

BAAN IVb/c

Definition of BEMIS 1.0a Import and Export File for the Message Type Sequence Schedule

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About this document

This document details the standard inhouse data formats, which the BAAN Electronic Message Interchange System BEMIS requires as interfaces to the appropriate EDI subsystem.

The document is intended for developers of EDI subsystems, which want to realize an interface of their software to BAAN IV. Furthermore, it supports consultants, who want to implement and verify such an interface within a customer project. Important fields are identified with both the English and German terms, to assist German-language speakers using this documentation.

Chapter 1 gives an overview over the general principles of the relevant EDI message. For example available record types, message structure, key fields and other conventions.

Chapter 2 details all corresponding record types for the EDI message. All data fields are listed in an overview table in connection with the corresponding table fields. In addition, every single field is more detailed. You will find information about the general conditions, which you need to observe for the processing in the EDI subsystem or in BAAN IV.

1 General principles

This document describes the BAAN EDI in-house format for the message type *sequence schedule (incoming)*.

The message *sequence schedule (outgoing)* is not included in this document because this message is usually generated in another BAAN IV subsystem (for example, assembly control or manufacturing control).

Available record types

The use of the following record types is conditional (C) respectively mandatory (M) when you transmit information about sequence schedules by means of the message VDA 4916 (“*Datenfernübertragung von Produktionssynchronen Abrufen*”)¹.

| ID | Status | Name |
|-----|--------|---|
| SA1 | M | Sequence Overhead (<i>Nachrichten-Vorsatz</i>) |
| SA2 | M | Sequence Schedule Header (<i>PAB Kopfdaten</i>) |
| SA3 | M | Sequence Schedule Lines (<i>PAB Positionsdaten</i>) |

¹ Remote transfer of sequence schedules.

Branching diagram

The branching diagram shows the structure of the message. It indicates the hierarchical relationship between segments. A segment is a set of functionally-related BAAN tables.

The following record structure is used for the message type BEMIS sequence schedule:

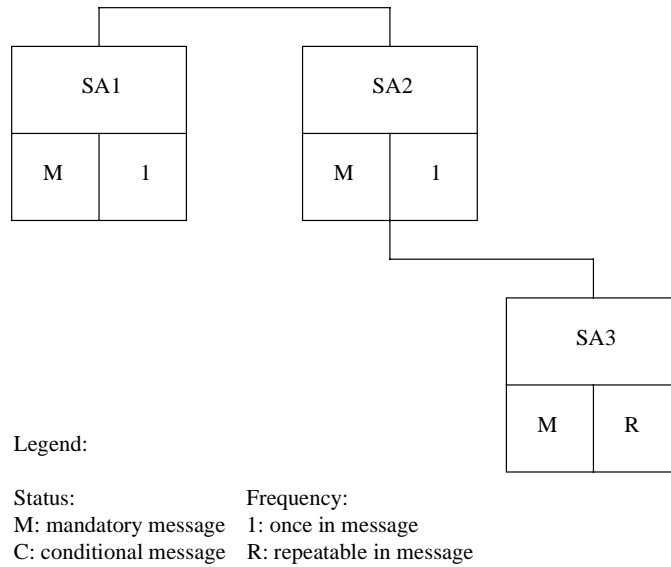


Figure 1, Branching diagram

For example, for the items of two vehicles the BEMIS file for sequence schedules has the following structure:

| | |
|------------------|--------------------------|
| SA1 ... | BAAN IV Overhead |
| SA2 ... | Vehicle information |
| Production No. 1 | |
| SA3 ... | Date, quantity of item 1 |
| SA3... | Date, quantity of item 2 |
| | |
| SA1 ... | BAAN IV Overhead |
| SA2 ... | Vehicle information |
| Production No. 2 | |
| SA3 ... | Date, quantity of item 1 |
| SA3... | Date, quantity of item 2 |
| | |

Key fields for incoming messages

The following structure for key fields is used to determine the related records of a sequence schedule message:

| Record type | Key field 1 | Key field 2 | Key field 3 | Key field 4 |
|-------------|-------------------|--------------------------|-----------------------|----------------|
| SA1 | Message reference | Network address customer | | |
| SA2 | Message reference | Network address customer | Code delivery address | Production No. |
| SA3 | Message reference | Network address customer | Code delivery address | Production No. |

Network directories

The so-called network directories form the basis of the communication between the EDI subsystem and BAAN IV. These directories are established in BAAN. The network basis directories for each network are defined in the BAAN session tcedi0120m000. For the network BEMIS, the basis directories can be indicated in the following way:

/auto3/baanIV/bemis/pab

BAAN will additionally create the following subdirectories:

/auto3/baanIV/bemis/pab/appl_from/

/auto3/baanIV/bemis/pab/appl_to/

/auto3/baanIV/bemis/pab/command/

/auto3/baanIV/bemis/pab/store_recv/

/auto3/baanIV/bemis/pab/store_sent/

/auto3/baanIV/bemis/pab/trace/

The above mentioned directories have the following function:

- 1 `.../appl_from/`: In this directory, BAAN IV records the outgoing messages which are the defined BEMIS inhouse format files. The EDI subsystem can collect them from here.
- 2 `.../appl_to/`: The EDI subsystem writes the incoming message into this directory in the BAAN IV inhouse format.
- 3 `.../command/`: Directory of the semaphores.
- 4 `.../store_recv/`: BAAN IV stores in this directory processed incoming messages, if the configuration is accordingly. During this process an additional subdirectory by incoming message file is created which is named with a date and time stamp indicating when the message was moved.
- 5 `.../store_sent/`: BAAN IV stores in this directory processed outgoing messages if the configuration is accordingly. During this process an additional subdirectory by incoming message file is created which is named with a date and time stamp indicating when the message was moved.
- 6 `.../trace/`: BAAN creates under this directory a log of the incoming and outgoing messages in the processing order, if the configuration is accordingly.

