BAAN IVb/c

Structure, master data, and configuration of BEMIS

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Baan Development B.V.
P.O.Box 143
3770 AC Barneveld
The Netherlands

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About this document

This documentation provides an overview over the BAAN Electronic Message Interchange System (BEMIS). It describes the positioning, structure and working method, as well as the requirements for the correct operation. Furthermore, the necessary data settings, which support the correct configuration of BEMIS are described in detail.

This document is intended for everyone who wants to use the advantages of the EDI functionality in connection with the BAAN IV Supply Chain solution, as well as for every consultant who implements such a solution.

This documentation does not contain a detailed or complete description of the whole EDI functionality in BAAN, but is limited to the aspects concerning BEMIS. For further details about EDI, see the EDI Users' Guide (U7041C US). Users' Guides are also available for each of the specific file types supported by BEMIS (for example, invoice, shipping schedule). Important fields are identified with both the English and German terms, to assist German-language speakers using this documentation.

After the Introduction, this Users' Guide is divided into seven chapters:

- Chapter 1 describes the structure of BEMIS and its functioning as interface between the EDI subsystem and the BAAN IV ERP-System. It contains definitions of the individual BEMIS components and their functions.
- Chapter 2 describes the master data settings which are necessary for the correct functioning of BEMIS.
- Chapter 3 describes the conversion settings which are necessary for the correct functioning of BEMIS.
- Chapter 4 describes the code and conversion tables which are necessary for the correct functioning of BEMIS.
- Chapter 5 contains information about the used evaluation expressions.
- Chapter 6 describes the import and export of the defaults.edi file.
- Chapter 7 describes the interface between the EDI subsystem and BAAN IV.

A glossary of terms and abbreviations is provided at the end of the book.

1 Introduction: concept and structure of BEMIS

Currently the VDA standard is used in Germany for electronic data interchange in the automobile industry. In contrast to that, the standard ODETTE is used in other European countries and ANSI X.12 is used in the United States. Each standard is distinguished from the others by different transmission formats and data interpretation.

The BAAN Electronic Message Interchange System (BEMIS) has been developed as fixed interface to the ‘outside world of EDI’ to ensure a consistent processing of the different standards from the side of the BAAN ERP-System.

Therefore, BEMIS provides the following advantages for BAAN:

- Independence from which EDI standard is used
- Process security when using another EDI standard
- Reduction of necessity for development by concentrating on one internal standard and for suppliers of EDI subsystems
- Possibility to estimate the necessary efforts for the acquisition to BAAN IV
- Reduction of development scope through defined interface

The diagram on the following page shows the areas, in which BEMIS can be used in the EDI communication chain. Between the EDI subsystems, messages are transmitted with a certain standard (for example, VDA, ODETTE) using remote data transmission. The communication between the EDI subsystem and BAAN IV is carried out via BEMIS.

BEMIS consists of several components to carry out its task in a flexible and correct way, as is shown in Figure 1.

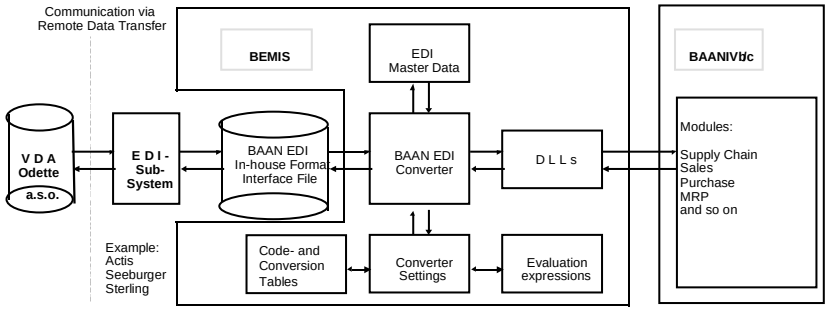


Figure 1, BEMIS components

The individual components have the following functions:

- BAAN EDI in-house **format interface** file
  The BAAN EDI in-house **format interface** file serves as interface to the EDI subsystem. A defined format is available for incoming and outgoing messages for every message type supported. For incoming messages, the EDI subsystem creates from the received file an interface file with the agreed format. For outgoing messages, BAAN IV creates from BAAN data an interface file with this format, which the EDI subsystem will process, convert into a transmission file, and transmit.
- BAAN EDI Converter
  - Outgoing: The EDI Converter creates from BAAN data (for example, schedules, purchase contracts) an interface file with the appropriate format for the message type required.
  - Incoming: The EDI Converter creates from the interface file the appropriate data (for example, schedules, invoices), in the appropriate format, which will then be processed in the BAAN modules.
- EDI Master Data
  The EDI Master Data provide fundamental information about the functionality and operational capacity of the system concerning the network used, messages supported and communication partners involved.

- Converter Settings
  The converter settings contain the instructions for the BAAN EDI Converter, including the format of the interface file by message type and transmission direction. These settings define for incoming messages how and where the information of the interface file will be stored in BAAN IV. For outgoing messages, they define how and which BAAN data will be written to the interface file.
- Code Tables and Converter Tables
  The code and conversion tables define which data have to be converted by the EDI Converter for processing. That way, customer or supplier data (for example, item numbers, item codes, quantity units) can be converted to BAAN internal data and the other way round. The converter settings determine when these settings are valid.
- Evaluation expressions
  The evaluation expressions define the conditions under which the EDI Converter carries out certain actions. The converter settings determine when these settings are valid.
- Dynamic Link Libraries (DLLs)
  Dynamic Link Libraries, which the EDI Converter uses at lead time to carry out certain actions, are available for every supported message type, by transmission direction. They can be adapted to the application as required.

2 Master data in BEMIS

The following parameters and master data have to be defined, entered and possibly maintained to be able to use the BAAN Electronic Message Interchange System and to ensure its functioning:

- Organizations
- Networks
- Messages
- EDI Business Partner
- Code Tables and Conversion Tables

The following sections detail the steps necessary, and illustrates them with examples. The data of the examples refer to the BAAN internal EDI subsystem BEMIS. This system has been developed to become independent of the various EDI organizations/standards, which are currently used in the automobile industry. When you set up your system, you should use the values given in the examples, or only make changes if you are certain what the effect will be.

Fundamental EDI parameters

This session defines the fundamental parameters for the BAAN EDI module.

```
tcedi0100m000           first               single-occ (1)     Form 1-2 >
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain EDI Parameters                                  Company: 500   │
│──────────────────────────────────────────────────────────────────────────│
│                                                                          │
│  EDI Implemented                   : Yes                                 │
│  Standard Path                     : /auto3/baanIVb/edi/bemis/           │
│  Make Use of Tracefil              : Yes                                 │
│  Name of Tracefile                 : trace                               │
│  Our Identification                : F500                                │
│  Store All Received Messages       : Yes                                 │
│  Store All Sent Messages           : Yes                                 │
│                                                                          │
│  Reference Number                                                        │
│  Fixed Part                        : F500-                               │
│  Date Format                       : Without Century (YYMMDD)            │
│  First Free Number                 :          1                          │
│  Action on First Message on New Date : Start with 1                      │
│                                                                          │
│  Suppress Blank Text Line on Generation : Yes                            │
│  Suppress Blank Generated Text Fields   : Yes                            │
│                                                                          │
│  Interchange Message                    :                                │
│  Interchange Header Conversion Setup    :                                │
│  Message Overhead Conversion Setup      :                                │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

Some of them can be redefined in other sessions.

EDI Implemented	This field has to be set to 'Yes' and the BAAN EDI module has to be installed.
Standard Path	This Unix directory, where the messages and control files will be stored, is used for the communication between BEMIS and the EDI-subsystem.
Make use of Tracefile	When processing messages, all actions will be recorded in a sub-directory ('Tracefile') of the 'Standard Path'.
Our Identification	This field contains the network identification of the transmitter, which is enclosed in outgoing messages. (The encoded number of the company from which the messages were generated is usually enclosed as well).
Reference Number	The message reference for outgoing messages will be generated on the basis of the subsequent 4 fields. The message reference consists of 14 characters and contains the fixed part/date/serial number.
Fixed Part	This is the fixed part of the message reference.
Date Format	Different date formats (for example, with or without century) can be selected in this field. The selected format can then be used for the date in the reference number.
First free number	The serial number will be increased from this number.
Action on First Message on New Date	For every new date the serial number will be set back to 1.

Organization

In BEMIS, the organizations are used as common standard for the data transmission. These standards are for example VDA in Germany (automobile industry) or ODETTE in Europe.

BEMIS itself does not use these standards but a BAAN internal organization/standard BEM, which is able to support VDA and ODETTE messages.

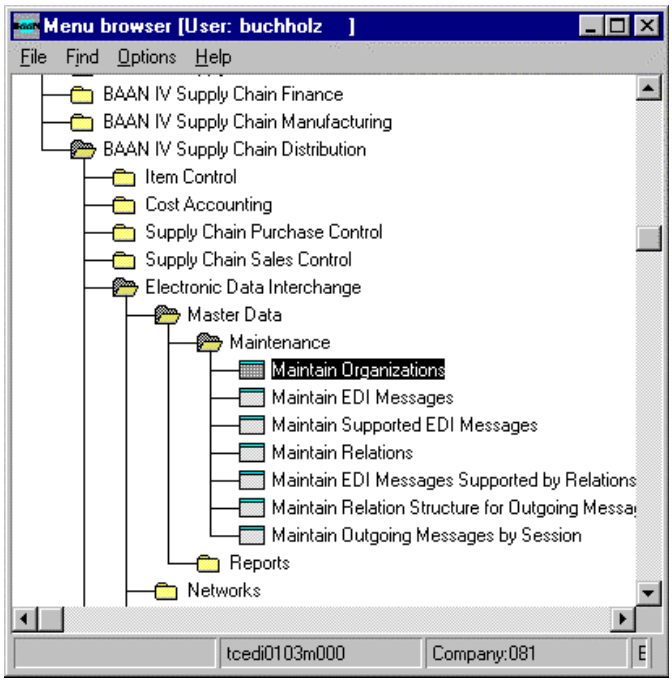
The organization BEM has to be entered in the BAAN session tcedi0103m000.

Changing the Date Format

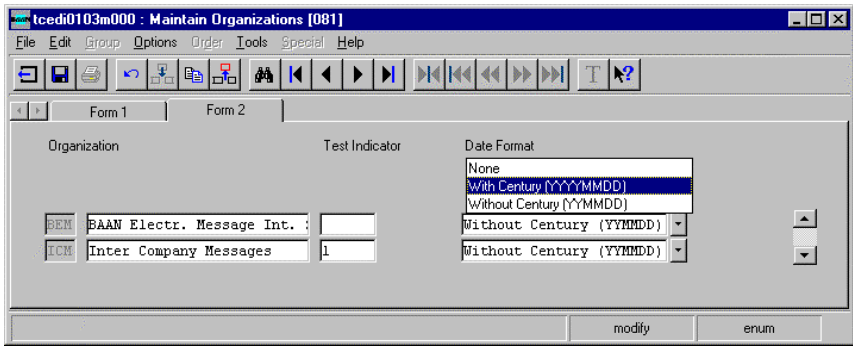
For the BAAN Versions b and c2/3 we have defined a date format using up to 6 numerical digits. Reading this definition, you will find out that the date format has been changed to 8 digits at maximum. With the BAAN Version BAAN IVC4 the delivered BEMIS default file the defaults.edi will be different in this point (in comparison to the versions delivered before). In BAAN EDI there is one global Parameter in order to send out date information including the two digits for the century.

The enclosed screen shots will show you where you will find the responsible parameter.

You have to choose the following menu option:



After you called the session tcedi0103m000 you will see that the entry for the dateformat on form two has been changed to “With Century (YYYYMMDD).



PLEASE NOTICE: If you use this option above the date format of every exported message will be changed to 8 digits! This means that the partner system (the translator software) has to able to translate each outgoing message comming with the changed date format!

Networks

