JIS Supplier Communication Handbook Ver. 1.2

Revision History

Revision Level	Change Date	Reason for change, affected pages	Author
1.0	02/01/2016	Initial creation	D.Kussmaul (SC/SCSI) F. Heiss (ITP/AL)
1.1	02/19/2016	Minor changes in chapter JIS Preview	D.Kussmaul (SC/SCSI)
1.2	03/18/2016	Added chapter 6 - PrePayment advice Added chapter 7 - JIT-VPDD Data Description chapter 8 - JIS Reordering Process Change in chapter 5 - Link to MBUSI supplier portal added	D.Kussmaul (SC/SCSI)

IMPORTANT: *Check with MBUSI for any late-breaking changes to this specification.*

Mercedes-Benz
U.S. International, Inc.

Table of Content

Revision History 1
Table of Content 2
1 Introduction/Preamble 3
1.1 Data flow between MBUSI and sequenced suppliers 3
2 Material Release (ANSI 830) 4
3 JIS Preview 5
3.1 Content of JIS Preview 5
3.2 Example of JIS Preview 7
4 JIS Broadcast 8
4.1 Content of JIS Broadcast 8
4.2 Example of JIS Broadcast 9
5 Advanced Shipping Notification (ASN) ANSI 856 including automatic reconciliation 10
5.1 Structure of the delivery notification ANSI856 10
5.2 JIS receiving process 11
5.3 ASN for reordering parts 11
6 Prepayment Advice (ANSI 820) 12
7 JIT-VPDD (as built data) 13
8 JIS Reordering 14
8.1 Reorder 14
8.2 Special orders 14
9 JIS Emergency System 16

1 Introduction/Preamble

This document provides the Suppliers of Mercedes Benz U.S. International Inc. (MBUSI) with a description of the data types and formats which are exchanged between MBUSI and the Suppliers during the supply of sequenced parts.

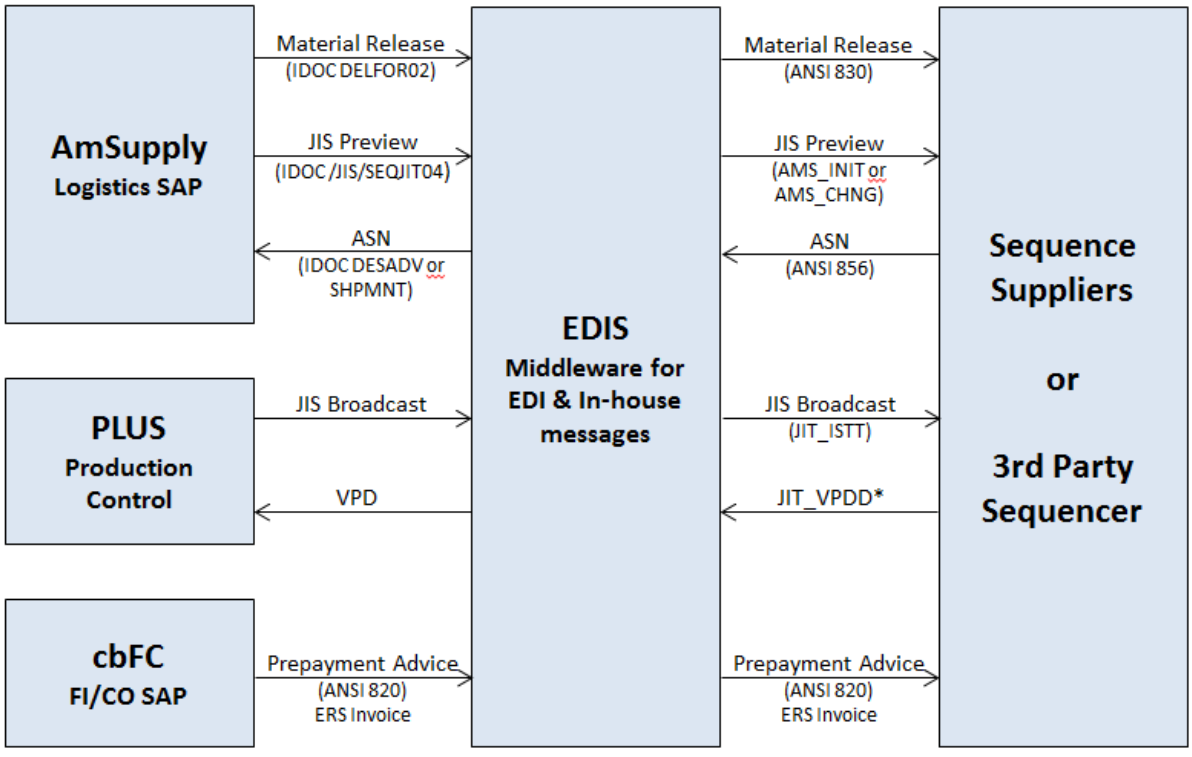
1.1 Data flow between MBUSI and sequenced suppliers