The file name of the BEMIS inhouse format file of the sequence schedule, which is being described in this document, is defined in the following way:

| Direction | File name | Network directory |
|-----------|-----------|-------------------------|
| incoming | PABIN | <code>../appl_to</code> |

BEMIS Messages – Conventions

The following general rules apply to a message record in a BEMIS message file:

- 1 Every message record starts with “SAX”
- 2 Every message record ends with “SAX_END”
- 3 The length of a data record can vary.
- 4 The message record must consist of all fields, even if not every field contains a value.
- 5 The fields in the file must be separated by a ; .
- 6 All string fields have to be put in “...”.
- 7 The numerical values must not be put in “”.

When BAAN generates outgoing messages, the numerical fields are written into the inhouse format file without leading zeros. For example, for the year "0000" a "0" is written into the BEMIS message file.

On the outgoing side numerical fields with decimal places are used in the following way: If the decimal places equal the value zero these decimal places will not be written. For example, in the interface file the internal value '13.00' is indicated as 13.

In the following sections you will find the format descriptions for the individual record types of the interface file. The table contains the following data:

| PAB INHOUSE FORMAT | | | | |
|--------------------|-------------------|-----|----|----|
| Pos | FIELD DESCRIPTION | Key | ST | FM |

The first block of the table describes the format of a kind of data record:

| | |
|------------|---|
| Pos. | Position of the field in the data record |
| Field name | Description of the field |
| Key | Key field outgoing (O) / incoming (I) |
| ST | Field status mandatory (M) / conditional (C) |
| FM | Field format |
| | an..14 alphanumeric field with a maximum of 14 characters |
| | an14 alphanumeric field with exactly 14 characters |
| | n..10 numerical field with a maximum of 10 characters |
| | n1 numerical field with exactly 1 character |

| Mapping from (out) / to Application Table Fields (in) | |
|---|--------|
| Table Field | Action |

The second block of the table describes the corresponding table field in BAAN IV as well as possible special actions, which are carried out during the processing of the messages.

Following the table overview, every field is more detailed, including information about the processing in the EDI subsystem and in BAAN IV.

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2 Data record description by record type

SA1 Sequence Schedule Overhead – *Nachrichtenvorsatz*

Status : Mandatory

Frequency : Once by message

Description: This record type contains information about the transmitter, the message type and the time of the transmission. The included message reference identifies all related records of this message.

Data record description by record type

| PAB INHOUSE FORMAT | | | | | Mapping to Application Fields (in) | |
|--------------------|--|-----|----|--------|------------------------------------|-----------------------------|
| Pos | FIELD DESCRIPTION | Key | ST | FM | Table Field | Action |
| 1 | Record type (<i>Satzart</i>) | O/I | M | an3 | SA1 | |
| 2 | Message reference (<i>Nachrichtenreferenz</i>) | O/I | M | an..14 | tcedi702.bano | Generation by EDI subsystem |
| 3 | Identification/network address customer (<i>Identifikation/Netzwerkadresse Kunde</i>) | | M | an..17 | tcedi702.reno | Conversion (see below) |
| 4 | Message (<i>Nachricht</i>) | | M | an..6 | tcedi702.mess | Conversion (see below) |
| 5 | Organization (<i>Organisation</i>) | | M | an..6 | tcedi702.orga | Conversion (see below) |
| 6 | Order type (<i>Auftragsart</i>) | | M | an..35 | tcedi702.koor | Conversion (see below) |
| 7 | Transmission reference (<i>Übertragungsreferenz</i>) | | M | an..20 | tcedi702.msno | |
| 8 | Transmission date (<i>Sendedatum</i>) | | M | n..6 | tcedi702.send | |
| 9 | Transmission time (<i>Sendezeit</i>) | | M | n..4 | tcedi702.sent | |
| 10 | Transmission reference old (<i>Übertragungsreferenz alt</i>) | | M | an..20 | tcedi702.prno | |
| 11 | End of record marker (<i>Satzendekennung</i>) | | M | an7 | SA1_END | |

Detailed description of Sequence schedule, record type SA1 Overhead

| | | | | | |
|------------|--------------------|--------------|-------------|--------------|----------|
| Position | 1 | Field format | an3 | Field status | M |
| Field name | Record type | | (Key field) | | |

Description: This field identifies the record type in the message block. The field contains the fixed value 'SA1'.

Processing incoming

EDI subsystem: The field is filled with fixed value 'SA1'.

