Infor ERP LN 6.1

Currency Initialization (CRI)

Reference Guide

be enterprising

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Table of Contents

About this Guide

This document describes the implementation of Currency Initialization (CRI) in Infor ERP LN. Currency initialization is a generic conversion-environment framework. You can use CRI to:

- Change your currency system
- Switch to the recommended standard for multicurrency implementations: the standard currency system (as of ERP LN FP5)
- Change and/or extend the used home currencies
- Change transaction currencies to euros
- Make your system euro compliant

This document is intended for persons in charge of setting up and carrying out the currency initialization.

The reader is assumed to be familiar with the Infor ERP LN software and the overall structure of packages, modules, and sessions in the Infor ERP LN software. A general knowledge of Financials is recommended.

Overview of this manual

This manual contains the following chapters:

- Chapter 1, “Currency Initialization,” briefly explains what currency initialization is, and how you can use currency initialization to make your system euro compliant.
- Chapter 2, “To Set Up the Currency-Initialization Environment,” describes how you share CRI tables between the companies of a conversion cluster, and how you initialize CRI tables with the correct information.
- Chapter 3, “Currency Systems and Company Structures,” describes the currency types and currency systems that you can use in ERP LN, and the currency system requirements for companies that are linked to each other.
- Chapter 4, “Currency-Initialization Scenarios,” describes the possible currency system changes that you can perform by using CRI.

- Chapter 5, “The Currency-Initialization Process,” describes how you can use CRI sessions to perform the different types of currency initialization.
- Chapter 6, “Currency Differences,” describes how you can post currency differences that result from the different currency exchange rates before and after the internal currency initialization.
- Chapter 7, “Euro Initialization,” describes how you can use CRI sessions to change one of your home currencies and (EMU) transaction currencies to euros.
- Chapter 8, “Conversion Rules,” describes the standard conversion rules that are used to convert and recalculate the amounts and currency rates during the currency initialization processes.
- Appendix A, “To Check the Financials Fields,” lists the fields that you can check and correct after internal currency initialization.
- The Glossary lists the definitions of the terms used in this document.

Abbreviations and acronyms

The following table lists the abbreviations and acronyms used in this document.

A/P	Accounts payable
A/R	Accounts receivable
BP	Business partner
CI	Currency initialization
COP	Colombia pesos
CRI	Currency initialization
DKK	Denmark kroner
DLL	Dynamic-link library
EMU	The former Economic and Monetary Union
EUR	Euro
FST	Financial statements
GBP	United Kingdom pounds
G/L	General ledger
INR	India rupees
NZD	New Zealand dollars
USD	United States dollars

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In your e-mail, refer to the document code and title. More specific information will enable us to process feedback efficiently.

Chapter 1
Currency Initialization

1

Currency Initialization (CRI) enables you to adapt your organization's currency system to changing needs for the internally used currencies. For example, currency changes can be required as a result of:

- The need to report in more than one currency.
- The need to change calculating reporting-currency amounts via the local instead of via the reference currency (as of ERP LN FP5).
- The need to change the reference currency because of subsidiary obligations on reporting to the holding company.
- The introduction of the euro.

Important ERP LN does not yet support CRI for the following localizations:
- Brazil localization
- India localization (on ERP LN FP2).

Internal and external currency initialization

There are two types of currency initialization:

- Internal currency initialization
  You can use internal currency initialization to do one or all of the following:
  - Change a company's currency system, for example, from dependent currency to standard.
  - Change a company's reference currency or its home currencies.
- External currency initialization to euro
  You can use external currency initialization to change transaction currencies to euro and to convert the corresponding amounts and currency rates. Conversion to other currencies than euro is not supported. There are two types of external currency initialization:

- External, business partner related
  A limited number of transaction amounts and transaction currencies that are directly related to business partners are converted to euros for a specified range of business partners. This especially applies to the business partner's currency defaults.
- External, non-business partner related
  A limited number of transaction amounts and transaction currencies that are not directly related to business partners are converted to euros. For example, item sales prices, and price lists.

The currency-related data and amount-related data, such as rates, rate factors, and rate determiners, are also converted.

Euro compliance

You can use the CRI functions to make your ERP LN system euro compliant.

You can use the CRI module to change one (or, in case of the standard currency system, all) of your home currencies, and, to a limited extent, EMU transaction currencies to euros. For more information, refer to Chapter 7, "Euro Initialization."

External euro translation

Legal rules and accounting principles do not permit that you change the currency or the amount of registered purchase and sales invoices. You can use the external euro translation functions in Financials to generate payment advice, interest invoices, cash forecast, and reports in euros for open invoices in EMU currencies if this is necessary. For more information, refer to Chapter 7, "Euro Initialization," section "External euro translation."

Chapter 2
To Set Up the Currency-Initialization Environment

2

If you set up multiple companies (a multisite environment), use the Maintain Logical Tables (ttaad4120m000) session to share the CRI tables between the companies that belong to one logistic area. The tables can be linked to any company of the logistic area. After entering the required information, you must convert the data to runtime.

In general, the associated archive companies must also be converted in the CRI process (see also Chapter 5), which means that these associated archive companies are included in the CRI cluster.

Caution: Unless you are certain that no data corruption will occur, you must ensure that these “frozen” companies are no longer archived. You must also verify that no intercompany data links exist between the live and the archive environment. If such links exist, you must include the archive companies in the live CRI cluster.

For more information about logistic areas, refer to Chapter 3, “Currency Systems and Company Structures.”

The companies must share the following tables:

- CI Rates (tccri700)
- CI Process Data (tccri701)
- CI Process Data Internal Conversion (tccri702)
- CI Clusters (tccri711)
- CI Cluster Companies (tccri712)
- CI Cluster Transaction Currencies (tccri715)
- CI Error Log CI (tccri720)
- CI Conversion Fields (tccri721)
- CI Conversion Tables (tccri722)

Note: The following tables *must not* be shared:

- Audit Finalized Transactions (tccri703)
- Audit Open Items Purchase (tccri704)
- Audit Open Items Sales (tccri705)

Refer to table set R00900 – Common Currency Initialization (session tltsm1100m000) for possible additional sharing details.

You can use a demo company to explore the CRI sessions before you start currency initialization for your production company.

Chapter 3
Currency Systems and Company Structures

3

This chapter describes the currency systems that can be used in structures of companies that are linked to each other. It explains the following concepts:

- Currency types
- Currency systems
- Logistic area
- Currency exchange-rates

Note: The recommended standard currency system is available as of ERP LN FP5.

Currency types

An ERP LN company uses the following types of currencies:

- Home currencies
  The base currencies used by a company, in which all amounts are expressed.
- Reference currency, sometimes called the logistic currency
  In any currency system other than the standard currency system, the reference currency is the home currency that is used for the company's accounting.
  - In the single as well as the independent currency system, the reference currency equals the local (that is, functional) currency of all financial companies.
  - In a dependent currency system, the reference currency is the base for all calculations with currencies.

  - In the standard currency system, the reference currency is just a non-home, common currency between companies, in which currency shared amounts can be expressed: it is not used as currency base for calculations.

- In a multicurrency system you can define up to three home currencies for each financial company. Except in a standard currency system, one of these must equal the reference currency. In a single and independent system, the reference currency by definition equals the local, functional currency. If you use more than one home currency, amounts are calculated and stored in all three home currencies. In sessions that display home currency amounts, you can use the **Rotate Currency** command to display the amount in the home currency that you want. In the standard currency system, currency rotation is only enabled in display sessions and reports of both G/L, and A/P - A/R subadministrations. In addition to this, as of ERP LN FP5, the Financial Statements (FST) module offers extended possibilities for multicurrency reporting.

  The three home currencies that you can define for a company are:

  - The local or functional home currency
    The home currency that is the legal currency of the country in which the company is established. Tax reporting must usually be done in the local home currency.
  - Reporting currency 1 and reporting currency 2
    Alternative reporting currencies.

- Transaction currencies
  The currencies used for transactions with your business partners. For example, the following amounts are expressed in transaction currencies:
  - Contract amounts
  - Invoice amounts
  - Price lists

Currency systems

The company's currency system determines:

- The number of home currencies that the company uses.
- The method used to convert amounts in transaction currencies into amounts in the home currencies.

If the companies form a logistic company structure, special rules apply to the currencies that each company can use, depending on the currency system. ERP LN supports the following currency systems:

- **Standard** (recommended)
  A currency system in which foreign currency transactions are translated straight from the transaction currency to the local currency, without triangulation through the reference currency. You can define the rules for translation to the other reporting currencies either directly from the transaction currency, or from the local currency.
  The standard currency system replaces the other curency systems previously used in ERP LN.
- **Single**
  In all financial companies, one and the same currency is used. This is the the local home currency, which is also the reference currency.
- **Dependent**
  A currency system in which you can use multiple home currencies within the same logistic company. For most entities, the financial company determines the local currency that is used.
  All transactions are registered in all home currencies. Currency rates are defined between the external currencies and the reference currency, and between the reference currency and the other home currencies.
  Transaction amounts are first converted into an amount in the reference currency and then the amount in the reference currency is converted into amounts in the other home currencies.
- **Independent**
  A currency system in which all financial companies and logistic companies that are related to each other in the enterprise structure model use the same two or three home currencies. All transactions are registered in all home currencies. Currency rates are defined between the transaction currencies and all home currencies. Transaction amounts are translated directly from the transaction currency into the home currencies.

  Except for the case when a home currency is also used as transaction currency, no currency rates are defined between the home currencies of an independent currency system. Therefore, the home currencies are independent of each other.

The independent currency system is primarily intended for use in high-inflation countries. Reporting to the local authorities can be done in the national currency, which may be unstable. At the same time, company accounting can be done using a more stable currency such as dollars.

Chapter 4, “Currency Initialization Scenarios,” describes the CRI scenarios that support the conversion from each type of currency system into one of the other currency systems.

Logistic area

The financial results of the activities that are carried out in a logistic company, such as production, purchase of materials, and the sales of the product, are posted in financial companies. Logistic companies contain enterprise units, which are linked to financial companies for their financial reporting. In this way, the logistic and financial companies are linked to each other via the enterprise units.

The logistic and financial companies that have links with each other form a logistic area. Internal currency initialization is performed for all the companies within a logistic area. After internal currency initialization, all the companies must comply with the rules of the resulting currency system.

The following rules apply to the companies within a logistic area:

- An organization can have more than one logistic company (multisite). Each logistic company contains one or more enterprise units.
- Each enterprise unit is linked to one financial company.
- The reference currency must be the same for all financial companies that are linked to the enterprise units of one logistic company.
- A financial company can be linked to enterprise units in different logistic companies.
- Logistic companies that have common financial companies linked to their enterprise units must use the same currency system and the same reference currency.
- The currency system and the reference currency of a logistic company is independent of other logistic companies to which it is not linked via the enterprise units. Note that in that case, the companies are not visible in each other's environment as defined in the Companies (tcemm1170m000) session.

Standard multicurrency system

The following rule applies to the companies within a logistic area that use a standard currency system:

- A common currency, not necessarily one of the home currencies, must be defined for all companies in the logistic area. A limited number of "shared" amounts, such as lot prices, will be expressed in this currency.

The following figure shows the possible links between logistic companies and financial companies in a multisite environment that uses a standard currency system.

