 05: Delivery date = „14.09.2004".
Pos. 06: Corresponding quantity = „120" pieces.
Pos. 07: „555555" means: All following date entries should be interpreted as weeks/months.
Pos. 08: Corresponding quantity field is blank.
Pos. 09: Delivery week = week 38, 2004.
Pos. 15: Delivery time frame from week 41 - 44, 2004.
Pos. 17: „000000": end of this call off period.

1.9.5 Record 515 (Additional call off information)

Record 515 / a ‚conditional' record / is sent if required / once per record 512

Pos	Field name VDA	K / M	Lg. Byte	N/ AN	Digit	Data content in accordance with VDA-AKVD 4905	BMW Requirements
01	Record	M	3	N	1-3	Record 515 contains additional call off data	Fix value „515"
02	Version number	M	2	N	4-5	Indicates the update status of a record	Version „02"
03	Production release, Starting date	K	6	N	6-11		Not used by BMW
04	Production release, End date	K	6	N	12-17		Not used by BMW
05	Production release, Cumulative demand	K	10	N	18-27		Not used by BMW
06	Material release, Starting date	K	6	N	28-33		Not used by BMW
07	Material release, End date	K	6	N	34-39		Not used by BMW
08	Material release, Cumulative demand	K	10	N	40-49		Not used by BMW
09	Additional part number	K	22	AN	50-71		BMW internal term for design changes: NAEL: 6 digits
10	Tier 2 supplier	K	9	AN	72-80		Not used by BMW
11	Date of planning horizon	K	6	N	81-86		Not used by BMW
12	Point of consumption	K	14	AN	87-100	Point of consumption	Transmitted individually
13	Cumulative quantity reached at „zero position"	K	10	N	101-110		not used
14	Blank	M	18	AN	111-128	Filled with BLANKS	

Example of a record 515 transmission:

Digit	1	4	6	12	18	28	34	40
Content	5 1 5	0 1	_ _ _ _ _ _	_ _ _ _ _ _	- - - - - - - - - -	_ _ _ _ _ _	_ _ _ _ _ _	- - - - - - - - - -
Position	01	02	03	04	05	06	07	08

Digit	50	72	81	87	101	111 - 128
Content	EKR42K _ _ _ _ _	- - - - - - - -	_ _ _ _ _ _	500903-NAEG28	0000037864	_ _ _ _ _ _
Position	09	10	11	12	13	14

1.9.6 Record 518 (Call off-text data)

Record 518 / a "conditional" record / is sent if required / maximum 4 times per call off.

Pos	Field name VDA	K/ M	Lg. Byte	N/ AN	Digit	Data content in accordance with VDA-AKVD 4905	BMW Requirements
01	Record	M	3	M	1-3	Record 518 contains call off's text data	Fix value „518"
02	Version number	M	2	M	4-5	Indicates the update status of a record	Version „01"
03	Call off text 1		40	M	6-45	Free text	Left-justified.
04	Call off text 2		40	K	46-85	Free text	Left-justified
05	Call off text 3		40	K	86-125	Free text	Left-justified.
06	Blanks		3	M	126-128	Reserved digits	Reserved digits

Example of a record 518 transmission:

Digit	1	4	6	46	86	126 .. 128
Content	5 1 8	0 1	R O L L E N B UC H S E _ _ _ ...	_ _ _ ... _ _ _	_ _ _ ... _ _ _	_ _ _
Position	01	02	03	04	05	06

Explanation of the example:
Pos. 03 - 05: The description of the material number can be transmitted here.

NEW: An additional 518 record can be transmitted which has the information regarding the unloading point change.

Example of a 518 record with the „Unloading point Change":

Digit	1	4	6	46	86	126 .. 128
Content	5 1 8	0 1	ABLADESTELLENAENDERUNG	ALTE ABLADESTELLE	NEUE ABLADESTELLE	_ _ _
Position	01	02	03	04	05	06

1.9.7 Record 519 (Trailer record of Call off data)

Record 519 / a ‚must' record / once per transmission.

Pos	Field name VDA	K/ M	Lg. Byte	N/ AN	Digit	Data content in accordance with VDA-AKVD 4905	BMW Requirements
01	Record	M	3	N	1-3	Record 519 is the trailer record of the transmission. Is sent once per transmission. Contains statistical data concerning all records. Provides the possibility to check the thoroughness of the transmission.	Fix value „519“
02	Version number	M	2	N	4-5	Indicates the update status of a record	Fix value „02“ (at the time)
03	Record 511	M	7	N	6-12	Count of records processed.	
04	Record 512	M	7	N	13-19	Count of records processed.	
05	Record 513	M	7	N	20-26	Count of records processed.	
06	Record 514	M	7	N	27-33	Count of records processed.	
07	Record 517	M	7	N	34-40	Count of records processed.	
08	Record 518	M	7	N	41-47	Count of records processed.	
09	Record 519	M	7	N	48-54	Count of records processed.	
10	Record 515	M	7	N	55-61	Count of records processed.	
111	Blank	M	67	AN	62-128	Reserved digits	Reserved digits

Example of a record 519 transmission:

Digit	1	4	6	13	20	27	34
Content	5 1 9	0 1	0 0 0 0 0 0 1	0 0 0 0 0 0 1	0 0 0 0 0 0 1	0 0 0 0 0 0 1	0 0 0 0 0 0 0
Position	01	02	03	04	05	06	07

Digit	41	48	55	62 ... 128
Content	0 0 0 0 0 0 1	0 0 0 0 0 0 1	0 0 0 0 0 0 1	_ _ _ ... _ _ _
Position	08	09	10	11

Explanation of the example:
In this example, records 511, 512, 513, 514, 515, 518 and 519 are transmitted only once.

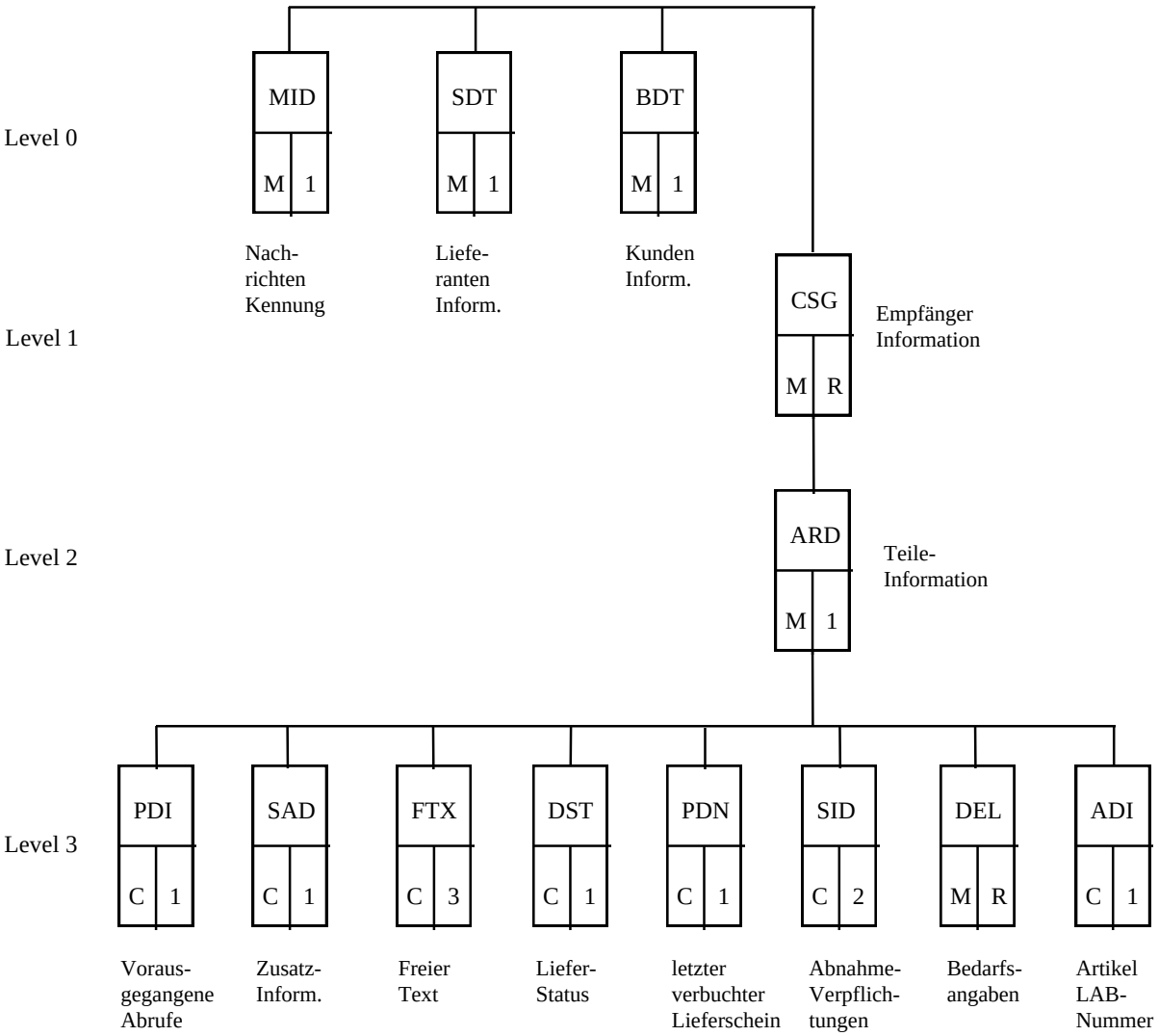
1.9.8 Code List for Call Off Transmission

Data (field name)	Record/ Position	Code	Description
Unit of measurement	512/13	ST M M2 M3 L T KG G KM MM SA PA TG SD	Piece Meter Square metre Cubic metre Litre Ton Kilogram Gram Kilometre Millimetre Set Pair Day Hour
Delivery interval	512/14	L T W M	In accordance with delivery date Daily Weekly Monthly
Code usage	512/17	S E M V	Series Spare Initial sample Test

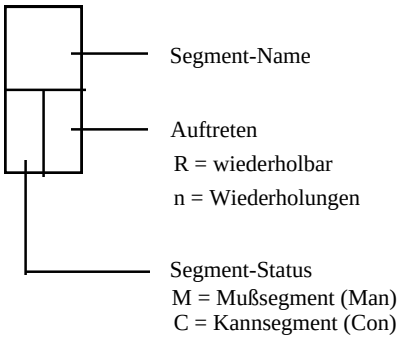
Plant number BMW internal code	512/03	010 020 030 060 070 080 092 040 041 047 048 049 030 060 020 CX1	Munich Dingolfing series / Central Distribution Center Dingolfing Berlin motor cycle plant Regensburg Leipzig Oxford Rosslyn/South Africa Component plant Landshut Component plant Landshut Component plant Landshut Component plant Landshut Component plant Landshut Component plant Berlin Component plant Wackersdorf Component plant Dingolfing SKD Plant Duncan/USA

1.10 Description of call off message structure in accordance with VDA 4905/2 (Subset of ODETTE DELINS, Version 3)

Branching diagram of used message segments



Erläuterung:



1.11 Message segments and BMW specifications

UNB:
UNB+UNOA:1+<O0013000045BMW-AG or agreed sender code>+<ODETTE-ID supplier>+YYMMDD:hhmm+<Transmission number old>< Transmission number new>++DELINS'

UNH:
UNH+1+DELINS:3:0:OD'

Segment Code MID
Segment Name Message identifier
Segment Status Man / 1 x per call off transmission

TAG	Name	St.	Format ODETTE	Format BMW	Remarks
1004	Document number	M	an..17	an3	ARD is transmitted in this field since BMW's call off numbers are order related

Segment Code SDT
Segment Name Supplier information
Segment Status Man / 1 x per call off transmission

TAG	Name	St.	Format ODETTE	Format BMW	Remarks
3347	Supplier number	M	an..20	an8	6 digit supplier number + 2 digit supplier account address (of supplier location related to the first ARD segment)
3036	Supplier name	C	an..35	an..35	This information must not be processed further
3124	Address	C	an..35	an..35	This information must not be processed further
3296	Internal supplier number	C	an..17	an..8	Is the supplier number from tag 3347; must not be processed further
3928	Supplier phone number	C	an..17	an..17	This information must not be processed further
3926	Supplier fax number	C	an..17	an..17	This information must not be processed further

Segment Code BDT
Segment Name Customer Information
Segment Status Man / 1 x per call off transmission

TAG	Name	St.	Format ODETTE	Format BMW	Remarks
3003	Customer number	M	an..20	an..9	Customer number, given to BMW by the supplier; one per SAP plant is possible. Default: BMW-AG
3124	Transport route	C	an.. 35	n.. 2	Transport route: 1. It is only needed for German plants if the special case air freight have to be transmitted. 2. For branch Rosslyn/South Africa the Route of Transport will be transmitted generally Possible specifications: 10 = sea freight 40 = air freight If transmitted, the Transport route have to be indicated in the ASN segment DET Tag 8067.