Sequence Suppliers receive three major types of data from MBUSI:

1. Material Release
2. JIS Preview
3. JIS Broadcast

MBUSI receives up to 2 types of data from the sequenced suppliers:

1. JIT-ASN
2. JIT-VPDD



*VPD data is only suppliers that send parts with serial numbers

2 Material Release (ANSI 830)

The Material Release or forecast is sent to the supplier as an EDI 830 ANSI standard transaction through EDIS. Each supplier receives only forecasts about the parts provided by that supplier.

Each day's forecast includes:

- Daily volumes for each part for the next 20 business days
- Volume for remainder of next month (after the 20 days)
- Monthly volumes for each part for the following 3 – 6 calendar months

Note that the data sent for the current week are redundant with the JIS Preview data. The difference is that the JIS Preview refers to a vehicle production number, whereas forecasts are aggregated by part error or a change in the schedule; the supplier should be informed as to the cause.

The EDI 830 format is included in the EDI 830 Specification. The Guide is available online on the public Internet at:

https://daimler.portal.covisint.com/web/mbusi

3 JIS Preview

The JIS Preview provides detailed information at the production number level and contains information about the required part numbers (BoM – Bill of material) and their volume.

A message will always include all necessary information for one production number. If there is a change on a part number or the due date the complete message will be sent again and has to replace the previous message.

Every day MBUSI sends the JIS Preview related to orders that are basically 10 days from planned assembly start via EDIS (EDIS is the frame network which connects all outgoing or incoming messages with the suppliers). The exact forerun when the JIS Preview is sent can be adjusted for each supplier.

The format for the JIS Preview which MBUSI uses is based on the Daimler Business Process Format. A detailed description of all provided record types and data fields are as follows:

3.1 Content of JIS Preview

field	description	data type	Field usage*	length	from	to	comment
MESSAGE HEADER LAYOUT							
1	serial number	String	n	8	1	8	
2	Business process	String	m	8	9	16	Values: AMS_INIT for initial and AMS_CHNG for additional transmission
3	Business process ver.	Numeric	n	4	17	20	
4	Timestamp	Time	m	19	21	39	Format: yyyy.mm.dd#hh:mm:ss
5	base object (BO)	String		100	40	139	
5.1	vehicle order number	String	o	12	40	51	
5.2	production number	String	m	7	52	58	7 digit production number. In case of a additional order without relation to a real production number value of the field will be "SPECIAL"
5.3	vendor code	String	m	10	59	68	
5.4	TTZ date	Numeric	o	12	69	80	
5.5	TTZ Frozen code	String	n	1	81	81	
5.6	Filler	String	n	22	82	103	
5.7	Idoc number of related JIT call	Numeric	n	16	104	119	
5.8	Filler	String	n	20	120	139	
6	Data	String		var.			
RECORD HEADER LAYOUT							
1	record-id	String	m	12	1	12	Format: “nnnn_RECORD ”