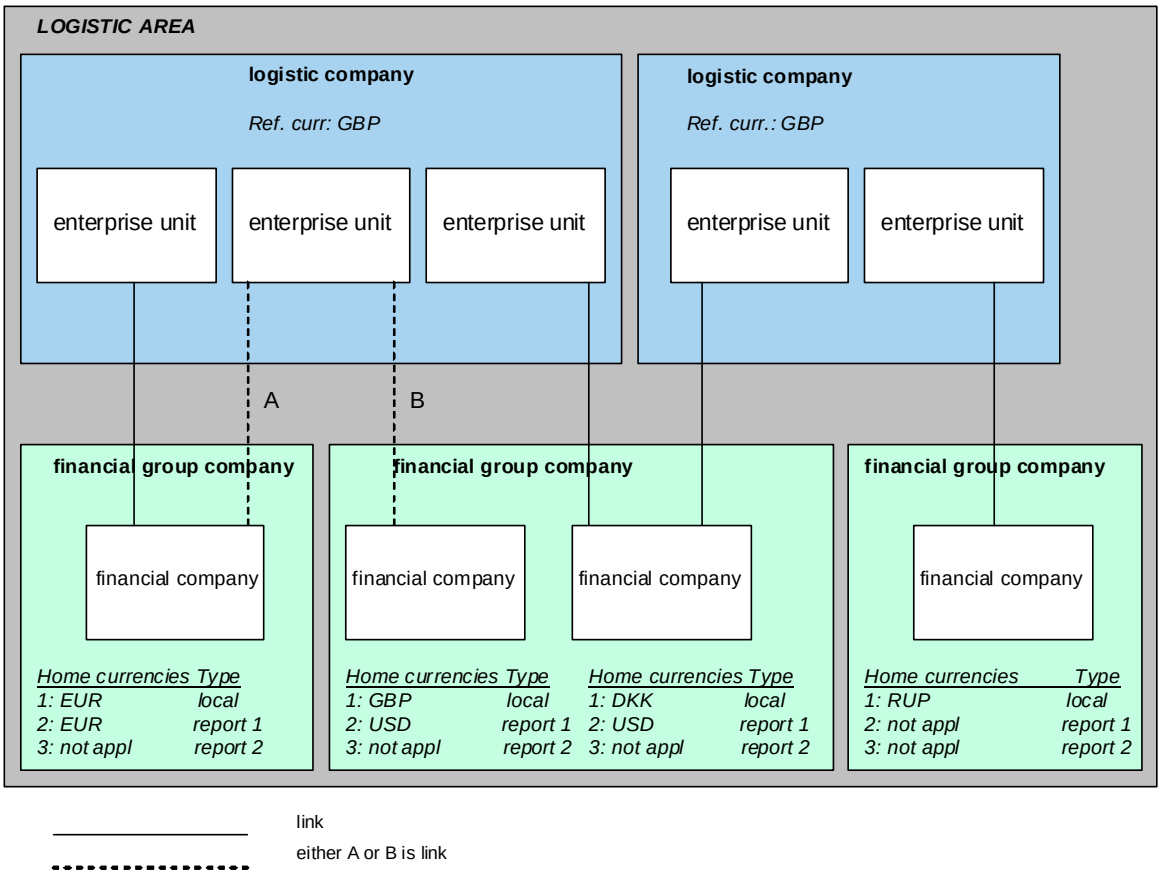

Figure 1: A company structure with a standard currency system

Single currency system

The following rule applies to the companies within a logistic area that use a single currency system:

- Only one currency is internally used. This currency is the reference currency as well as the local home currency of the logistic companies and all financial companies within the logistic area.

The following figure shows the possible links between logistic companies and financial companies in a multisite environment that uses a single currency system. The additional home currencies are not used.

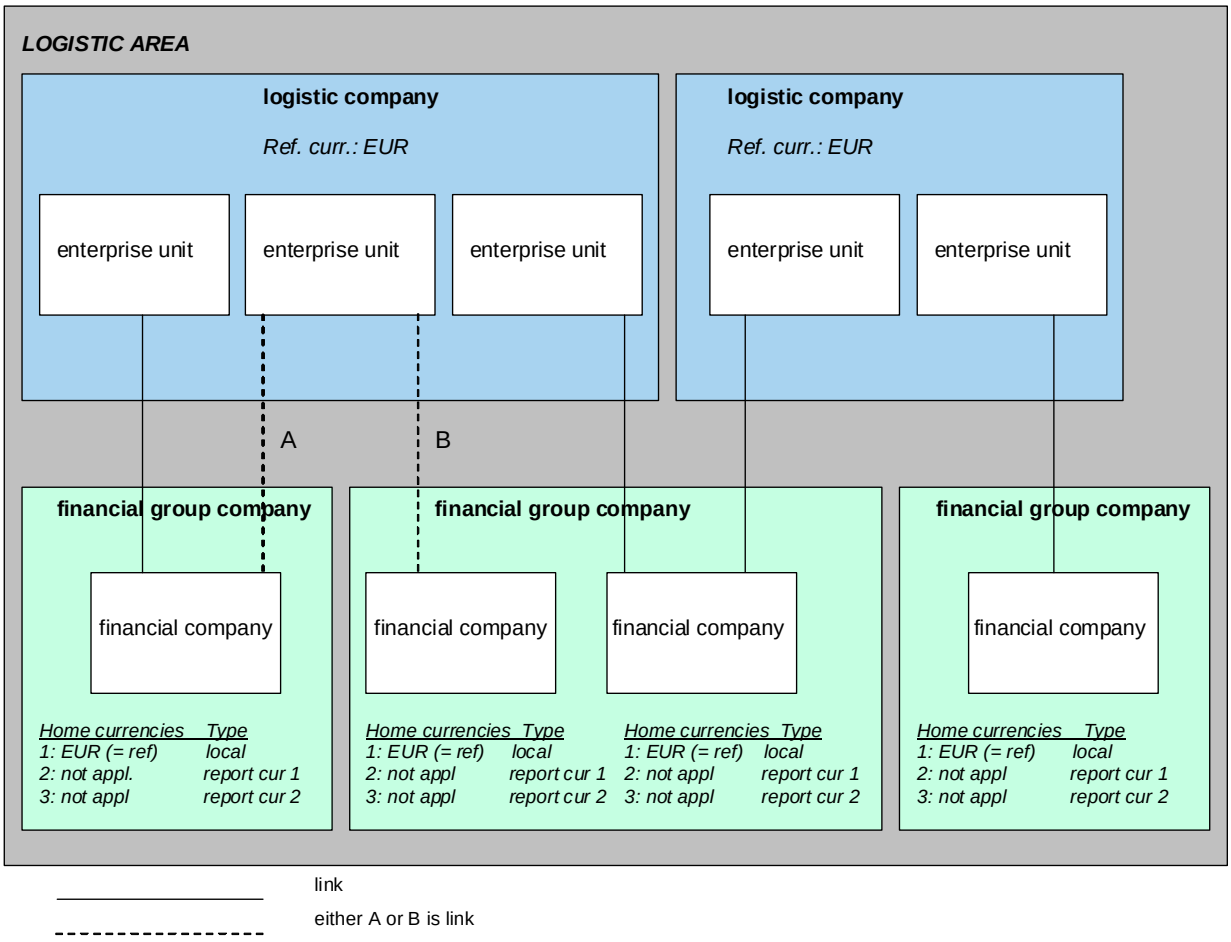

Figure 2: A company structure with a single currency system

Dependent multicurrency system

The following rule applies to the companies within a logistic area that use a dependent multicurrency system:

- The financial companies that are linked to the enterprise units of the logistic companies in a logistic area must all use the same reference currency, which, in turn, must be one of the home currencies. Per financial company, the other two home currencies can be different from the home currencies of the other financial companies.

The following figure shows the possible links between logistic companies and financial companies in a in multisite environment that uses a dependent multicurrency system.

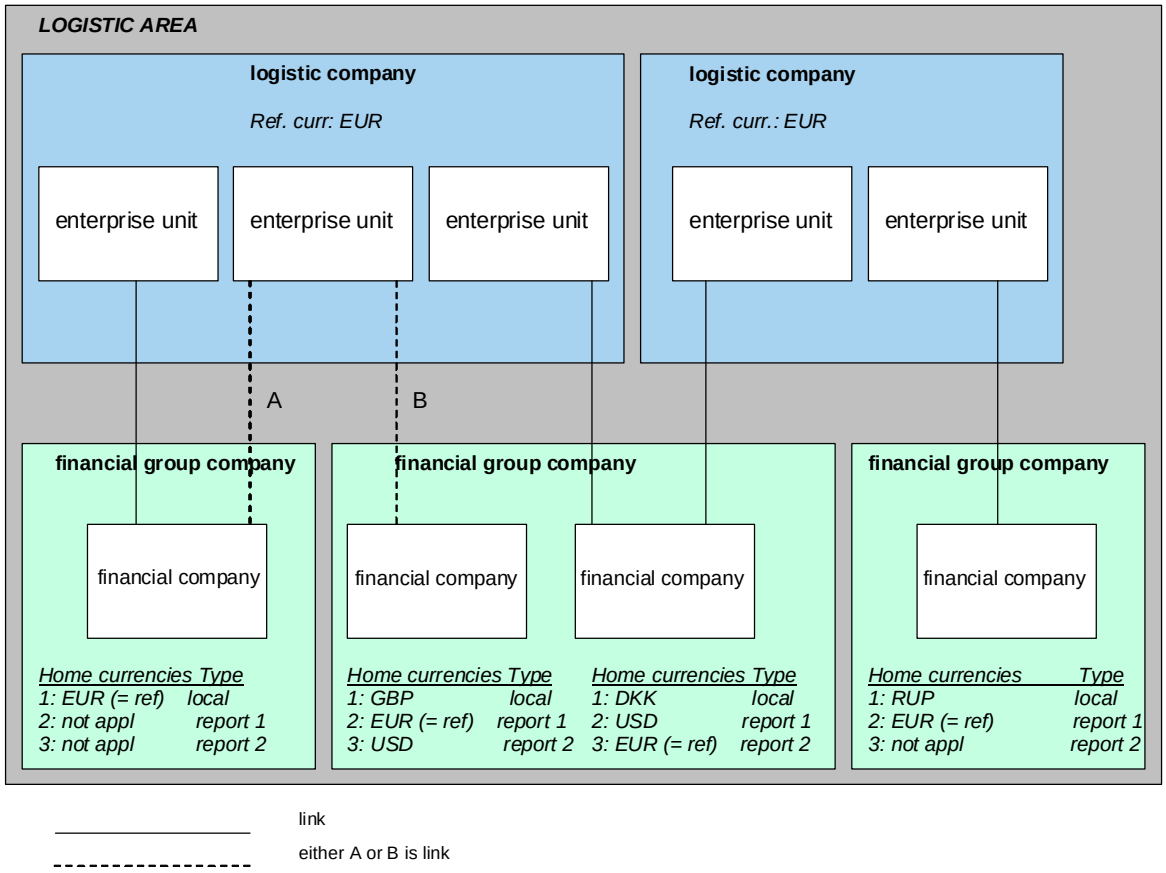

Figure 3: A company structure with a dependent multicurrency system.

Independent multicurrency system

The following rule applies to the companies within a logistic area that use an independent multicurrency system:

- All financial companies that are linked to the enterprise units of the logistic companies in the logistic area must use the same home currencies and the same reference currency.

The following figure shows the possible links between logistic companies and financial companies in a in multisite environment that uses an independent multicurrency system.

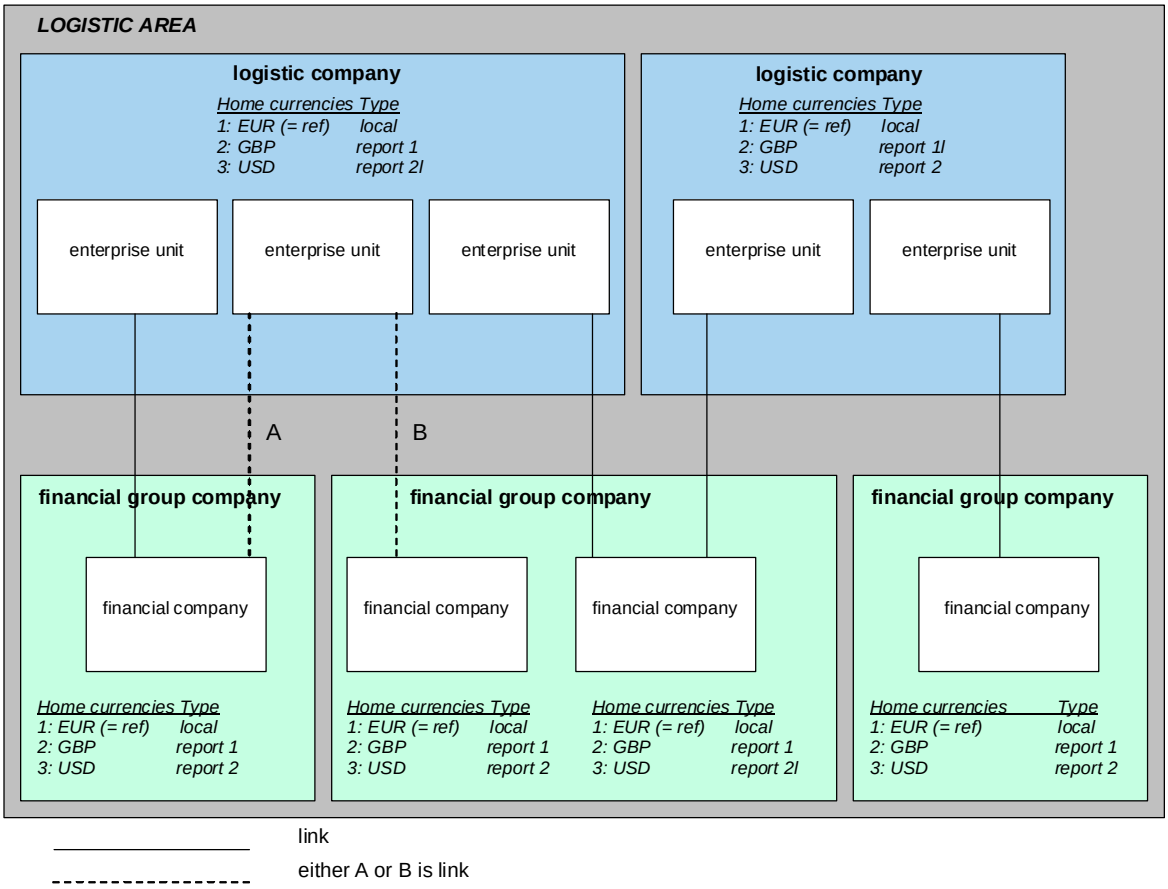

Figure 4: A company structure with an independent multicurrency system

Currency exchange-rates

The currency exchange-rate is the factor by which an amount in a different currency is multiplied to calculate the amount in the currency base. In a single or dependent currency system, the currency base always equals the reference currency. In an independent currency system, the currency base is one of the home currencies. In a standard currency system, the local currency is the default currency base; the other home currencies, and sometimes the reference currency can serve as currency base.

```
transaction currency amount * currency exchange-rate =
currency base-amount
```

Rate factor

The rate factor (for example, 100 or 10,000) indicates how many units of a given currency are equal to one unit of the base currency multiplied by the currency rate.