Segment Code CSG

Segment Name Receiver Information
Segment Status Co / 1 x per part number/purchase order number/unloading point

TAG	Name	St.	Format ODETTE	Format BMW	Remarks
3133	Plant-customer	M	an..20	an3	010 = Munich 020 = Dingolfing / Central Distribution Center Dingolfing 030 = Berlin 040, 041, 047, 048, 049 = Componants plants Landshut 060 = Regensburg / Wackersdorf 070 = Leipzig 080 = Oxford 092 = Rosslyn/South Africa CX1 = Duncan/USA
3036	Plant name	C	an..35	an..35	This information must not be processed further
3124	Address	C	an..35	an..35	This information must not be processed further
3296	Internal plant specification	C	an..17	an4	This information must not be processed further
3921	Unloading point	R	an..17	an..5	5 digit BMW unloading point: Please see List of Unloading Points on the B2B portal
3920	Unloading point address	C	an..35	an..35	This information does not have to be processed further
3923 3922	Storage location Point of consumption	C C	an..17 an..35	an..5 an..14	BMW's material storage point BMW's point of consumption

Segment Code ARD
Segment Name Part information
Segment Status Man / 1 x per CSG

TAG	Name	St.	Format ODETTE	Format BMW	Remarks
7304	Customer's part number	M	an..35	an..22	9 digit material number: Format „XXXXXXX-XX“
		C	an..35	an..22	
7194	Supplier's part number	C	an..35	an..35	In accordance with BMW purchase order, provided it is available there.
7008 7008	Part number description dto	C	an..35	an..5	BMW part number description ...maximum 40 digits
6410	Unit of measurement	C	an..3	an3	Please see the list at the end of this chapter
1022	Framework order number	M	an..17	an..7	Format: XXXXXXX
4440	Change Index indicator	C	an..70	an..1	F = Fix, V = Variable or blank
1376	Design change management number	C	an..17	an.6	NAEL number. Format: ERD23K

Segment Code PDI
Segment Name Previous call offs
Segment Status Con / 1 x per ARD

TAG	Name	St.	Format ODETTE	Format BMW	Remarks
1004	Call off number - old	C	an..17	an..9	Sequence number of the previous call off
2007	Call off date - old	C	n6	n6	Date of previous call off. Format: YYMMDD

Segment Code SAD
Segment Name Additional part information
Segment Status Con / 1 x per ARD

TAG	Name	St.	Format ODETTE	Format BMW	Remarks

7807	Call off code	M	n1	n1	fix value „1“ i.e.: the current call off completely replaces the previous one
3413	Customer code	C	an..17	an..3	3 digit code of the delivery controller
7153	Part status code	C	n2	n2	03 = Series 06 = Spare 18 = Initial sample 15 = Test

Segment Code FTX
Segment Name Free text
Segment Status Con / up to 3 times per ARD

TAG	Name	St.	Format ODETTE	Format BMW	Remarks
4440	Text line 1	M	an..70	an..35	
4440	Text line 2	C	an..70	an..35	
4440	Text line 3	C	an..70	an..35	

Any informative text, 'cumulative quantity received' before the „zero position" and/or information regarding unloading point change

Segment Code DST
Segment Name Delivery status
Segment Status Con / 1 x per ARD

TAG	Name	St.	Format ODETTE	Format BMW	Remarks
2253	Booking in date of last delivery note	M	n6	n6	
6802	Cumulative demand	C	n..10	n..10	Cumulative demand
6804	Cumulative quantity received	C	n..10	n..10	Cumulative quantity received
2121	Start date of cumulation	C	n6	n6	XX0101 (1st of January of current year)

Segment Code PDN
Segment Name Last booked in delivery note
Segment Status Con / 3 x per ARD

TAG	Name	St.	Format ODETTE	Format BMW	Remarks
1128	Delivery note number	M	an..17	n..8	
2219	Delivery note date	M	n6	n6	Format: YYMMDD
6270	Delivery quantity	M	n..10	n..9	

Segment Code SID
Segment Name Inclusive Production release
Segment Status Con / 2 x per ARD

TAG	Name	St.	Format ODETTE	Format BMW	Remarks
6811	Inclusive Production release - code	M	n1	n1	1 = production release 3 = additional material release timeframe
2151	Timeframe - code	C	an..3	an1	fix M
2152	Timeframe - quantity	C	n..3	n1	fix value 1/0; i.e. 1 month production release plus 0 month material release – excluding monthly due date

Segment Code DEL
Segment Name Demand information
Segment Status Man / n x per ARD

TAG	Name	St.	Format ODETTE	Format BMW	Remarks
2803	Call off date from	C	n6	n6	First date of a call off, (YYMMDD)
2805	Call off date to	C	n6	n6	Last date of a call off, (YYMMDD)
2836	Call off timeframe	C	n8	n8	Call off time frame YYWWYYWW for weeks or week groups; **is not used**
6060	Call off quantity	M	n..15	n..9	Accompanying scheduled quantity
7803	Call off quantity -code	C	n..1	n..1	„3“ = back order „4“ = immediate demand „5“ = no further call offs for this part number, quantity = „0“

Segment Code ADI
Segment Name Article - call off number
Segment Status Con / 1 x per ARD

TAG	Name	St.	Format ODETTE	Format BMW	Remarks
1004	Call off number – new	M	an..17	an..9	number of current call off
2007	Call off date – new	M	n6	n6	processing date of current call off, format: YYMMDD

Unit of Measurement Index

Segment ARD, TAG 6410

Unit of Measurement	Code
Piece	PCE
Metre	MTR
Square metre	MTK
Cubic metre	MTQ
Litre	DMQ
Kilogram	KGM
Gram	GRM
Millimetre	MMT
Set	SET*
Pair	NPR
Day	DAY
Hour	HUR

)* a BMW definition. not in ODDC25!

2 Planning and Implementation of EDI delivery notes

2.1 Data preparation

The EDI delivery note data must be in accordance with VDA 4913, version 3 (Edition 10/94) or version 4 (Edition March 96) or Odette AVIEXP V.3. The BMW specific items are identified in the message description with "BMW/K/M"
M = Mandatory, **K** = conditional, **R** = Required by BMW

Every transmission must correspond to one BMW unloading point.

Example:

Series part transports are sent to Dingolfing – one to the unloading point 24000 and the other to 24201 - at the same time. For each unloading point one ASN with a different transport number has to be transmitted via virtual filename W2.VDA4913.INB.ASN

Unloading point	SLB / Transport number	Transmission number new in ASN
24000	0000123	00001
24201	0000124	00002

There is a special file name for every plant system:

Dingolfing Core production*
VDA 4913 W2.VDA4913.INB.ASN
Odette AVIEXP W2.AVIEXP.INB.ASN
Leipzig
VDA 4913 WL.VDA4913.INB.ASN
Odette AVIEXP WL.AVIEXP.INB.ASN
Oxford
VDA 4913 W8.VDA4913.INB.ASN
Odette AVIEXP W8.AVIEXP.INB.ASN
Regensburg Core production*
VDA 4913 W6.VDA4913.INB.ASN
Odette AVIEXP W6.AVIEXP.INB.ASN
Munich
VDA 4913 W1.VDA4913.INB.ASN
Odette AVIEXP W1.AVIEXP.INB.ASN
Component plants
VDA 4913 WK.VDA4913.INB.ASN
Odette AVIEXP WK.AVIEXP.INB.ASN
Rosslyn/South Africa
VDA4913 W9.VDA4913.INB.ASN
Odette AVIEXP W9. AVIEXP. INB.ASN
Duncan/USA
VDA4913 WCX. VDA4913.INB.ASN
Odette AVIEXP WCX. AVIEXP. INB.ASN

Berlin

VDA4913	W3. VDA4913.INB.ASN
Odette AVIEXP	W3. AVIEXP. INB.ASN

Central Distribution Center Dingolfing

VDA4913	WA. VDA4913.INB.ASN
Odette AVIEXP	WA. AVIEXP. INB.ASN

)* other file names are used for deliveries to Wackersdorf Supply Center (plant group Regensburg)

Deliveries for all call offs - that are received using the file names stated in Chapter 1.6 - should be sent using the corresponding file names above.

2.2 Record Types

The use of record types and the structure of their sequence should follow the rules of VDA 4913 (except record 717. please see below)

Record 715 is mandatory since BMW manages packaging data based on its position. Packaging codes can be taken from BMW's packaging guide and they can be found in purchase/framework order.

Please note that the correct code for disposable packaging must be taken from packaging manual of the BMW Group.

You can find all disposable packaging on https://b2b.bmw.com -> departments -> logistics -> packaging manual of the BMW Group -> planning -> packaging materials -> special situations.

„B" (or VDA 4913's own code) code should be used for sub packaging.

The number of 715 records per delivery note/position is not restricted to 2 anymore. However, multilevel packaging must be entered as a ‚loading unit' (packaging code „L310XXXX").

Supplementary information (text) can be transmitted in record 716.

Record 717 can not be processed at BMW. It should not be transmitted.

Record 718 can only be used in JIS processes (SPAB-order related/sequence related).

2.3 Data transmission – When?

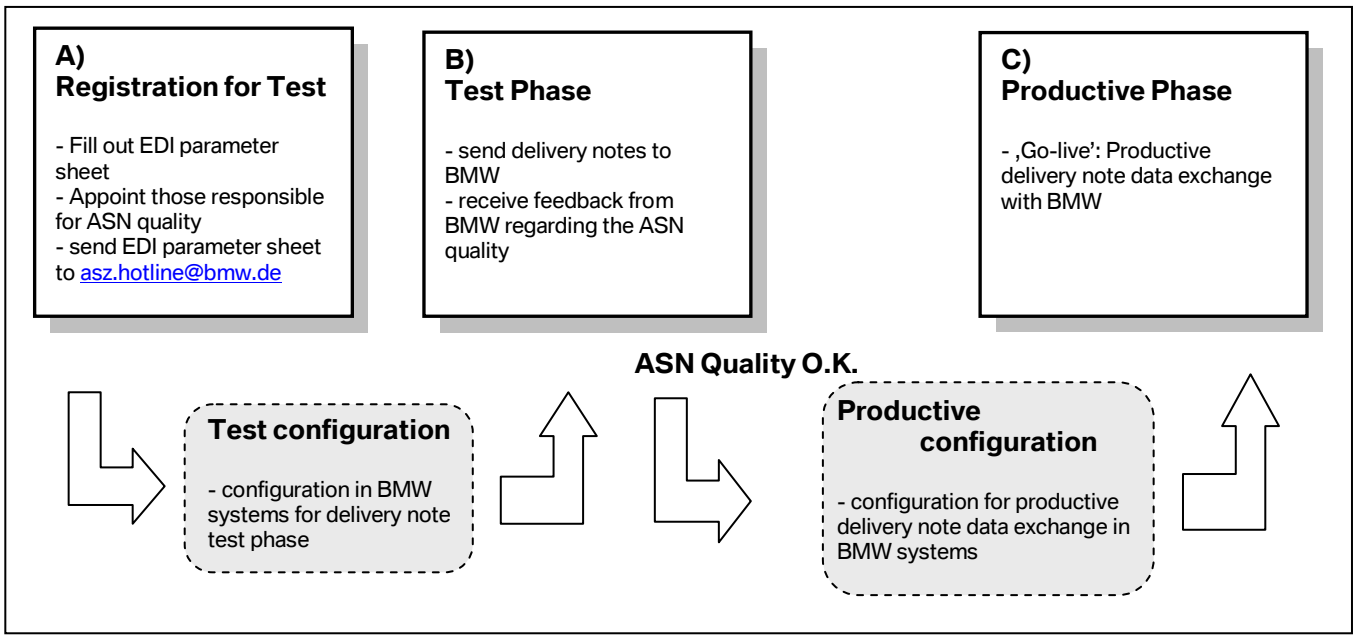
Data transmission can be done from 0:00 to 24:00. The data is subsequently forwarded to the decentralized SAP systems.

The preparation and transmission of the data should be carried out right after the dispatch from the supplier's plant. On time and correct transmission of delivery note data is a prerequisite for a successful material planning at BMW since the planning is also based on the 'stock in transit' that is transmitted by the supplier.

Any differences between actual values and the target requirements should be taken into account in EDI. The information on the paper work (accompanying the transport) and in the transmitted data should always match.