2	record length	Numeric	m	10	13	22	Counts all chars used in all following items from the same record type and the chars used in the record layer. right-justified, filled up with zeros.
3	number of items	Numeric	m	8	23	30	Counts all following items of the same record type. right-justified, filled up with zeros.
6174_Record Additional Header Data							
1	extended production number	String	m	10	1	10	If production number starts with 000 it is a regular order. If it is alphanumeric it is a reorder. Else it is a special order
2	check digit	String	m	1	11	11	
3	Filler	String	n	117	12	128	
5131_RECORD							
1	Baumuster	String	m	8	1	8	
2	paint UT	String	m	4	9	12	right-justified
3	paint OT	String	n	4	13	16	
4	upholstery	String	m	3	17	19	
5	technical flag (PA1)	String	m	1	20	20	
6	plant	String	m	4	21	24	left justified. MBUSI is 3 digit "138" Format in AmSupply: 138
7	decade sales (yyyymmdd)	String	n	8	25	32	
5135_RECORD							
1	check point	String	m	4	1	4	3 digit key identifying the assembly line. Left justified
2	date (yyyymmdd)	String	m	8	5	12	Planned start date on assembly line. Format YYYYMMDD
3	time (hhmm)	String	m	4	13	16	Planned start time on assembly line. Format HHMM
5153_RECORD							
1	version number	String	n	2	1	2	
2	processing mark	String	n	1	3	3	
3	MB part number	String	m	24	4	27	left justified
4	counting number	String	n	3	28	30	
5	leading receiving group	String	m	4	31	34	
6	volume	String	m	9	35	43	
7	additional receiving groups	String	m	36	44	79	
5169_RECORD							
1	code number	String	m	4	1	4	There is one 5169_Record for each TBE code. TBE codes are 1 to 4 digits long. Left justified

***mandatory (m), optional (o) or not used (n)**

3.2 Example of JIS Preview

```
        AMS_INIT    2016.03.24#16:44:13000026209507123456700155719952016032401 22
6174_RECORD 000000004100000001
00012345671
5131_RECORD 000000006200000001
20508712 040    965 138
5153_RECORD 000000013000000004
   A2134902702                RG01    1.000RG02RG03RG04RG05RG06RG07RG08RG09RG10
   A2134903511                RG01    3.000RG02RG03RG04RG05RG06RG07RG08RG09RG10
   A2051132020         9051   RG01    3.000RG02RG03RG04RG05RG06RG07RG08RG09RG10
   N000000008169              RG01   12.000RG02RG03RG04RG05RG06RG07RG08RG09RG10
5169_RECORD 00000005400000006
056
12B
1U3
2233
955A
YJCY
```

4 JIS Broadcast

The JIS Broadcast tells you that an order has reached a certain point in the manufacturing process. All suppliers will receive this JIS Broadcast when a vehicle enters the assembly area. Other checkpoints may be available upon request. The supplier will receive only one JIS Broadcast per vehicle.

As with other messages, the JIS Broadcast message begins with a standard header. The most significant data in these messages is the Production Number (because it will match the number in the related JIS Preview message), and the Shift Number (which acts like a sequence number for a shift).

4.1 Content of JIS Broadcast

field	description	data type	Field usage*	length	from	to	comment
MESSAGE HEADER LAYOUT							
1	serial number	String	n	8	1	8	
2	Business process	String	m	8	9	16	JIT_ISTT
3	Business process version	Numeric	o	4	17	20	
4	Timestamp	Time	m	19	21	39	Format: yyyy.mm.dd#hh:mm:ss
5	base object (BO)	String		100	40	139	
5.1	vehicle order number	String	o	12	40	51	
5.2	production number	String	m	7	52	58	
5.3	vendor code	String	n	10	59	68	
5.4	TTZ date	Numeric	n	12	69	80	
5.5	TTZ Frozen code	String	n	1	81	81	
5.6	Filler	String	n	22	82	103	
5.7	Idoc number of related JIT call	Numeric	n	16	104	119	
5.8	Filler	String	n	20	120	139	
6	Data	String		var.			
RECORD HEADER LAYOUT							
1	record-id	String	m	12	1	12	Format: “5nnn_RECORD ”
2	record length	Numeric	m	10	13	22	Counts all chars used in all following items from the same record type and the chars used in the record layer. right-justified, filled up with zeros.
3	number of items	Numeric	m	8	23	30	Counts all following items of the same record type. right-justified, filled up with zeros.
5921_RECORD							
1	Baumuster	String	m	8	1	8	