If the currency rate is expressed in the base currency, the amount in the currency to be converted is divided by the rate factor before the currency rate is applied. This option is useful for conversion to currencies with very small values, such as the Colombia peso.

For example, instead of defining that COP 1 = 0.000346 EUR you can define that COP 10,000 = EUR 3.46 with the rate factor = 10,000.

Currency rate registration

Currency rate registration is different in dependent and independent multicurrency systems. This has an effect on the conversion rules for rates and rate factors, which are described in Chapter 8, “Conversion Rules.” The following figures shows which rates are defined in single, dependent, and independent currency systems.

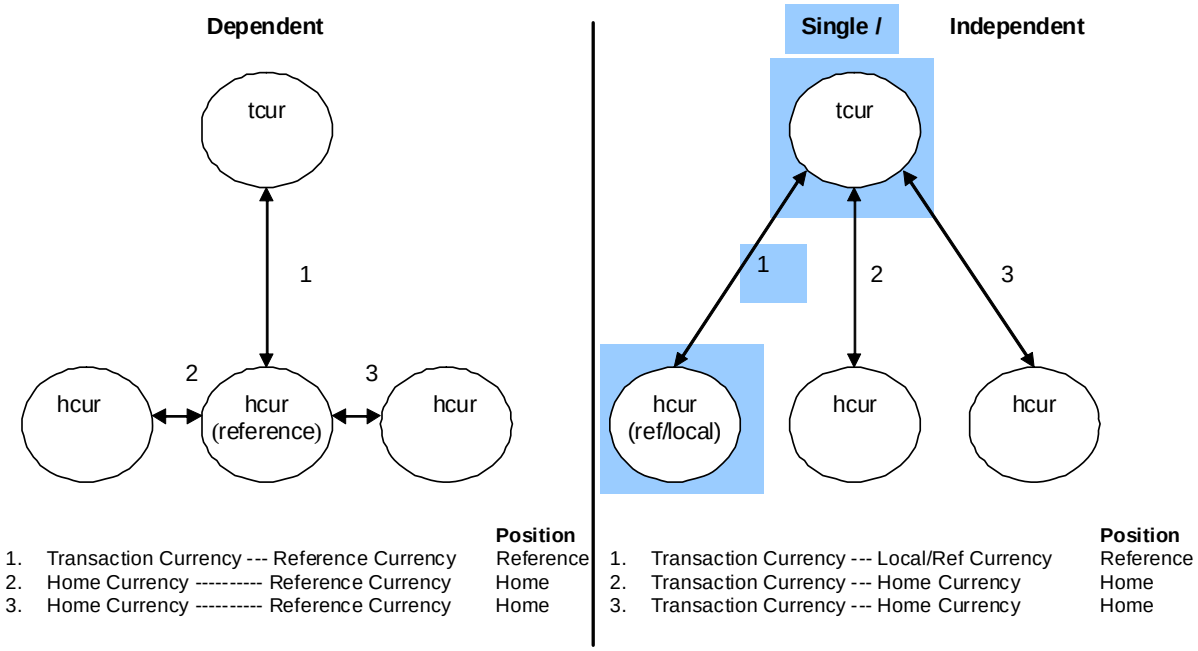

Figure 5: Currency rate registration in dependent, single, and independent currency systems

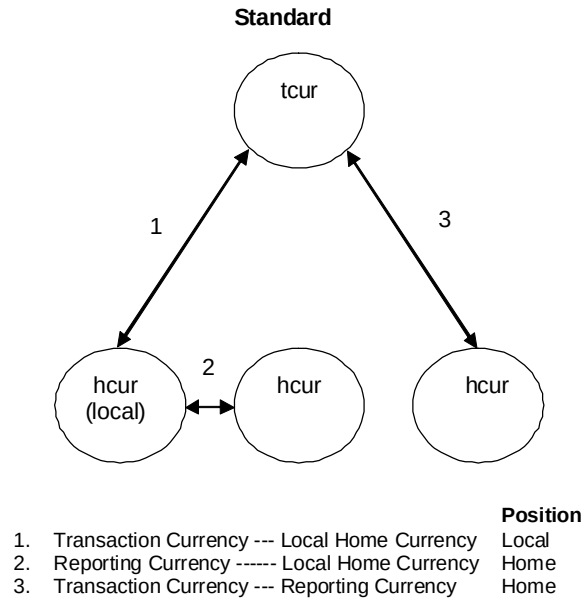

Figure 6: Possible scenario for currency rate registration in a standard currency system

Currency rates in a standard currency system

In a standard multicurrency system, currency rates must be defined between all foreign currencies and all home currencies of the financial companies of a group. Additionally, rates between the reference currency and the foreign currencies, and between the local and the reference currency, must be set up.

Currency rates in a single currency system

In a single currency system, the currency rates must be defined between the transaction currencies and the reference currency, which is the common local home currency for all companies.

Currency rates in a dependent multicurrency system

In a dependent multicurrency system, the following currency rates must be defined:

- The rates between the transaction currencies and the reference currency, which is one of the home currencies in all financial companies.
- The rates between the reference currency and each of the other home currencies.

No rates are used between the transaction currency and the other home currencies. The other home currencies are only related to the reference currency and are therefore dependent on that currency.

Transaction amounts are first converted into the reference currency and then from the reference currency into each of the other home currencies.

Currency rates in an independent multicurrency system

In an independent multicurrency system, the currency rates must be defined between the transaction currencies and each of the home currencies, including the reference currency. In an independent system, the reference currency equals the local currency.

Transaction amounts are converted into the reference currency and also directly into each of the other home currencies.

In the amount calculations, no rates are used between the reference currency and the other home currencies. The home currencies are all related to the transaction currency and are therefore independent of each other.

Chapter 4
Currency-Initialization Scenarios

4

Eleven currency-initialization scenarios support the conversion from each type of currency system into one of the other currency systems. The following table shows the currency system conversion types that are supported. The conversion of an independent multicurrency system into a dependent multicurrency system and vice versa, is not supported.

Currency initialization scenarios

From / To	Single currency system	Dependent multi-currency system	Independent multi-currency system	Standard currency system
Single currency system	Change the local/reference currency	Change the local/reference currency. Remove the reporting currencies	Change the local/reference currency. Remove the reporting currencies	*Not supported*
Dependent multicurr. system	Change the local/reference currency Add reporting currencies	Add, remove, or change any of the home currencies. Change the ref. currency	*Not supported*	*Not supported*
Independent multicurr. system	Change the local/reference currency Add reporting currencies	*Not supported*	Add, remove, or change any of the home currencies. Change the ref. currency	*Not supported*
Standard currency system	Change the local currency. Add reporting currencies. Change the ref. currency	Add, remove, or change any of the home currencies. Change the ref. currency	Add, remove, or change any of the home currencies. Change the ref. currency	Add, remove, or change any of the home currencies. Change the ref. currency. Change the translation method for a reporting home currency

The following sections list the specific requirements of each scenario.

Currency initialization basically consists of initializing currencies and currency amounts. Additional data related to the currencies and currency amounts, such as rates, rate factors, and amount limits, is also converted. This chapter describes only the requirements for conversion of the currencies and currency amounts. The conversion of the additional data is the same for each conversion scenario.

Different conversion rules apply to the fields that are involved in CRI depending on the field type. For example, different rules apply to converting amounts, currency rates, rate factors, and rate determiners. Refer to Chapter 8, “Conversion Rules,” for details of the conversion rules.

Single to single currency

If you convert a single currency system to a single currency system, you can make the following change:

- Change the reference currency, which is also the local home currency

The amounts in the local home currency are converted into amounts in the new local home currency. The new home-currency amounts replace the original amounts in the database, as shown in the following example.

For elementary differences in home-amount calculation between an “euro initialization” and other conversions, refer to Chapter 8.

Example

Single to single currency initialization			
Company	**Currency type**	**Before initialization**	**After initialization**
Logistic company	Local and reference	DKK	USD
	Reporting 1, 2	not used	not used
Financial company 1	Local and reference	DKK	USD
	Reporting 1, 2	not used	not used
Financial company 2	Local and reference	DKK	USD
	Reporting 1, 2	not used	not used

Single currency to dependent multicurrency

If you convert a single currency system to a dependent multicurrency system, you can make the following changes:

- Extend the number of home currencies to a maximum of three currencies.
- Change the reference currency.

The amounts in the local home currency are converted into amounts in the new home currencies. The new home-currency amounts replace the original amounts in the database or are stored as the additional home-currency amounts. Amounts in home currency that are already present in one of the new home currencies are not recalculated.

Note: In a dependent setup, if the euro is one of the new home currencies, it must be the reference currency to be euro compliant, as shown in the following example.

For elementary differences in home-amount calculation between a “euro initialization” and other conversions, refer to Chapter 8.

Example

Single to dependent multicurrency initialization			
Company	**Currency type**	**Before initialization**	**After initialization**
Logistic company	Reference	DKK	USD
	Local home	DKK	USD
	Reporting 1	not used	not used
	Reporting 2	not used	not used
Financial company 1	Reference	DKK	USD
	Local home	DKK	GBP
	Reporting 1	not used	DKK
	Reporting 2	not used	USD
Financial company 2	Reference	DKK	USD
	Local home	DKK	DKK
	Reporting 1	not used	GBP
	Reporting 2	not used	USD

Example

Fictive euro initialization of the DKK: (The new reference currency is euro.)

Single to dependent multicurrency initialization			
Company	**Currency type**	**Before initialization**	**After initialization**
Logistic company	Reference	DKK	EUR
	Local home	DKK	EUR
	Reporting 1	not used	not used
	Reporting 2	not used	not used
Financial company 1	Reference	DKK	EUR
	Local home	DKK	DKK
	Reporting 1	not used	EUR
	Reporting 2	not used	USD
Financial company 2	Reference	DKK	EUR
	Local home	DKK	GBP
	Reporting 1	not used	USD
	Reporting 2	not used	EUR

Single currency to independent multicurrency

If you convert a single currency system to an independent multicurrency system, you can make the following changes:

- Extend the number of home currencies to a maximum of three currencies.
- Change the reference currency, which is also the local home currency.

The companies of one logistic area in an independent multicurrency system must all have the same reference currency, the same local home currency, and the same reporting home currencies. Therefore, the new currencies must be the same for all financial companies involved.

The amounts in the local home currency are converted into amounts in the new home currencies. The new home-currency amounts replace the original amounts in the database, or are stored as the additional home-currency amounts. Amounts in home currency that are already present in one of the new home currencies, are not recalculated.

For elementary differences in home-amount calculation between a “euro initialization” and other conversions, refer to Chapter 8.

Example

Single to independent multicurrency initialization			
Company	**Currency type**	**Before initialization**	**After initialization**
Logistic company	Reference	COP	USD
	Local home	COP	COP
	Reporting 1	not used	EUR
	Reporting 2	not used	USD
Financial company 1	Reference	COP	USD
	Local home	COP	COP
	Reporting 1	not used	EUR
	Reporting 2	not used	USD
Financial company 2	Reference	COP	USD
	Local home	COP	COP
	Reporting 1	not used	EUR
	Reporting 2	not used	USD

Single currency to standard multicurrency

If you convert a single currency system to a standard multicurrency system, you can make the following changes:

- Extend the number of home currencies to a maximum of three currencies.
- Change the local home currency.
- Change the reference currency.

The companies of one logistic area in a standard multicurrency system must all have the same reference currency. For the home currencies, no restrictions exist.

The amounts in the local home currency are converted into amounts in the new home currencies. The new home-currency amounts replace the original amounts in the database, or are stored as the additional home-currency amounts. Amounts in home currency that are already present in one of the new home currencies are not recalculated.