```
tcedi0103m000                                    multi-occ (2)     Form 1-2 >
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Organizations                                  Company: 500    │
│──────────────────────────────────────────────────────────────────────────│
│                                                                          │
│  Organization                    Code in   Derived -    Association   Root-
│                                  Message                Assigned      Org.
│                                                                          │
│  BEM  BAAN ELECT. MESSAGE INTERCH.   BEMIS     No                        │
│                                                                          │
│                                                                          │
│                                                                          │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

```
tcedi0103m000                                   multi-occ (2)    < Form 2-2
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Organizations                                  Company: 500    │
│──────────────────────────────────────────────────────────────────────────│
│                                                                          │
│  Organization                    Test Indicator   Date Format            │
│                                                                          │
│                                                                          │
│  BEM  BAAN ELECT. MESSAGE INTERCH.                Without Century (YYMMDD)
│                                                                          │
│                                                                          │
│                                                                          │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

The fundamental communication parameters (for example, stacker directories, structure of the message files, date formats, separators, and special characters within the message files) are defined in the network settings.

The network used for the communication has to be entered in the BAAN session tcedi0120m000. It is advisable to define a network for every message type.

```
tcedi0120m000                                  single-occ (1)      Form 1-2 >
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Networks                                          Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Network              : ABRUF                                            │
│                                                                          │
│  Description          : ABRUF-Communication                              │
│  Path                 : /auto3/baanIVb/edi/bemis/schedule/               │
│  Our Identification   : F500                                             │
│                                                                          │
│  Multicompany         : No                                               │
│  Start Read Batch                                                        │
│  After Generating     : No                                               │
│                                                                          │
│  General Reference    : No                                               │
│  Fixed Part           : F500                                             │
│  Date Format          : Without Century (YYMMDD)                         │
│  First Free Number    :          3                                       │
│  Action on New Date   : Start with 1                                     │
│                                                                          │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

Path	This Unix directory, where the messages and control files will be stored, is used for the communication between BEMIS and the EDI-subsystem.
Our Identification	This field contains the network identification of the transmitter, which is enclosed in outgoing messages. (The encoded number of the company from which the messages were generated is usually enclosed as well).
General Reference	The message reference for outgoing messages will be generated on the basis of the subsequent 4 fields. The message reference consists of 14 characters and contains the fixed part/date/serial number.
Fixed Part	The BAAN company number has to be entered into this field as fixed part of the general reference.
First Free Number	The serial number will be increased from this number.
Action on New Date	For every new date the serial number will be set back to 1

Example: On the basis of the above information, the message reference number for outgoing messages will be: F5009705200003. The first message reference number for the next day would be: F5009705210001.

The important information about the record format is entered in the second form:

```
tcedi0120m000                                  single-occ (1)    < Form 2-2
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain networks                                          Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Network              : ABRUF   ABRUF -Communication                     │
│                                                                          │
│  Record Separator     : LF                                               │
│  Field type           : Delimited                                        │
│                                                                          │
│  Separator Sign       : ;              Sign Around Strings   : "          │
│  Replacement Sign     :                Replacement Sign      : ’          │
│                                                                          │
│  Leading Zeroes       : No                                               │
│                                                                          │
│  Suppress Standard    : No                                               │
│  Communication                                                           │
│                                                                          │
│  Generate Outgoing    : Yes                                              │
│  Messages before                                                         │
│  Connection                                                              │
│                                                                Choice: .  │
└──────────────────────────────────────────────────────────────────────────┘
```

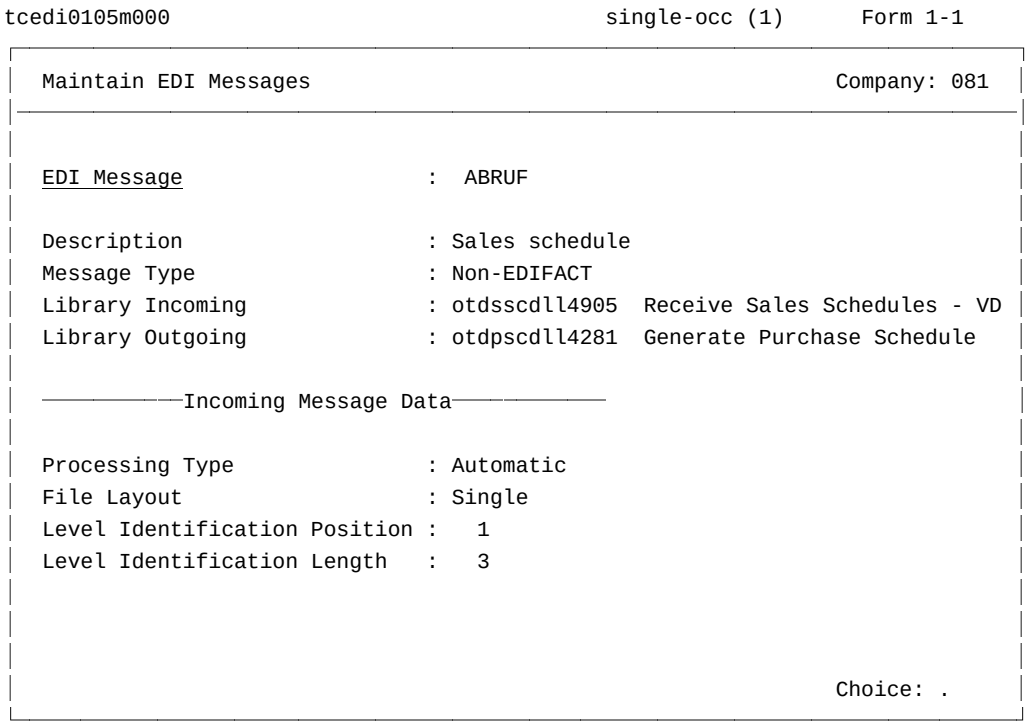
Record Separator	**LF (LineFeed) indicates the end of a record.**
Field type	The individual fields in the records do not consist of a certain number of characters, but are separated by separators.
Separator Sign	The fields are separated by a semicolon (;)
Sign Around Strings	Strings have to be put in inverted commas (“ “).
Leading Zeroes	Fields are not to be filled up with leading zeroes, as the field type is delimited.
Suppress Standard Communication	The standard communication procedure between BEMIS and the external EDI subsystem is activated.

Examples:	....;“ABCDEFG“;.....	string ABCDEFG
	....;““;.....	empty string
	....;“ “;.....	string with one blank
	....;199;.....	number 199
	....;“199“;....	string 199
	....;;.....	Field will not be read or filled.
	Date fields will be transmitted as strings.	

Messages

You must define the messages processed by BEMIS in the BAAN session tcedi0105m000.

In that session you can also define message-specific sessions (DLLs), which have to be executed to process such a message. The general message ABRUF must have been defined when processing schedules in the BAAN EDI standard in-house format.

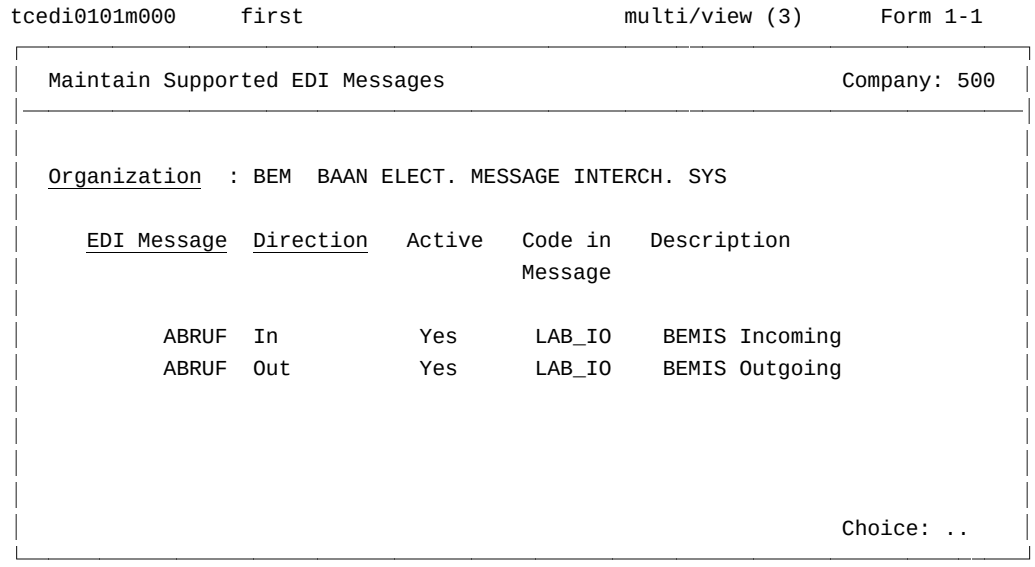


Library for incoming/outgoing messages	The sessions used for the processing of messages will be recorded in this field. They are adapted to BEMIS and every message type.
Processing type (in)	The system checks incoming EDI messages and processes the messages without error.
File Layout	All record types of one message are transmitted in one file (single).
Level Identification Position	The first part of the record is the identification of the record type.
Level Identification Length	The identification of the record type consists of three characters
	In BEMIS the identification of the record type is by default “SAx“, with x = 1,2,3,... representing the level of the record type (1 = highest level).