BAAN: None

| | | | | | |
|------------|--------------------------|--------------|---------------|--------------|----------|
| Position | 2 | Field format | an..14 | Field status | M |
| Field name | Message reference | | (Key field) | | |

Description: This field identifies all connected data records of one sequence schedule. The numbering, which has to be unambiguous by sequence the complete transmission. The field consists of a fix part with four characters, the current date (format: YYMMDD) and a serial number with four characters.

The special format is defined in the network parameters in the BAAN table tcedi020. When generating the message be specific, that means unique. While storing the message reference BAAN verifies whether it is specific.

Processing incoming

EDI subsystem: The EDI subsystem generates this number to identify a sequence schedule and writes it into all data records of a sequence schedule.

BAAN: Mapping to BAAN table field tcedi702.bano.

| | | | | | |
|------------|--|--------------|---------------|--------------|----------|
| Position | 3 | Field format | an..17 | Field status | M |
| Field name | Identification/network address customer | | | | |

Description: This field contains the identification respectively network address of the customer.

Processing incoming

EDI subsystem: Transmission of customer identification from message file and preparation of a between BAAN and the EDI subsystem agreed business partner identification.

BAAN: The network address determines the corresponding business partner and the network in the BAAN table tcedi028 'Relations by network'. This identification is mapped to the BAAN table field tcedi702.reno.

| | | | | | |
|------------|----------------|--------------|--------------|--------------|----------|
| Position | 4 | Field format | an..6 | Field status | M |
| Field name | Message | | | | |

Description: This field contains the code for the identification of the concerned message. The code of the message type remittance advice is PAB-IN.

Processing incoming

EDI subsystem: The field is filled with the fixed value 'PAB-IN'.

BAAN: The message code in the BAAN table tcedi001 'Supported EDI Messages' determines, which internal message is connected to this BEMIS sequence schedule. In the BAAN table tcedi005 'EDI Messages' is determined for every message, which session (DLL) is used in BAAN to process the BEMIS sequence schedule. The message code is mapped to the BAAN table field tcedi702.mess.

| | | | | | |
|------------|---------------------|--------------|--------------|--------------|----------|
| Position | 5 | Field format | an..6 | Field status | M |
| Field name | Organization | | | | |

Description: This field contains the organization (standard) which is used for the EDI communication.

Processing incoming

EDI subsystem: The field is filled with the fixed value 'BEMIS'.

BAAN: Mapping to BAAN table field tcedi702.orga
 The corresponding organization must have been entered into the BAAN table tcedi003.

| | | | | | |
|------------|-------------------|--------------|---------------|--------------|----------|
| Position | 6 | Field format | an..35 | Field status | M |
| Field name | Order type | | | | |

Description: This field contains a code for the concerned order type.

Processing incoming

EDI subsystem: This field is filled with a blank.

BAAN: Mapping to BAAN table field tcedi702.koor.
 In BAAN table tcedi200 there must be an entry for this order type in connection with the appropriate message and organization.

| | | | | | |
|------------|-------------------------------|--------------|---------------|--------------|----------|
| Position | 7 | Field format | an..20 | Field status | M |
| Field name | Transmission reference | | | | |

Description: This field contains the number which the EDI subsystem applied to the reference for this transmission.

Processing incoming

EDI subsystem: Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tcedi702.msno.

| | | | | | |
|------------|--------------------------|--------------|-------------|--------------|----------|
| Position | 8 | Field format | n..6 | Field status | M |
| Field name | Transmission date | | | | |

Description: This field contains on the outgoing side the current date, on which the message was created. On the incoming side, this field contains the arrival date of the message at the EDI subsystem (format: YYMMDD).

Processing incoming

EDI subsystem: Entry of the arrival date of the message at the EDI subsystem.

BAAN: Mapping to BAAN table field tcedi702.send.

| | | | | | |
|------------|--------------------------|--------------|-------------|--------------|----------|
| Position | 9 | Field format | n..4 | Field status | M |
| Field name | Transmission time | | | | |

Description: This field contains on the outgoing side the time, when the message was created. On the incoming side, the field contains the arrival time of the message at the EDI subsystem (format: HHMM).

Processing incoming

EDI subsystem: Entry of the arrival time of the message at the EDI subsystem.

BAAN: Mapping to BAAN table field tcedi702.send.

| | | | | | |
|------------|-----------------------------------|--------------|---------------|--------------|----------|
| Position | 10 | Field format | an..20 | Field status | M |
| Field name | Transmission reference old | | | | |

Description: This field contains the reference number which the EDI subsystem applied to the previous transmission.

Processing incoming

EDI subsystem: Transmission of the value from the transmission file.

BAAN: Mapping to BAAN table field tcedi702.prno.

| | | | | | |
|------------|-----------------------------|--------------|------------|--------------|----------|
| Position | 11 | Field format | an7 | Field status | M |
| Field name | End of record marker | | | | |

Description: This field indicates the end of the record. It contains the fixed value 'SA1_END'.

Processing incoming

EDI subsystem: The field is filled with the fixed value 'SA1_END'.