2.4 Implementation-/ Test phase

During the test phase, the delivery note data (ASN) is not yet used at the Arrivals. The test data is forwarded to a test system. Below chart describes the process between the implementation/test phase and the productive phase:



A) Please select the file names you need to use from the EDI parameter sheet*. By using these file names, you will be able to take part in the automatic test phase. This procedure is a prerequisite of a productive configuration. Please give a contact name in your company who will be responsible for ASN quality during the test phase.

B) When the configurations for the test phase are done by BMW, you can send a delivery note. In order to have a realistic test phase and to avoid any problems that might come up after the "go-live", the data should be prepared using real transport information. The BMW system checks your ASN and an email is sent to the ASN Quality contact at your company informing him/ her about any errors so that the necessary changes can be done for the next transmission. BMW EDI Team supports the supplier during this phase until the data quality reaches the required level.

C) When the data quality is good enough, ‚go-live' date is set by BMW and the supplier. After this date, the supplier is obliged to send correct and complete ASNs with every delivery.

2.5 Ongoing Process of EDI delivery notes

A.) Basics

After the go-live, the data quality must be high and the data should be sent to BMW on time. Department responsible for system and process organization and dispatch must have qualified personnel. EDI delivery notes should be sent for all transports. Should this be not possible in exceptional case, please inform the unloading point concerned.

B.) Correction Procedure

The correction procedure described in VDA Recommendations 4913-Version 2 will not be used since it proved to be impractical.

If a data that is already transmitted needs to be corrected, following procedure should be carried out:
Supplier's dispatch department sends a new transmission with the correct data that has a new transport number; the transmission number must count up. BMW Arrivals should be informed that

the original transport number will be transmitted again or that it will be replaced by a new transport number.
It must be ensured that the identification number in the data and the paperwork matches.

C.) Dispatch documents
Time-synchronous issuing of below documents is necessary to ensure a consistency between the EDI data and the paperwork:

1. **Forwarding instruction in accordance with VDA 4922***
   Supplier number of the dispatching plant and transport number must be on the document as a reference to EDI data.
2. **Goods accompanying slip-EDI - in accordance with VDA 4912****
   In cases where the EDI data is missing, a paper document that accompanies the transport is mandatory. BMW requires duplicate documents issued in accordance with VDA 4912 standards.
   In exceptional cases, the delivery note can also be used in accordance with DIN 4994 standards.
   The order of the documents and the order of the data must also match!
3. **Transport label in accordance with VDA 4902**
   Version 3 or 4 (please see BeloM label specifications)

)* Forwarding instruction and goods accompanying slip-EDI can be replaced by transport documents in accordance with VDA 4939 (12/2002). For specifications please refer to document 'TSB_BMW_V01' on b2b-portal.

Die Guidelines for dispatch documents can be found in BMW's packaging manual (Chapter 4) (https://b2b.bmw.com **/Departments/Logistics).**

E.) Change and Problem Management
Should, in exceptional cases, an on time data transmission be not possible, BMW Arrivals in question must be contacted immediately and the transport numbers should be specified.

When the Arrivals department detect a content or format error in the data, they inform the supplier by fax to support the correction process.

In order to achieve a smooth electronic data interchange, it is mandatory that you inform the hotline on time (+49-89-382-49111 or email asz.hotline@bmw.de - subject: EDI support group), regarding any changes in below parameters:
Supplier number
Address
New dispatch location/plant identification
Contact (System support and dispatch)
EDI data links
Transmission process
Service hours of your EDI server

Please specify the following information when you contact us:
Company, Contact, Phone number, email address, BMW supplier number, unloading point, process number (transport number).

2.6 Structure of a delivery note message - VDA 4913

Column K/M: **M** = Mandatory, **K** = conditional, **R** = Required by BMW

2.6.1 Record 711

Record 711 / a ‚must' record / once per transmission

Po.	Field name VDA	K/M	BMW K/M	Lg. Byte	AN/N	Digit	Description	BMW Requirements
01	Record	M	M	3	N	1-3	Constant value: „711“	
02	Version number	M	M	2	N	4-5	Indicates the update status of a record	02 or 03
03	Data receiver number	M	K	9	AN	6-14	Identification number that the data sender agrees with the data receiver	Used at BMW internally only for information purposes
04	Data sender number	M	M	9	AN	15-23	Identification number that the data receiver agrees with the data sender	8 digit BMW supplier number of the data sender (see record 712, pos. 04 for the dispatching plant)
05	Transmission number OLD	M	**M**	5	N	24-28	For first transmission= „00000“	Must be unique
06	Transmission number NEW	M	**M**	5	N	29-33	Transmission number should count up („00001“)	Must be unique
07	Transmission date	M	**M**	6	N	34-39	Format: „YYMMDD“.	Can not be after „target arrival date“ (712_18)
08	Tier 2 supplier number	K	**K**	9	AN	40-48		Is not used at BMW
09	Freight number	K	**K**	9	AN	49-57		Is not used at BMW
10	Stockist code	K	**K**	1	AN	58-58		Used only in EDL data transmission
11	JIT code	K	**R**	1	AN	59	Code of JIT deliveries	Normal delivery: empty J = SPAB delivery
12	Blank	M	**M**	69	AN	60-128	Reserved digits.	Must field for oversea traffic: Indication of waybill number (Left justified, position 60-76)

Example of a record 711 transmission

Digit	1	4	6	15	24	29	34	40	49	58	40
Content	7 1 1	0 2	6 0 0 7 0 1 _ _	1 2 0 3 4 0 1 0	0 0 1 2 8	0 0 1 2 9	0 3 0 2 1 7	_ _ ...	_ _ ...	_	_ _ ...
Position	01	02	03	04	05	06	07	08	09	10	11

2.6.2 Record 712

Record 712 / a ‚must' record / once per transport (transport number)

Po.	Field name VDA	K/ M	BMW K/M	Lg. Byte	AN /N	Digit	Description	BMW Requirements
01	Record	M	M	3	N	1-3	Constant value: „712“	
02	Version number	M	M	2	N	4-5		02 or 03.
03	Transport number	M	M	8	N	6-13	Number given to the shipment by sender. Can not be repeated throughout a year	Used at BMW to identify a shipment.
04	Plant code, supplier	K	K	3	AN	14-16	Code of the dispatching plant	Important in managing ‚packaging accounts' when supplier has many locations. If the supplier is different to the data sender, this must be signed via plant code supplier, which is agreed with BMW.
05	Freight company	M	K	14	AN	17-30	Name or Number.	
06	Freight company-date	M	K	6	N	31-36	Format: „YYMMDD“.	
07	Freight company-time	M	K	4	N	37-40	Format: „HHMM“.	
08	Gross weight of shipment	M	M	7	N	41-47	Weight of goods in kilograms-including packaging and/or packing equipment (numerical with leading zeros).	
09	Net weight of shipment	K	K	7	N	48-54	Weight of goods in kilograms-including packaging but excluding packing equipment (numerical with leading zeros).	
10	Freight code	K	R	2	N	55-56	Please see VDA 4913/2, Attachment 10, Pos. 01	01, 02, 03, 04, 05 is allowed. 99 is not allowed!
11	Forwarding agent – EDI code	K	K	1	AN	57		Is not used at BMW
12	Number of handling units	K	M	4	N	58-61	Sum of all packaging in the shipment	Used for plausibility check
13	Transport Partner Number	K	K/M	14	AN	62-75	number of forwarding agent (number which forwarding agent have by BMW)	Must field for oversee traffic: Indication of forwarding agent number
14	Means of transport- code	M	K	2	N	76-77	Code in accordance with VDA 4913.	
15	Means of transport-number	M	M	25	AN	78-102	Licence plate of means of transport: 1. With transport via truck: Indication of license plate (on request on BMW) 2. With railway delivery: carriage number 3. With container traffic: container number (only with full load shipment / full container)	Have to be filled, where required indicate zeros.
16	Fare zone/ Community fare	K	K	9	AN	103-111		Is not used at BMW
17	Target arrival date	K	M	6	N	112-117	Supplier's declaration: when the goods will arrive at BMW.	Necessary for STARD!
18	Target arrival time	K	K	4	N	118-121		Is not used at BMW
19	Loading meter	K	K	3	N	122-124		Is not used at BMW
20	Lorry type code	K	K	1	N	125		Is not used at BMW
21	Blank	M	M	3	AN	126-128		

Example of a record 712 transmission:

Digit	1	4	6	14	17	31	37	41	48
Content	7 1 2	0 2	0 0 9 3 0 1 5 6	A 0 2	S P E D . S C H N E L L	0 3 0 2 1 7	1 5 3 0	0 0 0 3 7 8 0	0 0 0 2 5 3 0
Position	01	02	03	04	05	06	07	08	09

Digit	55	57	58	62	76	78	103	112	118	122	125	126 .. 128
Content	0 1	_	0 0 1 2	_ _ .. _ _	0 1	F - T X _ 5 3 6 4 _ _ ..	_ _ ..	_ _ ..	_ _ _ _	_ _ _	_	_ _ _
Position	10	11	12	13	14	15	16	17	18	19	20	21

Explanation if the example:

Pos. 03:	The transport number must be on the transport document/forwarding instruction/goods accompanying slip. **1 Transport for every unloading point = 1 transport number**
Pos. 04:	Code must be reported to BMW EDI-Support in case of many dispatching plants (mandatory for managing packaging accounts, return of empties etc.)
Pos. 08:	Gross weight of shipment – numerical with leading zeros. Unit of measurement: kg
Pos. 09:	Net weight of shipment (or else- like Pos. 08)
Pos. 10:	See VDA 4913/2 Attachment 10, Pos. 01. 01, 02, 03, 04, 05 is used. Code 99 is not in use at BMW!
Pos. 12:	Sum of containers, in accordance with transport documents/forwarding instruction (VDA 4922).
Pos. 14:	See VDA 4913/2 Attachment 10, Pos. 02
Pos. 15:	Necessary information of the means of transport. Please enter wagon number in case of rail freight.

2.6.3 Record 713

Record 713 / a ‚must' record / once per delivery note.

Po.	Field name VDA	K/ M	BMW K/M	Lg. Byte	AN /N	Digit	Description	BMW Requirements
01	Record	M	M	3	N	1-3	Constant value: „713“	
02	Version Number	M	M	2	N	4-5	Indicates the update status of a record	02 or 03.
03	Delivery note number	M	M	8	N	6-13	Given by supplier.	It's not allowed to repeat within the year
04	Dispatch date	M	M	6	N	14-19	Format: „YYMMDD“.	
05	Unloading point	M	M	5	AN	20-24	given by customer, coded format	In accordance with call off record 512, Pos. 11; 5 digits
06	Dispatch method	M	M	2	N	25-26	Coded format. According to VDA 4913/ Attachment 10 Pos. 03 Changes because of Projects BCC and Direct Supply South Africa: 1. It is only needed for German plants and Oxford if the special case air freight have to be transmitted. 2. For plant Rosslyn/South Africa generally transmitting the mode of despatch	If in the call off (Record 518, field 18 Position 111-112) is transmitted, the following Transport route = mode of despatch have to be indicated. 10 = air freight 11 = sea freight
07	Code of customer (call off)	K	K	4	AN	27-30		In accordance with call off record 512, Pos. 12.
08	Purchase order number	K	R	12	AN	31-42	Identification number of framework order given by customer . A mandatory field at BMW!	Left-justified, 7 digit order number in accordance with the technical update status of the delivered item - generally from call off record 512, Pos. 10
09	Transaction code	K	K	2	N	43-44	Coded format.	Used only in EDL data transmission!
10	Blank 1	M	M	4	AN	45-48		
11	Plant-customer	M	M	3	AN	49-51	given by customer, coded format. (see attachment 2 / plant group).	In accordance with call off record 512, Pos. 03
12	Consignment	K	K	8	N	52-59		Is not used at BMW
13	Goods receiver number	K	**K**	9	AN	60-68		Is not used at BMW
14	Blank 2	M	**M**	1	AN	69		
15	Warehouse location – Customer	K	**R**	7	AN	70-76	Must be taken from the call off	In accordance with call off record 512, Pos. 19; if available in the data
16	Supplier number	M	**M**	9	AN	77-85	Identification number given by customer to a supplier	Goods supplier or supplier number of the pick up place. The information is only necessary, in special cases: If the 6-digit supplier code from item „data sender“ (Record type 711, item 04) is different to the real pick up place or goods supplier.
17	Point of consumption	K	**K**	14	AN	86-99		In accordance with call off record 515, Pos. 12.
18	Call off number	K	**K**	4	AN	100-103		Is not used at BMW
19	Customer code	K	**K**	6	AN	104-109	Taken from a single order	Is not used at BMW
20	Document number-customer	K	**K**	14	AN	110-123	Document number given by customer to this shipment	Used only in ‚order related' SPAB ('shipping instruction number' in SPAB order related)
21	Blank 3	M	**M**	5	AN	124-128		

Example of a record 713 transmission:

Digit	1	4	6	14	20	25	27	31	43	45	49
Content	7 1 3	0 2	0 0 6 3 0 4 3 6	0 3 0 2 1 7	2 4 1 2 3	0 3	2 4 7 3	7 6 5 4 3 2 1 _ ..	_ _	_ _ _ _	0 2 0
Position	01	02	03	04	05	06	07	08	09	10	11

Digit	52	60	69	70	77	86	100	104	110	124
Content	_ _ .. _ _	_ _ .. _ _	_	8 5 0 1 3 2 1	_ _ .. _ _	500903-NAEG28	_ _ _ _	_ _ _ _ _	_ _ _ _	
Position	12	13	14	15	16	17	18	19	20	21

Explanation of the example:

Pos. 05: Unloading point in accordance with call off record 512, Pos. 11.