Messages by organization

Following the definition of the organization (that is, system) and the messages, you define which messages are supported, in which direction they are supported, and which organization they are supported for.

You can also use this session to determine the code for the message in the message file (field code in message).



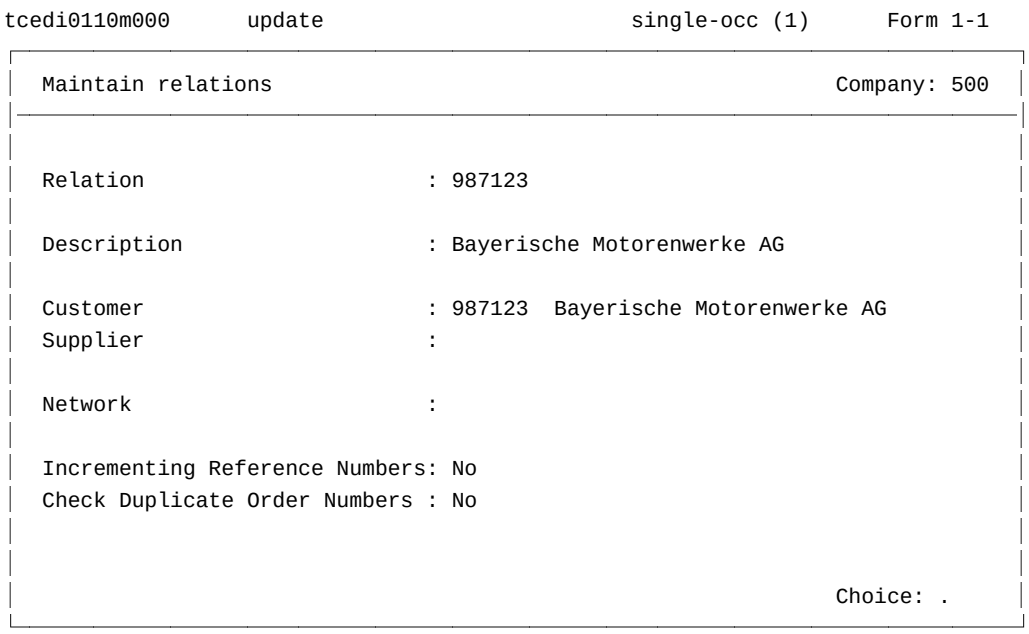
Active	The corresponding message is activated in this organization. The processing/generation will be carried out when this field is set to ‘Yes’.
Code in Message	This code identifies the message type in the message file.

EDI relations

The EDI relation is the business partner with which you exchange messages by means of the EDI module. It can be a customer or supplier.

In the BAAN session tcedi0110m000, the EDI relations will be maintained and assigned to the BAAN internal supplier or customer by entering the corresponding customer/supplier number.

In this way a 1:1 relationship between the EDI relation and the BAAN supplier/customer is established.

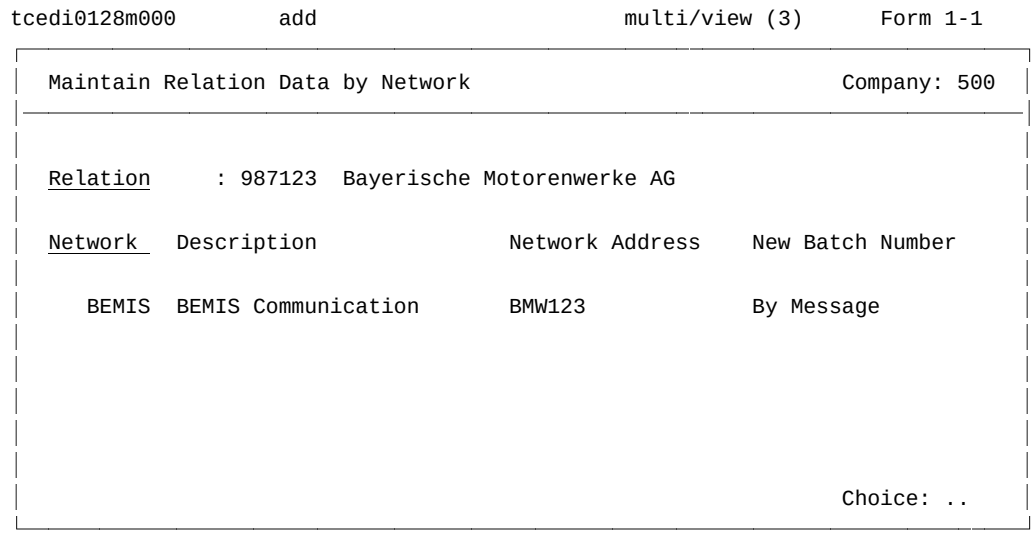


NOTE For a better overview and a clear assignment you should use the alphanumerical supplier or customer code consisting of 6 characters as code for the business partner.

Business partner by network

Following the definition of the business partner, you need to assign him to a network in the BAAN session tcedi0128m000 for the communication.

In this session you need to enter the network address of the business partner, which will be used in the message file.



Network Address	Incoming messages contain this network address, which is used to determine the relationship with the corresponding customer number in BAAN. For outgoing messages (for example, schedules) use the number of the relationship here.
New Batch Number	A new message reference number is applied to for every new message. This number is used to identify the records of one message.

NOTE Network Address

- BAAN creates by business partner (customer or supplier) and message type one network address, which is identified by identification and path. This network address has to be unique.
- The EDI subsystem has to store an incoming message file from the business partner with the agreed file name under the corresponding path of the business partner and message type. The identification of the network address has to be written to the record type SA1 in position 3.
- For the identification of contracts, you can determine in BAAN additional business partners, for example the ship-to business partner, on the basis of the message contents (plant/final delivery location).

  The data of the networks and business partner identifications have to be settled amongst the EDI subsystem and BAAN on the basis of the business partner relationship.

NOTE Network address not defined in incoming message

It is possible that the network address is not defined. In this case the transmitter sends messages with his identification to several different business partners. Usually it is possible to determine a clear network address when converting the incoming message from the transmitter/receiver information and/or from the combination of message-specific information already before the conversion of the BEMIS message standard.

With the appropriate configuration of BEMIS it is also possible to convert the ship-from business partner into the target business partner by using the code and conversion table below with regard to a corresponding significant field.

```
tcedi3128m000       last                      multi/group (3)     Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conversion of Third Party Codes by Relation (in)     Company: 081  │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Relation            : 005522  OPEL                                      │
│  Organization        :    BEM  BAAN Electr. Message Int. Sys.             │
│  Address Code ID     : DP      Ship-from BP address                      │
│                                                                          │
│  Code in Message       Third Party Relation  Description                 │
│                                                                          │
│   001                             005523    Opel Rüsselsheim             │
│   002                             005524    Opel Bochum                  │
│                                                                          │
│                                                                          │
│                                                                          │
│                                                                          │
│                                                          Choice: .       │
└──────────────────────────────────────────────────────────────────────────┘
```

To activate the conversion table, you must maintain the corresponding BEMIS table. Copy the existing standard conversion.

Example: Incoming EDI message **ABRUF**:

```
tcedi5111s000                                multi/group (3)    Form 1-3 >

Maintain Definitions of Conversion Setups


Organization :    BEM  BAAN Electr. Message Int. Sys. Direction        : In
EDI Message  :  ABRUF  Lieferabrufe                  Field Type       : Delimited
Destination  :                                       Conversion Setup : ABRUF1  Stand 26.9.97 Version 1.0.a


Field          Seq Seq. Level Start Index Length Next Sequence  Write  Conv. Field     Action on    Code Table
               No.             Pos.               Rec. Iter  Key Record      Action    Conv err

tdssc002.cuno   1    5     2   3->4    0      0  Yes     0    0         Yes   Update     Give Error Mess
tdssc002.cdel   1   10     2     4     0      0          0    0         Yes   Update     Give Error Mess
tdssc002.item   1   15     2     5     0      0          0    0         Yes   Update     Give Error Mess
"Q-ID:Adr.art"  1   20     2     6     0      0          0    0               Update
"Q-ID:Lief.adr" 1   25     2     7     0      0          0    0               Update
"Q-ID:Artikel"  1   30     2     8     0      0          0    0               Update
tdssc002.plnt   1   35     2     9     0      0          0    0               Update
tdssc002.scnn   1   40     2    10     0      0          0    0               Update
tdssc002.isdt   1   45     2    11     0      0          0    0               Update
tdssc002.scno   1   50     2    12     0      0          0    0               Update

Choice: .
```

```
tcedi5111s000                                multi/group (3)  < Form 2-3 >

Maintain Definitions of Conversion Setups


Organization :  BEM  BAAN Electr. Message Int. Sys.  Direction       : In

EDI Message  :  ABRUF  Lieferabrufe                  Field Type      : Delimited

Destination  :                                       Conversion Setup : ABRUF1  Stand 26.9.97 Version 1.0.a


Field           Value if empty field Description on                    Qualifier 1
Qualifier 2
Text Field           Pos Length No Conversion Default    Pos Length No Conversion Default

tdssc002.cuno                                             0->6    0               ->DP         0      0

tdssc002.cdel                                              6      0                DP          7      0   ZZ

tdssc002.item                                              8      0                SA          0      0

"Q-ID:Adr.art"                                             0      0                            0      0

"Q-ID:Lief.adr"                                            0      0                            0      0

"Q-ID:Artikel"                                             0      0                            0      0

tdssc002.plnt                                              0      0                            0      0

tdssc002.scnn                                              0      0                            0      0

tdssc002.isdt                                              0      0                            0      0

tdssc002.scno                                              0      0                            0      0

Choice: .
```

Messages by business partner

In the session tcedi0111m000 you define which business partner and which kind of message is linked to a particular.

You also have to enter the conversion settings to be used for the creation or processing of the message with the BAAN internal EDI converter.

These conversion settings inform BEMIS about the format of the message files as well as about possibly necessary conversions of individual field contents of these files. The definition and functioning of the conversion settings will be explained in the following chapter.

NOTE The below defined settings for incoming schedules have to be entered by message.

```
tcedi0111m000                                  single-occ (1)     Form 1-2 >
┌──────────────────────────────────────────────────────────────────────────┐
│ Maintain EDI Messages Supported by Relation                Company: 500  │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│ Relation            : 987123  Bayerische Motorenwerke AG                 │
│ Organization        :    BEMIS                                           │
│ EDI Message         :  ABRUF  Lieferabrufe                               │
│ Direction           : In                                                 │
│ Order Type          :                                                    │
│                                                                          │
│ Type of Number      : SCH Sales Schedule                                 │
│ Network             : BEMIS   BEMIS-Communication                        │
│ Conversion Setup    : ABRUF1  Edition 26.9.1997  Version  1.0a           │
│ Person Responsible  : bsp           General_User                         │
│ Block               : No                                                 │
│ Print               : No                                                 │
│                                                                          │
│ Incoming Message                                                         │
│ Processing Type     : Automatic                                          │
│                                                                          │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

Type of Number	For incoming messages, the number will be determined on the basis of the indicated type of number and the series on form 2-2 (next page).
Print	Outgoing EDI messages will usually be created by a print session. If No is entered in this field, the messages are created but not printed.
Incoming Message Processing Type	The system automatically checks and processes incoming messages while reading the message file.