BAAN: None

SA2 Sequence Schedule Header – Kopfdaten

Status : Mandatory

Frequency: Once by production number/vehicle number

Description: This record type is used to transmit vehicle-specific data. The record contains information about the vehicle to be produced and the exact delivery address. This record type can be used as often as there are vehicle respectively production numbers available for this sequence schedule. All records up to the next record of the record type SA2 refer to the same sequence schedule.

| PAB INHOUSE FORMAT | | | | | Mapping from Application Table Fields (out) | | Mapping to Application Fields (in) | |
|--------------------|---|-----|----|--------|---|--------|------------------------------------|--|
| Pos | FIELD DESCRIPTION | Key | ST | FM | Table Field | Action | Table Field | Action |
| 1 | Record type (<i>Satzart</i>) | I | M | an3 | | | SA2 | |
| 2 | Message reference (<i>Nachrichtenreferenz</i>) | I | M | an..14 | | | tcedi702.bano | |
| 3 | Network address customer (<i>Netzwerkadresse Kunde</i>) | I | M | an..17 | | | tdssc602.cuno | Conversion (see below) |
| 4 | Code delivery address (<i>Schlüssel Lieferadresse</i>) | I | M | an8 | | | tdssc601.cdel | Generation by EDI subsystem Conversion based on qualifier in pos. 6 and 7 (see below) |
| 5 | Production number (<i>Produktionsnummer</i>) | I | M | an..10 | | | tdssc602.pref | |
| 6 | Qualifier address code (<i>Qualifier Adress-Code</i>) | | M | an2 | | | DP | |
| 7 | Qualifier address type (<i>Qualifier Adressart</i>) | | M | an2 | | | ZZ | |

| | | | | | |
|----|--|---|--------|------------------|------------------------------|
| 8 | Revision key (<i>Änderungsschlüssel</i>) | M | an1 | tdssc601.iedi(1) | check value range |
| 9 | Sequence schedule number (<i>Produktionsfolge nummer</i>) | M | n..9 | tdssc602.jbsq | |
| 10 | Plant customer (<i>Werk Kunde</i>) | M | an..3 | tdssc601.site | Code for search for contract |
| 11 | Final delivery point (<i>Abladestelle</i>) | M | an..5 | tdssc601.delp | |
| 12 | Line feed location (<i>Verbrauchsstelle</i>) | M | an..17 | tdssc602.lnfd | |
| 13 | Schedule date type (<i>Art des Abrufdatums</i>) | M | an1 | tdssc602.dkey | Check value range |
| 14 | Vehicle type (<i>Fahrzeugtyp</i>) | C | an..8 | tdssc602.vtyp | |
| 15 | Chassis number (<i>Fahrgestellnummer</i>) | C | an..19 | tdssc602.chas | |
| 16 | Number of vehicles (<i>Anzahl Fahrzeuge</i>) | C | n..9 | tdssc602.vnum | |
| 17 | End of record marker (<i>Satzendekennung</i>) | M | an7 | SA2_END | |

Detailed description of Sequence schedule, record type SA2 Sequence schedule header

| | | | | | |
|------------|----------|--------------------|------------|--------------|----------|
| Position | 1 | Field format | an3 | Field status | M |
| Field name | | Record type | | (Key field) | |

Description: This field identifies the record type in the message block. The field contains the fixed value 'SA2'.

Processing incoming

EDI subsystem: The field is filled with fixed value 'SA2'.

BAAN:

| | | | | | |
|------------|--------------------------|--------------|---------------|--------------|----------|
| Position | 2 | Field format | an..14 | Field status | M |
| Field name | Message reference | | (Key field) | | |

Description: This field identifies all connected data records of one sequence schedule. The numbering, which has to be unambiguous by sequence schedule, helps to control the chronological order of the sequence schedules and the complete transmission. The field consists of a fix part with four characters, the current date (format: YYMMDD) and a serial number with four characters.

The special format is defined in the network parameters in the BAAN table tcedi020. When generating the message reference with the EDI system, the created message reference needs to be specific, that means unique. While storing the message reference BAAN verifies whether it is specific.

Processing incoming

EDI subsystem: Refer to record type SA1.

BAAN:

| | | | | | |
|------------|---------------------------------|--------------|---------------|--------------|----------|
| Position | 3 | Field format | an..17 | Field status | M |
| Field name | Network address customer | | (Key field) | | |

Description: This field contains the network address of the customer.

Processing incoming

EDI subsystem: Transmission of customer identification from message file and preparation of a between BAAN and the EDI subsystem agreed business partner identification.

BAAN: The network address determines the corresponding business partner and the network in the BAAN table tcedi028 'Relations by network'. This identification is used for the determination of the BAAN internal customer number in the table tcedi010 ,Business partner' and mapped to the BAAN table field tcedi602.cuno.

| | | | | | |
|------------|--|--------------|--------------|--------------|----------|
| Position | 4 | Field format | an..8 | Field status | M |
| Field name | Code delivery address (Key field) | | | | |

Description: This field contains the code for the delivery address of the customer (format: WWWAAAAA). WWW means *Plant number customer* and AAAAA represent the first five characters of the *Final delivery point*.

Processing incoming

EDI subsystem: The EDI subsystem generates this code on the basis of the data in *Plant number customer* and *Final delivery point*.

All 3 characters of the *Plant number customer* need to be taken into account and the *Final delivery point* starts with the 4th character.