For elementary differences in home-amount calculation between a “euro initialization” and other conversions, refer to Chapter 8.

For euro compliancy, no specific home-currency setup is required other than introduction of the euro as the local home currency for those companies that reside in the new “euro country”.

Example

Single to standard currency initialization			
Company	**Currency type**	**Before initialization**	**After initialization**
Logistic company	Reference	DKK	USD
	Local home	DKK	DKK
	Reporting 1	not used	EUR
	Reporting 2	not used	not used
Financial company 1	Reference	DKK	USD
	Local home	DKK	EUR
	Reporting 1	not used	EUR
	Reporting 2	not used	not used
Financial company 2	Reference	DKK	USD
	Local home	DKK	GBP
	Reporting 1	not used	USD
	Reporting 2	not used	USD

Dependent multicurrency to single currency

In this case the single to single currency scenario applies. In addition, at least one home currency currently in use is removed.

Dependent to dependent multicurrency

In this case, the single currency to dependent multicurrency scenario applies. In addition, it is possible that at least one additional home currency currently in use must be converted.

Dependent to standard multicurrency

In this case the single currency to standard multicurrency scenario applies. In addition, at least one additional home currency currently in use may have to be converted.

Independent multicurrency to single currency

In this case, the single to single currency scenario applies. In addition, at least one home currency currently in use is removed.

Independent to independent multicurrency

In this case, the single currency to independent multicurrency scenario applies. In addition, at least one additional home currency currently in use may have to be converted.

Independent to standard multicurrency

In this case, the single currency to standard multicurrency scenario applies.

Standard to standard multicurrency

In this case, the single currency to standard multicurrency scenario applies. In addition, at least one additional home currency currently in use may have to be converted.

Chapter 5
The Currency-Initialization Process

5

This chapter describes the CRI sessions that you must use to carry out each stage of the internal or external currency initialization. Refer to the online session Help and field Help for details. Refer to Chapter 7, “Euro Initialization,” for details that apply to internal and external currency initialization to euros.

Moving to the recommended standard multicurrency system requires you to perform some preparatory setup actions in your G/L. Because, for each financial company, non-default rates can be defined by individual ledger account, this setup must be done before conversion. These additional preparatory steps are described later in this chapter.

Currency initialization overview

To carry out currency initialization, you must take the following steps. Details of each step are described later in this chapter.

1. If you are moving to a standard currency system, verify that you have completed the necessary preparatory setup, as described in the section “Additional preparation for a standard multicurrency system setup”.
2. Verify that you have carried out the necessary prerequisite actions, as described in the section “Prerequisites for currency initialization.”
3. Define the conversion cluster in the following sessions:
   - CI Clusters (tccri7501m000/tccri7101s000)
     Define the initialization type, the new currency system, and the new reference currency.
   - CI Cluster Companies (tccri7502m000/tccri7102s000)
     For each conversion-cluster company, define the new home currencies.
   - CI Cluster Transaction Currencies (tccri7104m000)
     Only for an external currency initialization, select the EMU transaction currencies that must be converted to euros.

4 Define the currency exchange-rates between the currencies that are currently in use and the new home currencies, in the CI Rates (tccri7100m000) session.

5 Run the Update TCCRI Tables and Table Field Tables for All ERP Packages (tccri7221m000) session to fill the CI tables and CI fields tables.

6 Specify customized tables and table fields that must be converted.
Specify the customized tables and fields, the conversion rules to be applied, and the priority with which the table or field must be converted, in the following sessions:

- CI Tables (tccri7522m000)
- CI Conversion Table Parameters (tccri7123s000)
- CI Fields (tccri7521m000)
- CI Conversion Field Parameters (tccri7122s000)

7 Process the conversion cluster. Before you start the actual initialization process, you must perform one or more trial initializations to generate error logs. When all the errors are corrected, you can run the actual initialization process to change the data in the database.

Use the following sessions:

- CI Process (tccri7203m000)
- CI Error Log (tccri7520m000)

8 View or print the audit data. You can delete the audit data after printing the data.

Use the following sessions:

- Print Audit Files (tccri7401m000)
- CI Process Data (tccri7503m000)
- CI Process Data Internal (tccri7504m000)
- CI Process Data Internal (tccri7505s000)

Process model

The following figure shows the dependencies between the different parts of the conversion process.

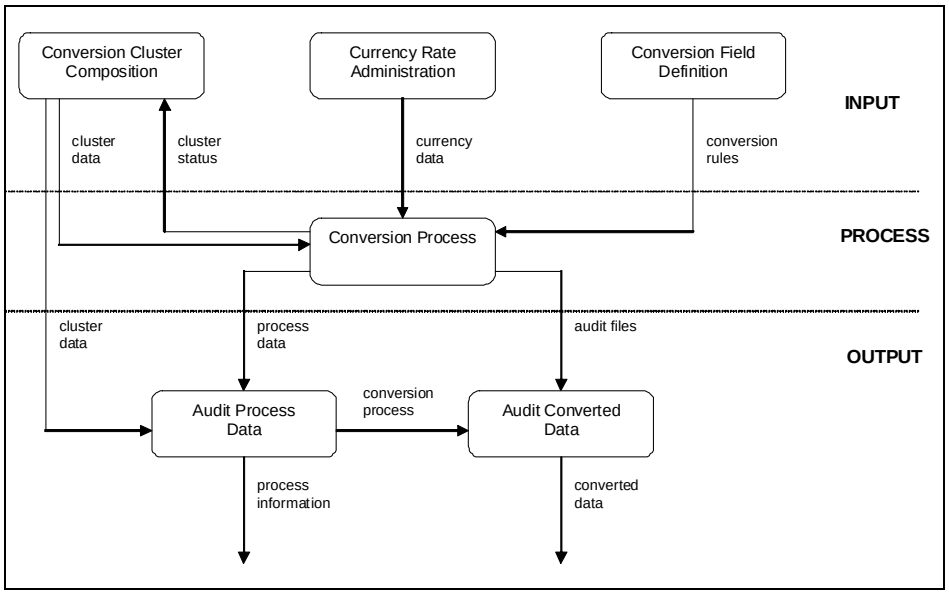

Figure 7: The conversion-process dependency diagram

Prerequisites for currency initialization

Before you start a currency initialization process, take care of the following:

- Ensure that all printed invoices are posted to Financials, then run the following sessions:
  - Process Delivered Sales Orders (tdsls4223m000)
  - Process Delivered Service Orders (tdpur4223m000)

  If you fail to do so, invoices with the status Printed (in the Sales Invoicing module) that have not yet been posted to Financials, will remain. The original invoice will still be in the old home currency, because the CRI conversion changes the old home currency to the new home currency,. However, when you reprint the invoice, ERP LN will use the new home currency.
- As much as possible, transactions must be finalized before you start the initialization process, for the following reasons:
  - During internal currency initialization, the currency rates between the transaction currencies and the new home currencies defined in the CI

rates (tccri7100m000) session, are copied to the Currency Rates (tcmcs0108m000) session and the effective date is set to the initialization date. After that, the currency rates between the transaction currencies and the new home currencies with an effective date earlier than the initialization date do not exist. Therefore, after internal currency initialization you cannot carry out any actions on invoices and other documents with a document date earlier than the initialization date.

  - No audit data is recorded for non-finalized transactions because these are still subject to change. If not all transactions can be finalized, you can print the report of non-finalized transactions before or after the initialization process, depending on your audit needs.
  - Financial batches containing inter-company transactions must have been finalized in any case.
- All non-modifiable batches in Financials must be finalized. If this is not the case, the conversion process is aborted. If you run a trial conversion process, the error log includes any non-finalized batches.
- The ledger accounts and related data required for posting rounding differences and for dual accounting during the CRI process, must be specified in the Chart of Accounts (tfgld0508m000) session.
- Before you start currency initialization, always generate a backup for safety reasons.
- You can only reverse currency initialization by reinstalling the backup.
- If currency initialization stops due to a failure, you must reinstall the backup to recover the tables.

Additional preparation for a standard multicurrency system setup

In the standard currency system, by financial company at ledger-account level, you can define which rate must be used for calculating the reporting home amounts. The default rate-determiner settings, defined at company level during setting up the CI cluster, and which, after currency initialization, will be visible in the Companies (tcemm1170m000) session, can be overwritten at ledger-account level. If the company defaults should not apply to all ledger accounts, then, for each financial company, you must complete this setup before you run the final CRI process, using the following sessions:

- Ledger Account Settings by Business Partner Group (Suppliers) (tfacp0113m000), to define common settings for ledger accounts by supplier group.

- Ledger Account Settings by Business Partner Group (Customers) (tfacr0113m000), to define common settings for ledger accounts by customer group.
- Ledger Account Settings by Tax Origin (tfgld0127m000), to define common settings for sales tax accounts and purchase tax accounts.
- Ledger Account Settings by Individual Account (tfgld0128m000), to define individual settings for any other account.

To define the conversion cluster

Use the Currency Initialization Clusters (tccri7101s000) session to specify general cluster information, such as the following:

- The conversion type (internal or external)
- The new currency system
- The new reference currency
- The ledger accounts to which the rounding differences must be posted.
- The rate determination and translation methods by cluster company.

Conversion-cluster companies

When you create a conversion cluster, ERP LN generates a list of cluster companies to be converted. A conversion cluster includes all companies within a logistic area. Archive companies are also included.
Refer to Chapter 3, “Currency Systems and Company Structures,” section “Logistic areas.”

ERP LN generates the list of conversion cluster based on the company structure to which the current company belongs. The cluster companies include all the companies that have a link with the current company.

Important: Before you perform currency initialization, the multisite setup must be correct, otherwise the data that results from the conversion can be corrupt.

- To *view* the generated list of conversion-cluster companies, use the CI Cluster Companies (tccri7502m000) overview session.
- To *maintain* the details to be used for the internal conversion of each cluster company, use the CI Cluster Companies (tccri7102s000) details session.

Conversion-cluster transaction currencies

Use the CI Cluster Transaction Currencies (tccri7104m000) session to indicate the (EMU) transaction currencies that must be converted to euros during external currency initialization. The session displays the (ERP LN generated) list of the currencies used by the cluster companies of the selected conversion cluster.

To define the currency exchange-rates

Use the CI Rates (tccri7100m000) session to maintain the currency rates for all clusters defined in the CI Clusters (tccri7501m000) session. When you start the session, you can choose to generate a list of all the currencies used by the company for which currency rates to the new home currencies of all the defined clusters must be present.

To change the home currencies of logistic or financial companies, you must supply the currency rates between the currencies used and the new home currencies. The rates must be based on the new home currencies.

Note: The CRI module does not use the currency rates defined in the Currency Rates (tcmcs0108m000) session. You must define all the required currency rates in the CI Rates (tccri7100m000) session.

To define the CI tables table and CI table fields

Use the Update TCCRI Tables and Table Fields Tables for all ERP Packages (tccri7221m000) session to fill the CI Tables and the CI Fields tables.

To specify customized tables and table fields

Customized ERP LN software can have specific conversion requirements. Therefore, the conversion table and conversion field definition sessions allow you to add customized tables and fields to the conversion cluster.

Use the CI Tables (tccri7522m000) and CI Conversion Table Parameters (tccri7123s000) sessions to specify for each customized table:

- The conversion type(s) to be performed on the table or field.
- The priority of the table conversion (before or after other tables have been converted).

- A condition to specify selective conversion of the data in the table. For example, if only rows of a specific type must be converted.
- Whether a table must be converted by using a DLL instead of the standard conversion scripts. If this is the case, you can indicate whether the DLL must be processed before, during, or after the standard conversion.

Use the CI Fields (tccri7521m000) and CI Conversion Field Parameters (tccri7122s000) sessions to specify for each customized field:

- The type of conversion in which the field must be processed.
- The priority with which the field must be converted.
- The conversion rule that indicates how the field must be processed. The conversion rules are described in Chapter 8, “Conversion Rules.”
- The table fields, in the same table, where the related currency, customer, supplier, rate, and rate factor can be found. If this information is contained in a different table, you must provide a DLL to convert the table.
- The field that contains the financial company number that is used for the conversion of the field. If a shared table contains a company field, for example, tfgld110.cono, this field must be used. The home currency amounts must be converted to the home currencies of this company instead of the company that is currently being processed. This parameter cannot be used in combination with the default currency rule. If no financial company is used for the table, this parameter can be left blank.
- The Express in Base Currency field that can be used in combination with the Rate and the Rate Factor fields. This parameter can only be used in combination with the rate / rate factor rule. If no Express in Base Currency field is used in combination with the Rate field, this parameter can be left blank.

If the standard conversion rules cannot be used for a customized table or field, special conversion DLLs must be written and linked to the table.

Chapter 8 lists the standard conversion rules and describes when and how you must provide special DLLs.