```
tcedi0111m000                                  single-occ (1)     Form 2-2 >
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain EDI Messages Supported by Relations                Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Relation            : 987123  Bayerische Motorenwerke AG                │
│  Organization        :    BEMIS                                          │
│  EDI Message         :  ABRUF  Lieferabrufe                              │
│  Direction           : In                                                │
│  Order Type          :                                                   │
│                                                                          │
│  Character Conversion:                                                   │
│                                                                          │
│  SLS Order Type      :                                                   │
│  Order Procedure     :                                                   │
│  Series              :                                                   │
│                                                                          │
│  Item Code System    :                                                   │
│                                                                          │
│                                                                          │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

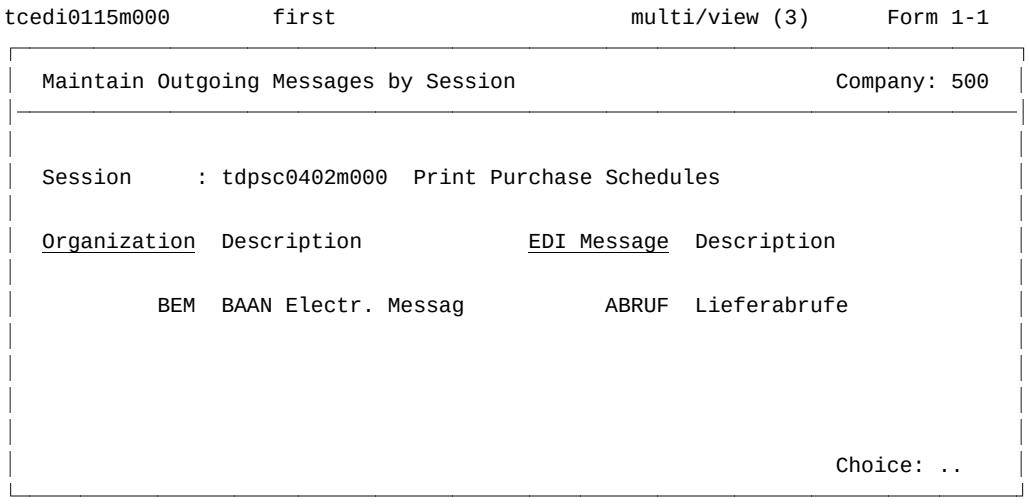
Generation of outgoing messages

The generation of outgoing messages in BAAN IV is usually prepared with print sessions. After having started the print job, a message is prepared for the EDI module. The reference number indicating the outgoing message which has to be created will be stored in the table tcedi700. Based upon this reference, BEMIS automatically or interactively creates the actual message. These sessions are already programmed in the appropriate way. For example for:

- Message Session
- Schedule tdpsc0402m000 Print Purchase Schedules
- Delivery Schedule tdpsc0429m000 Print Delivery Schedules

The BAAN session tcedi0115m000 Maintain outgoing messages by session defines which message has to be prepared for which organization in the appropriate print session.

The corresponding organization and message have to be entered to prepare the generation of schedule messages via the session tdpsc0402m000 ‘Print Purchase Schedules’. These entries are necessary for the generation of outgoing schedules.



3 Conversion settings

General information

Receiving a message file from the business partner, the EDI subsystem creates on the basis of the incoming standard format (for example, VDA, ODETTE) a message file in accordance with the BAAN EDI Message in-house File Format. This file will be processed in BEMIS and the for this necessary actions will be executed in BAAN.

Sending an EDI message to a business partner, BEMIS creates from the BAAN data a message file in the BAAN EDI Message in-house Format, corresponding to the message type. This file will be processed in the EDI subsystem, converted to a file with a standard format (for example, VDA, ODETTE) and sent.

All these information, which BEMIS requires for the processing (incoming) or generation (outgoing) of the BEMIS message file, are defined in the conversion settings of the BAAN EDI module by message type and message direction.

The name and general information about various record types as well as the identification, number and position of their key fields are recorded in the BAAN session tcedi5112m000.

The detailed structure of the file in connection with the links between a message file field and the corresponding BAAN table field is stored in the BAAN sessions tcedi5110m000 and tcedi5110s000. Furthermore, you will find in these sessions information about linked code and conversion tables or evaluation expressions (outgoing), which will be used for the generation or processing of the BEMIS message file.

WARNING Changes of the default settings given in the following chapter will lead to malfunctioning of BEMIS.

4 Code tables and conversion tables

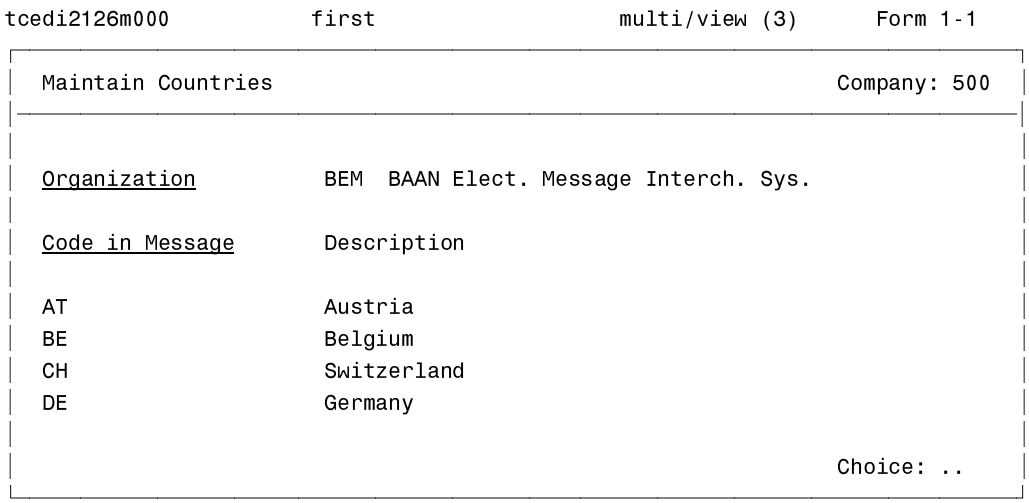
General information

In BEMIS the code tables and conversion tables increase the flexibility of the data interchange between BAAN and the business partners.

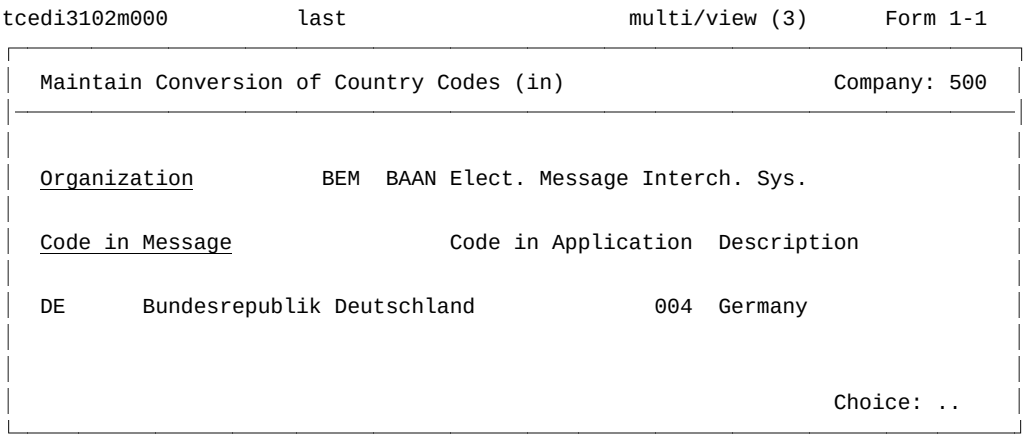
There are two possible ways to change the contents of certain codes when generating (outgoing) or processing (incoming) messages:

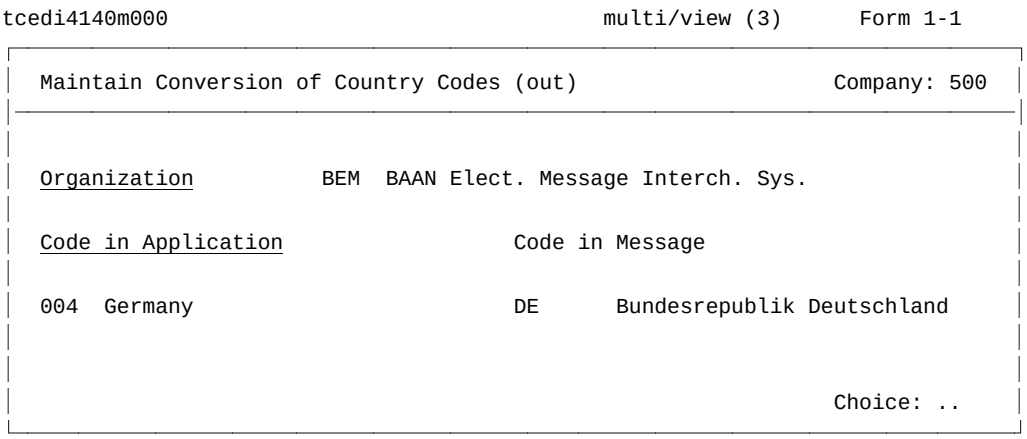
- Firstly, the codes (for example, country or currency codes) can be converted using conversion tables. This procedure will be explained for country codes.

  The code table **Countries**, which contains the allowed values for the country codes, will be maintained by organization. The codes in this table refer to ISO4217.



