



BaanIV Cable

Euro Initialization for Baan Cable

Detail Design

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Table of contents

1.	Introduction	1
1.1	Purpose	1
1.2	Scope	1
1.3	References	1
1.4	Global conditions	1
1.5	Configuration	2
2.	Problem Description	3
2.1	General outline	3
2.2	Baan Cable	3
2.3	Triangulation	4
2.4	Internal Conversion	5
2.5	External Conversion	5
3.	Solution Description	7
3.1	Triangulation	7
3.2	Internal Conversion	8
3.3	External Conversion	9
Appendix A	. List of components	13
Appendix B	Table Definitions	14
B.1	General	14
3.4	New tables	14
3.4.1	<i>Euro initialization Material Price Standards - tdlra420</i>	14

1. Introduction

1.1 Purpose

The purpose of this document is to describe the Euro Initialization procedure required for BaanCable.

1.2 Scope

Product data

Product:	BaanIV Cable
Release:	D491
Based on:	BaaN IV c4

Customization data

Customer:	n.a.
Project:	Cable
Customization Part:	LRA E1486

1.3 References

Code	Description
U71634H	User's Guide for Euro Initialization
820004E2	Material Registration (Basic Design)
840006D2	Material Price Variation (Detail Design)

1.4 Global conditions

1.5 Configuration

The enhancements are based on Baan IV c4 and Baan Cable version d491.

Usage of our software in other software versions and packages may be effects for the described functionality.

2. Problem Description

2.1 General outline

Since 1 January 1999 conversion between different EU currencies has to be performed via the so-called *Triangulation*. This means that conversion for EU currencies always uses the Euro as the basic currency. After July 1, 2002, however, all accounting must be carried out in euros.

The Baan euro compliance functions ensure that you can complete transactions with customers and suppliers that uses the euro, and perform your accounting and financial reporting in euros.

During the transition period, from January 1, 1999 until July 1, 2002 at the latest, specific rules apply to the conversion of amounts in EU currencies. This type of conversion, which is called *triangulation*, is implemented in Baan.

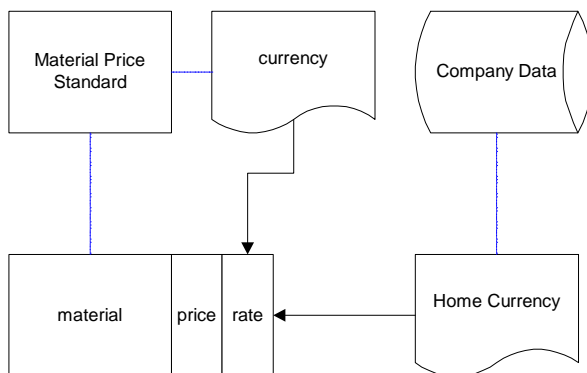
2.2 Baan Cable

BaanCable provides additional information for handling Material Price Variation (MPV). Which means that value fluctuations of expensive materials are taken into account during the sales prices. Since Baan Cable MPV allows different currencies to be used euro conversion functionality is required.

There are different stages in the euro conversion process:

- ??Triangulation
- ??Internal Conversion
- ??External conversion

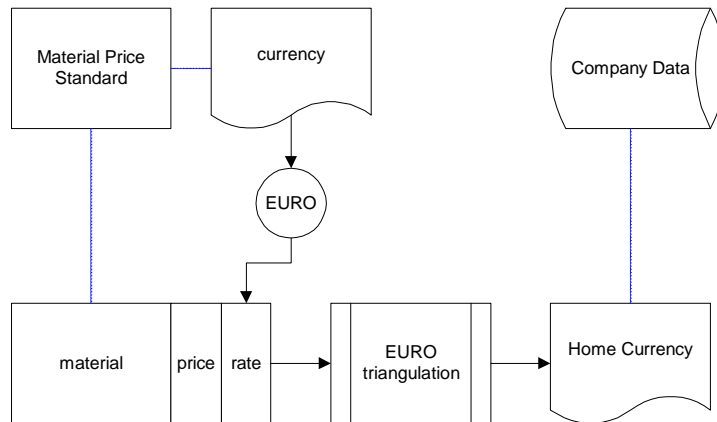
All three stages are described in the following paragraphs.