To process the conversion cluster

Use the CI Process (tccri7203m000) session to start the conversion batch process.

To run a trial conversion

In order to prevent inconsistent data after conversion, you must first run at least one trial conversion to check the availability of all data needed for the conversion. The trial conversion must be repeated until a “Trial succeeded” status is encountered. The trial conversion carries out the changes without storing the new data in the database.

The errors detected during the trial conversion are logged to the error log file. During a trial conversion, the process does not stop at an error. In this way you can detect and solve all errors before you carry out the actual conversion.

After a trial conversion, the **Conversion Cluster Status** remains **Registered**. The **Run Status** has one of the following values:

- **Errors/Warnings**
  Errors were detected during the trial conversion.
- **Trial succeeded**
  The trial conversion was completed without errors.

To run the currency initialization process

You can start the conversion process for a conversion cluster that has not yet been succesfully processed. The **Conversion Cluster Status** must be **Registered**.

When the process is started, ERP LN sets the conversion cluster’s **Run Status** to **In Process**.

During the conversion, ERP LN performs the following actions:

- Currency initialization.
- Registration of the audit data.
- Recording the process information.

- Update the Currency rates (tcmcs008) table.
  ERP LN adds the CI currency rates of the new home currencies that you defined in the CI Rates (tccri7100m000) session to the currency rates that are defined in the Currency Rates (tcmcs0108m000) session. The CI rate is copied to each of the exchange-rate types in use.

  If a rate is defined in both sessions, the rate defined in the CI Rates (tccri7100m000) session replaces the rate present in the Currency Rates (tcmcs0108m000) session. The currency rate effective dates are set to the date and time when the conversion was completed.

- Update the company setup, visible in the Companies (tcemm1170m000) session, with the CRI settings.

A progress indicator informs you about the progress of the process.
If no errors are detected during the batch process the conversion ends normally and the conversion cluster **Run Status** is set to **Ready**. The **Conversion Cluster Status** is set to **Processed**.
If errors are detected you will receive a message and the **Run Status** is set to **Aborted**. The errors are logged to the error log file.

To view the audit data

ERP LN records two types of audits:

- Process data audit
- Conversion data audit

To view or print the process data audit

You can use the following sessions to view or print the process audit data:

- The Process Data (tccri7503m000) session, to view general process data such as the status of the process that has been carried out and the status of the clusters that have been converted.
- The CI Process Data Internal (tccri7504m000) session to view information about the companies within a processed cluster.
- The Process Data Internal (tccri7505s000) details session to view all the details of one of the companies selected in the CI Process Data Internal (tccri7504m000) overview session.
- The CI Error Log (tccri7520m000) session, to view the error log file.

To view or print the converted data audit

Use the converted data audit to check the results of the conversion processes. ERP LN generates the following audit files:

- Finalized transactions
- Open items purchase
- Open items sales

You can use the Print Audit Files (tccri7401m000) session to print the audit reports of a selection of converted tables. You can choose to delete the audit files after printing the reports.

You can choose to print the audit report with or without details. A detail line consists of a complete table occurrence. At the end of the report, a line with totals is printed automatically for the **Amount** fields. If you choose to print no details, only the lines with the totals are printed.

If you choose to delete audit data, ERP LN first prints a report of the totals and then deletes the data within the selection range.

To complete the internal currency initialization

After processing the internal initialization cluster you must carry out the following actions:

1. Run the Clear Rounding Differences for Documents with Period Change (tccri7214m000) session. This session clears incorrect rounding differences that are created for documents for which the financial period changed, and balances these documents with the correct rounding differences.
2. Use the Recalculate Supplier Balances (tfacp2245m000) session to adjust open invoice amounts in the subledger. This session recalculates totals for each open invoice, and totals of all open invoices for each supplier. The Invoice Balance (tccom123.amnt) field in the Invoice-from Business Partner Balances (tccom123) table is updated.
3. Use the Recalculate Customer Balances (tfacr2245m000) session to adjust open invoice amounts in the subledger. This session first recalculates the total amount for each open invoice and next, the total amounts of all open invoices for each supplier.

4 Use the Update Open Items – Rounding Differences (tccri7210m000) session to eliminate rounding differences between the **Amount in Foreign Currency** field and the **Amount in Home Currency** field in the open item tables. As a result, for the tables tfacp200 and tfacr200, wherever the balance in foreign currency is zero, the balance must also be zero for the balance amount in home currency. You can only effectuate this session in the base company of the group.

5 Use the Recalculate Business Partner Balances (tfacp2245m000) session again to adjust open invoice amounts in the subledger, after making corrections with the Update Open Items – Rounding Differences (tccri7210m000) session.

6 Use the Recalculate Business Partner Balances (tfacr2245m000) session again to adjust open invoice amounts in the subledger, after making corrections with the Update Open Items – Rounding Differences (tccri7210m000) session.

7 Check the balance between the total amount of the subledger and the control account of the general ledger. If differences exist, start the Print Control Accounts Checklist (tfacp2415m000) session and explain the indicated difference.

8 Check the balance between the total amount of the subledger and the control account of the general ledger. If differences exist, start the Print Control Accounts Checklist (tfacr2415m000) session and explain the indicated difference;

9 Use the Rebuild Opening Balance/History from Transactions (tccri7212m000) session to include all the postings that result from rounding differences in the history. You must do this shortly after the internal conversion, to avoid unexpected rounding differences in the history. You can also run this session for closed periods.

Note: If during the internal currency initialization no entries were created on the ledger accounts for rounding differences that you specified in the CI Cluster Companies (tccri7102s000) session, you do not need to rebuild the opening balances and the history.

10 If you have changed your currency system from single currency to (in)dependent or standard multicurrency and you want to perform dual accounting, you must enter the appropriate data for dual accounting in the Company Parameters (tfgld0103s000) session of ERP LN Financials.

11 If you have changed your currency system to an independent multicurrency system and you want to calculate and post exchange gains and losses, you must enter the destination gain and loss accounts in the Chart of Accounts (tfgld0108s000) session of ERP LN Financials.

12 If you have changed your currency system to a standard multicurrency system, you must define gain and loss accounts for document balancing, either in the Company Parameters (tfgld0503m000) session, or, by currency, in the Additional Currency Features (tfgld0129m000) session.

13 Check the values of a number of parameters and master data in Financials and correct them if necessary. Refer to Appendix A: “To check Financials fields” for a list of the fields in Financials that may need to be checked.

For example, if some specified maximum amount was USD 1500, then after internal conversion the maximum amount can be EUR 1030.23. You may want to change this to a round number, for example 1000 or 1100.

14 Use the Actualize Cost and Valuation Prices (ticpr2220m000) session in Manufacturing to recalculate the cost prices of standard items if necessary. For more information, refer to Chapter 6, “Currency Differences,” section “To reduce cost price differences”.

15 Use the Calculate Commissions and Rebates (tdcms0240m000) session in Order Management to rebuild the commissions and rebates amounts.

16 Use the following sessions in Enterprise Planning to recalculate the data based on the new home currency:

- Compute Performance Indicators (tcrao2202s000)
- Optimize Order Parameters (tcrao3200m000)

17 ERP LN does not convert FASB52 translation adjustment data. If you use the FASB52 translation adjustment schemes, you must delete all FASB52 data that existed before internal currency initialization. After internal currency initialization, you must derive the FASB52 ledger accounts again and recalculate the FASB52 data.

18 Clear the user default settings. This may be required because if the old home currency is the user’s default currency, default amount calculation can lead to data corruption.

19 If required, run the Companies (ttaad4100m000) session and change the old default currency into the new default currency.

Chapter 6
Currency Differences

6

This chapter describes:

- How to post currency differences that are caused by the difference in exchange rates
- How to reduce cost price differences after internal currency initialization
- How to manage the effect of internal currency initialization on the period totals (“history”) tables

To post currency differences

Currency differences are caused by currency exchange-rate fluctuations during, for example, the period that an invoice amount is outstanding. During currency initialization the rate fluctuation can be caused by the recalculation of the rates based on the amounts in the new currencies.

These currency difference must be accounted for. In a regular situation such currency differences are posted as unrealized currency difference at year’s end, and at the moment of payment/receipt they are posted as realized.

After internal and external currency initialization, you can use the following sessions to write off currency differences of open invoices:

- Write off Currency Differences (tfacp2240m000)
- Write off Currency Differences (tfacr2250m000)

The ledger account for rounding differences

In the CI Cluster Companies (tccri7102s000) session you must enter the ledger accounts to which ERP LN posts the rounding differences that result from the conversion. You can specify statutory and complementary accounts of the **Balance sheet** and **Profit and loss** types. Rounding differences of transactions that can have an opening balance are posted to the balance-sheet accounts. Rounding differences of other types of transactions are posted to the profit and loss accounts.

The following rules apply to the ledger accounts:

- The ledger account must have sublevel zero.
- The ledger account must not already be in use. This is because during the internal conversion of the period-totals tables it is possible that a row is inserted with a key that already exists. This would stop the process.

To reduce cost price differences

There can be a considerable difference between the price amounts before and after internal currency initialization. This can be caused by a difference in the degree of accuracy of the currency exchange-rates that are used before and after the internal currency initialization.

You can reduce the price differences by recalculating the cost prices in the Actualize Cost and Valuation Prices (ticpr2220m000) session after the internal currency initialization. The recalculated prices are then more accurate than the amounts that result from converting the old prices.

Internal currency initialization of period totals (“history”) tables

Period totals data and statistics data are also converted to the new currency during internal currency initialization. This is to avoid that amounts in the new home currency and in the previous home currency are mixed if some of the period-totals data is presented after the conversion and when the statistics are used for analyses.

If you have doubts about the correctness of the period totals and opening balances tables, you can use the Rebuild Opening Balance/History from Transactions (tfgld3203m000) session before you carry out the internal currency initialization.

After the internal currency initialization, you must use the Rebuild Opening Balance/History from Transactions (tfgld3203m000) session to include all postings due to rounding differences in the history. You can use this session at any time after the internal currency initialization, but it is advised to do it shortly afterwards to avoid unexpected rounding differences in the period totals.

Note: If during the internal currency initialization no entries were created on the ledger accounts for rounding differences that you specified in the CI Cluster Companies (tccri7102s000) session, you do not have to rebuild the opening balances and the period totals.

You must also check the instructions present in the Recurring Transaction Instructions (tfgld1107m000) session for possible unbalances caused by the rounding of amounts.

If ERP LN detects an imbalance in the transaction history, the following message for the history tables tfgld201-206 appears in the error log of the conversion run:

- Rounding difference too large in: company / year / period / period type

If the error message appears for the tfgld106 **Finalized Transactions** table, the chart of accounts is already out of balance. This situation cannot be solved. Running the Rebuild Opening Balance/History from Transaction (tfgld3203m000) session cannot repair the balance. In this case, contact your ERP LN implementation consultant.

Chapter 7
Euro Initialization

7

This chapter describes how you can use the currency-initialization (CRI) functions to make your ERP LN system euro compliant.

Euro initialization types

You can use the CRI functions to initialize the euro as your new reference and local home currency. The following CRI functions are available:

- Internal currency initialization, which you can use to:
  - Change your reference and local home currency to euro
    You must either replace one of your existing home currencies by the euro or change the currency system to add the euro to your home currencies. Note that in the standard currency system the reference currency does not necessarily have to be the euro.
  - Add the euro to your home currencies
    Change your currency system, for example, from single currency to multicurrency, so that you can add the euro to your home currencies.
- External euro initialization. There are two types:
  - Business-partner related external initialization, which you can use to change the default order and contract currency from an EMU-marked currency (in session tcmcs0102m000) to euro for a selected range of business partners.
  - Non-business partner related external initialization, which you can use to change amounts in transaction currencies that are not directly related to business partners. For example, item purchase prices, price lists, and so on.

External translation

In addition, you can use the external euro translation functions in Financials to generate payment advices, interest invoices, cash forecast, and reports in euros for open invoices in EMU-marked currencies.

Euro compliance implementations

The type of changes that you need to make depend on the currency system used before and after the internal euro initialization. To comply with the fixed-rate rule (a fixed rate exists between the EMU currency and the euro), the new currency system must be one of the following:

- Single currency or dependent multicurrency, in which the reference currency must be euro.
- Standard multcurrency, in which the local home currency must be euro, and no restrictions exist for the reference currency.

Internal euro initialization involves changing:

- The reference currency from an EMU currency to euro (single currency or dependent multicurrency system)
- The local home currency from an EMU currency to euro (standard multicurrency system).

If you already use the maximum of three home currencies, you can replace one of your home currencies with the euro.

The following table shows examples of typical euro compliance implementations. The **System and currencies after conversion** column contains the specific data defined for the conversion cluster and the conversion-cluster companies.