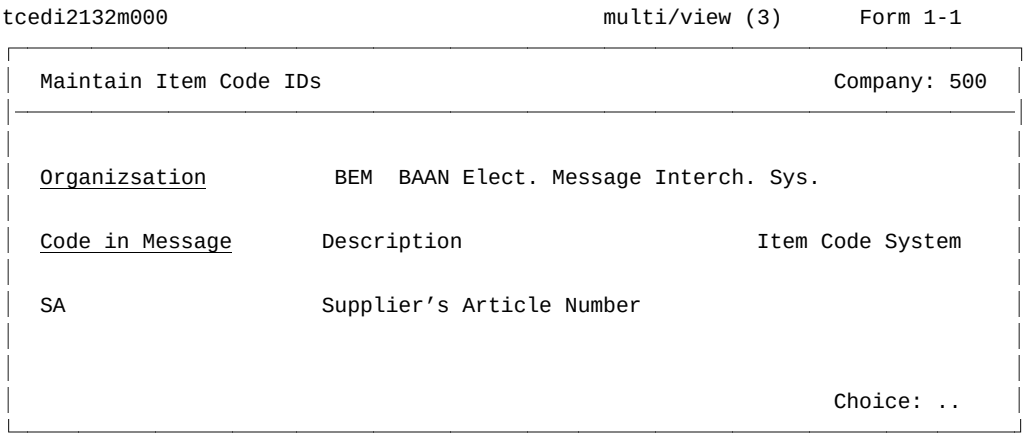
A conversion table, which defines the country code to be converted, is available for both message directions (incoming/outgoing). The codes are agreed to by the EDI subsystem supplier.





- Secondly, you can use code tables for Code IDs. These code IDs are codes in connection with date for other codes. For example, the address code ID = ‘DP’ means that addresses for address code with this ID are delivery addresses. Using these address code IDs, they have to be included in the corresponding message together with the address code. The item code ID will be used in the example below.

  All item numbers with the item code ID ‘SA’ refer to supplier’s item numbers.



For item group IDs it is possible to define conversion tables by business partner and organization. In the following example, the item number of the message ‘037 103 4475 G’ will be converted into the BAAN item number ‘8383900’ for the corresponding supplier, when the item code ID ‘SA’ is included in the message.

```
tcedi3106m000         first                      multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conversion of Item Codes by Relation (in)          Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Relation            : 007025  Bayerische Motorenwerke AG                │
│  Organization        : BEM  BAAN Elect. Message Interch. Sys.            │
│  Item Code ID        : SA      Supplier's Article Number                 │
│                                                                          │
│Code in Message                   Proj.    Code in Appl.                  │
│                                                                          │
│037 103 475 G                             8383900          Zylinderkopfha │
│1 092 868                                  5597300          Längsträger, r │
│1 161 962                                  8383000          ZB Lagerbock B │
│1 714 613                                  8395800          Ölpumpendeckel │
│A 601 200 17 73                            8407600          Spannhebel     │
│E39/M50 1 092 867                          5597400          Längsträger, l │
│                                                                          │
│                                                                          │
│                                                          Choice: .       │
└──────────────────────────────────────────────────────────────────────────┘
```

The BEMIS converter settings define, if these tables will be used for the generation or processing of the message, by setting the conversion option to Yes when mapping the corresponding BAAN field. The following chapter provides a detailed description of the converter settings.

The settings of the code and conversion tables of course depend on the requisitions of the business partners and the capacity of the used EDI subsystem. Therefore, on the next pages only the default settings for the correct processing of the BEMIS in-house data formats will be described.

The following conversions will be described:

- Terms of delivery (outgoing)
- Countries (outgoing)
- Units (incoming/outgoing)
- Item groups (Item Codes) (incoming/outgoing)
- Address types (outgoing)
- Address code IDs (incoming/outgoing)
- Order types (outgoing)
- Purchase contract Codes (incoming)
- Requirement types (incoming/outgoing)
- Requirement frequencies (incoming/outgoing)
- Release date (incoming/outgoing)

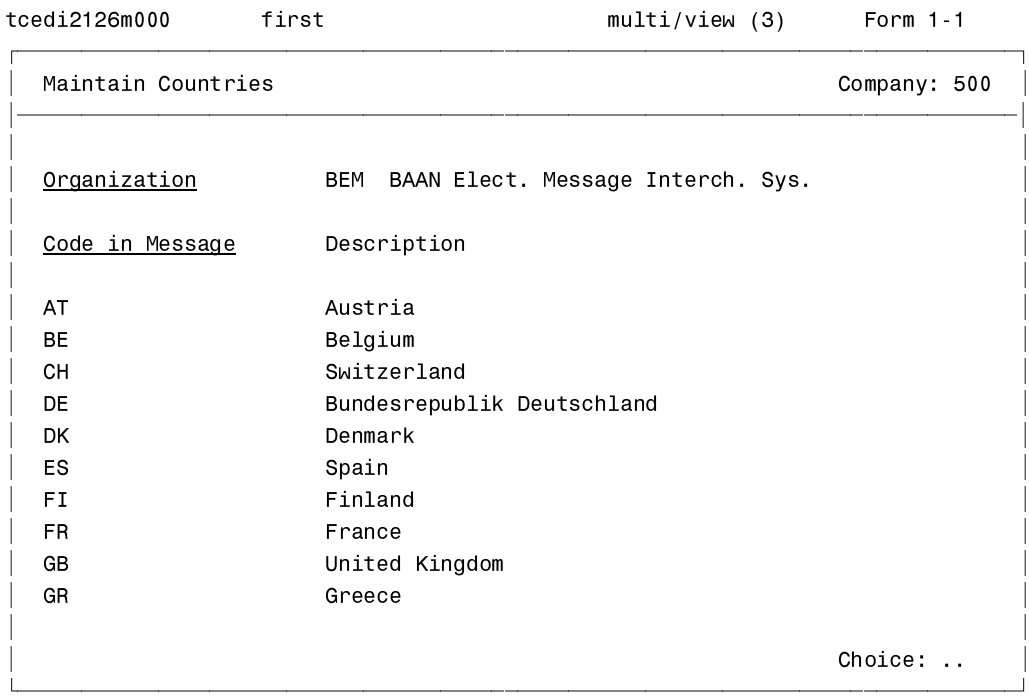
WARNING Changes of the following default settings will lead to malfunctioning of BEMIS.

Terms of Delivery (outgoing)

```
tcedi2128m000                                  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Terms of Delivery                                Company: 500  │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Organization          BEM  BAAN Elect. Message Interch. Sys.            │
│                                                                          │
│  Code in Message       Description                                       │
│                                                                          │
│  01                    unfrei                                            │
│  02                    frei Bestimmungsort                               │
│  03                    frei Haus                                         │
│  04                    frei deutsche Grenze                              │
│  05                    frei Empfangsspediteur                            │
│  99                    Sonderfrankatur(indv.Vereinb.)                    │
│                                                                          │
│                                                                          │
│                                                           Choice: ..     │
└──────────────────────────────────────────────────────────────────────────┘
```

```
tcedi4130m000                                  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conversion of Terms of Delivery Codes (out)       Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Organization          BEM  BAAN Elect. Message Interch. Sys.            │
│                                                                          │
│  Code in Application                  Code in Message                    │
│                                                                          │
│   01  ab Werk, auschl. Verp. u. T.V.   01      unfrei                    │
│   02  frei Haus, ausschl. Verp.u.TV    03      frei Haus                 │
│   03  frei Werk,einschl.Verp.a.T.V.    02      frei Bestimmungsort       │
│   04  f.o.B.                           05      frei Empfangsspediteur    │
│   07  frei Empfangsstation             02      frei Bestimmungsort       │
│   08  frei Anschlußgleis               02      frei Bestimmungsort       │
│   09  frei deutsche Grenze             04      frei deutsche Grenze      │
│                                                                          │
│                                                                          │
│                                                           Choice: ..     │
└──────────────────────────────────────────────────────────────────────────┘
```

Countries (outgoing)



NOTE The codes in this table refer to ISO4217.

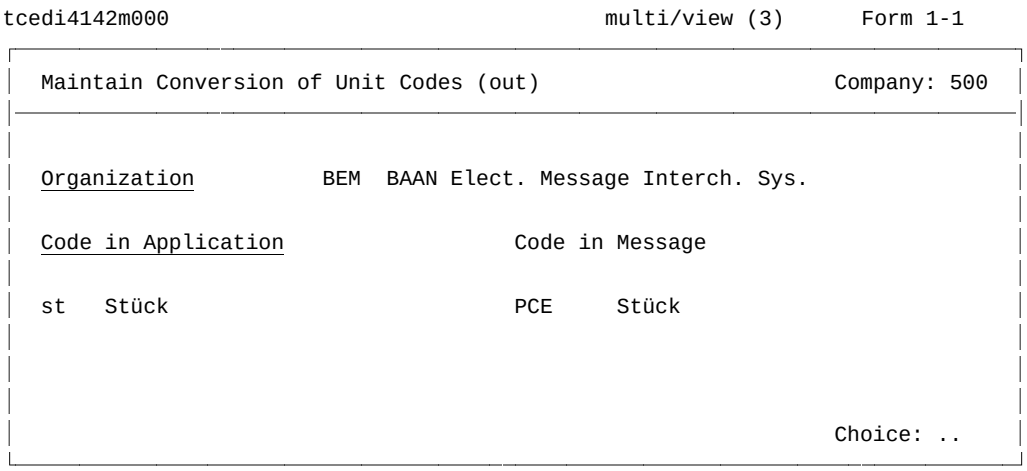
```
tcedi4140m000                                  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conversion of Country Codes (out)                 Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Organization          BEM  BAAN Elect. Message Interch. Sys.            │
│                                                                          │
│  Code in Application                Code in Message                      │
│                                                                          │
│  004  Germany                       DE      Bundesrepublik Deutschland   │
│                                                                          │
│                                                                          │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

Units (incoming/outgoing)

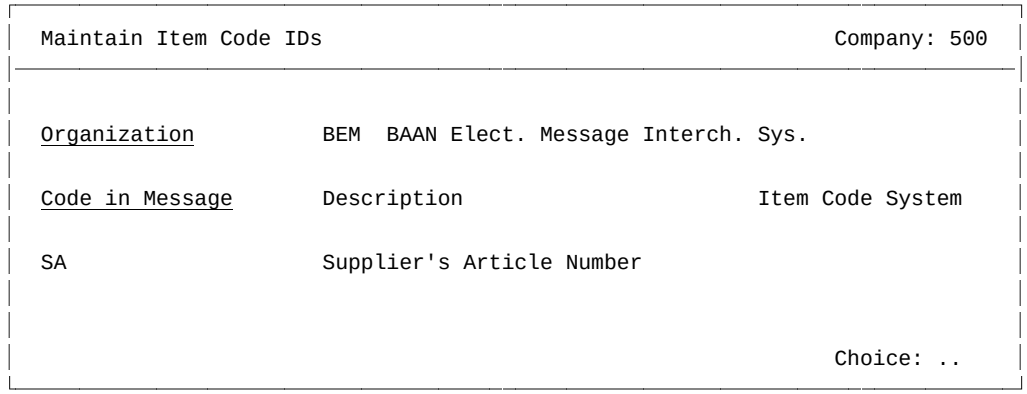
```
tcedi2130m000          first                multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Units                                             Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Organisation          BEM  BAAN Elect. Message Interch. Sys.            │
│                                                                          │
│  Code in Message       Description                                       │
│                                                                          │
│  KGM                   Kilogramm                                         │
│  KMT                   Kilometer                                         │
│  CMQ                   Liter                                             │
│  MTR                   Meter                                             │
│  MTK                   Quadratmeter                                      │
│  MTQ                   Kubikmeter                                        │
│  PCE                   Stück                                             │
│  TON                   Tonne                                             │
│                                                                          │
│                                                                          │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