Pos. 06: Please see VDA 4913/2, Attachment 10, Pos. 03. for the projects BCC and Direct Supply South Africa according to call off Record 518 Pos 18, digits 111-112

Pos. 07: As specified in the call off, record 512, Pos. 03.

Pos. 08: call off, record 512, Pos.10. 7 digits, left-justified . Digits 8-12 blank, 6 digit purchase order number first digit blank.

Pos. 11: In accordance with , Record 512, Pos. 03.

Pos. 15: In accordance with call off record 512, Pos. 19.

Pos. 17 In accordance with call off record 515, Pos. 12

2.6.4 Record 714

Record 714 / a ‚must' record / once per 713 record

Po.	Field name VDA	K/ M	BMW K/M	Lg. Byte	AN /N	Digit	Description	BMW Requirements
01	Record	M	M	3	N	1-3	Constant value: „714“	
02	Version number	M	M	2	N	4-5	Indicates the update status of a record.	02 or 03
03	Part number - customer	M	**M**	22	AN	6-27	Identification number given to a part by the customer	BMW part number. 9 digits (xxxxxxx-xx). Left-justified without blanks, like in BMW's call off 512/08. Can be sent as below: a) xxxxxxx-xx b) xxxxxxxxx 7 digits in case of operating supplier. NAEL is right-justified, 6 digits (see pos. 21 for an alternative)
04	Part number - supplier	M	**K**	22	AN	28-49	Identification number given to a part by the supplier.	Is not used at BMW.
05	Country of origin	M	M	3	N	50-52	Coded format.	
06	Delivery quantity 1	M	M	13	N	53-65		
07	Unit of measurement 1	M	M	2	AN	66-67		
08	Delivery quantity 2	K	K	13	N	68-80		
09	Unit of measurement 2	K	K	2	AN	81-82		
10	VAT rate	K	K	3	N	83-85	Used in Self billing invoice - on agreement	
11	Blank 1	M	M	1	AN	86		
12	Position number-delivery note	M	M	3	N	87-89	Position number of a delivery note.	**At BMW, delivery notes are used with 1 position: always „001“ or =“010“**
13	Call off code	K	**K**	1	AN	90		Is not used at BMW
14	Batch number	K	**K**	15	AN	91-105	Identification number given to a batch by the manufacturer.	Mandatory if agreed with BMW Quality Assurance)*
15	Use code	M	**M**	1	AN	106	Coded format.	In accordance with call off record 512, Pos. 17.
16	Hazardous substance code	K	K	8	AN	107-114		Mandatory in case of hazardous material
17	Preference status	M	**K**	1	AN	115		Is not used at BMW
18	Dutiable goods	M	**K**	1	AN	116		Is not used at BMW
19	Blank 2	M	**M**	1	AN	117		Is not used at BMW
20	Stock status	M	**K**	1	AN	118		Is not used at BMW
21	Design change code	M	**K**	2	AN	119-120	Code used in VDA 4913 Version 3 / 4, to signal that the „design change status“ will be stated in record 716.	In VDA version V.03 und V.04: „T“ on digit 120 (only T or empty is allowed) and „design change status“ (NAEL) in record 716.
22	Original delivery note number	K	**K**	8	AN	121-128		Is not used at BMW.

)* Various batches should be separated into different delivery notes!

Example of a record 714 transmission

Digit	1	4	6	28	50	53	66
Content	7 1 4	0 2	8321408-05 _ _ _ _ _ _ EAG35H	A-406 _ 3X _ _ .. _ _	0 0 4	0000000240000	S T
Position	01	02	03	04	05	06	07

Digit	68	81	83	86	87	90	91	106	107	115	116	117	118	119	121 .. 128
Content	_ _ ..	_ _	1 5 0	_	0 0 1	_	A 2 7 4 8 _ _	S	_ _ ..	_	_	_	_	_T	_ _ ...
Position	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22

Explanation of the example:

Pos. 03: Part number= digits 1-10, left-justified. NAEL= right-justified, digits 22-27 within record 714
Pos. 05: Please see VDA 4913/2, attachment 10, Pos. 05.
Pos. 07: Please see VDA 4913/2, attachment 10, Pos. 06.
Pos. 12: Only 1 position; 001 or 010
Pos. 15: BMW uses S, E, M in call off/ delivery schedule.
Pos. 16: In case of hazardous material
Pos. 21: T on digit 120 = signals the change status in record 716

2.6.5 Record 716

Record 716 / a ‚conditional' record; a ‚must' record when „T" is used in record 714, position 120.

Po.	Field name VDA	K/ M	BMW K/M	Lg. Byte	AN /N	Digit	Description	BMW Requirements
01	Record	M	**M**	3	N	1-3	Constant value „716"	
02	Version number	M	**M**	2	N	4-5	Indicates the update status of a record	01, 02 or 03.
03	Text 1	M	M	40	AN	6-45	Alternative to ‚design change status' in VDA 4913, Version 3 or 4.	NAEL: 6 digits, without blanks or dots. Left justified.
04	Text 2	K	**K**	40	AN	46-85		
05	Text 3	K	**K**	40	AN	86-125		
06	Empty	M	**M**	3	AN	126-128		

Example of a record 716 transmission:

Digit	1	4	6	46	86	126 .. 128
Content	7 1 6	0 2	EAG35H _ _ _ _ _ _ _ _ _ _			_ _ _
Position	01	02	03	04	05	06

Explanation of the example:

Pos. 03: When VDA 4913, Versions 3 or higher are used= If design change status is entered here instead of record 714(item 3). a T must be in record 714 on pos. 21 (digit 120).
Pos. 05 Rest digits of 'Transport route'

2.6.6 Record 715

Record 715 / a ‚must' record / n times per 714 record

Po.	Field name VDA	K / M	BMW K/M	Lg. Byte	AN/ N	Digit	Description	BMW Requirements
01	Record	M	M	3	N	1-3	Constant value: „715“.	
02	Version number	M	M	2	N	4-5	Indicates the update status of a record	01,02 or 03.
03	Packaging code - customer	M	M	22	AN	6-27	Identification number given to a packaging by the customer. Mandatory for STARD!	„310****“ or loading unit „L310****“. Disposable packaging arcording to packaging manuall of the BMW Group. “E” is not allowed to use at BMW! „”B“ for sub packaging.
04	Packaging code - supplier	M	K	22	AN	28-49	Identification number given to a packaging by the supplier.	Is not used at BMW
05	Number of packagings	M	M	13	N	50-62	Number of packaging for each type.	
06	Position number-delivery note	M	M	3	N	63-65	‘Position number- delivery note’ of record 714.	„001“ or „010“
07	Filling quantity	K	R	13	N	66-78	Actual quantity of the part number per packaging. **Mandatory for STARD, when the label identification is „ M“ or „ S“!**	Actual filling quantity per packaging Please see below for further information on label identification.
08	Handling unit number - from	K	R	9	AN	79-87	This number can not be repeated throughout a year. **Mandatory for STARD!!**	Mandatory for package related processes. Must be numerical!!!
09	Handling unit number - to	K	R	9	AN	88-96	Like Pos 8, with disposal: ‘Handling unit number - from’ and ‘Handling unit number - to’ should increase without a gap (inside Record 715) **Mandatory for STARD!!**	Mandatory for package related processes Must be numerical for BMW!!!
10	Packaging dimensions	K	K	12	N	97-108		Is not used at BMW
11	Stacking factor	K	K	1	N	109		Is not used at BMW
12	Warehouse call off number	K	K	15	AN	110-124		Is not used at BMW
13	Label identification	K	R	1	AN	125	Mandatory for STARD!!	M, S
14	Packaging identification	K	R	1	AN	126		In case of mixed loadings for single packaging „B“ has to be filled in. Compare example on Point 4.3.2.6
15	Ownership identification	K	K	1	AN	127		Is not used at BMW
16	Blank	M	M	1	AN	128		Is not used at BMW

Attention:
In the item „packaging code customer” (item 03) the packaging number, which is agreed for the respective material number, with the BMW packaging planning dept., has to be entered.

Depending on the agreement, a loading unit (for example L310XXXX) or every individual packaging has to be entered. (for example: 3100062, 3106410, 3101208).

Example of a record 715 transmission:

Digits	1	4	6	28	50	63	66
Content	7 1 5	0 2	3 1 0 0 4 1 9 _ _ ..	X Y - G I B O X _ _ ..	0 0 .. 0 0 1 2	0 0 1	0 0 0 0 0 0 0 0 2 0 0 0 0
Position	01	02	03	04	05	06	07

Digits	79	88	97	109	110	125	126	127	128
Content	900056442	900056453	_ _ ... _	_	_ _ ... _ _	S	_	_	_
Position	08	09	10	11	12	13	14	15	16

Explanation of the example:
Pos. 03: BMW container identification number without additional text.
If loading unit, begins with „L“ (L3104711). Single packaging begins with 310****
Correct disposable packaging from packaing manuall of the BMW Group. (not ‚Karton’ or ‘E’!)
Pos. 06: Identical with the corresponding 714 record, Pos. 12.
Pos. 07 Filling quantity = 20
Pos. 08 ‚Handling unit number - from’ = 900056442
Pos. 09 ‚Handling unit number - to = 900056453 (12 handling unit numbers without any gaps)
Pos. 13 As an example: Label identification S for “single”

2.6.6.1 Information on Label Identification

S = single The packaging has only one part number. Filling quantity must be specified. When the loading units’ label identification is “S”, the filling quantity is the sum of all containers.
M = master Filling quantity in Record 715 is not applicable. (Full value= ZERO).
G = mixed Is not used at BMW, see Chapter 4

Please notice the detailed description for the packaging in chapter 4.

2.6.7 Record 718

Is only used in sequenced delivery – JIS System SPAB. Please refer to ‚***SPAB Interface Contract with Suppliers***’ for descriptions.

2.6.8 Record 719

Record 719 / a ‚must’ record / once per transmission.

Po.	Field name VDA	K/ M	BMW K/M	Lg. Byte	AN /N	Digit	Description	BMW Requirements
01	Record	M	M	3	N	1-3	Constant value: „719“	
02	Version number	M	**M**	2	N	4-5	Indicates the update status of a record.	01 or 02.
03	Counter record 711	M	**M**	7	N	6-12	Number of transmitted 711 records.	
04	Counter record 712	M	**M**	7	N	13-19	Number of transmitted 712 records.	
05	Counter record 713	M	**M**	7	N	20-26	Number of transmitted 713 records.	
06	Counter record 714	M	**M**	7	N	27-33	Number of transmitted 714 records.	
07	Counter record 715	M	**M**	7	N	34-40	Number of transmitted 715 records.	
08	Counter record 716	M	**M**	7	N	41-47	Number of transmitted 716 records.	
09	Counter record 718	M	**M**	7	N	48-54	Number of transmitted 718 records.	
10	Counter record	M	**M**	7	N	55-61	Number of transmitted 719 records.	