Examples of euro compliance implementations

System and currencies before conversion	System and currencies after conversion
Single currency Reference currency = EMU Local home currency = EMU	*Standard multicurrency* Reference currency = GBP Local home currency = EUR Reporting currency 1 = GBP
Single currency Reference currency = EMU Local home currency = EMU	*Single currency* Reference currency = EUR Local home currency = EUR
Single currency Reference currency= EMU Local home curency = EMU	*Dependent multicurrency* Reference currency = EUR Local home currency = GBP Reporting currency 1 = EUR
Single currency Reference currency= EMU	*Dependent multicurrency* Reference currency = EUR Local home currency = EUR

Local home currency = EMU	Reporting currency 1 = GBP
Dependent multicurrency Reference currency = EMU Local home currency = EMU Reporting currency 1 = USD	*Dependent multicurrency* Reference currency = EUR Local home currency = GBP Reporting currency 1 = USD Reporting currency 2 = EUR
Dependent multicurrency Reference currency = EMU Local home currency = EMU Reporting currency 1 = USD	*Standard multicurrency* Reference currency = USD Local home currency = EUR Reporting currency 1 = USD Reporting currency 2 = EUR
Standard multicurrency Reference currency = USD Local home currency = EMU Reporting curency 1 = USD	*Standard multicurrency* Reference currency = USD Local home currency = EUR Reporting currency 1 = USD

Note: To be euro compliant, both in a single currency and in a dependent multicurrency system, the reference currency must be euro. If you use a non-EMU currency (for example, American dollars) as your reference currency, and a transaction currency is a (former) EMU currency, your system is not euro compliant because it does not comply with the fixed-rate rule. This restriction regarding the reference currency does not apply to the standard multicurrency system in which the transaction currency is always directly translated into the local home currency.

Enterprises outside the European Union

Enterprises outside the European Union with business partners that use EMU currencies can optionally perform external conversion to change the EMU currencies to euros.

If you still use EMU currencies, you will need to optionally perform external conversion to avoid the use of currencies that no longer exist.

Internal euro initialization

You can use internal euro initialization to:

- Change the reference currency and one of the home currencies to euro.
- Change the currency system from single currency to standard or dependent multicurrency if this is required.

To perform internal euro initialization

You perform internal euro initialization in the same way as described for internal currency initialization in Chapter 5, “The Currency Initialization Process.” The current chapter only describes the differences with internal currency initialization.

Prerequisites

Before you perform internal euro initialization you must:

1. Define the euro in the Currencies (tcmcs0102m000) session.
2. Mark the EMU currency/currencies as “EMU Currency” in the Currencies (tcmcs0102m000) session.
3. Ensure that all companies within the logistic area have the euro as “Transition Currency” (from ERP LN FP5) or “Euro Currency” (in previous versions) defined in the Companies (tcemm1170m000) session.

The currency exchange-rates

In the CI Rates (tccri7100m000) session, you must define the currency exchange-rates between all the currencies that are used by the company, and the new home currencies.

To be euro compliant, you must define the rates between EMU transaction currencies and the euro as follows:

- The fixed rates between the EMU currencies and the euro must be used
- The **Base Currency** must be euro
- The **Rate Factor** must be 1
- The **Express in Base Currency** check box must be selected

The conversion cluster data

In the CI Clusters (tccri7101s000) session, you must select the following data:

- The **Currency System** must be one of the following:
  - Standard
  - Single
  - Dependent
- Except for the standard multicurrency system, the **Logistic Currency** (that is the reference currency) must be the euro currency. In the standard currency system, the Logistic Currency can be any currency.

The cluster company data

In the CI-Cluster Companies (tccri7102s000) session, you must select the following data:

- One of the **Home Currencies** must be the euro.

External euro initialization

Only external currency initialization of the euro is supported. You cannot convert transaction currencies to other currencies than euros.

External euro initialization is used to convert the selected transaction currencies of order contracts and service orders to euros. After external euro initialization, the financial transactions still to be performed for the contracts and service orders are completed in euros.

The difference between external conversion in ERP LN and the conversion in ERP LN's predecessor systems is that in ERP LN, open purchase and sales orders are *not* converted; this is because in ERP LN the complexity of the order-related data to be converted has increased significantly, and the risk of data corruption in specific situations is greater than in the preceding systems. Reconciliation of data in general, and financial and operations-management data in particular, is better controlled in ERP LN than it was. Also, the business need for a conversion of open orders is less urgent, because in most cases, the lifetime of orders is limited. Note that, after external initialization, for the business partners that have changed their EMU currency into euro, new orders will be generated/defaulted in the new euro currency. Contracts, which typically have a longer lifetime, will be converted.

To use euros for *new* orders and contracts with your business partners, you can change the business partner's default currency to euro in the same external euro initialization. If your business partners want to use euros for future orders and existing contracts, you must perform external euro initialization for those business partners.

Open invoice amounts

Legal rules and accounting principles do not permit you to change the currency or the amount of registered purchase and sales invoices. Therefore, ERP LN does not change the amounts of open invoices in Central Invoicing and in the Financials database during external currency initialization.

After external currency initialization, you can use the external translation functions to handle open invoices that are in EMU currencies. Refer to the section “External euro translation in Financials,” later in this chapter, for details.

To convert price books and price lists

You can use price books and price lists for multiple business partners. When you have run external euro initialization for all the business partners that use a price list or a price book, you can run external non-business partner related euro initialization to change the price-list currency and the price-book currencies to euro.

If you do not run external euro initialization for all the business partners that use a price list or a price book, you can copy the price list and the price book and change the currency of the copy.

To adapt the bank payment files

If the bank currency is an EMU currency, payments can be made in either the national currency or the euro. If you use a bank file to report payments to your bank, you must adapt the bank payment file to reporting in euros instead of EMU currencies after external euro initialization.

To perform external euro initialization

You perform euro currency initialization in the same way as described for internal currency initialization, in Chapter 5, “The Currency-Initialization Process.”

This chapter only describes the differences with internal currency initialization and the additional information that only applies to external euro initialization.

Prerequisites

Before you can carry out external euro initialization, you must perform the following actions in each company of the conversion cluster:

1. Define the euro currency in the Currencies (tcmcs0102m000) session. The **EMU Currency** check box must be cleared.
2. Ensure that the company has the euro as “Transition Currency” (from ERP LN FP5) or “Euro Currency” (in previous versions) defined in the Companies (tcemm1170m000) session.

The external conversion type

In the Conversion cluster details (tccri7101s000) session, you can select two types of external conversion:

- **External BP** to convert customer/supplier related data
  Converts the transaction-currency amounts and currencies that are linked to specific business partners or a range of business partners. For example:
  - Open contracts
  - Business-partner currencies and insured credit amounts
- **External nonBP** to convert non customer/supplier related data
  Converts the transaction-currency amounts and currencies that are not linked to any business partners, for example, price-list currencies.

The conversion-cluster companies for external conversion

ERP LN generates the same conversion-cluster companies for internal currency initialization and external euro initialization. You cannot change the list of conversion-cluster companies that ERP LN generates. Therefore, external conversion is carried out for all companies of the conversion cluster.

The conversion-cluster transaction currencies

When you create a conversion cluster for external conversion, ERP LN generates the list of conversion transaction currencies. It includes all currencies used by all the companies of the conversion cluster.

In the Conversion Clusters (tccri7501m000) session, on the **Specific** menu, choose **Specify Transaction Currencies** to start the CI Cluster Transaction-Currencies (tccri7104m000) session. You must use this session to indicate for each currency whether it must be converted to euro.

Transaction-currency rates

In the CI Rates (tccri7100m000) session, you must define the currency exchange-rates between the EMU transaction currencies and the euro as follows:

- The fixed rates between the EMU currencies and the euro must be used.
- The **Base Currency** must be euro.
- The **Rate Factor** must be 1.
- The **Express in Base Currency** check box must be selected.

The conversion rules

The following conversion rules are available to convert tables during external conversion:

- Transaction currency
- Transaction-currency amount
- Rate/rate factor (external)
- DLL

For more information, refer to Chapter 8, “Conversion Rules.”

External euro translation in Financials

Legal rules and accounting principles usually do not permit that you change the invoice currency or the amount of registered purchase and sales invoices. Therefore, ERP LN does not change the transaction amounts of open invoices in the Financials database during external euro initialization.

If the invoice currency is an EMU currency, this creates a problem because the EMU currencies actually ceased to exist after the transition. As a result, you cannot generate payment advices, interest invoices, cash forecasts, and so on, in the invoice currency.

External euro translation translates open invoice amounts in EMU currencies to euros before you generate payments, interest invoices, and cash forecast, and before you display or print the amounts. External euro translation does not change the original amounts and currencies that are stored in the database; these remain in EMU currencies.

Enterprises outside the European Union with business partners that use EMU currencies must also use external euro translation to handle open invoice amounts in EMU currencies, after the transition.

External euro translation supports all types of multicurrency systems, including the new standard currency system, and can be used in euro-compliant and non-euro-compliant companies.

The external euro translation functions

External euro translation can be used for the following transaction amounts:

- Open Items in the A/R module.
- Open Items in the A/P module.
- Anticipated Payments and Receipts in the Cash Management module.

Note: Standing orders are payments to which no invoices are linked. You can modify standing orders and create standing orders with the euro currency when needed. Therefore, external euro translation does not apply to standing order amounts.

For the standard currency system, external euro translation in Financials is not yet supported.

Prerequisites

ERP LN can perform external euro translation of open invoice amounts if the following conditions are met:

- The “EMU Currency” check box is selected for the transaction currency (the invoice currency) in the Currencies (tcmcs0102m000) session.
- The euro is defined in the Currencies (tcmcs0102m000) session.
- The euro currency is defined as “Transition Currency” (from ERP LN FP5) or “Euro Currency” (in previous versions) defined in the Companies (tcemm1170m000) session.
- The currency rates between the euro currency and the company’s home currencies are defined in the Currency Rates (tcmcs0108m000) session.
- The rate determiner that applies to the invoice amount is not of a **Fixed** type.

If the rate determiner that applies to the invoice amount is of a **Fixed** type, the invoice amounts are not translated because the fixed rate can differ from the rates derived from the fixed rates between the EMU currency and the euro.

Amount registration and rate registration in the database

Regarding the external translation process, bear the following in mind:

- Amount registration in ERP LN
  Transaction amounts are calculated and stored in the database:
  - In the transaction currency
  - In each of the home currencies (note that in the standard currency system, amounts in the reporting home currencies are only stored within the general ledger and the subledgers)
- The currency rate and the rate factor used to convert the transaction amount to the home-currency amount, as well as and the rate's effective date are usually stored with the amount, in the same table.
- Currency rate/rate-factor registration in ERP LN
  Depending on the currency system, the currency rates and the corresponding rate factors listed below are defined in the Currency Rates (tcmcs0108m000) session. Currency rates between currencies that are not home currencies are not available:
  - **Standard multicurrency system**
    The currency rates between the transaction currencies and each of the home currencies, including the reference currency, as well as the currency rates between the local home currencies and the reporting home currencies.
  - **Single currency system**
    The currency rates between the transaction currencies and the reference currency.
  - **Dependent multicurrency system**
    The currency rates between the transaction currencies and the reference currency.
    The currency rates between the reference currency and the other home currencies.
  - **Independent multicurrency system**
    The currency rates between the transaction currencies and each of the home currencies, including the reference currency.

External euro-translation input

To translate transaction amounts in EMU currencies into euros, external euro translation uses the following input data:

- The EMU transaction currency
- The transaction amount expressed in the reference currency
- The rate date
- The rate determiner
- The exchange-rate type

The translation process

During the external translation process, ERP LN performs the following actions:

- Currency translation
  In the appropriate session or document, replacing the EMU currency code and description with the euro code and description.
- Amount translation
  Recalculating the invoice amount in euros. The calculation method depends on the company's currency system. For details, refer to the next section, "Amount translation."
- Rate and rate factor determination
  Determination of the currency rate and the rate factor used to convert the new invoice amount, in euros, to the home currencies. How the rate and the rate factor are determined depends on the company's currency system. Refer to Rate/Rate factor determination.

Amount translation

Note: External euro translation does not change the original data of the open invoices stored in the database.

The amounts are translated as follows:

- Euro-compliant single currency and dependent multicurrency systems
  The reference currency is the euro. The translated amount is the transaction amount in the reference currency.
- One of the home currencies is the euro. The translated amount is the transaction amount in the home currency that is the euro.

- Not euro-compliant systems
  The currency rate between the EMU currency and the euro is not available because the euro is not one of the home currencies. Therefore, the invoice amount in the reference currency is translated to euro, for the following reasons:
  - For single currency and dependent multicurrency systems, the reference currency *must* be used.
  - In independent multicurrency systems, the reference currency is probably the most stable currency.