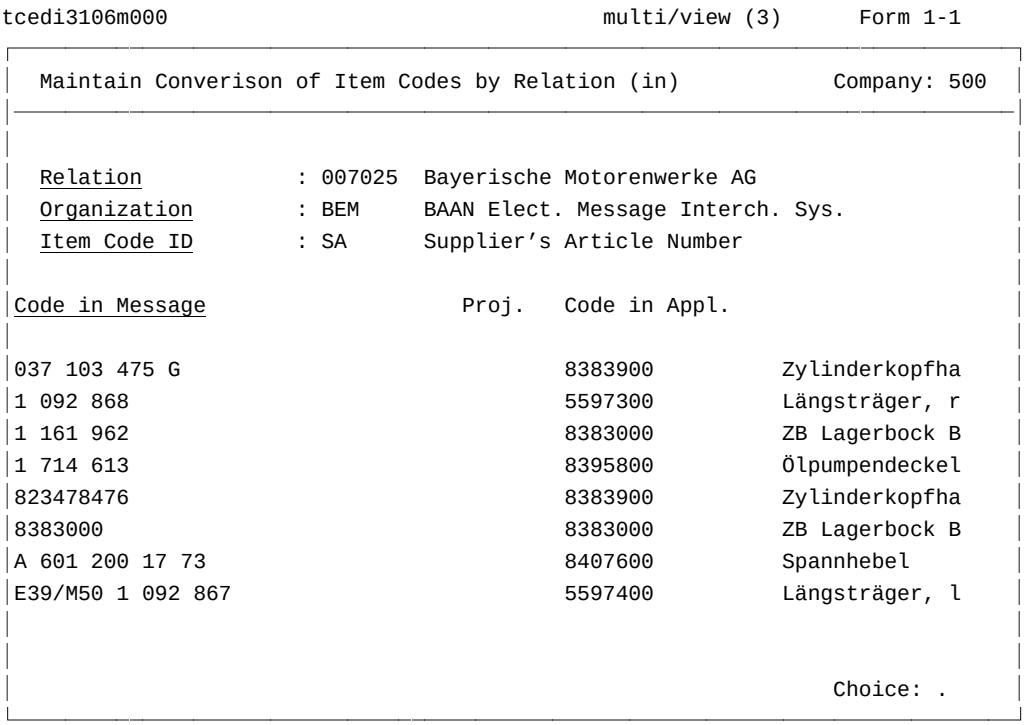
The in the session above recorded quantity units are taken from the standard ODETTE ODDC25. They are agreed to the EDI subsystem supplier. The conversion into the units being used in BAAN will be carried out in the following session.

```
tcedi3104m000                                  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conversion of Unit Codes (in)                    Company: 500  │
│──────────────────────────────────────────────────────────────────────────│
│                                                                          │
│  Organization          BEM  BAAN Elect. Message Interch. Sys.            │
│                                                                          │
│  Code in Message                     Code in Application                 │
│                                                                          │
│  KGM    Kilogramm                      kg   Kilogramm                    │
│  MTR    Meter                          m    Meter                        │
│  PCE    Stück                          st   Stück                        │
│                                                                          │
│                                                                          │
│                                                                          │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

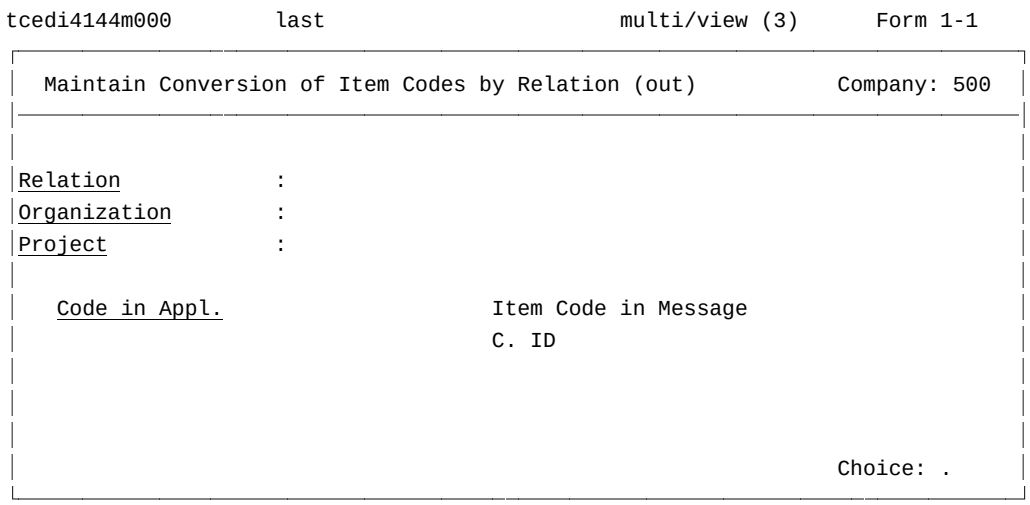


Item Groups (Item Codes) (incoming/outgoing)





```
tcedi3106m000                                  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Converison of Item Codes by Relation (in)          Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Relation           : 007025  Bayerische Motorenwerke AG                 │
│  Organization       : BEM     BAAN Elect. Message Interch. Sys.          │
│  Item Code ID       : SA      Supplier's Article Number                  │
│                                                                          │
│Code in Message                  Proj.   Code in Appl.                    │
│                                                                          │
│037 103 475 G                           8383900          Zylinderkopfha  │
│1 092 868                               5597300          Längsträger, r  │
│1 161 962                               8383000          ZB Lagerbock B  │
│1 714 613                               8395800          Ölpumpendeckel  │
│823478476                               8383900          Zylinderkopfha  │
│8383000                                 8383000          ZB Lagerbock B  │
│A 601 200 17 73                         8407600          Spannhebel      │
│E39/M50 1 092 867                       5597400          Längsträger, l  │
│                                                                          │
│                                                                          │
│                                                          Choice: .       │
└──────────────────────────────────────────────────────────────────────────┘
```



NOTE If conversions need to be carried out as well for outgoing messages, they will have to be entered in the session above.

Address types (outgoing)

```
tcedi2124m000                                  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Address Types                                   Company: 500   │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Organization          BEM  BAAN Elect. Message Interch. Sys.            │
│                                                                          │
│  Code in Message       Description                                       │
│                                                                          │
│  ZZ                    Delivery Address                                  │
│                                                                          │
│                                                                          │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

```
tcedi4134m000            last                  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conversion of Address Types (out)               Company: 500   │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Organization          BEM  BAAN Elect. Message Interch. Sys.            │
│                                                                          │
│  Code in Application   Code in Message                                   │
│                                                                          │
│                                                                          │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

NOTE If conversions need to be carried out as well for outgoing messages, they will have to be entered in the session above.

Address Code IDs (incoming/outgoing)

```
tcedi2118m000      first                        multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Address Code IDs                                  Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Organization          BEM  BAAN Elect. Message Interch. Sys.            │
│                                                                          │
│  Code in Message       Description                                       │
│                                                                          │
│  DP                    Delivery Address                                  │
│                                                                          │
│                                                                          │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

```
tcedi3110m000       first                        multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conv. of Delivery Address Codes by Customer (in)  Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Customer            : 007025  Bayerische Motorenwerke AG                │
│  Organization        : BEM     BAAN Elect. Message Interch. Sys.         │
│  Address Code ID     : DP      Delivery Address                          │
│                                                                          │
│  Code in Message       Code in Application                               │
│                                                                          │
│  020                                   002  Werk Dingolfing              │
│  030                                   D01  Bayerische Motorenwerke AG   │
│                                                                          │
│                                                                          │
│                                                          Choice: .       │
└──────────────────────────────────────────────────────────────────────────┘
```

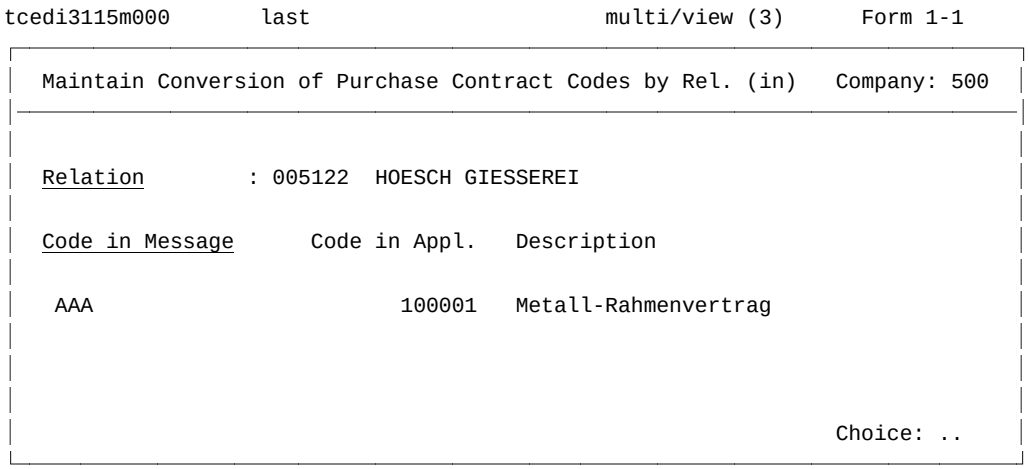
Order Types (outgoing)

```
tcedi2100m000                                  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│ Maintain Order Types                                          Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│ Organization          BEM  BAAN Elect. Message Interch. Sys.             │
│                                                                          │
│      EDI  Description   Code in Message                  Description     │
│  Message                                                                 │
│                                                                          │
│    ABRUF  Lieferabrufe                                   Normal Order    │
│                                                                          │
│                                                                          │
│                                                              Choice: ..  │
└──────────────────────────────────────────────────────────────────────────┘
```

```
tcedi4132m000                                  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│ Maintain Conversion of Order Types (out)                      Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│ Organization   :  BEM    BAAN Elect. Message Interch. Sys.               │
│ Message        :  ABRUF  Lieferabrufe                                    │
│                                                                          │
│ Code in Application                  Code in Message                     │
│                                                                          │
│ PJ1  SCH Standard purchase                                               │
│                                                                          │
│                                                                          │
│                                                              Choice: ..  │
└──────────────────────────────────────────────────────────────────────────┘
```

NOTE: No outgoing message will be prepared while printing the schedules, if the above displayed data are not entered in the session.