	719							
11	Counter record 717	M	**M**	7	N	62-68	Number of transmitted 717 records.	
12	Blank	M	**M**	60	AN	69-128		

Example of a record 719 transmission:

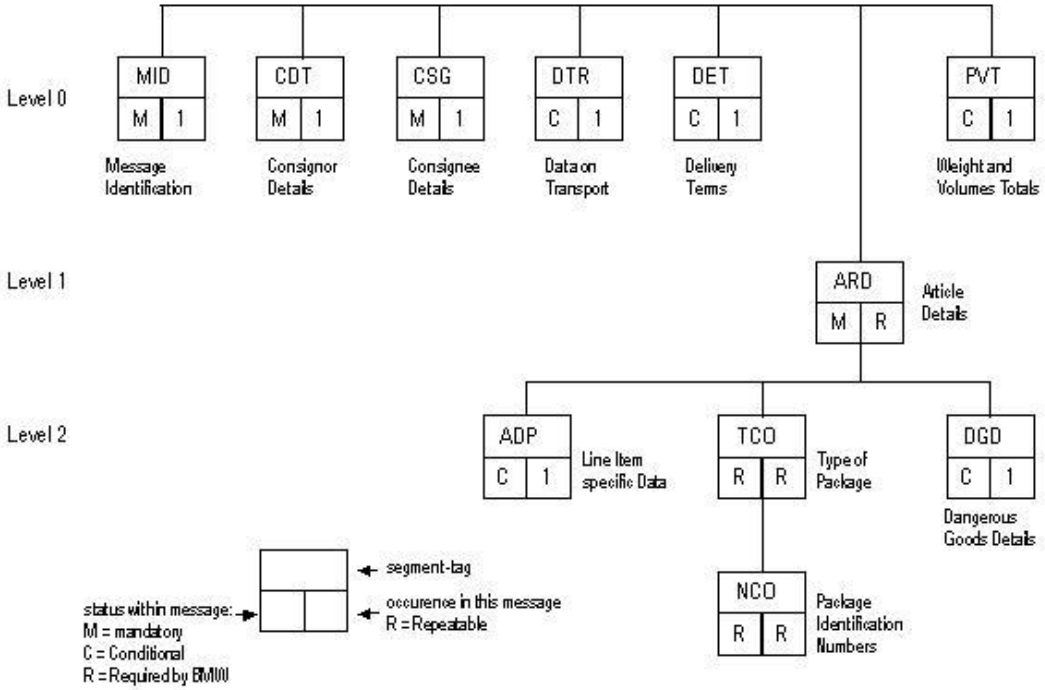
Digit	1	4	6	13	20	27	34	41
Content	7 1 9	0 2	0 0 0 0 0 0 1	0 0 0 0 0 0 1	0 0 0 0 0 0 1	0 0 0 0 0 0 1	0 0 0 0 0 0 1	0 0 0 0 0 0 1
Position	01	02	03	04	05	06	07	08

Digit	48	55	62	69 .. 128
Content	0 0 0 0 0 0 0	0 0 0 0 0 0 1	0 0 0 0 0 0 0	_ _ _ .. _ _ _
Position	09	10	11	12

Explanation of the example:
Pos. 03 Pos.11: Right-justified with leading zeros.

2.7 Odette AVIEXP V.3 Specifications

Branching Diagram



Message Segments and their BMW-specific use

Segment Code UNB
Segment Name Interchange Header
Segment Status Man / 1 x per AVIEXP-Message

TAG	Name	St.	Format Odette	Format BMW	Remarks
0001	Syntax Identifier	M	a4	a4	Format UNOA
0002	Syntax Version No.	M	n1	n1	Syntax Version: 1
0004	Sender Identification	M	an..35	an..16	Odette ID or mailbox ID supplier
0010	Recipient Identification	M	an..35	an..16	Odette ID or mailbox ID BMW
0017	Date of preparation	M	n6	n6	YYMMDD (transmission date)
0019	Time of preparation	M	n4	n4	HHMM
0020	Interchange Control Ref.	M	an..14	n5	Transmission No.

Segment Code UNH
Segment Name Message Header
Segment Status Man / 1 x per AVIEXP-Message

TAG	Name	St.	Format Odette	Format BMW	Remarks
0062	Message Ref. No.	M	an..14	an..14	Message No.
0065	Message Type	M	a6	a6	AVIEXP
0052	Message Version No.	M	n..3	n..3	Version being used by BMW: 3

Segment Code MID
Segment Name Message-Identification
Segment Status Man / 1 x per AVIEXP-Message

TAG	Name	St.	Format Odette	Format BMW	Remarks
1004	Document No.	K	an..17	an..8	Unique message identification no.
2007	Document Date	M	n6	n6	Date of preparation of message YYMMDD
2002	Document Time	M	n4	n4	Time of preparation of message HHMM

Segment Code CDT
Segment Name Despatcher Information
Segment Status Man / 1 x per AVIEXP-Message

TAG	Name	St.	Format Odette	Format BMW	Remarks
3337	Supplier No.	M	an..20	n8	6-digit supplier no. + 2-digit subaddress code of the sender
3036	Party name				not used for BMW
3124	Name and Address Line				not used for BMW
3124	Name and Address Line				not used for BMW
3124	Name and Address Line				not used for BMW
3124	Name and Address Line				not used for BMW
3296	Plant code supplier	C	an..17	an..3	Plant-code of suppliers site (to be defines by supplier) If the supplier is different to the data sender, this must be signed via plant code supplier, which is agreed with BMW.

Segment Code CSG
Segment Name Consignee Details
Segment Status Man / 1 x per AVIEXP-Message

TAG	Name	St.	Format Odette	Format BMW	Remarks
3133	Plant ID customer	M	an..20	n3	plant code BMW (e.g. Oxford = 080)
3036	Party name				not used for BMW
3124	Name and Address Line				not used for BMW
3124	Name and Address Line				not used for BMW
3124	Name and Address Line				not used for BMW
3124	Name and Address Line				not used for BMW
3296	Internal ID No.				not used for BMW
3921	Place of discharge	R	an..17	an2..5	Place of discharge acc. to Delivery Instruction
3920	Final Delivery Point				not used for BMW
3124	Name and Address Line				not used for BMW
3124	Name and Address Line				not used for BMW
3124	Name and Address Line				not used for BMW
3124	Name and Address Line				not used for BMW
3923	Warehouse code	M	an..17	an..7	Transmitted with the delivery instruction
3922	Place of consumption	C	an..35	an 14	Required when transmitted with the delivery instruction

Segment Code DTR
Segment Name Data on Transport
Segment Status Man / 1 x per AVIEXP-Message

TAG	Name	St.	Format Odette	Format BMW	Remarks
8212	Identification of the means of transport	M	an..17	an..25	For truck transport: Registration no. For train transport: wagon number For container transport: Container number (only for full loaded container)
8164	Trailer No.	R	an..17	an..17	For overseas transport: Waybill number
8028	Conveyance Ref. No.				
3127	Carrier, coded	R	an..20	n8	Supplier no. of carrier
3036	Party name	R	an..35	an..14	Name of carrier
3124	Name and Address Line				not used for BMW
3124	Name and Address Line				not used for BMW
3124	Name and Address Line				not used for BMW
3124	Name and Address Line				not used for BMW
3296	Internal ID				not used for BMW
1188	Consignment No. / Transport Document No.	R	an..17	n..8	No. assigned by sender to the consignment (on forwarding instruction) / transport no.
4351	Carriage Payment Instruction	R	a1	a1	ODDC8
2349	Target arrival date	R	n6	n6	Expected arrival date YYMMDD or YYMMDDHHmm
3335	Place of Loading, coded				not used for BMW
3334	Place of Loading				not used for BMW
2459	Packing List Date, coded				not used for BMW
2171	Pick-up date	R	n6	n6	Equal to despatch date YYMMDD

2002	Pick-up time	C	n4	n4	not used for BMW

Segment Code DET
Segment Name Delivery Terms
Segment Status Rec / 1 x per AVIEXP-Message

TAG	Name	St.	Format Odette	Format BMW	Remarks
8067	Mode of transport, coded	M	n..2	n..2	ODDC 3 For projects BCC and Direct Supply Rosslyn: see delivery schedule (DELINS) segment BDT Tag 3124: 10 = sea freight 40 = air freight
4110	Incoterms Code	R	a3	a3	ODDC 4 (allowed codes, please see below)

Segment Code ARD
Segment Name Article Details
Segment Status Man / 1 x per Artikel

TAG	Name	St.	Format Odette	Format BMW	Remarks
7304	Customers Article No.	M	an..35	an..10	7-digit BMW article no. + 2-digit AI (design change no.): 1234567-01
7194	Sellers Article no.	C	an..35	an..22	
7008	Article Description				not used for BMW
7008	Article Description				not used for BMW
7008	Article Description				not used for BMW
7008	Article Description				not used for BMW
7008	Article Description				not used for BMW
6270	Delivered Quantity	M	n..10	n..13	
6410	Measure Unit	R	an..3	an..3	ODDC 25
1022	Purchase Order No.	M	an..17	n7	BMW PO no.
2001	Date, coded				not used for BMW
3239	Country of Origin, coded	R	a2	a2	ODDC 6
3238	Country of Origin				not used for BMW
4440	Free Text				not used for BMW
4440	Free Text				not used for BMW
4440	Free Text				not used for BMW
7860	Design Revision No. (AI)				not used for BMW / SAP plants
1376	Engineering Change No.	R	an..17	an6	BMW NAEL-No. (Example: EGB42H)

Segment Code ADP
Segment Name Line Item specific Data
Segment Status Req / 1 x per ARD-Segment

TAG	Name	St.	Format Odette	Format BMW	Remarks
5284	Unit Price Basis				not used for BMW
6410	Measure Unit Specifier				not used for BMW
7338	Batch No.	C	an..17	an..15	Only for special use
1174	Delivery Instruction No.				not used for BMW
1310	Delivery Note No.	R	an..17	n8	No. assigned by sender; it's not allowed

					to repeat within the year

Segment Code TCO
Segment Name Type of Package
Segment Status Req / n x per ARD-Segment

TAG	Name	St.	Format Odette	Format BMW	Remarks
7064	Type of Package				not used for BMW
1906	Customers Package ID	M	an..35	an..8	BMW package-ID 310**** or L310**** for loading units. Disposable packaging specification according to packaging manual of the BMW Group. ‚B' in case of accessory pack. "E" is not used at BMW!
1131	Code List Identifier, coded				not used for BMW
7224	Number of Packages	M	n..6	n..6	
6853	Filling Quantity	M	n..10	n..10	

Segment Code NCO
Segment Name Package Identification Numbers
Segment Status Req / Repeatable per TCO-Segment

TAG	Name	St.	Format Odette	Format BMW	Remarks
7246	Transport Label No.	C	an..17	an..10	Label no. of 'M' type packages (e.g. M000001234)
7102	Handling unit number	M	an..17	an..10	Up to 100 x Used to specify 'S' type label numbers

Segment Code DGD
Segment Name Hazardous Goods Details
Segment Status Con / 1 x per ARD-Segment

TAG	Name	St.	Format Odette	Format BMW	Remarks
7254	Hazardous substance code	M	an..26	an..8	To be agreed with BMW material planner

Segment Code PVT
Segment Name Weight and Volume Totals
Segment Status Req / 1 x per AVIEXP-Message

TAG	Name	St.	Format Odette	Format BMW	Remarks
6012	Gross consignment weight	M	n..12	n..7	Gross weight always in kilogram (KGM)

Segment Code UNT
Segment Name Message Trailer
Segment Status Man / 1 x per AVIEXP-Message

TAG	Name	St.	Format Odette	Format BMW	Remarks
0074	No. of segments / message	M	n..6	n..6	No. of segments (incl. UNH and UNT)
0062	Message Ref. No.	M	an..14	an..14	Message No. (must match UNH)

Segment Code UNZ
Segment Name Interchange Trailer
Segment Status Man / 1 x per AVIEXP-Message

TAG	Name	St.	Format Odette	Format BMW	Remarks
0036	Interchange Control Count	M	n..6	n..6	No. of segments in transmission
0020	Interchange Control Ref.	M	an..14	n5	Transmission No. (must match UNB)

Measure Units
Segment ARD, TAG 6410

Measure Unit	Code
Pieces/Each	PCE
Meter	MTR
Square-meters	MTK
Cubic-meters	MTQ
Liter	DMQ
Kilogram	KGM
Gram	GRM
Millimeter	MMT
Set	SET*
Pair	NPR
Day	DAY
Hour	HUR

)* BMW-Definition, not content of ODDC25!

Despatch Methods
Segment DET, TAG 8067

code	Despatch Method
30	Road transport
21	Railway freight
22	Railway express
24	Railway wagon
50	Mail
40	Air transport
10	Maritime transport

Incoterms
Segment DET, TAG 4110

Code	Incoterm
EXW	Ex Works
FAS	Free Alongside Ship
FCA	Free Carrier
FOB	Free On Board
CFR	Cost And Freight
CIF	Cost, Insurance And Freight
CPT	Carriage Paid To
CIP	Carriage And Insurance Paid To
DES	Delivered Ex Ship
DEQ	Delivered Ex Quay (Duty Paid)
DAF	Delivered At Frontier
DDP	Delivered Duty Paid
DDU	Delivered Duty Unpaid

AVIEXP V.3 Example for BMW-Use

Example with handling unit:

UNB+UNOA:1+O001300SUPPLIER-EDI+O0013000045BMW-AG::TEST+050828:1010+00002'
UNH+0000001+AVIEXP:3'
MID+0014411+050828:1010'
CDT+12345610::::::ERD'
CSG+020+24000+370'
DTR+M-XY-1234++00000000:EXEL+0014411+C+050902+++050831'
DET+30+EXW'
ARD+7145638-01:AP 254 32+0000000200:PCE+1899325+GB++:E3895G'
ADP++++07654340'
TCO+:**L3104444**+2+100'
NCO++S000000043:S000000044'
PVT+920'
UNT+12+0000001'
UNZ+1+00002'

Shipment contains 2 wire cage pallets (L3104444 = Gitterbox + auxiliary packaging), each filled with 100 PCE. Each has a single-labelled handling unit number (S000000043 and S000000044)
Handling unit numbers for single labels can be displayed with or without 'S', e.g. S000000043 or 000000043.