2	Current checkpoint	String	m	4	9	12	
3	Checkpoint date and time	String	m	12	13	24	YYYYMMDDHHMM
4	Shift Number (“Sequence Number”)	String	m	15	25	39	AAAYYYYMMDDSCCC (AAA, area 3 char alphanumeric) (YYYY year, numeric) (MM month, numeric) (DD day, numeric) (S, shift, 1 char: F=first, S=second. T=third) (CCC, running number per shift, 3 digits numeric) All blank for checkpoints prior to Assembly Start.
5	Last shift number of this (current) shift	String	m	4	40	43	Forecast of last number of this shift
6	Actual transmission counter	String	m	4	44	47	Each transmission to a JIT supplier increases the transmission counter. Rolls over after reaching 9999.

***mandatory (m), optional (o) or not used (n)**

4.2 Example of JIS Broadcast

```
       JIT_ISTT00012014.11.12#07:20:36            3512364
5921_RECORD 0000000077000000011
660571254022014111207 20T2420141112T035T9992422
```

5 Advanced Shipping Notification (ASN) ANSI 856 including automatic reconciliation

5.1 Structure of the delivery notification ANSI856

The following must be taken into account when creating the delivery notification ANSI856:

1. MBUSI requires suppliers to send an Advanced Shipping Notification (ASN) for sequence parts to signal that parts are on their way and to initiate the payment process upon goods receipt. The ASN is to include the production numbers of the vehicles.

2. Sequence suppliers are requested to send an ASN for the content of each truck as it leaves the supplier.

3. Technical documentation of the ANSI856 message format is provided on the supplier portal, which is available online on the public Internet at:
   https://daimler.portal.covisint.com/web/mbusi

   Example for production number mapping in LIN segment:

```
HL*3*2*I!
LIN*00010*BP*A2057801300 1C51*EC*Q2!
SN1**3*EA!
PRF*5500115222****00060!
PID*F**AB*S!
MEA**G*20*KG!
REF*JN*0009070113!
REF*JN*0009071105!
REF*JN*0009071109!
```

4. A unique external delivery note number must be generated for each ASN. Only one unloading point per ASN is possible. Delivery note numbers can only be used by a supplier once per calendar year.

5. JIS and non-JIS parts cannot be mixed in one ASN. (JIS and non-JIS parts have different unloading points.)

6. The ASN for JIS parts does not include any information about the packaging. Moreover, sending handling unit information is also not required.

7. Multiple material numbers for the same vehicle to the same unloading point must be included on one ASN.
   When a supplier delivers multiple item numbers for one vehicle to the same unloading point at the same time, all these item number positions must be sent with the same external delivery note.

5.2 JIS receiving process

MBUSI compares the information in the JIS Preview with the information sent in the ASN. If the ASN reconciliation shows no discrepancy, the goods receipt will be posted and the payment process will begin.

In the event of an error or discrepancy, the supplier/service provider will be informed by email and has the option to correct the delivery note in the IBL/DQM system in the Daimler Supplier Portal or to delete the delivery and send a corrected ASN.

Who is affected?

All JIS suppliers and service providers who send JIS parts are affected.

Discrepancies within delivery notifications must be processed promptly. We would like to point out that only correct delivery notes are booked as incoming goods and receive payment.

5.3 ASN for reordering parts

An ASN for parts ordered via the defined reordering process for scrap or DMT materials is required. Details are provided in chapter JIS Reordering.

6 Prepayment Advice (ANSI 820)

Prepayment advice is sent to the supplier as an EDI 820 ANSI standard transaction through EDIS.

The EDI 820 format is included in the EDI 820 Specification, which is available online on the public Internet at:

https://daimler.portal.covisint.com/web/mbusi

7 JIT-VPDD (as built data)

For parts that are serial numbered, the suppliers are to transmit the serial number associated with each serialized part including the production number. The Supplier's system should check to preclude any sending of duplicates.