Flow diagram above shows the initial situation in which the currency rate is representing the factor between the Material Price Standards' and the company home currency.

2.3 Triangulation

Marks the participating currencies are EU currencies, makes the currency exchange rates between EU currencies and the euro effective and starts BaaN using triangulation to convert amounts when EU currencies are involved. For Material Price Variation all saved currency rates are based on the home currency. Implementing triangulation requires these rates to be recalculated.



Flow diagram above shows how to implement triangulation for MPV functionality. Initially the materials' rate was representing the factor between the home currency and the material price standards' currency, which will be different after implementing the triangulation functionality. The factor will then represent the factor between the material price standard and the euro.

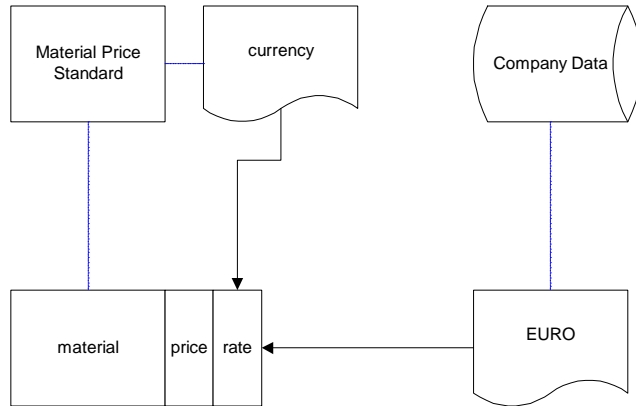
For example: Currency of material price standard is USD while the home currency is HFL (Dutch Guilders). One USD corresponds with 2 HFL and one euro corresponds with 2.20371 HFL.

- (1) Before triangulation
The rate (USD->HFL) for the material is 2
- (2) After triangulation
The rate (USD-HFL-EUR) for the material is $2 * (1 / 2.20371) = 0.90756$

Standard Euro triangulation initialization process will be extended with new functionality that will convert existing MPV rates to appropriate values.

2.4 Internal Conversion

This process changes the home currency into euros. For MPV this means all saved currency rates requires a recalculation.

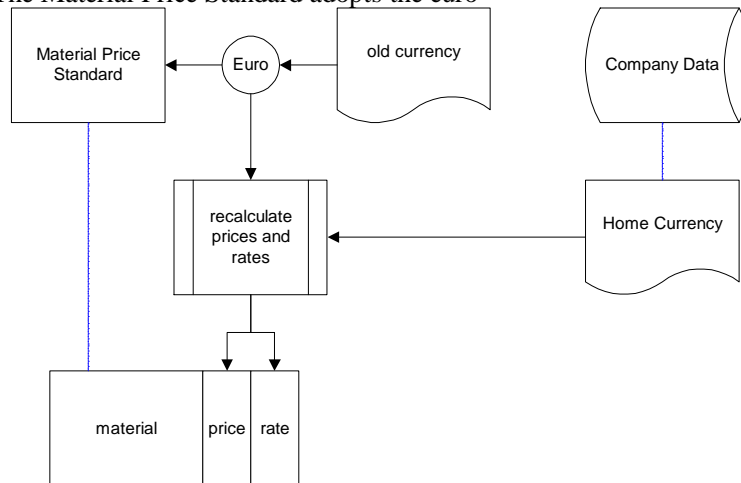


Flow diagram above shows procedure for internal euro conversion. All rates which were calculates during the triangulation phase need to be recalculated, based on the new home currency (euro)

2.5 External Conversion

External conversion means that an business partner adopts the euro as the transaction currency. There are two cases of external conversion, which affects MPV:

1) The Material Price Standard adopts the euro



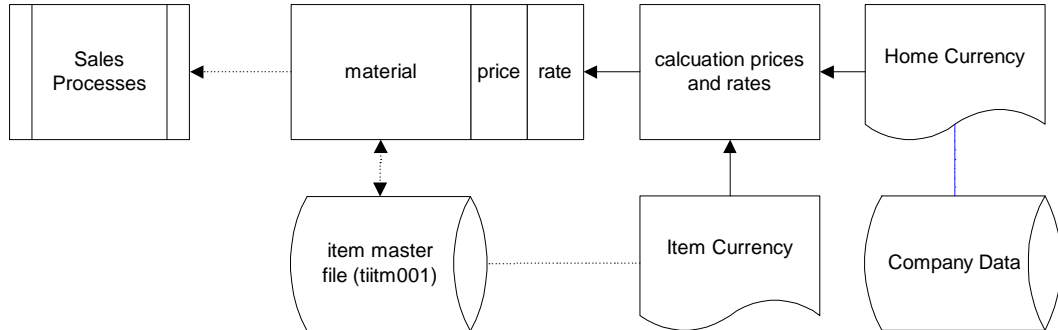
Flow diagram shows procedure, which is required after changing the Material Price Standard currency to euro:

1. Change currency for Material Price Standard to Euro

2. Recalculate prices and rates for all existing materials (*table tdlra404*) based on settings in Euro Initialisation tables.

2) Item Currency changes to euro

Prices of material items (see MPV documentation for explanation) are expressed in the items' currency. If this changes, all existing material items linked to sales orders or contracts needs to be converted to the new currency.



Flow diagram shows that all existing material prices and rates, which are linked to sales processes, need to be recalculated based on the suppliers' new currency (Euro). Affected tables are tdlra410 (material Header data), tdlra412 (material Line data) and tdlra415 (material line data history)

3. Solution Description

3.1 Triangulation

Before implementing *Triangulation* all existing data has to be Material rates must be recalculated based on the triangulation rules:

Table	Field	Reason	Conversion
tdlra404	Rate	Value is ratio between home currency (tccom000.hcur) and the material price standard currency (tdlra402.ccur)	$tdlra404.rate * 1 / (Rate\ Eur ?\ Home\ Currency)$
tdlra412	Rate	Value is ratio between home currency (tccom000.hcur) and the materials' currency which is stored in the item master file (tiitm001.ccur)	$tdlra412.rate * 1 / (Rate\ Eur ?\ Home\ Currency)$
tdlra415	Rate	Value is ratio between home currency (tccom000.hcur) and the materials' currency which is stored in the item master file (tiitm001.ccur)	$tdlra415.rate * 1 / (Rate\ Eur ?\ Home\ Currency)$

Recalculation requires the old home currency, the euro currency and the materials' currency. Since this information is stored in different tables recalculation cannot be handled with a standard conversion rule (session tccri7109m000). Therefore a new DLL function (tdlra.dll4012) needs to be developed which will be linked to tables tdlra404, tdlra412 and tdlra415 in session tdlra7109m000 “*Maintain EI Fields*”

tdcra7109m000 #1234 Multi-acc (2) Form 1-1 >

Package	Module	Table	Field Name	Conversion Type	Conversion Rule	Customized
td	lra	404		Triangulatio	DLL	Yes
td	lra	412		Triangulatio	DLL	Yes
td	lra	415		Triangulatio	DLL	Yes

Company: 070
Changer: ..

Parameters for table tdlra404 are shown below:

The screenshot shows a window titled 'Maintain EI Field Parameters' with the following parameters:

```

Package      : td
Module       : lra
Table        : 404
Field Name   :
Conversion Type : Triangulatio
Conversion Rule : DLL
Customized   : Yes
Table Currency Field:
Table Customer Field:
Table Supplier Field:
Rate Factor Field :
Array Depth   : 1
Condition     :
DLL-Name     : tdlra.dll4012.internal.conversion.tdlra404
Execute DLL before conversion : No
  
```

On the right side, there is a 'Company: ST6' field and a 'Customized' section with a list of 'Yes/No' options. The 'Yes' option is selected for the 'Customized' field.