Example with multi-level packaging:

UNB+UNOA:1+O001300SUPPLIER-EDI+O0013000045BMW-AG::TEST+050828:1010+00002'
UNH+0000001+AVIEXP:3'
MID+0014412+050828:1010'
CDT+12345610::::::ERD'
CSG+020+24000+370'
DTR+M-XY-1234++00000000:EXEL+0014412+C+050902+++050831'
DET+30+EXW'
ARD+7145638-01:AP 254 32+0000000100:PCE+1899325+GB++:E3895G'
ADP++crg++07654336'
TCO+:**3100062**+2+0'
NCO++M012345678:M012345679'
TCO+:**3103147**+3+20'
NCO+M012345678+S000000020:S000000021:S000000022'
TCO+:**3103147**+4+10
NCO+M012345679+S000000023:S000000024:S000000025:S000000026'
PVT+920'
UNT+17+0000001'
UNZ+1+00002'

Shipment contains 2 pallets (3100062); the first contains 3 boxes (3103147) with filling quantity of 20 each; the second pallet contains 4 boxes with filling quantity 10. Pallets' handling unit numbers must be labelled with "M" for master. Boxes are labelled as single and refer to the pallet containing them.

Example with mixed loading unit:

UNB+UNOA:1+0658553630000+BMWAGM8+090401:1332+11110688'
UNH+011110688+AVIEXP:3'
MID+54210+090401:1332'
CDT+XXXXXXXX'
CSG+060+61007+602:18017 B'
DTR+470760++11589310:BMW SENATOR #+54210+C+0904081700+++090401'
DET+40+EXW'
ARD+915908902:905-1717-001+12:PCE+2911969+US++:ENL95W'
ADP++2248608++2248608'
TCO+:PAL000+1+0'
NCO++M920882869'
TCO+:SCH000+1+12'
NCO+M920882869+S920835868'
ARD+915911802:905-1736-001+12:PCE+2911991+US++:ENL95W'
ADP++2252215++2252215'
TCO+:SCH000+1+12'
NCO++S920882482'
PVT+234'
UNT+26+011110688'
UNZ+1+11110688'

3 Self billing invoice EDI

3.1 Principles and Objectives

As an international company, BMW is breaking new ground with its invoicing system for pre-series, series and spare parts and raw and operating supplies. Modern methods are applied to invest in the relationship with suppliers to make it easier and more cost effective.

With self billing invoice, every supplier has the opportunity work closer with BMW.
The self billing invoice has been developed and adopted as a result of a cooperation between VDA and the German supply industry.

It was introduced at BMW AG in the first quarter of 1991 and EDI application has been added to it since the third quarter of that year.

The self billing invoice EDI is implemented according to VDA 4908 standards that manage the electronically exchange of self billing invoice data between customers (BMW AG) and its suppliers.

Since 2002 BMW also provides the VDA 4932 message format (based on EDIFACT INVOIC). The description is available on the supplier web as a separate document.

An important advantage of self billing invoice for the supplier is reaching fast and selective information about the future incoming payment and avoiding invoice issuing.

We'd be pleased if you would start using this method.

File name: RP.BMWGSV.L<6 digit supplier number >.V1<7th and 8th digit of the supplier number>

3.2 Information on the Self Billing Invoice Process.

3.2.1 Billing cycle

The billing of the shipment occurs on the due date specified in the order. In advance, an individual notification (as a rule, weekly; in sequenced deliveries, daily) of received shipment takes place by means of self billing invoice.

3.2.1.1 Information Content of Self Billing Invoice

Descriptions of records are on the following pages.

3.2.2 Procedure for EDI Implementation

If you'd like to receive self billing invoice via EDI, we will send you the data both via EDI and also by fax during the implementation phase.
Thereby, you will have the chance to adjust your system before the fax communication is cancelled.

3.2.3 Further Information on Self Billing Invoice

Further information on the following topics can be found on https://b2b.bmw.com / Departments/Finances:
Reclamation procedure
Tax and customs requirements
Orders / price changes

3.3 Advantages of the Method.

Saving administration costs:
by eliminating unnecessary communication flow and reducing postage and form costs
Increasing partnership confidence.
Improving supplier's financial planning:
Since the self billing invoice is transmitted on a weekly basis, the supplier receives information about the incoming payment for the monthly due date (25th) in good time. This results in better finance and liquidity planning.
Possibility of early reclamation in case of errors:
Right after receiving it (approx. 4 times per month), the invoice can be checked to see if it includes all deliveries in that month correctly (price/quantity). If not, an early reclamation is possible. Before, this was only possible only after receiving BMW's 'advice of payment".
Earlier payment by BMW AG:
Payment period depends only on delivery note or shipment date (free works, ex works). Before, the period began when the invoice was received and the invoice processing of faster payments led to delayed payments
An easier dunning process for the supplier.

Please note:

BMW offers electronically transmission of 'payment advice, VDA 4907' to its suppliers.

File name:

ZF.BMWZAV.L<6 digit supplier number >.V1<7th and 8th digit of the supplier number >

3.4 Description of Self billing Invoice EDI Records According to VDA 4908

3.4.1 Record 821

First record (1 x per transmission)
A ‚must' record, Record length 128, Version 03

Pos.	Field name VDA	M K	Digit	Lg. Byte	AN/ N	Content according to VDA	BMW Requirements
01	Record	M	01-03	3	N	Constant value: „821“	
02	Version number	M	04-05	2	N	„03“ = Indicates the update status of a record. Increases separately for each record type without a gap. After each change VDA decides on, it increases by 1.	
03	Customer number	M	06-14	9	AN	Identification number given by supplier to a customer. All data including this field is subject to data protection. Left-justified. When information can not be entered at the beginning of a process, this field must be filled with blanks.	Customer number per plant (SAP) is possible. ‚BMW-AG' should be entered if no customer number.
04	Supplier number	M	15-23	9	AN	Identification number given by customer to a supplier (contractor). All data including this field is subject to data protection. Left-justified.	
05	Transmission number OLD	M	24-28	5	N	Right justified.. Please see ‚transmission number NEW' for description	
06	Transmission number NEW	M	29-33	5	N	In an application (e.g.: self billing invoice EDI), the data originator gives a transmission number (NEW) to every data creation. „00000“ cannot be used in NEW field. Data originator and receiver store this number until the next transmission of the same application. Since the data originator transmits the (OLD) number - belonging to the previous data of the same application – in the NEW transmission, the receiver can check the completeness of data transmissions for each application. Therefore, an increasing number sequence (without any gaps) is not mandatory. Right justified with leading zeros. Examples: Transaction: OLD / NEW Start: 00000 / 00001 or: 00000 / 00017 Routine: 00019 / 00020 or: 88051 / 88061 Overrun: 99999 / 00001 or: 89361 / 00011	
07	Transmission date	M	34-39	6	N	Format: YYMMDD	
08	VAT identification number of receiver	K	40-59	20	AN	Identification number of the national tax authorities of the receiver. A mandatory field for shipment within EU. Left-justified	
09	VAT identification number of sender	K	60-79	20	AN	Identification number of the national tax authorities of the sender. A mandatory field for shipment within EU. Left-justified	
10	Comp.Reg.Nr.	K	80-104	25	AN	Identification number of the national Commercial Registry of the receiver. Mandatory field in some European countries (Spain and Belgium).	
11	Blank	M	105-128	24	AN	Filled with blanks/empty spaces	

3.4.2 Record 822

Non recurring data of self billing invoice
A ‚must' record, Record length 128, Version 03

Pos	Field name VDA	MK	Digit	Lg. Byte	AN /N	Content according to VDA	BMW Requirements
01	Record	M	01-03	3	N	Constant value: „822“	
02	Version number	M	04-05	2	N	„03“ = Indicates the update status of a record. Increases separately for each record type without a gap. After each change VDA decides on, it increases by 1.	
03	Self billing invoice number	M	06-13	8	AN	Identification number given by customer to a self billing invoice that he issued. Right-justified with leading zeros.	
04	Self billing invoice date	M	14-19	6	N	Format: YYMMDD	
05	Payment due date	M	20-25	6	N	Format: YYMMDD	
06	Surcharges/Reductions	K	26-38	13	N	Sum of all surcharges and reductions for a self billing invoice. Addition of surcharges and reductions from 823/06. Right-justified with leading zeros. 2 decimal points.	
07	Sign code	M	39	1	N	Coded format. Please see Code List. Since arithmetic fields are in character format, the mathematical signs are separately entered after the arithmetic field. The sign depends on the content of “sum of surcharges / reductions” field. E.g.: Sign code “2”= supplier debit	
08	Total amount of discount	M	40-52	13	N	Sum of all discounts for the self billing invoice. Addition of discount amount from 823/08. Right-justified with leading zeros. 2 decimal points.	
09	Total amount of VAT	M	53-65	13	N	Sum of all VAT amounts for the self billing invoice. Addition of discount amount from 823/09. Right-justified with leading zeros. 2 decimal points. If the self billing invoice code is in accordance with Pos 14 „2“, zeros should be entered in this field.	
10	Total of self billing invoices (not discounted)	M	66-78	13	N	Sum of total prices of all self billing invoice positions. Addition of delivery note values from 823/10. Right-justified with leading zeros. 2 decimal points. If the self billing invoice code is in accordance with Pos 14 „2“, zeros should be entered in this field.	
11	Sign code	M	79	1	N	Coded format. Please see Code List. Since arithmetic fields are in character format, the mathematical signs are separately entered after the arithmetic field. The sign depends on the content of “sum of surcharges / reductions” field. E.g.: Sign code “2”= supplier debit	
12	Currency	M	80-82	3	AN	Coded format. ISO 4217/1978 alphanumeric. Please see Code List. In this application, same code per EDI data	
13	Shipment Identification	K	83-96	14	AN	Self billing invoice content. Mandatory when the customer and the supplier are UK based. Left-justified.	
14	Self billing invoice code	M	97	1	N	Please see Code List	
15	Country code	K	98-100	3	AN	Please see Code List	
16	‚Accounts payable entry' number	K	101-108	8	N	Identification number given in an accounting process/posting procedure	
17	Blank	K	109 - 126	18	N		
18	Digits 1-2 of the self billing invoice	M	127-128	2	A	Digits 1-2 of the self billing invoice of pos. 03, digit 06-13	

3.4.4 Record 823

Non recurring data of delivery note/document
A ‚must' record, Record length 128, Version 03

Pos	Field name VDA	M K	Digit	Lg. Byte	AN/N	Content according to VDA	BMW Requirements
01	Record	M	01-03	3	N	Constant value: „823“	
02	Version number	M	04-05	2	N	„03“ = Indicates the update status of a record. Increases separately for each record type without a gap. After each change VDA decides on, it increases by 1.	
03	Delivery note number	M	06-13	8	AN	Identification number given by supplier to a delivery note. In case of missing shipment paperwork, the identification number (substitute delivery note) of customer is used. Right justified.	
04	Plant - customer	M	14-16	3	AN	The plant of customer the shipment is made to. Customer‘s coded format. Left-justified,	
05	Dispatch date	M	17-22	6	N	Format: YYMMDD	
06	Sum of surcharges/reductions	K	23-35	13	N	Sum of all surcharges and reductions for the delivery note. Addition of discount amount from 825/04. Right-justified with leading zeros. 2 decimal points.	
07	Sign code	M	36	1	N	Coded format. Please see Code List. Since arithmetic fields are in character format, the mathematical signs are separately entered after the arithmetic field. The sign depends on the content of “sum of surcharges / reductions” field. E.g.: Sign code “2”= supplier debit	
08	Discount amount	M	37-49	13	N	Sum of all discounts for the self billing invoice. Addition of discount amount from 823/08. Right-justified with leading zeros. 2 decimal points.	
09	VAT amount	M	50-62	13	N	Sum of all VAT amounts for the delivery note. Addition of discount amount from 823/08. Right-justified with leading zeros. 2 decimal points.	
10	Delivery note - final value (not discounted)	M	63-75	13	N	Sum of total prices of all delivery note positions; shipment and packaging costs from 824/09 and corresponding sales tax from 824/14. Right-justified with leading zeros. 2 decimal points.	
11	Sign code	M	76	1	N	Coded format. Please see Code List. Since arithmetic fields are in character format, the mathematical signs are separately entered after the arithmetic field. The sign depends on the content of “sum of surcharges / reductions” field. E.g.: Sign code “2”= supplier debit	
12	Purchase order number	K	77-88	12	AN	Identification number given by supplier to a framework order. Left-justified	
13	Unloading point	K	89-93	5	AN	The point at customer’s plant, where the parts are delivered to. Coded format. Left-justified.	
14	Booking number	K	94-101	8	AN	The connection between booking document (delivery note, invoice, debit) and warehouse i.e. customer’s chronological microfilm archive. Left-justified.	
15	Date of booking	K	102-107	6	N	Format: YYMMDD Can be invoice date, debit etc. depending on the document type.	
16	Customer contact	K	108-122	15	AN	Can be postal code, phone number. Left-justified.	
17	Blank	M	123-128	6	A	Filled with blanks	