MBUSI will inform each supplier as to what VPD-ident-numbers will be used for their particular data in advance of production. Many VPD data include a check digit; there are several different algorithms for calculating this (contact MBUSI Quality Dept. for guidance).

field	description	data type	Field usage*	length	from	to	comment
MESSAGE HEADER LAYOUT							
1	serial number	String	n	8	1	8	
2	Business process	String	m	8	9	16	JIT-VPDD
3	Business process ver.	Numeric	n	4	17	20	
4	Timestamp	Time	m	19	21	39	Format: yyyy.mm.dd#hh:mm:ss
5	base object (BO)	String		100	40	139	
5.1	vehicle order number	String	o	12	40	51	
5.2	production number	String	m	7	52	58	7 digit production number.
5.3	vendor code	String	m	10	59	68	
5.4	TTZ date	Numeric	o	12	69	80	
5.5	TTZ Frozen code	String	n	1	81	81	
5.6	Filler	String	n	22	82	103	
5.7	Idoc number of related JIT call	Numeric	n	16	104	119	
5.8	Filler	String	n	20	120	139	
6	Data	String		var.			
RECORD HEADER LAYOUT							
1	record-id	String	m	12	1	12	Format: "nnnn_RECORD "
2	record length	Numeric	m	10	13	22	Counts all chars used in all following items from the same record type and the chars used in the record layer. right-justified, filled up with zeros.
3	number of items	Numeric	m	8	23	30	Counts all following items of the same record type. right-justified, filled up with zeros.
5126_RECORD							
1	VPD ident number	String	m	5	1	5	
2	VPD value	String	m	48	6	53	

***mandatory (m), optional (o) or not used (n)**

8 JIS Reordering

Valid from 10-Jul-2017, until then the current MBUSI reordering processes are valid.

MBUSI distinguishes two cases of reordering with launch of AmSupply in 10-Jul-2017.

Those 2 cases are:

- reorders (for damaged parts)
- special orders

8.1 Reorder

Reorders are for regular produced vehicles which are having a production number. When a sequenced commodity is damaged, MBUSI creates a reorder. For the reorder the supplier receives updated material releases for all affected parts and a JIS Preview with the Bill of Material (BoM).

The JIS Preview will include the original 7 digit production number in the Message Header (field 5.1) and a alphanumeric 10 digit production number in the 6174_Record (field 1).

The 10-digit production number for reorders is the 7-digit production number with a 3-digit suffix. The suffix starts with R (for reorder) and ends with a 2-digit counter for the number of reorders for this particular production number.

e.g.

original production number	**7654321**
1st reorder	**7654321R01**
2nd reorder	**7654321R02**

An JIS-ASN with reference to the 10-digit production number is mandatory.

MBUSI will not send a JIS Broadcast, the delivery is expected as soon as possible.

If the reorder affects the 'as built data' a new JIT-VPDD message for all VPD relevant elements for this production number has to be sent.

8.2 Special orders

Special orders are not related to a vehicle. Those orders are used for training or testing purposes. For the special order the supplier receives updated material releases for all affected parts and a JIS Preview with the BoM.

The JIS Preview will include the string 'SPECIAL' in the 7 digit production number field in the Message Header (field 5.1) and a numeric 10 digit production number in the 6174_Record (field 1).

A JIS-ASN with reference to the 10-digit production number is mandatory.

MBUSI will not send a JIS Broadcast, this is only send for regular planned and assembled vehicles.

The payment process is triggered like a regular order with goods receiving.

JIT-VPDD message is not required.

9 JIS Emergency System

The JIS Emergency System is an additional System with a web-frontend which provides data about the vehicle sequence and the BoM of each vehicle in the pearl chain.

In case of downtime of EDIS on MBUSI side or data loss on supplier side the JIS Emergency System gives the opportunity to download JIS Previews and JIS Broadcast information for relevant vehicles.

A detailed description for JIS Emergency System will follow with a new version of this handbook.