BAAN: The conversion tables for the address codes can be found in the BAAN table tcedi310 under the business partner and the *Organization* from data record SA1 and the *Address code ID* from data record SA2. The BAAN internal address code of the generated *Code delivery address* is determined in this BAAN table and mapped to the BAAN table field TFDdssc002.cdcl.

| | | | | | |
|------------|--------------------------|--------------|---------------|--------------|----------|
| Position | 5 | Field format | an..10 | Field status | M |
| Field name | Production number | | | | |

Description: This field contains the production-related identification number of the end product (vehicle) at the customer for which the called-off items are required.

Processing incoming

EDI subsystem: Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc602.pref

| | | | | | |
|------------|-------------------------------|--------------|------------|--------------|----------|
| Position | 6 | Field format | an2 | Field status | M |
| Field name | Qualifier address code | | | | |

Description: This field contains the qualifier address code which is used to determine the delivery address from the value in position 4. This position must be filled with the fixed value 'DP'.

Processing incoming

EDI subsystem: The field is filled with the fixed value 'DP'.

BAAN: The qualifier must have been entered in the BAAN table TBtcedi218 (Address code IDs). It is taken into account when the BAAN internal delivery address code is determined from the value in position 4.

| | | | | | |
|------------|-------------------------------|--------------|------------|--------------|----------|
| Position | 7 | Field format | an2 | Field status | M |
| Field name | Qualifier Address type | | | | |

Description: This field contains the qualifier address type which is used to determine the delivery address from the value in position 4. This position must be filled with the fixed value 'ZZ'.

Processing incoming

EDI subsystem: The field is filled with the fixed value 'ZZ'.

BAAN: The qualifier must have been entered in the BAAN table TBtcedi224 (Address types). It is taken into account when the BAAN internal delivery address code is determined from the value in position 4.

| | | | | | |
|------------|---------------------|--------------|------------|--------------|----------|
| Position | 8 | Field format | an1 | Field status | M |
| Field name | Revision key | | | | |

Description: This field contains the identification for the meaning of the record for the supplier:
 Value range:
 blank: no change
 Z: new record (first access)
 A: revision
 L: deletion/cancellation of already transmitted FI scope
 N: backorder
 D: already delivered
 T: test/no delivery

Processing incoming

EDI subsystem: Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc601.iedi(1).

| | | | | | |
|------------|---------------------------------|--------------|-------------|--------------|----------|
| Position | 9 | Field format | n..9 | Field status | M |
| Field name | Sequence schedule number | | | | |

Description: This field contains the sequence number that gives detail about the order.

Processing incoming

EDI subsystem: Transmission of value from transmission file. If the value in the message is blank, (forecast without order) this value has to be replaced by 0.

BAAN: Mapping to BAAN table field tdssc602.jbsq.

| | | | | | |
|------------|------------------------------|--------------|--------------|--------------|----------|
| Position | 10 | Field format | an..3 | Field status | M |
| Field name | Plant number customer | | | | |

Description: This field contains the code for the plant of the customer, to which the goods have to be delivered.

Processing incoming

EDI subsystem: The EDI subsystem uses this field for the generation of the *Code delivery address*.

Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc601.site.

| | | | | | |
|------------|-----------------------------|--------------|---------------|--------------|----------|
| Position | 11 | Field format | an..10 | Field status | M |
| Field name | Final delivery point | | | | |

Description: This field contains the code of the customer for the final delivery point of the required goods at the plant of the customer.

Processing incoming

EDI subsystem: The EDI subsystem uses this field to generate the *Code delivery address*.

Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc601.delp.

| | | | | | |
|------------|---------------------------|--------------|---------------|--------------|----------|
| Position | 12 | Field format | an..17 | Field status | M |
| Field name | Line feed location | | | | |

Description: This field contains the identification of the customer for the city, where the required material is consumed.

Processing incoming

EDI subsystem: Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc602.lnfd.

| | | | | | |
|------------|---------------------------|--------------|-----------|--------------|----------|
| Position | 13 | Field format | n1 | Field status | M |
| Field name | Schedule date type | | | | |

Description: This field contains the identification of the *Schedule date type* of the sequence schedule in record type SA3. Allowed values:
 1 = Delivery At this date the required quantity has to be delivered at the customer's plant.
 2 = Pick-up At this date the required quantity has to be ready for pick-up at the supplier's plant.

Processing incoming

EDI subsystem: The EDI subsystem sets the value on the basis of the data in the transmission file. If no value is transmitted, the system by default sets the value '1'.

BAAN: Mapping to BAAN table field tdssc002.tdat. Used code and conversion table: TBtcedi485.

| | | | | | |
|------------|---------------------|--------------|--------------|--------------|----------|
| Position | 14 | Field format | an..8 | Field status | C |
| Field name | Vehicle type | | | | |

Description: This field contains the type of the vehicle to be produced.

Processing incoming

EDI subsystem: Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc602.vtyp.

| | | | | | |
|------------|-----------------------|--------------|---------------|--------------|----------|
| Position | 15 | Field format | an..19 | Field status | C |
| Field name | Chassis number | | | | |

Description: This field contains the chassis number of the vehicle to be produced.