3.4.5 Record 824

Position data of delivery note /document
A ‚must' record, Record length 128, Version 03

Pos	Field name VDA	MK	Digit	Lg. Byte	AN /N	Content according to VDA	BMW Requirements
01	Record	M	01-03	3	N	Constant value: „824“	
02	Version number	M	04-05	2	N	„03“ = Indicates the update status of a record. Increases separately for each record type without a gap. After each change VDA decides on, it increases by 1.	
03	Transaction code	M	06-07	2	N	Booking code. Please see Code List.	
04	Part number – customer	M	8-29	22	AN	Identification number given by supplier to a part, a packaging etc. Left-justified. Starting on 07.07.2005, Format: 1234567-89 ‚Part description'	Maximum 10 digits. Left-justified and then the part description.
05	Delivery quantity	M	30-42	13	N	Quantity indicated on the delivery note by the supplier. Right-justified with leading zeros. 3 decimal points.	
06	Unit of measurement	M	43-45	3	AN	Please see Code List	
07	Price unit	M	46-47	2	N	Please see Code List	
08	Unit price	M	48-60	13	N	Net price (price unit 824/07) excluding sales tax. Right-justified with leading zeros. 2 decimal points.	
09	Total price inc. surcharge/reduction	M	61-73	13	N	Product-delivered quantity from 824/08 and unit price from 824/08 plus surcharge/reduction from 825/04 without sales tax when GA-Code=“0“ or Product-delivered quantity from 824/05 und the difference from 826/06 when GA-Code=“1“. Right-justified with leading zeros. 2 decimal points.	
10	Sign code	M	74	1	N	Coded format. Please see Code List. Since arithmetic fields are in character format, the mathematical signs are separately entered after the arithmetic field. The sign depends on the content of “sum of surcharges / reductions” field. E.g.: Sign code “2”= supplier debit	
11	Discount percentage	K	75-77	3	N	The customer enters here the agreed discount percentage. 2 decimal points.	
12	Discount amount	K	78-90	13	N	Sum of all discounts for the invoice. Addition of discount amounts from 823/08. Right-justified with leading zeros. 2 decimal points.	
13	VAT record	M	91-94	4	N	Right-justified with leading zeros. 2 decimal points	
14	VAT amount – not discounted	M	95-107	13	N	Product from total price from 824/09 x VAT record – 100. Right-justified with leading zeros. 2 decimal points.	
15	Complaint report number – customer	K	108-121	14	AN	Identification number given by customer to a complaint report.	
16	Blank	M	122-128	7	AN	Filled with blanks	

3.4.6 Record 825

Position related surcharges/reductions
A ‚must' record, record length 28, version 03

Pos	Field name VDA	MK	Digit	Lg. Byte	AN/N	Content according to VDA	BMW Requirements
01	Record	M	01-03	3	N	Constant value: „825“	
02	Version number	M	04-05	2	N	„03“ = Indicates the update status of a record. Increases separately for each record type without a gap. After each change VDA decides on, it increases by 1.	

03	Surcharge / reduction Code	M	06-07	2	N	Please see Code List	
04	Surcharge / reduction amount	M	08-20	13	N	Surcharge / reduction amount if self billing invoice code= 0 or difference between Surcharge / reduction old/new if self billing invoice code= 1. right justified with leading zeros. 2 decimal points.	
05	Sign code	M	21	1	N	Coded format. Please see Code List. Since arithmetic fields are in character format, the mathematical signs are separately entered after the arithmetic field. The sign depends on the content of “sum of surcharges / reductions” field. E.g.: Sign code “2”= supplier debit	
06	Type of surcharge	K	22 - 25	4	AN		See Code list
07	Blank	M	26-128	107	AN	Filled with blanks	

3.4.7 Record 826

Supplementary positions of 'settlement invoice'
A ‚must' record when GA-Code="1", Record length 128, Version 03

Pos	Field name VDA	M K	Digit	Lg. Byte	AN/N	Content according to VDA	BMW Requirements
01	Record	M	01-03	3	N	Constant value: „826"	
02	Version number	M	04-05	2	N	„03" = Indicates the update status of a record. Increases separately for each record type without a gap. After each change VDA decides on, it increases by 1.	
03	Price unit	M	06-07	2	N	Please see Code List.	
04	New price	M	8-20	13	N	New agreed price (according to ‚price unit' from 824/07) for the part number-customer from 824/04. Net price without VAT. Right justified with leading zeros. 2 decimal points.	
05	Validity date	M	21-26	6	N	Format: YYMMDD The new price is valid from this date onwards. Must be an earlier date than the transmission date.	
06	Total difference	M	27-39	13	N	Difference between ‚old' and ‚new' total price paid by customer. Right justified with leading zeros. 2 decimal points.	
07	Sign code	M	40	1	N	Coded format. Please see Code List. Since arithmetic fields are in character format, the mathematical signs are separately entered after the arithmetic field. The sign depends on the content of "sum of surcharges / reductions" field. E.g.: Sign code "2"= supplier debit	
08	Blank	M	41-128	88	AN	Filled with blanks	

3.4.8 Record 827

National Requirements
A ‚must' record, record length 128, version 03

Pos	Field name VDA	M K	Digit	Lg. Byte	AN/N	Content according to VDA	BMW Requirements
01	Record	M	01-03	3	N	Constant value: „827"	
02	Version number	M	04-05	2	N	„03" = Indicates the update status of a record. Increases separately for each record type without a gap. After each change VDA decides on, it increases by 1.	
03	Text	M	06-45	40	AN	Data element covering national requirements (e.g.: Spain, Belgium, etc) that are yet to be defined or mutually agreed on text information	Specific to BMW: Settlement invoice (822/14 = „1"): Reference to master document; Self billing invoice (822/14 = „2"): contact in accounting
04	Text	M	46-85	40	AN	Data element covering national requirements (e.g.: Spain, Belgium, etc) that are yet to be defined or mutually agreed on text information	Specific to BMW: Information on the Arrivals point of the individual self billing invoice.
05	Text	M	86-125	40	AN	Data element covering national requirements (e.g.: Spain, Belgium, etc) that are yet to be defined or mutually agreed on text information	Specific to BMW: Information on the responsible Purchaser of the individual self billing invoice
06	Blank	M	126-128	3	AN	Filled with blanks	

3.4.9 Record 828

Non recurring data of self billing invoice (not used by BMW)
A ‚conditional' record, Record length 128, Version 03

Pos	Field name VDA	M K	Digit	Lg. Byte	AN/N	Content according to VDA	BMW Requirements
01	Record	M	01-03	3	N	Constant value: „828“	
02	Version number	M	04-05	2	N	„03“ = Indicates the update status of a record. Increases separately for each record type without a gap. After each change VDA decides on, it increases by 1.	
03	Currency	M	06-08	3	AN	Please see Code List	
04	Exchange rate	K	09-25	17	N	Right justified with leading zeros. 11 decimal points.	
05	Date of exchange rate	K	26-31	6	N	Format: YYMMDD	
06	Sum of self billing invoices (final/accumulated value) including VAT	M	32-44	13	N	Sum of total price of all self billing invoice positions of dispatch & packaging costs and corresponding VAT. Like 822/10 but in currency stated in Pos. 3	
07	Sum of self billing invoices (final/accumulated value) excluding VAT	M	45-57	13	N	Sum of total price of all self billing invoice positions of dispatch & packaging costs but without VAT. Like 822/10 but in currency stated in Pos. 3	
08	Sum of VAT amounts	M	58-70	13	N	Sum of all VAT amounts for the self billing invoice. Like 822/10 but in currency stated in Pos. 3	
09	Blank	M	71-128	58	AN	Filled with blanks	

3.4.10 Record 829

Trailer record of self billing invoice data
A ‚must' record, Record length128, Version 03

Pos	Field name VDA	M K	Digit	Lg. Byte	AN /N	Content according to VDA	BMW Requirements
01	Record	M	01-03	3	N	Constant value: „829“	
02	Version number	M	04-05	2	N	„03“ = Indicates the update status of a record. Increases separately for each record type without a gap. After each change VDA decides on, it increases by 1.	
03	Counter-Record 821	M	06-12	7	N	Number of 821 records transmitted. Right justified with leading zeros	
04	Counter-Record 822	M	13-19	7	N	Number of 822 records transmitted. Right justified with leading zeros	
05	Counter-Record 823	M	20-26	7	N	Number of 823 records transmitted. Right justified with leading zeros	
06	Counter-Record 824	M	27-33	7	N	Number of 824 records transmitted. Right justified with leading zeros	
07	Counter-Record 825	M	34-40	7	N	Number of 825 records transmitted. Right justified with leading zeros	
08	Counter-Record 826	M	41-47	7	N	Number of 826 records transmitted. Right justified with leading zeros	
09	Counter-Record 827	M	48-54	7	N	Number of 827 records transmitted. Right justified with leading zeros	
10	Counter-Record 829	M	55-61	7	N	Number of 828 records transmitted. Right justified with leading zeros	
11	Counter-Record 828	M	62-68	7	N	Number of 829 records transmitted. Right justified with leading zeros	
12	Total VAT amount	M	69-81	13	N	VAT total of transmitted 822 records. Right justified with leading zeros	

13	Total of all payments (not discounted)	M	82-94	13	N	Sum of all delivery notes/documents inc. VAT. Right-justified with leading zeros. 2 decimals	
14	Sign code	M	95	1	N	Coded format. Please see Code List. Since arithmetic fields are in character format, the mathematical signs are separately entered after the arithmetic field. The sign depends on the content of “sum of surcharges / reductions” field. E.g.: Sign code “2”= supplier debit	
15	Payment type	K	96	1	N	Please see Code List	
16	Blank	M	97-128	32	AN	Filled with blanks	

3.4.11 Code List

number	Code content	in
01	Sign code 1 = Positive 2 = Negative	822/07 822/11 823/07 823/11 824/10 825/05 826/07
02	Currency, ISO 4217/1978, e.g.: EUR = EURO USD = US Dollar GBP = British Pound	822/12
03	Self billing invoice code 0 = Self billing invoice 1 = Settlement invoice 2 = Non-valuated shipment	822/14
04	Booking code 2 digit, numerical 01-99 01 = Arrivals 02 = Correction- Arrivals 03 = Return 04 = Shipment material 05 = Damages in transit 99 = Other	824/03
05	Unit of measurement, DIN 16559/ISO 7372, e.g.: PCE = Piece KGM = Kilogram MTR = Metre LTR = Litre NPR = Pair	824/06
06	Price unit 01 = per 1 unit 02 = per 100 units 03 = per 1000 units 99 = per indicated quantity	824/07 826/03
07	Surcharge / reduction Code 01 = Packaging 02 = Freight 03 = Material price increase surcharge (MTZ) 99 = Other	825/03
08	Payment type 0 = not yet determined 1 = Cheque 2 = Bank transfer 3 = Bill of exchange 4 = Cheque / Bill of exchange 5 = Clearing accounts receivable 6 = Electronically transfer	829/15
09	Country code, ISO 4217/1978, e.g.: DE = Germany GB = Great Britain US = USA	822/15

4 Instructions on packaging information in electronically transmissions of delivery note and transportation data

4.1 Introduction

This chapter is a supplement of the current version of BMW Group's Packaging Manual. This manual can be downloaded at:

https://b2b.bmw.com → departments → Logistics→ Packaging

This document describes how the EDI files should be prepared for a smooth transmission of delivery note and transportation data to BMW plants that run SAP.

4.2 Definitions of terminology

To be able to correctly generate the packaging information, it is necessary to explain the following terms.