Rate/Rate factor determination

After translating the invoice amount to euro, the rates and rate factors between the euro and the home currencies are determined.

If the reference currency is not euro, after translating the amount, ERP LN calculates the rate between the transaction amount in euro and the transaction amount in the reference currency instead of taking the rate from the Currency Rates (tcmcs008) table. This is done to avoid revaluation of the transaction amount.

Depending on the selection of the **Express in Base Currency** check box for the euro currency in the Currencies (tcmcs0102m000) session, ERP LN divides the amount in the euro by the amount in reference currency or the other way around.

The rate and rate factor are determined as follows:

- Single or dependent multicurrency system
  - The reference currency is the euro
    ERP LN sets the currency rate to 1.0 and the rate factor to 1. The rates between the reference currency and the other home currencies are not affected.
  - The reference currency is not euro
    The rate between the euro and the reference currency is calculated.
- Independent multicurrency system
  - One of the home currencies is the euro
    ERP LN sets the currency rate to 1.0 and the rate factor to 1.
    The rates between the euro and the other home currencies are taken from the Currency Rates (tcmcs008) table.
  - None of the home currencies is the euro
    The rate between the euro and the reference currency is calculated.
    The rates between the euro and the other home currencies are taken from the Currency Rates (tcmcs008) table.

To use external euro translation

You can use the external euro translation functions to translate open invoice amounts in EMU-marked currencies to euros in order to:

- Generate payment advices in euros and write them to a bank file
- Generate direct debit advices in euros
- Generate interest invoices in euros
- Generate cash forecast in euros
- Display or print the amounts in euros

To generate payment advices in euros

Normally when you generate a payment advice or a direct debit advice for open invoices, the payment advice currency or the direct debit advice currency is the invoice currency. If the payment method does not allow the use of foreign currencies, the payment method currency of the invoice payment method must be the same as the advice currency. External euro translation allows you to replace the invoice payment method with a euro-related payment method, in order to handle open invoices in EMU currencies in euros.

To use a euro-related payment method

To use a euro-related payment method, take the following steps.

1. Define the euro-related payment methods that you need. You can define a euro-related payment method for each existing payment method that handles EMU currencies. For example, you can copy such a method and set the **Payment Method Currency** to **euro**. You can also use a different type of report or bank file if this is required for reports in euros.
2. In the Payment Methods (tfcmg0140m0000) session, select the euro-related payment method for each payment method that uses an EMU currency.
3. Use the Maintain Data by Bank/Payment Method (tfcmg0145m000) session to link the new euro-related payment methods to the banks instead of the EMU currency payment methods.
4. Generate payment advice or direct debit advice in the following sessions:
   - Select Invoices for Payment (tfcmg1220m000)
   - Select Invoices for Direct Debit (tfcmg4220m000)

Select the **Use Euro for EMU Invoices** check box to generate payment advice or direct debit advice in euros for invoices in EMU currencies.

ERP LN automatically selects the euro-related payment method that you have linked to the invoice payment method with the EMU currency if the following conditions are met:

- The **Rate determiner** of the invoice is not of **Fixed** type.
- The **Foreign Currencies Allowed** field of the payment method linked to the invoice is **No.**
- The payment method currency is an EMU currency and the payment advice currency is euro. This is the case if the payment method currency is an EMU currency and you have selected the **Use Euro for EMU Invoices** check box**.**

Note: If you have not linked a euro-related payment method for the invoice payment method, ERP LN cannot find a payment method with a matching currency for the generated advice in euros. You can print an audit report of the advices that cannot be processed, and then select the euro-related payment method for each created or generated advice in the following sessions:

- Maintain Payment Advice (tfcmg1120m000)
- Maintain Direct Debit Advice (tfcmg4120m000)

To generate interest invoices in euros

In the Customer Receipts for Interest Invoices (tfacr5210m000) session, select the **Use Euro for EMU invoices** check box to generate interest invoices in euros based on open invoices in EMU currencies.

To generate interest cash forecast in euros

In the CMG Parameters (tfcmg0100s000) session, select the **Use Euro Instead of EMU currencies** check box to generate cash forecast in euros based on open invoices in EMU currencies.

To print Finance reports in euros

In a number of Print sessions of the A/R module and the A/P module you can print reports of open invoice amounts that are stored in EMU currencies in the database, in euros. In the Print sessions, select the **Use Euro Instead of EMU currencies** check box to print the reports in euros.

To display amounts in euros

In sessions that show invoice amounts and balance amounts in an EMU currency, you can choose **Display Invoice Amounts in Euro** on the **Specific** menu to display the invoice amount and the balance amount in euros. This command starts the **Invoice Amounts in Euro** (tfcmg6500m000) session.

Chapter 8
Conversion Rules

8

This chapter describes the conversion rules, or conversion functions that are used to convert the following types of fields during currency initialization:

- Currency fields
- Amount fields
- Rate fields
- Rate factor fields
- Rate determiner fields

The currency system to which you convert determines the way in which the data is registered after the conversion. After currency initialization the registered data must be consistent in all its internal relations. Therefore, the method of data conversion depends on the currency system to which you convert.

Currency initialization does not affect data that need not be converted. Therefore, ERP LN also determines whether data conversion is necessary when you change your home currencies.

For example, if reporting currency 1 before the conversion is reporting currency 2 after the conversion, the amounts and currency rates in reporting currency 1 are copied to the positions of the reporting currency 2 in the database. There is no need to recalculate the amounts or the rates.

For fields that cannot be converted by one of the standard CRI conversion rules, additional DLLs deal with the specific CRI requirements.

The conversion basis

The base currency for the conversion depends on the currency system after internal currency initialization, as follows:

- Conversion to standard multicurrency system:
  Either the local home currency or the transaction currency is the base currency for the conversion. Based on the translation method settings by reporting home currency, either the amounts in the local home currency are converted into amounts in the new reporting home currencies, or the transaction amounts are directly translated into amounts in the new reporting home currencies. These translation method settings are specific for the standard multicurrency system. Furthermore, if the local home currency is changed, the amounts in the local home currency, rather than the amounts in the transaction currency, are converted into amounts in the new local home currency.
- Conversion to dependent multicurrency system:
  The local home currency is the base currency for the conversion. The amounts in the local home currency are converted into the reference currency. After that the amounts in the reference currency are calculated in the other new home currencies.
- Conversion to independent multicurrency system:
  The transaction currency is the base currency for the conversion. The amounts in the transaction currencies are converted into the new currencies. However, if the local home currency is changed, the amounts in the local home currency, rather than the amounts in the transaction currency, are converted into the new local home currency.
- Conversion to single currency system:
  The local home currency, which is also the reference currency, is the base currency for the conversion. The amounts in the local home currency are converted into the new currencies.

The conversion rules

Conversion is performed in different ways, depending on the currency system to which you convert, and the type of the data. A number of standard conversion functions are available to convert the different types of data. Depending on the currency system to which you convert, the conversion rules process the data in different ways.

Internal initialization conversion rules

The following standard conversion rules have been implemented for internal currency initialization:

- Currency amount (amount in a specified currency)
  Currency amounts can be stored in up to three home currencies. The amount is converted into each of the new home currencies. Conversion takes place for each new home currency. The currency rates are taken from the CI Rates (tccri7100m0000) session.

  Single or dependent multicurrency system
  The transaction amount is converted to the reference currency. In a dependent currency system, the amount in the reference currency is then converted into the other home currencies.

  Independent multicurrency system
  The amount in the transaction currency is converted directly into each of the home currencies.

  Standard multicurrency system
  The amount in the transaction currency is converted directly into the local home currency. Depending on the translation method for each individual reporting home currency, either the amount in local home currency is converted into the amount in the particular home currency, or the home amount is calculated directly from the transaction amount.

- Rate/Rate factor
  Depending on the currency system after conversion, the rates are taken from the CI Rates (tccri7100m0000) session or the rates are calculated based on the converted amounts. The corresponding rate factors are changed as required.
- Default currency
  The default home currency for registering currency data is replaced with the new home currency.
- Sole home currency amount
  Use this rule in an independent currency system if the amount is not available in the transaction currency. The amount in the local home currency is converted into amounts in the new home currencies.
- Sole amount
  The currency of the amount in home currency is not available. To convert the amount, you must indicate whether the amount is in the reference currency or in the local home currency of the financial company.

- Rate determiners
  Some rate determiners cannot be used in specific currency systems. If the currency system changes and the rate determiner cannot be used in the new currency system, the rate determiner is changed to the most similar rate determiner that can be used in the new currency system. If the rate determiner can be used in the new currency system, the rate determiner is not changed.

External initialization conversion rules

The following standard conversion rules have been implemented for external currency initialization:

- Transaction-currency amount
  During external conversion, amounts in transaction currencies are converted to amounts in the new transaction currency, which is euro. The currency rates are taken from the CI Rates (tccri7100m0000) session.
- Transaction currency
  During external conversion, the transaction currencies are changed to the new transaction currency, which is euro.
- Rate and rate factors (external)
  The currency rate between the transaction amount in the new transaction currency (euro) and the company's home currency or currencies is calculated.

Amount conversion rule

Amounts can be registered in up to three home currencies. Conversion takes place for each new home currency and the resulting amounts are registered in the home currency amount positions in the database. ERP LN uses the currency rates defined in the CI Rates (tccri7100m000) session to calculate the new home currency amounts.

Amount conversion

A different calculation method is used, dependent on the (new) currency system you define in the CI cluster.

If the currency of the new amount in home currency is already present in the previous home-currency array, the new home amount is always copied from the particular previous home amount.

In general, if the currency of the amount is equal to the currency to which the amount is converted, the amount is not recalculated. One exception to this rule exists in case a euro initialization is performed: if the conversion basis is an EMU-marked currency (in the Currencies (tcmcs0102m000) session), and

the new currency is euro (defined as “Transition Currency” (from ERP LN FP5) or “Euro Currency” (in previous versions) in the Companies (tcemm1170m000) session), the amount in euro is always recalculated using the fixed CRI conversion rate. In the latter case, amount differences may occur between euro amounts in transaction currency and in home currency. This occurs if the euro was used as a transaction currency in the past, against a rate different from the CI conversion rate. The mechanism of using the direct rate in the euro initialization case will minimize the risk that the historic business results are different after euro initialization.

Note: No exception is made for transactions in which the transaction amount is zero, whereas one or more of the home amounts is unequal to zero. Also in that case, the amount conversion rule is executed.

- Single currency system
  In a single currency system, the local home currency and the reference currency are the same. The new local home (or reference) currency amount is calculated from the previous local home currency amount by using the exchange rate of the previous local home currency to the new reference currency.
- Dependent multicurrency system
  First the new reference-currency amount is calculated from the previous local home currency amount by using the exchange rate of the previous local home currency to the new reference currency. Next, the calculated reference-currency amount is converted to the amounts in the other home currencies using the exchange rates between the reference currency and the other home currencies.
- Independent multicurrency system
  The home-currency amounts are registered without being related to another home currency. Currency rates are available between each home currency and the transaction currency. The new local home-currency amount is calculated from the previous local home currency. The new reporting home-currency amounts are calculated directly from the transaction-currency amount using the exchange rate of the transaction currency to the new home currency.
- Standard multicurrency system
  The new local home currency amount is calculated from the previous local home currency amount by using the exchange rate of the previous local home currency to the new local home currency. Depending on the individual reporting home currency’s translation method defined in the CI cluster, amounts in reporting home currency are calculated either from the new local home currency or the transaction currency, using the particular CI conversion rates.

Rate/Rate factor conversion rule

The currency exchange rates are usually stored in the database with the amount, as well as the rate effective date. If the currency and the amount change, the correct new rate, rate factor, and effective date must also be stored. The setting of the **Express in Base Currency** check box which is either selected or cleared, must be copied.

The currency-rate registration for single and dependent currency systems differs from independent currency systems. Therefore, the rate/rate-factor conversion is also different. Refer to Chapter 3, “Currency Systems and Company Structures,” section “Currency-rate registration,” for details.

During external conversion, the home currencies do not change and a simpler method can be used to convert the currency rates and rate factors. Therefore, two rate/rate-factor rules exist:

- Rate/rate factor, used during internal conversion
- Rate/rate factor (external), used during external conversion

Rate factors and rate effective-date conversion

In all cases, the following changes are made during the conversion:

- The rate factors of the converted amounts are set to the appropriate rate factors defined for the home currencies in the CI Rates (tccri7100m000) session.
- The new currency rate’s effective date stored with the converted amount is set to the date when the currency initialization was carried out.

Internal rate/rate-factor conversion

Important: Home-currency amounts must be converted before the rate/rate-factor conversion-rule is used.

To avoid revaluation of the home-currency amounts, the rates stored with the converted amounts in the new home currencies are calculated from the new home-currency amounts and the corresponding amounts in the reference currency or the transaction currency.