Processing incoming

EDI subsystem: Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc602.chas

Data record description by record type

| | | | | | |
|------------|---------------------------|--------------|-------------|--------------|----------|
| Position | 16 | Field format | n..6 | Field status | C |
| Field name | Number of vehicles | | | | |

Description: This field contains the number of vehicles to be produced by production order number (for example, CKD).

Processing incoming

EDI subsystem: Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc602.vnum.

| | | | | | |
|------------|-----------------------------|--------------|------------|--------------|----------|
| Position | 17 | Field format | an7 | Field status | M |
| Field name | End of record marker | | | | |

Description: This field identifies the end of the record. It contains the fixed value 'SA2_END'.

Processing incoming

EDI subsystem: This field is filled with the fixed value 'SA2_END'.

BAAN: None

SA3 Production Sequence Lines – *Positionsdaten*

Status : Mandatory

Frequency: Repeatable by SA2, once by item number

Description: The record type supports the transmission of the required quantity of the item for the production number which is indicated in the previous record type SA2. The customer here indicates which quantity is required at which dates.

| PAB INHOUSE FORMAT | | | | | Mapping to Application Fields (in) | | |
|--------------------|---|-----|----|--------|------------------------------------|--------------------------------|--|
| Pos | FIELD DESCRIPTION | Key | ST | FM | Action | Table Field | Action |
| 1 | Record type (<i>Satzart</i>) | I | M | an3 | | SA4 | |
| 2 | Message reference (<i>Nachrichtenreferenz</i>) | I | M | an..14 | | tcedi702.bano | |
| 3 | Network address customer (<i>Netzwerkadresse Kunde</i>) | I | M | an..17 | | tdssc602.cuno | |
| 4 | Code delivery address (<i>Schlüssel Lieferadresse</i>) | I | M | an..8 | | tdssc601.cdel | |
| 5 | Production number (<i>Produktionsnummer</i>) | I | M | an..10 | | | |
| 6 | Customer's item number (<i>Sachnummer Kunde</i>) | | M | an..35 | | tdssc602.item tdssc601.cpno | Conversion based on qualifiers in pos. 7 (see below) |
| 7 | Qualifier item code ID (<i>Qualifer Artikelcode- ID</i>) | | M | an2 | | SA | |

Data record description by record type

| | | | | |
|----|---|---|--------|---------------------------------|
| 8 | Delivery instruction quantity (<i>Abrufmenge</i>) | M | n..9 | tdssc602.prsq |
| 9 | Final delivery point (<i>Abladestelle</i>) | M | an..5 | tdssc601.delp |
| 10 | Line feed location (<i>Verbrauchsstelle</i>) | M | an..17 | tdssc602.Infd |
| 11 | Schedule date type (<i>Art des Abrufdatums</i>) | M | n1 | tdssc602.dkey Check value range |
| 12 | Schedule date (<i>Abrufdatum</i>) | M | n..6 | tdssc602.date |
| 13 | Schedule time (<i>Abrufzeit</i>) | M | n..4 | tdssc602.time |
| 14 | Engineering change at customer (<i>Änderungsstand beim Kunden</i>) | C | an..17 | tdssc602.rev1 |
| 15 | End of record marker (<i>Satzendekennung</i>) | M | an7 | SA4_END |

Detailed description of Sequence schedule, record type SA3 Sequence schedule lines

| | | | | | |
|------------|--------------------|--------------|-------------|--------------|----------|
| Position | 1 | Field format | an3 | Field status | M |
| Field name | Record type | | (Key field) | | |

Description: This field identifies the record type in the message block. The field contains the fixed value 'SA3'.

Verarbeitung ausgehend

EDI subsystem:

BAAN:

Processing incoming

EDI subsystem: The field is filled with fixed value 'SA3'.

BAAN: None

| | | | | | |
|------------|--------------------------|--------------|---------------|--------------|----------|
| Position | 2 | Field format | an..14 | Field status | M |
| Field name | Message reference | | (Key field) | | |

Description: This field identifies all connected data records of one sequence schedule. The numbering, which has to be unambiguous by sequence schedule, helps to control the chronological order of the sequence schedules and the complete transmission. The field consists of a fix part with four characters, the current date (format: YYMMDD) and a serial number with four characters.

The special format is defined in the network parameters in the BAAN table tcedi020. When generating the message reference with the EDI system, the created message reference needs to be specific, that means unique. While storing the message reference BAAN verifies whether it is specific.

Processing incoming

EDI subsystem: Refer to record type SA2.

BAAN: Refer to record type SA2.

| | | | | | |
|------------|---------------------------------|--------------|---------------|--------------|----------|
| Position | 3 | Field format | an..17 | Field status | M |
| Field name | Network address customer | | (Key field) | | |

Description: This field contains the network address of the customer.

Processing incoming

EDI subsystem: Refer to record type SA2

BAAN: Refer to record type SA2

| | | | | | |
|------------|------------------------------|--------------|--------------|--------------|----------|
| Position | 4 | Field format | an..8 | Field status | M |
| Field name | Code delivery address | | (Key field) | | |

Description: This field contains the code for the delivery address of the customer.

Processing incoming

EDI subsystem: Refer to record type SA2.

BAAN: Refer to record type SA2.