4.2.1 Packaging

Packaging is required for the correct and safe delivery of goods. The goods are delivered in standard or BMW-specific containers. The suppliers receive packing instructions that describe how an article should be packed and which packaging type and filling quantity should be used. BMW gives each packaging type a code (packaging type code-customer) to identify them automatically. This is similar to „material number" of a component part.

Types of packaging are:

- Inner packaging,
- Outer packaging and
- Intermediate Layers

4.2.1.1 Inner packaging

Inner packaging is the container that holds the delivered materials. A plastic box (KLTs) - which comes in different sizes - is a common example.

In the broadest sense, stillages (gitterboxes) and transport cradles are also considered as inner packaging.

4.2.1.2 Outer packaging

Outer packaging is a 'shell' around the inner packaging and helps to hold them together. It is always used together with inner packaging. The most common one is Europallet.

4.2.1.3 Packing equipment

Inner packaging do not always pile up easily. Therefore an intermediate layer (also called packing equipment) is used. This additional packing equipment increases stability.

4.2.1.4 Loading units

A loading unit is a combination of different packaging types. It is similar to the parts list of a component group.

Example: The loading unit L3105860 is made up of the following packaging types:

- 1 pallet cage 3104444
- 2 hanging layer 3105860
- n* correx layer 3104802

)* the BMW packaging system will calculate the number of correx layers on the basis of the delivery quantity.

Alternatively, packaging data can also be entered separately for plants that run SAP (STARD plants).

4.2.1.5 Packaging

A package is a packaging type that has been assigned an identification number (called the handling unit number) by the dispatcher. This number allows the BMW Arrivals to receive and manage a complete loading unit as well as single units that make it up.

4.2.1.6 Handling Unit number

The handling unit number serves as a unique pack identification in the delivery process. This is a maximum 9-digit-number that is assigned by suppliers in ascending order. A handling unit number can not be repeated throughout a year.
On the material tags the handling unit number has to be stated 9-digit. Maybe leading zeros have to be add.

4.2.1.7 Package identification

The package identification (also called the label identification) identifies the package type and its position in a loading unit. Examples of package identification are:

1. S (ingle) = Unmixed packages without sub-packs
2. M (aster) = Unmixed loading unit

> According to VDA, it is possible to use “G” as package identification for mixed consignment. However, BMW systems can not process it.

4.2.2 Loading unit types

4.2.2.1 Unmixed

Unmixed loading unit consists of a base support (e.g. Europallet), plastic boxes containing the same kind of material (same material number) and if necessary an additional packing equipment like lid or layer.

4.2.2.2 Mixed

The first delivery note / material number contains base support (label identification M), + inner packaging (label identification S) +possibly packing equipment (without label identification).

For further delivery notes/material numbers, the label identification of inner packaging should be S.
Allocation to a loading unit is avoided on purpose to achieve a correct packaging inventory control.

4.3 Transport and delivery note data at BMW Arrivals

When the goods arrive, supplier's EDI delivery note data is activated in the arrivals system. The transport number on the forwarding instruction (shipping order) acts as the key term. If the EDI message is not /not yet available, BMW staff books the delivery manually. Manual bookings should be avoided so please make sure that the data is transmitted on time.
The next step in the booking process is checking if the actual delivery matches the information at hand. This involves scanning the goods tag according to VDA 4902. If a difference is detected, BMW staff has to correct the data manually. This data correction will be deducted from the supplier's next self billing invoice.

4.3.1 Packages in delivery and transport data

Suppliers must equip all packages with goods tag. This is essential for an efficient booking of delivered goods.

During the Goods Receipt process, packages without sub-packs are scanned individually. When the packages have sub-packs, only the main goods tag (outer packaging) is scanned. This scanned handling unit number would then refer to all the sub-packs in the container. In order for this reference to work, packaging information in delivery note data has to be free of errors (according to VDA 4913 / ODETTE AVIEXP).

When the packages in a container have the same material number and the same filling quantity, the data for "handling unit number from" and "handling unit number to" should be entered. This is only valid for packs with label identification "S". As a result, the amount of data to be transmitted is reduced.

4.3.1.1 Single packages

Single package is package without sub-packs. The following information is required:

- Label identification: "S"
- Number of packages
- Filling quantity per package
- Handling unit number

Single Packages as loading unit

- Label identification “S”
- Number of loading unit(s)
- Filling quantity of the loading unit
- Handling unit number(s)

4.3.1.2 Multiple unmixed loading unit

It consists of a base support (e.g. Europallet), plastic boxes containing the same kind of material (same material number) and if necessary an additional packing equipment like lid or layer. The following information is required:

Base support:

- Label identification: “M“
- Number of packages = 1
- Filling quantity = ZERO
- Handling unit number.

Plastic boxes:

- Label identification: “S“
- Number of packages
- Filling quantity per package
- Handling unit number

Packing equipment:

- Label identification: not applicable
- Number of packages
- Filling quantity per package = 0
- Handling unit number: not applicable

Alternatively= a loading unit:

- Label identification: „S“
- Number of loading units(s)
- Filling quantity of loading unit
- Handling unit number(s)

4.3.1.3 Mixed loading unit

Label identification G is not allowed at BMW **(please see 4.2.2.2).**

4.3.2 Examples in compliance with VDA 4913

The following example demonstrates how the delivery note data should be entered according to VDA 4913.

4.3.2.1 Single packages with multiple packaging

Four 3104444 stillages (gitterboxes): 2 of them containing material number 1222333-04 and the same filling quantity, the third one containing a different filling quantity and the fourth one containing material number 1222334-04.

Rec.	*Delivery note #*	*Part number*	*Packaging code-customer*	*# of pack.*	*Quant.*	*Handling unit # from*	*Handling unit # to*	*Label ident.*
713	123456							
714		1222333-04			250			
715			3104444	2	100	000000001	000000002	S
715			3104444	1	50	000000003	000000003	S
713	123457							
714		1222334-04			100			
715			3104444	1	100	000000237	000000237	S

Each material number has to have a delivery note.

4.3.2.2 Unmixed loading unit

A loading unit can only be used, if on the packaging only the single label is placed.

Multiple packaging – according to point 4.3.2.1 can not be used as a loading unit.

It is made up of base support 3100062, 24 type 3106147 plastic boxes and a 3101208 lid . The filling quantity of boxes is 20.

Rec.	*Delivery note #*	*Part number*	*Packaging code-customer*	*# of pack.*	*Quant.*	*Handling unit # from*	*Handling unit # to*	*Label ident.*

713	123456							
714		1222333-04			480			
715			3100062	1	0	000000010	000000010	M
715			3106147	24	20	000000011	000000034	S
715			3101208	1	0			

Please note:

The handling unit number from/to can ONLY be used in cases where:

✓the container types are the same

✓material number is the same

✓the filling quantity is the same.

In other cases, please use a new Record 715.

4.3.2.3 Loading units

Single label should be the only visible label on the loading unit. Further S labels may not be visible because this would lead to errors in automatic scanning.

The loading unit is made up of a base support (3104444), 2 plastic packaging piece hung inside (3105860) and a interlayer (3104802). The code for this loading unit is L3105860.

Rec.	***Delivery note #***	***Part number***	***Packaging code-customer***	***# of pack.***	***Quant.***	***Handling unit # from***	***Handling unit # to***	***Label ident.***
713	1234567							
714		1222333-04			480			
715			L3105860	1	480	000000103	000000103	S

4.3.2.4 An unmixed delivery is made up of many loading units

4.3.2.5 The delivery is made up of 2 loading units. The first loading unit is the one in Point 4.3.2.2 (4 layers + 6 boxes on each layer). The second loading unit is made up of a base support (3100062), 18 boxes (3106147) (3 layers+6 boxes on each layer) and a lid (3101208).

Rec.	*Delivery note #*	*Part number*	*Packaging code-customer*	*# of pack.*	*Quant.*	*Handling unit # from*	*Handling unit # to*	*Label ident.*
713	123456							
714		1222333-07			1000			
715			3100062	1	0	000000042	000000042	M
715			3106147	24	20	000000043	000000066	S
715			3101208	1	0			
715			3100062	1	0	000000073	000000073	M
715			3106147	18	20	000000074	000000091	S
715			3101208	1	0			

Please note:

The handling unit numbers are given without any gaps which is actually not a must. Packing equipments (e.g.: lid) are only numerically listed for inventory control purposes. They do not have any handling unit numbers. The order of the record also shows the correct physical order of the loading unit; i.e. which inner packaging (boxes, in this case) is on which outer packaging (pallet, in this case).

4.3.2.6 Mixed packaging

Label identification G is not allowed at BMW.

A mixed loading unit is made up of, for example, a plastic box including different material numbers and if necessary packing equipment like lid or intermediate layers.

Mixed packaging have to be warehouse location consistent.

In case of mixed packaging it is necessary, that a packaging list is provided.

This request is documented on the BMW Group Packaging Manual:

https://b2b.bmw.com– Departments – Logistics – Packaging – Packaging manual of the BMW Group BMW Group Verpackungshandbuch – Production Germany – Operative Process/Supply Process – Documents – Packages

For plant Regensburg, only for warehouse location **602** mixed packaging are not allowed.

Since label G can not be processed, the pallet and packaging equipment are mapped together with the inner packaging of the first material number (using label M), in accordance with 4.3.2.2
All remaining material numbers will be mapped only with their inner packaging, using label S. Although the allocation to the loading unit is missing, BMW prefers this method in order to achieve a correct packaging inventory control.

Mixed loading unit with pallet, plastic boxes and lid

Rec.	Delivery note #	Part number	Packaging code-customer	# of pack.	Quant.	Handling unit # from	Handling unit # to	Label ident.	Label ident.
713	10123456								
714		7102903-08			300				
715			3100062	1	0	000000090	000000090	M	
715			3104147	3	100	000000091	000000093	S	B
715			3104147	1	0				B
715			3101208	1					
713	10123457								
714		7102904-08			400				
715			3104147	2	200	000000123	000000124	S	B
713	10123458								
714		6582357-03			200				
715			3104147	2	100	000000234	000000235	S	B

In the delivery note 10123456, there is an empty box (KLT) without filling quantity, handling unit number and label identification to ensure a complete layer. The pallet (3100062) and the lid (3101208) are mapped with this first delivery note.

The other delivery note numbers/parts are only mapped with boxes (KLTs) and label S.

The empty container must be declared on the paperwork that is sent with the delivery!

In case of disposable packaging, please use the packaging specification according to packaging manual of the BMW Group. “E” is not used at BMW! Reusable pallet and lid data should be entered as above.

Mixed loading unit with a lattic box (3104444)

Rec.	Delivery note #	Part number	Packaging code-customer	# of pack.	Quant.	Handling unit # from	Handling unit # to	Label ident.
713	10123456							
714		7102903-08			30			
715			3104444	1	0	000000090	000000090	M
715			B	1	30	000000091	000000091	S
713	10123457							
714		7102904-08			40			
715			B	1	40	000000092	000000092	S
713	10123458							
714		6582357-03			20			
715			B	1	20	000000093	000000093	S

5 Contacts for EDI Applications.

Service	Contact	Dept.	Phone	Fax	Email
IV Troubleshooting Centre	ASZ (User Service Centre)		+49 89 382-55555	-22180	asz.hotline@bmw.de
EDI delivery schedule/call off, delivery note, Self billing invoice etc.	ASZ (User Service Centre)	FZ-331	+49 89 382-49111	-49091	asz.hotline@bmw.de

CAD/CAM data	Csc hotline	EB-23	+49 89 382-61662		csc.datenaustausch@bmw.de

Please note: Please use the partner database at **https://b2b.bmw.com.** Enter your data in our partner database and update it regularly.

Every request hast o be insert via a ticket to the User Service Centre.

The ticket hast o be opened with the catchword „EDI Support“.
If the ticket is opened via E-Mail, the following description has to be written in the E-Mail subject:
“Please forward request to the Group EDI-Support”

Please provide all necessary information:

- Supplier code (8-digit)
- Business process (for example: delivery call off)
- BMW plant
- Supplier’s contact person (Name, E-Mail address and telephone number)
- OFTP connection data
- Concrete Example (Data and time)

Address:
Bayerische Motoren Werke AG
Name / Department
D-80788 Munich Germany

Verband der Automobilindustrie (VDA)
Postfach 170563
D-60079 Frankfurt a. M. / Germany
Phone: 0049-69-97507-0
Fax: 0049-69-97507-261

VDA recommendations:
Free download at: http://www.vda.de > Service > Bestellung

6 EDI Parameter sheet.

The EDI parameter sheet can be found after the Login, on the Partner Portal of the BMW Group: https://b2b.bmw.com / Departments / logistics / Exchange Logistical Data / delivery call offs and delivery notes / EDI Guidelines / EDI-Parameter Sheet.