(For table tdlra412 DLL-Name = tdlra.dll4012.internal.conversion.tdlra412 and for tdlra415 DLL-Name = tdlra.dll4012.internal.conversion.tdlra404)

Note For initial version of Baan Cable Euro initialisation functions mentioned above were developed in component tdpur.dll9000. Since this was confusing they have been moved to a new dll function tdlra.dll4012.

3.2 Internal Conversion

As mentioned before internal conversion means the companys' home currency is set to euro.

Table	Field	Reason	Conversion
tdlra404	Rate	Value is ratio between home currency (tccom000.hcur) and the material price standard currency (tdlra402.ccur)	Ratio between the euro and tdlra402.ccur
tdlra412	Rate	Value is ratio between home currency (tccom000.hcur) and the materials' currency which is stored in the item master file (tiitm001.ccur)	Ratio between euro currency and tiitm001.ccur.
tdlra415	Rate	Value is ratio between home currency (tccom000.hcur) and the materials' currency which is stored in the item master file (tiitm001.ccur)	Ratio between euro currency and tiitm001.ccur.

Tables tdlra404, tdlra412 and tdlra415 must be added to session "Maintain EI fields (tccri7109m000)" Information is obtained from different tables and therefore conversion is performed by DLL functions. Parameter settings for internal conversion is identical to Triangulation settings.

tdcom000 multi-acc (2) Form 1-1 >

Maintain EI Fields Company: 876

Package	Module	Table	Field Name	Conversion Type	Conversion Rule	Customized
td	lra	404		Internal	BLL	Yes
td	lra	412		Internal	BLL	Yes
td	lra	415		Internal	BLL	Yes

Choice: █

3.3 External Conversion

As described in [chapter 2.5](#) there are two different types of external conversion. Next paragraphs describe each conversion type in detail.

1. Currency for Material Price Standard changed to Euro

Table	Field	Reason	Conversion
tdlra402	Ccur	Currency is changed to Euro	Update field with Euro currency
tdlra404	Rate	Value is ratio between home currency (tccom000.hcur) and the material price standard currency (tdlra402.ccur)	Ratio between the euro (tdlra412.ccur) and home currency
tdlra404	Pric	Price was initially expressed in Material Price Standard currency (for instance Dutch Guilder).	Recalculate prices to euro's

There may be different Material Price Standards, which are not all adopting the Euro at the same time. Therefore it must be possible to perform a conversion by Material Price Standard. To facilitate conversion by Material Price Standard a new session will be developed. All Material Price Standards added to this session will be converted to euros.

tdlra412com00 first multi-acc (2) Form 1-1

Maintain EURO Initialisation Material Price Standards Company: 876

Material Price Standard	Description
123	123 Metal Exchange
1234	1234 Metal Exchange
A-BEURS	De metaalbeurs van Abersfoort
BSX	Brazilian Steel Market
COMEX	Comex
JOHN	Johns Metal Exchange
LME	London Metal Exchange

Choice: .

Via the “*special*” option it is possible to initiate the table with values from tdlra402 (Material Price Standards). All standards, which should not be taken into account for conversion, should be deleted. Sessions’ main table is tdlra420. Please make sure this table is filled before executing the actual conversion.

Component tdlra.dll4102 includes functionality, which reads material price standards from table tdlra420 and performs the conversion for all materials with the selected price standard.

tdlra7109a000 multi-occ [2] Form 4-1 >

Maintain EI Fields							Company: 076
Package	Module	Table	Field Name	Conversion Type	Conversion Rule	Customized	
td	ira	404		External	ELL	Yes	