Purchase Contract Codes (incoming)



Requirement Types (incoming/outgoing)

```
tcedi4181m000                                   multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conversion of Requirement Type (in)                Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Org.      :    BEM   BAAN Electr. Message Int. Sys.                     │
│  Relation  : 987123   BMW Bayerische Motorenwerke                        │
│                                                                          │
│   Code in Messg  Code in Appl.                                           │
│                                                                          │
│   1              Immediate                                               │
│   2              Released                                                │
│   3              Planned                                                 │
│   4              Forecast                                                │
│                                                                          │
│                                                                          │
│                                                                          │
│                                                          Choice: .       │
└──────────────────────────────────────────────────────────────────────────┘
```

```
tcedi4180m000      find        alphanum./zoom  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conversion of Requirement Type (out)               Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Org.      :    BEM   BAAN Electr. Message Int. Sys.                     │
│  Relation  : 987123   BMW Bayerische Motorenwerke                        │
│                                                                          │
│   Code in Appl.  Code in Messg                                           │
│                                                                          │
│                                                                          │
│                                                                          │
│                                                          Choice:         │
└──────────────────────────────────────────────────────────────────────────┘
```

NOTE: The corresponding conversions for outgoing messages have to be entered in the session above when required.

Requirement frequencies (incoming/outgoing)

```
tcedi4183m000                                   multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conversion of Requirement Frequency (in)            Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Org.     :    BEM   BAAN Electr. Message Int. Sys.                      │
│  Relation : 987123   BMW Bayerische Motorenwerke                         │
│                                                                          │
│   Code in Messg  Code in Appl.                                           │
│                                                                          │
│   1              Daily                                                   │
│   2              Weekly                                                  │
│   3              Monthly                                                 │
│                                                                          │
│                                                                          │
│                                                                          │
│                                                          Choice: .       │
└──────────────────────────────────────────────────────────────────────────┘
```

```
tcedi4182m000      find         alphanum./zoom  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conversion of Requirement Frequency (out)           Company: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Org.     :    BEM   BAAN Electr. Message Int. Sys.                      │
│  Relation : 987123   BMW Bayerische Motorenwerke                         │
│                                                                          │
│   Code in Appl.  Code in Messg                                           │
│                                                                          │
│                                                                          │
│                                                                          │
│                                                          Choice:         │
└──────────────────────────────────────────────────────────────────────────┘
```

NOTE: The corresponding conversions for outgoing messages have to be entered in the session above when required.

Release Date (incoming/outgoing)

```
tcedi4185m000                                  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conversion of Release Date Type (in)                Firma: 500 │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Organization:    BEM   BAAN Electr. Message Int. Sys.                   │
│  Relation    : 987123   BMW Bayerische Motorenwerke                      │
│                                                                          │
│   Code in Messg  Code in Appl.                                           │
│                                                                          │
│                                                                          │
│   1              Delivery                                                │
│   2              Shipment                                                │
│                                                                          │
│                                                                          │
│                                                          Choice: .       │
└──────────────────────────────────────────────────────────────────────────┘
```

```
tcedi4184m000      find         alphanum./zoom  multi/view (3)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain Conversion of Release Date Type (out)           Company: 500   │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│  Organization:    BEM   BAAN Electr. Message Int. Sys.                   │
│  Relation    : 987123   BMW Bayerische Motorenwerke                      │
│                                                                          │
│   Code in Appl.  Code in Messg                                           │
│                                                                          │
│                                                                          │
│                                                                          │
│                                                          Choice:         │
└──────────────────────────────────────────────────────────────────────────┘
```

NOTE The corresponding conversions for outgoing messages have to be entered in the session above when required.

5 Evaluation expressions

Application of evaluation expressions

For the generation of outgoing messages it is possible to use evaluation expressions in the conversion settings. In this way a condition is linked to a field which decides whether the field will be written or not. In addition the evaluation expressions can control under which conditions whole record types will be written.

Maintenance of evaluation expressions

The evaluation expressions are recorded in the BAAN default text components. Importing the defaults.edi, the evaluation expressions will be entered in the current BAAN language version. For example, if the current language of the importing user is ‘German’ then the evaluation expressions will be imported into the German text components.

This needs to be taken into account when setting up the BAAN EDI module because otherwise the in-house format files will not be written complete.

6 Import and export of the defaults.edi file

Starting position

Updates of the BAAN EDI functionality can concern the following areas:

- Sessions
- Data

Updates of the sessions will be executed with the BAAN default update procedure. On the next pages will be described how to carry out updates of EDI relevant data (for example, implementation of new messages or transmission standards, format changes of messages files). The following cases can be executed with the available export and import functionality:

- Backup of EDI basic data by export
- Recovery of EDI basic data by import
- Transmission of EDI relevant data from old into new company by export/import
- Entry of all for EDI necessary data for the empty company by import
- Entry of data updates from BAAN by import

Export of EDI data

To backup the EDI basic data, the easiest way is to export these data as an ASCII file using the BAAN session tcedi6221m000 “Export EDI Data“.

```
tcedi6221m000                                  single-occ (4)      Form 1-1
┌──────────────────────────────────────────────────────────────────────────┐
│ Export EDI Data                                            Company: 510  │
├──────────────────────────────────────────────────────────────────────────┤
│                                                                          │
│ Code Tables                       : Yes                                  │
│                                                                          │
│ Conversion Message Specification : Yes                                   │
│                                                                          │
│ Organization                 from:                                       │
│                                to:    ZZZ                                │
│                                                                          │
│ EDI Message                  from:                                       │
│                                to: ZZZZZZ                                │
│                                                                          │
│ Network                      from:                                       │
│                                to: ZZZZZZ                                │
│                                                                          │
│                                                            Choice:       │
└──────────────────────────────────────────────────────────────────────────┘
```

Code Tables	Code tables will be exported as well.
	Note: The corresponding conversion tables for incoming and outgoing messages will not be exported.
Conversion Message Specification	The converter settings will be exported.
Organization	Selection of the organizations to be exported.
EDI Message	Selection of the messages to be exported.
Network	Selection of the messages to be exported.

The export includes the following EDI tables:

BAAN table	Description	Selection condition
tcedi003	Organization	according to selection
tcedi005	EDI Messages	according to selection
tcedi001	Supported EDI Messages	according to selected organization
tcedi015	Outgoing Messages by session	according to selected messages
tcedi020	Networks	according to selection
tcedi500	Conversion Setups (Name)	according to selected organization if field set to Yes
tcedi501	Conversion Setups (Definitions)	according to selected organization if field set to Yes
tcedi502	Conversion Setups (Relationships)	according to selected organization if field set to Yes
tcedi 505	Evaluation Expressions	all, if field converter settings set to Yes
tcedi200	Order Types	According to selected organization if field set to Yes
tcedi218	Address Code IDs	According to selected organization if field set to Yes
tcedi224	Address Types	According to selected organization if field set to Yes
tcedi226	Countries	According to selected organization if field set to Yes
tcedi228	Terms of Delivery	According to selected organization if field set to Yes
tcedi230	Units	According to selected organization if field set to Yes
tcedi232	Item Code IDs	According to selected organization if field set to Yes

NOTE In general, all EDI data (for example, customers, suppliers, items), which contain references to BAAN internal data, but which do not belong to the EDI module, will not be exported. These data include the conversion tables which belong to the code tables, the additional SCH conversion tables (requirement types, requirement frequencies, release date) and the business partner identification by network.

Import of EDI data

The following procedures are possible to establish a new company with all EDI relevant data:

- Manual entry of the required data
- Import of a file with EDI basic data and manual completion of the missing data

You will find a detailed description of the previous sections.

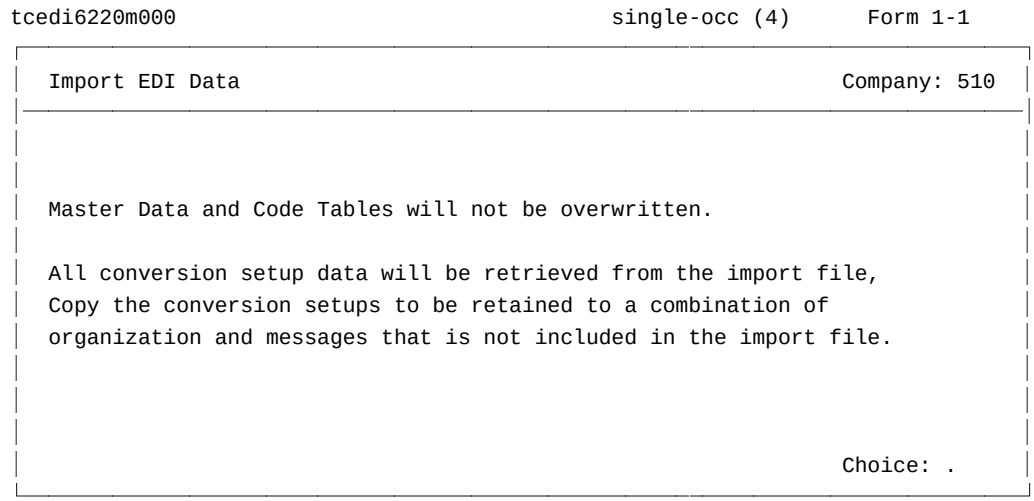
The second method will be described in the following section. For this method there has to be an export file of an EDI basic setting, which has been created as described above.

Another condition is the definition of the EDI parameter tcedi000.

```
tcedi0100m000       first                      single-occ (1)     Form 1-2 >
┌──────────────────────────────────────────────────────────────────────────┐
│  Maintain EDI Parameters                                  Company: 510   │
│──────────────────────────────────────────────────────────────────────────│
│                                                                          │
│  EDI Implemented                        : Yes                            │
│  Standard Path                          : /auto3/baanIVb/edi/bemis/      │
│  Make Use of Tracefile                  : Yes                            │
│  Name of Tracefile                      : trace                          │
│  Our Identification                     : F500                           │
│  Store All Received Messages            : Yes                            │
│  Store All Sent Messages                : Yes                            │
│                                                                          │
│  Reference Number                                                        │
│  Fixed Part                             : F500-                          │
│  Date Format                            : Without Century (YYMMDD)       │
│  First Free Number                      :          1                     │
│  Action on First Message on New Date    : Start with 1                   │
│                                                                          │
│  Suppress Blank Text Lines on Generation: Yes                            │
│  Suppress Blank Generated Text Fields   : Yes                            │
│                                                          Choice: ..      │
└──────────────────────────────────────────────────────────────────────────┘
```

The file to be imported has to be stored under the name **defaults.edi** in the file path, which is defined in the field **Standard Path**.