Data record description by record type

| | | | | | |
|------------|--------------------------|--------------|---------------|--------------|----------|
| Position | 5 | Field format | an..10 | Field status | M |
| Field name | Production number | | | | |

Description: This field contains the production-related identification number of the end product (vehicle) at the customer for which the called-off items are required.

Processing incoming

EDI subsystem: Transmission of value from transmission file.

| | | | | | |
|------------|---|--------------|---------------|--------------|----------|
| Position | 6 | Field format | an..35 | Field status | M |
| Field name | Customer's item number (Key field) | | | | |

BAAN: Mapping to BAAN table field tdssc602.prf

Description: This field contains the identification number which the customer applied to the required item.

Processing incoming

EDI subsystem:

BAAN: The conversion tables for the item numbers can be found in the BAAN table tcedi306 under the business partner and the *Organization* from data record SA1 and the *Item group ID* from data record SA2. The BAAN internal item number of the transmitted *Customer's item number* is determined in this BAAN table and mapped to the BAAN table field TFtdssc002.item.

| | | | | | |
|------------|------------------------------|--------------|------------|--------------|----------|
| Position | 7 | Field format | an2 | Field status | M |
| Field name | Qualifier item number | | | | |

Description: This field contains the qualifier item number for the determination of the item number on the basis of the *Customer's item number* in position 6. It must contain the fixed value 'SA'. ('SA' = Supplier's item number).

Processing incoming

EDI subsystem: The field is filled with the fixed value 'SA'.

BAAN: This qualifier must have been entered in the BAAN table TBtcedi232 (Item Code IDs). It is taken into account when determining the BAAN internal item code on the basis of the customer article code in position 6.

| | | | | | |
|------------|--------------------------|--------------|-------------|--------------|----------|
| Position | 8 | Field format | n..9 | Field status | M |
| Field name | Schedule quantity | | | | |

Description: This field contains the quantity which is called-off with this position.

Processing incoming

EDI subsystem: The EDI subsystem transmits the quantity which is called-off with this position to this field.

BAAN: Mapping to BAAN table field tdssc602.prsq.

| | | | | | |
|------------|-----------------------------|--------------|---------------|--------------|----------|
| Position | 9 | Field format | an..10 | Field status | M |
| Field name | Final delivery point | | | | |

Description: This field contains the code which the customer applied to the final delivery point to where the called-off goods have to be delivered.

Processing incoming

EDI subsystem: The EDI subsystem uses this field to generate the *Code delivery address*.

Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc601.delp.

| | | | | | |
|------------|---------------------------|--------------|---------------|--------------|----------|
| Position | 10 | Field format | an..17 | Field status | M |
| Field name | Line feed location | | | | |

Description: This field contains the identification which the customer applied to the site where the called-of material is consumed.

Processing incoming

EDI subsystem: Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc602.lnfd.

| | | | | | |
|------------|---------------------------|--------------|-----------|--------------|----------|
| Position | 11 | Field format | n1 | Field status | M |
| Field name | Schedule date type | | | | |

Description: This field contains the identification of the *Schedule date type* of the sequence schedule in record type SA3. Allowed values:
 1 = Delivery At this date the required quantity has to be delivered at the customer's plant.
 2 = Pick-up At this date the required quantity has to be ready for pick-up at the supplier's plant.

Processing incoming

EDI subsystem: The EDI subsystem sets the value on the basis of the data in the transmission file. If no value is transmitted, the system by default sets the value '1'.

BAAN: Mapping to BAAN table field tdssc002.tdat. Used code and conversion table: TBtcedi485.

| | | | | | |
|------------|----------------------|--------------|-------------|--------------|----------|
| Position | 12 | Field format | n..6 | Field status | M |
| Field name | Schedule date | | | | |

Description: This field contains the date of the requirement which is called-off with this position. This date depends on the *Schedule date type* in record type 2.

Processing incoming

EDI subsystem: Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc602.date.

| | | | | | |
|------------|----------------------|--------------|-------------|--------------|----------|
| Position | 13 | Field format | n..4 | Field status | M |
| Field name | Schedule time | | | | |

Description: This field contains the time of the requirement which is called-off with this position. This date depends on the *Schedule date type* in record type 2.

Processing incoming

EDI subsystem: Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc602.time.

| | | | | | |
|------------|---------------------------------------|--------------|---------------|--------------|----------|
| Position | 14 | Field format | an..17 | Field status | C |
| Field name | Engineering change at customer | | | | |

Description: This field contains the identification number which the customer applied, for example, to a change of the construction for the same item number.

Processing incoming

EDI subsystem: Transmission of value from transmission file.

BAAN: Mapping to BAAN table field tdssc602.rev1

| | | | | | |
|------------|-----------------------------|--------------|------------|--------------|----------|
| Position | 15 | Field format | an7 | Field status | M |
| Field name | End of record marker | | | | |

Description: This field indicates the end of the record. It contains the fixed value 'SA3_END'.

Processing incoming

EDI subsystem: The field is filled with the fixed value 'SA3_END'.