I

Choice: █

2. Item Currency changes to euro

Table	Field	Reason	Conversion
tdlra410	Base	Basic price, expressed in item currency (tiitm001.ccur), which is changed to euro	Amount must be expressed in euro's
tdlra412	Rate	Ratio between home and item currency	Ratio between home currency and euro
tdlra412	Base	Basic price, expressed in item currency (tiitm001.ccur), which is changed to euro	Amount must be expressed in euro's
tdlra414	Base	Basic price, expressed in item currency (tiitm001.ccur), which is changed to euro	Amount must be expressed in euro's
tdlra415	Rate	Ratio between home and item currency	Ratio between home currency and euro
tdlra415	Base	Basic price, expressed in item currency (tiitm001.ccur), which is changed to euro	Amount must be expressed in euro's

In session *Maintain EI clusters (tccri7101m000)* the field “customer/supplier related” must be set to “No” (this means the whole item table is taken into account) to enable conversion of MPV data (see picture below)

tccri7101m000 000V 0000 012010-000 (1) Form 1-1 >

Maintain EI Clusters Company: 076

Conversion Cluster : 13 External Conversion
 Conversion Type : External

Internal-
 Currency System : Single
 Currency ATCC : EUR EUR0
 Rounding Disc. Account :

External-
 Customer / supplier related : No

SHEDUCE : From - To
 Customer : - -

Choice: C.

Please note it is not necessary to add table tdlra415 to session tccri7101m000 because this table is converted together with tdlra412 and tdlra410.

tccri7101m000 000V 0000 multi-acc (2) Form 1-1 >

Maintain EI Fields Company: 076

Package	Module	Table	Field Name	Conversion Type	Conversion Rule	Customized
td	lra	412		External	DLL	Yes
td	lra	414		External	DLL	Yes

Choice: I.

Screenprints below show the required parameters for external conversion

```
tcpr1710s000 | single-occ (1) | Form 1-1
Maintain EI Field Parameters
Package      : td
Module      : ira
Table       : 414
Field Name  :
Conversion Type : External

Conversion Rule : DLL
Customised    : Yes
Table Currency field:
Table Customer Field:
Table Supplier Field:
Rate Factor Field :
Array Depth  : 1
Condition    :
DLL-name     : tdira.dll4012.external.conversion.price.list.data
Execute DLL before conversion : No

Choice: 1.
```

```
tcpr1710s000 | single-occ (1) | Form 1-1
Maintain EI Field Parameters
Package]     : td
Module      : ira
Table       : 412
Field Name  :
Conversion Type : External

Conversion Rule : DLL
Customised    : Yes
Table Currency field:
Table Customer Field:
Table Supplier Field:
Rate Factor Field :
Array Depth  : 1
Condition    :
DLL-name     : tdira.dll4012.external.conversion.materials
Execute DLL before conversion : No

Choice: 1.
```

Appendix A. List of components

New sessions

Code	Description	Time (hrs)
tdlra4120m000	Maintain Euro Initialization Material Price Standards	

Modified DLL's

Code	Description	Time (hrs)
tdpurdll9000	Functions for Euro Conversion	

New DLL's

Code	Description	Time (hrs)
tdlra.dll4012	Functions for MPV Euro conversion	

Appendix B Table Definitions

B.1 General

The tables mentioned in the previous chapters are worked out in detail in the current appendix. For each table field a relation to another table can be maintained. When a reference is created, the kind of reference must be filled in. For control of the so called “*Reference integrity*” the field “*DBMS Check*” is set to “Yes”. Next the “*Delete mode*” and the “*Update mode*” can be maintained.

For the different kinds of mode the following abbreviations will be used:

Reference mode	Delete mode	Update mode
R1: Mandatory	D1: Child will be deleted	U1: Child will be updated
R2: Mandatory unless empty	D2: Restricted (with counter)	U2: Restricted (with counter)
R3: Not mandatory	D3: Nullifies	U3: Nullifies
	D4: No lock	U4: No check
	D5: Lookup (restricted)	U5: Lookup (restricted)

3.4 New tables

3.4.1 Euro initialization Material Price Standards - tdlra420

Field	Type	Length	Mand	Ref.Table	Ref.Mode	Help	Remarks
Mpst	tdlra.mpst		Y	Tdlra402	D4/U5		

Index	Fields	Dupl.
1.	Mpst	N