This file will be imported into the new (empty) company in the BAAN session tcedi6222m000 Import EDI Data.



When you importing data you must note the following points:

- The error message “Error opening file ’filename’ press <return>“ appears: In this case the import file is stored in the wrong directory or has got the wrong name.
- The error messages “Default text group by user not available“ appears: In this case you need to create the corresponding text group for the importing user under BAAN Tools / Text Management / Text Parameters.
  - 1. Maintain Text Windows ➔ create
  - 2. Maintain Text Groups ➔ create
  - 3. Maintain Default Text Groups by User ➔ create
- When you import, existing EDI basic data will not be overwritten. Data with already existing key fields will not be taken over, new data will be added.
- When you import, already-existing data in code tables will not be overwritten. Data records with already existing key fields will not be altered, new data will be added.

- When you import, already existing converter settings will be overwritten. To keep existing settings, copy them to another key field (organization, name) before you start the import.
- When you import, a selection is not possible. All data of a file will be imported under consideration of the above mentioned restrictions.
- If the corresponding Unix directories are not available during the import of the network data, an error messages appears on the screen. Nevertheless, the data will be imported and the directories have to be created afterwards.

The import includes the following EDI tables:

BAAN table	Description
tcedi003	Organization
tcedi005	EDI messages
tcedi001	Supported EDI messages
tcedi015	Outgoing message by session
tcedi020	Networks
tcedi500	Conversion setups (name)
tcedi501	Conversion setups (definitions)
tcedi502	Conversion setups (relationships)
tcedi 505	Evaluation expression
tcedi200	Order types
tcedi218	Address code IDs
tcedi224	Address types
tcedi226	Countries
tcedi228	Terms of delivery
tcedi230	Units
tcedi232	Item code IDs

The following data have to be maintained manually:

BAAN Table	Description	Link to BAAN Master Data
tcedi010	Relations	Supplier, customer master data
tcedi011	Messages supported by relations	EDI relations
tcedi028	Relations by Network	EDI relations
tcedi432	Conversion of Order Types (out)	Order types
tcedi310/448	Conversion of Delivery Address Codes by Customer (out/in)	Customer master data delivery address
tcedi434	Conversion of Address Types (out)	Address types
tcedi302/440/	Conversion of Country Codes (in/out)	Countries
tcedi300/430	Conversion of Delivery Condition Codes (in/out)	Terms of delivery
tcedi304/442	Conversion of unit codes (in/out)	Units
tcedi306/444	Conversion of Item Codes by Relation (in/out)	Item master data
tcedi481/480	Conversion of Requirement Type (in/out)	Requirement types
tcedi483/482	Conversion of Requirement Frequency (in/out)	Requirement Frequencies
tcedi485/484	Conversion of Release Date Type (in/out)	

When you create EDI business partners, observe the following :

In an empty company the message “Sales parameters not available“ appears. You can solve this problem by initializing the distribution parameters in the BAAN session tcmcs0295m000. In the standard menu, you can find this session under BAAN IV Common / Parameters / Parameter Distribution / Initialize parameters. You must also check the EDI parameters.

To import a new defaults.edi:
When you import a current defaults.edi file, you are reccomended to carry out the following procedure to update theconversion tables (especially the tables TBtcedi500 and TBtcedi501). Before starting the import you are recommended to store the current conversion settings under a different name and then to delete the old settings. You can then start the import of the new defaults.edi file.

7 Interface

This chapter describes the technical link between the BAAN Electronic Message Interchange System BEMIS and the corresponding EDI subsystem.

You must take into account the following two components when looking at the interface between the EDI subsystem and the default software of BAAN IV:

- The BEMIS in-house files to be exchanged
- The communication method necessary for the exchange

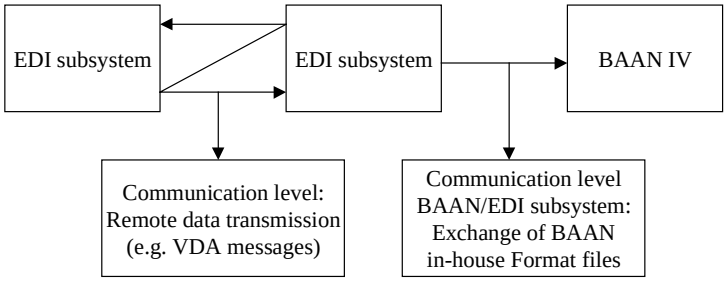


Figure 2, Communication method

Separate User Guides are provided which describe the BEMIS in-house file formats. In this chapter, communication methods are described which give a well-ordered and error-free exchange of the BEMIS message files. The general functioning of the BAAN EDI module is also described.

In BAAN IV, data are generally exchanged on the basis of semaphores. With the help of a shell script this exchange can be carried out in a more flexible way. Furthermore, the BAAN EDI module can generate or record messages over its internal job management with the crontab file.

Overview 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 will be defined in the BAAN session tcedi0120m000. For the network BEMIS, the basis directories can be indicated in the following way:

/auto3/baanIV/edi/bemis/schedule
/auto3/baanIV/edi/bemis/dci

BAAN will additionally create the following subdirectories:

/auto3/baanIVb/edi/bemis/schedule/appl_from/
/auto3/baanIVb/edi/bemis/schedule/appl_to/
/auto3/baanIVb/edi/bemis/schedule/command/
/auto3/baanIVb/edi/bemis/schedule/store_recv/
/auto3/baanIVb/edi/bemis/schedule/store_sent/
/auto3/baanIVb/edi/bemis/schedule/trace/

The above directories have the following function:

1. **.../appl_from/:** In this directory, BAAN IV records the outgoing messages which are the defined BEMIS in-house 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 in-house 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 will be 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 outgoing message file will be 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.

Default communication over the semaphores

In general, the BAAN IV EDI subsystem works in two phases: Firstly, the outgoing messages will be created and secondly, the incoming messages will be read. In the directory .../command will be defined, if BAAN IV or the EDI subsystem writes or reads.

The following points describe the order for the exchange of the temporary format files:

1. The communication between BAAN IV and the EDI subsystem is only possible, when the corresponding network has been activated. BAAN IV checks the corresponding directory **.../command** for the semaphore comm.yes. If this semaphore is not set, then the network for BAAN IV has not been activated and the EDI subsystem is not ready for communication.
2. After the EDI subsystem has set comm.yes, BAAN IV generates a corresponding message file in the directory **.../appl_from/.** Before writing the outgoing message file, BAAN IV generates a log file in the directory **.../trace/.**
3. After BAAN IV has generated the message file, the semaphore command.fil is written into the directory **.../command.** BAAN IV then waits until this semaphore is deleted by the EDI subsystem.
4. The EDI subsystem reads the messages which BAAN IV generated in the directory**.../appl_from/** and writes the incoming messages into the directory **.../appl_to/.**
5. After having finished this procedure, the EDI subsystem deletes the semaphore command.fil in the directory **.../command.**
6. Then BAAN IV starts to record the message files, which the EDI subsystem stored in the directory **.../appl_to/.** This procedure will also be logged in the directory **.../trace/.**
7. BAAN will copy the message generated by BAAN and the incoming message file from the EDI subsystem into the directory **.../store_sent/** or **.../store_recv/.**
8. BAAN IV writes the semaphore command.end into the directory **.../command.** This step brings the communication between the EDI subsystem and BAAN IV to an end.
9. Finally, the EDI subsystem deletes the semaphores comm.yes and command.end in the directory **.../command.**

The following table displays an overview over the used pattern of the semaphores:

Step	Semaphores in directory .../command	BAAN writes semaphore(s)	EDI subsystem writes semaphore(s)	EDI subsystem deletes semaphore(s)	Status communication
I.	empty				Network directory deactivated
II.			comm.yes		Network directory activated by EDI subsystem
III.	comm.yes	Command.fil			BAAN IV has generated messages
IV.	comm.yes command.fil			command.fil	The EDI subsystem records outgoing messages or writes incoming messages
V.	comm.yes				BAAN IV reads incoming messages and stores them
VI.	comm.yes	command.end			End of communication
VII.	comm.yes command.end			comm.yes command.end	Disconnecting network
VIII.					Network deactivated

Extension of the default communication

In BAAN IV, you can extend the default communication with a shell script. The script is stored under the name command.script in the directory **.../command.**

The shell script `command.script` will be executed by BAAN after the semaphore command.fil has been written to the directory **.../command**. Therefore it is possible to transmit or exchange the outgoing message file by remote with the EDI subsystem.

The project-specific operational scope of the shell script is carried out in accordance with the supplier of the EDI subsystem. The extension of the default communication does not change the order of the communication based on semaphores. The developer of the EDI subsystem is responsible for the technical realization and operational security of the default communication which has been extended by shell scripts.

PLEASE NOTICE: That using BAAN IV in a MS Windows NT environment the shell script functionallity is not available! It is not possible to start the shell script in a MS Windows NT environment.

Turning off the default communication

BAAN IV generates or reads messages, even if the communication based on semaphores in BAAN has been turned off. Please note the following points:

- When BAAN generates and stores messages in the directory **.../appl_from/,** these messages will neither be deleted nor copied. The message file which has been generated by BAAN will be stored in the directory. When new messages are generated, they will be appended to the old message file in the directory **.../appl_from/.**
- Message files, which have been stored in the directory **.../appl_to/** by the EDI subsystem, will be deleted after BAAN has read them.

If this communication method is being selected, the EDI subsystem has to guarantee, that:

- Incoming and outgoing messages have to be stored in the BAAN in-house format
- Outgoing messages have to be deleted in the directory **.../appl_from**/ after being transmitted to the EDI subsystem.

8 Glossary of terms and abbreviations

ABRUF	Schedule
Appl	Application
ANSI	American National Standards Organisation
BEM	Baan Electronic Message - abbreviated form of BEMIS used with the definition of the EDI organisation
BEMIS	Baan Electronic Message Interchange System
Business partner	Customer or supplier
C	Conditional, that is, optional message
defaults.edi	Export file detailing master EDI data
DELINS	Odette Delivery Instruction (Schedule)
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	Oddette 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
Translation	Conversion of one data format to another, for example Baan in-house data format to ODETTE

VDA	Standard used for electronic data exchange in Germany
X12	Standard used for electronic data exchange in the United States