BAAN: None

3 Glossary of terms and abbreviations

| | |
|-----------------------|--|
| ABRUF | Schedule |
| Appl | Application |
| ANSI | American National Standards Organization |
| BEM | Baan Electronic Message - abbreviated form of BEMIS used with the definition of the EDI organization |
| BEMIS | Baan Electronic Message Interchange System |
| Business partner (BP) | Customer or supplier |
| C | Conditional, that is, optional message |
| Defaults.edi | Export file detailing master EDI data |
| DELINS | Odette Delivery Instruction (Schedule) |
| Directory | Folder |
| EDI | Electronic Data Interchange; electronic exchange of documents in standard formats |
| EDIFACT | Electronic Data Exchange For Administration, Commerce and Transport. An ISO standard. |
| ELP | External Logistic partner |
| Evaluation expression | If statement in the conversion setup for outgoing messages |
| ISO | International Standards Organization |
| ISO 4217 | Code table |
| M | Mandatory (compulsory) message |
| MAIS | General Motor's interpretation of the subset of EDIFACT DELJIT Message |
| Messg | Message |
| Network address | Folder (directory) path on network |
| ODDC | Odette Code Table |
| ODDC25 | Odette Code Table 25 |
| ODETTE | European standard for electronic data exchange |
| Org | Organization, that is, system |
| SCH | Supply Chain |
| Semaphore | Method to show a status using files with zero length |

Glossary of terms and abbreviations

| | |
|-------------|---|
| Translation | Conversion of one data format to another, for example Baan in-house data format to ODETTE |
| VAT | Value Added Tax (tax on turnover; sales tax) |
| VDA | Standard used for electronic data exchange in Germany |
| X12 | Standard used for electronic data exchange in the United States |

Definition of BEMIS 1.0a Import and Export File for the Message Type Sequence Schedule

3-2

4 Appendix

Conversion of plant/final delivery point into delivery address

When transmitting the messages:

- VDA4905 (schedule incoming)
- VDA 4915 (shipping schedule incoming)
- VDA 4916 (sequence schedule incoming)

The features plant and final delivery point are expected respectively transmitted as unambiguous identification of the delivery point. BAAN uses an unambiguous delivery address without making any distinctions about final delivery points. Therefore, it is necessary for the above mentioned incoming messages to carry out a conversion of the combination plant/final delivery point into a certain delivery address in BAAN.

You need to enter the appropriate parameters into the following code- and conversion tables:

1 Address types (TBtcedi214)

| | |
|------------------------|--------------------------------------|
| Maintain address types | Company: 600 |
| <u>Organization</u> | : BEM BAAN Electr. Message Int. Sys. |
| <u>Code in Message</u> | Description |
| ZZ | Delivery address |
| | Choice: .. |

These parameters need to be entered once by organisation (BEM).

2 Address Code IDs (TBtcedi218)

| | | |
|--------------------------|---|------------------------------------|
| Maintain Address Code ID | | Company: 600 |
| <u>Organization</u> | : | BEM BAAN Electr. Message Int. Sys. |
| <u>Code in Message</u> | | Description |
| DP | | Delivery address |
| | | Choice: .. |

These parameters need to be entered once by organisation (BEM).

3 Delivery address codes by customer incoming (TBtcedi310)

| | | |
|---|---|------------------------------------|
| Maintain Conv. Of Del. Addr. Codes by Customer (in) | | Company: 600 |
| <u>Customer</u> | : | 000001 Volkswagen AG |
| <u>Organization</u> | : | BEM Verband der deutschen autoind. |
| <u>Address Code ID</u> | : | DP Delivery Address |
| <u>Code in Message</u> | | Code in Application |
| 01601QC | | 001 Werk Wolfsburg Tor1 |
| 01602QC | | 002 Werk Wolfsburg Tor2 |
| | | Choice: .. |

The conversion of the plant/final delivery point into the delivery address (code in application) is entered into this table referring to one customer. The parameters have to be entered for every plant/final delivery point-combination of one customer.

Sample file

Incoming file: **PABIN**

"SA1";"19970808000001";"#4916";"PAB-
IN";"BEMIS";";";"45678";970609;0600;"45677";"SA1_END"

"SA2";"19970808000001";"#4916";"21 N54/Q";"V-
ID400123";"DP";"ZZ";"Z";81;"21";"N54/Q";"Band1";"T";"TYP45";"Chas22222
2";100;"SA2_END"

"SA3";"19970808000001";"#4916";"21 N54/Q";"V-
ID400123";"5.597.400";"SA";90;"N54/Q";1;
970808;615;"Rev12.74";"SA3_END"

"SA3";"19970808000001";"#4916";"21 N54/Q";"V-
ID400123";"6.351.300";"SA";91;"N54/Q";970808;715;"Rev12.74";"SA3_END"

"SA2";"19970808000001";"#4916";"21 N54/Q";"V-
ID404123";"DP";"ZZ";"Z";82;"21";"N54/Q";"Band3";"T";"ZEI-
1212";"TYP05";"Chas444444";102;"SA2_END"

"SA3";"19970808000001";"#4916";"21 N54/Q";"V-
ID404123";"5.597.400";"SA";90;"N54/Q";970808;617;"Rev12.74";"SA3_END"

"SA3";"19970808000001";"#4916";"21 N54/Q";"V-
ID404123";"6.351.300";"SA";"ST";"91";"N54/Q";970808";717;"Rev12.74";"SA
3_END"

Definition of BEMIS 1.0a Import and Export File for the Message Type Sequence Schedule
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