Note: If the rate cannot be calculated because the amount is not available in the home currency but only in the transaction currency, the rate entered in the CI Rates (tccri7100m000) session is stored for the amount. For example, the amounts of invoices that are not yet composed are not available in the home currency.

One amount is divided by the other depending on the setting of the **Express in base currency** check box in the CI Rates (tccri7100m000) session.

Depending on the currency system after the currency initialization, different calculations are carried out.

- Conversion to single or dependent multicurrency system
  - If the reference currency changes, all rates are calculated. First, the rate between the transaction amount and the new reference currency is calculated. Next, for a dependent multicurrency system the rates between the amount in the reference currency and the other (new) home currencies are calculated, with the exception of rates between an EMU currency and the euro: in that case, the fixed CI conversion rates are stored.
  - If the reference currency does not change for a dependent multi-currency system, the rates between the amount in the reference currency and the other new home currencies are calculated.
- Conversion to independent multicurrency system
  The rates between the transaction currency and the new home currencies defined in the CI Rates (tccri7100m000) session are taken.
- Conversion to standard multicurrency system
  First, the rate between the transaction amount and the new local home amount is calculated. Next, depending on the individual translation method settings defined in the CI cluster, either the rates between the transaction currency and the new reporting home currency, or the rate between the new local home currency and the new reporting currency defined in the CI Rates (tccri7100m000) session, are taken.

External rate/rate-factor conversion

Important: Before the rate/rate factor (external) conversion rule is used, transaction-currency amounts must first be converted to euro.

The currency rates between EMU currencies and the euro must be based on the euro. It is not permitted to use inverted rates. Therefore, the new calculated currency rates are based on the transaction currency instead of the home currency.

- Conversion to single or dependent multicurrency system
  The currency rate between the transaction amount in the new transaction currency (euro) and the reference currency is calculated.
- Conversion to independent multicurrency system
  The currency rate between the transaction amount in the new transaction currency (euro) and each of the home currencies is calculated.

- Conversion to standard multicurrency system
  The currency rate between the transaction amount in the new transaction currency (euro) and each of both the local, and those reporting home currencies with the “From Transaction Currency” translation method, is calculated.

Default currency conversion rule

In certain parts of ERP LN such as the Financial Budget System (FBS), data is registered in a default currency which must be one of the home currencies. If the default currency is no longer one of the home currencies after the conversion, it must be replaced with another home currency during the currency initialization process.

Default currency conversion

During conversion, the current default currency is replaced with the new default currency and the amounts are converted to the new default currency.

Sole home-currency amount conversion rule

Sometimes the transaction-currency amount is not available for the calculation of the new home-currency amount. In such cases, the calculation of new home-currency amounts is based on the local home-currency amount.

Sole home-currency amount conversion

The new home-currency amount is calculated from the previous local home-currency amount.

Sole amount conversion-rule

A sole amount is an amount that is registered in one currency and to which no currency field is linked. Such amounts are usually in either the reference currency or the local home currency. For example, an item’s Inventory Carrying Cost (wh wmd400.scst) is a sole amount in the reference currency.

The sole amount rule converts the amount into the new local home currency or to the new reference currency.

To use this rule, you must specify whether the field is in the reference currency or in the local home currency, by selecting or clearing the **Use Reference Currency** check box in the CI Fields (tccri7521m000) session.

Sole amount conversion

Depending on the selection of the **Use Reference Currency** check box in the CI Fields (tccri7521m000) session, the amount is converted:

- From the previous reference currency into the new reference currency
- From the previous local home currency into the new local home currency

Rate determiner conversion-rule

A rate determiner defines the currency differences that will be written off as a result of currency rate fluctuation between the invoice date and the payment date.

Rate determiners vary per currency system. ERP LN supports three types of handling currency differences:

- The following rate determiners exclude the home currencies from currency-difference calculations:
  - Fixed local
  - Fixed hard
  - Fixed local and hard
- The following rate determiners use a specific exchange rate date for currency-difference calculations:
  - Delivery date
  - Receipt date
  - Document date
  - Expected cash date
- The **Manually Entered** rate determiner uses manually entered rates for currency-difference calculations

Some rate determiners cannot be used in specific currency systems. If the currency system changes and the rate determiner cannot be used in the new currency system, the rate determiner is changed to the most similar rate determiner that can be used in the new currency system. If the rate determiner can be used in the new currency system, it is not changed.

The following table shows the rate determiners that can be used for each currency system.

Rate determiner	Currency system			
	Standard	**Single**	**Dependent**	**Independent**
Fixed Local	-	Y	-	Y
Fixed Hard	-	-	Y	Y
Fixed Local and Hard	-	-	-	Y
Delivery Date	-	Y	Y	Y
Receipt Date	-	Y	Y	Y
Document Date	Y	Y	Y	Y
Expected Cash Date	-	Y	Y	Y
Manually Entered	Y	Y	Y	Y

Where:

Y = the determiner is valid for the currency system

- = the determiner is *not* valid for the currency system

Rate-determiner conversion

If the previous rate determiner cannot be used in the new currency system, the rate determiner is converted. Rate determiners that can be used by the currency system before and after the currency initialization are not changed. The following table shows the rate determiners that are replaced during each currency initialization scenario.

Rate determiner conversion		
Scenario	**Rate determiner before conversion**	**Rate determiner after conversion**
Single to Standard	Any rate determiner except Manually Entered	Document Date
	Manually Entered	Manually Entered
Single to Dependent and Dependent to Single	Fixed Local and Hard Fixed Local Fixed Hard	Fixed
Single to Independent	Fixed	Fixed Local and Hard
Independent to Single	Fixed Hard Fixed Local and Hard	Fixed
	Fixed Local	Document date

Transaction-currency amount conversion rule

Important: Transaction amounts are always converted to euros. The conversion of transaction amounts to other currencies than the euro is not supported.

The following figure shows the amount calculation scheme for amount conversion during external euro initialization.

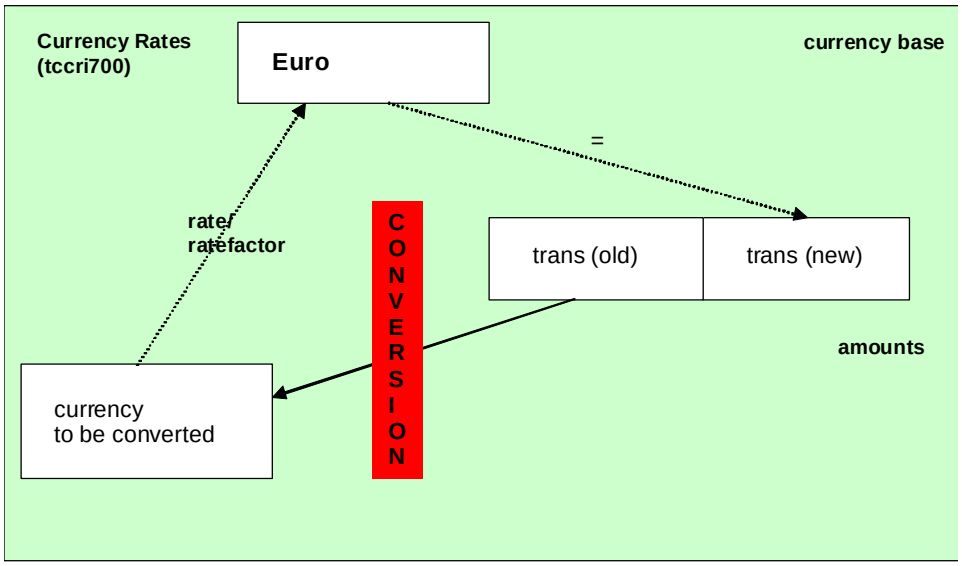

Figure 8: Amount conversion during external euro initialization

Transaction amount conversion

The euro amount is calculated from the transaction-currency amount by using the exchange rate of the transaction currency to the euro, defined in the CI Rates (tccri7100m000) session and according to the selection of the **Express in Base Currency** check box.

Transaction-currency conversion rule

The EMU transaction currency is replaced with the euro.

Important: Transaction currency fields must be converted after using the rate/rate factor (external) conversion rule.

Appendix A
To Check the Financials Fields

A

After the internal currency initialization, you must check the values of a number of fields in Financials and correct them as necessary.

For example, if the maximum amount for a specific transaction was 1500 NLG, the maximum amount after internal conversion can be 677.11 euros. You probably want to change this amount to a round number, for example, 650 or 700.

Check the following fields in Financials:

Financials fields to be checked after internal currency initialization		
Session code	**Session name**	**Field**
tfgld0101s000	Group Company Parameters	Short description of currency
tfgld0503m000	Company Parameters	Matching currency for different transaction currency, Gain / loss accounts for document balancing (from ERP LN FP5, when moving to the standard currency system)
tfgld0511m000	Transaction Types	Currency
tfgld0112m000	Transaction Schedules	Currency
tfgld0113s000	Transaction Schedule Details	Net amount
tfgld0140m100	Recurring Journal Transactions	Currency, Currency rate, Amount
tfgld0680m000	Reporting Currency Group Setup	Currency (possibly, define new group) - applies to the standard currency system only

Financials fields to be checked after internal currency initialization		
Session code	**Session name**	**Field**
tfgld0101s000	Group Company Parameters	Short description of currency
tfgld0503m000	Company Parameters	Matching currency for different transaction currency, Gain / loss accounts for document balancing (from ERP LN FP5, when moving to the standard currency system)
tfgld0511m000	Transaction Types	Currency
tfgld0112m000	Transaction Schedules	Currency
tfgld0113s000	Transaction Schedule Details	Net amount
tfgld0140m100	Recurring Journal Transactions	Currency, Currency rate, Amount
tfacr5101s000	Interest Invoice Related Data	Minimum amount for interest invoicing
tfacr0116m000	Pay-by Business Partners by Factor	Factoring Limit
tfacp0100s000	ACP Parameters	Matching tolerances amounts
tfacp0107m000	Automatic Matching Tolerances by Invoice-from Business Partner	Tolerance amounts
tfacp0114m000	Purchase Invoice Payment Authorizations	Maximum amount payment approval
tfacp0150m000	Purchase Invoice Authorizations	Invoice amounts higher/lower than expected
tfacp0508m000	Procurement Cards	Credit limits
tfcmg0100m000	CMG Parameters	Minimum amount for tax calculation, Home currency for cash forecast, Amounts for payment difference tolerances, Minimum trade note amount and currency
tfcmg0110s000	Bank Relations	Bank currency, Credit limit

Financials fields to be checked after internal currency initialization		
Session code	**Session name**	**Field**
tfgld0101s000	Group Company Parameters	Short description of currency
tfgld0503m000	Company Parameters	Matching currency for different transaction currency, Gain / loss accounts for document balancing (from ERP LN FP5, when moving to the standard currency system)
tfgld0511m000	Transaction Types	Currency
tfgld0112m000	Transaction Schedules	Currency
tfgld0113s000	Transaction Schedule Details	Net amount
tfgld0140m100	Recurring Journal Transactions	Currency, Currency rate, Amount
		amount
tfcmg0140s000	Payment/Receipt Method	Maximum amount, Minimum amount for reason
tfcmg1100m000	Payment Authorizations	Minimum and maximum amounts
tfcmg1115m000	1099 Box Numbers	Minimum amount
tffam0100s000	FAM Parameter	Depreciation unit maximum value

Appendix B
Glossary

B

conversion cluster
A group of companies and/or currencies that must be converted together with the conversion details such as the type of conversion to be processed.

conversion-cluster company
One of the companies that will be converted when you process the cluster.

currency difference
A difference caused by currency exchange-rate fluctuations, for example, during the period that an invoice amount is outstanding.

During currency initialization the rate fluctuation can be caused by the recalculation of the rates based on the amounts in the new currencies.

dependent currency system
A currency system in which you can use multiple home currencies within the same logistic company. For most entities, the financial company determines the local currency that is used. All transactions are registered in all the home currencies.

Currency rates are defined between the external currencies and the reference currency, and between the reference currency and the other home currencies.
Transaction amounts are first converted into the reference currency. Then the transaction amount in the reference currency is converted into the other home currencies.

EMU currency
The national currency of a country participating in the European Economic and Monetary Union (EMU) before the introduction of the euro.

enterprise unit
A financially independent part of your organization that consists of entities such as departments, work centers, warehouses, and projects. The enterprise unit's entities must all belong to the same logistic company, but a logistic company can contain multiple enterprise units. An enterprise unit is linked to a single financial company.

When you carry out logistic transactions between enterprise units, these are posted in the financial companies to which each enterprise unit is linked. The enterprise structure models define the relationships between the enterprise units, and in this way the goods transfer that can take place between the enterprise units. To use invoicing and pricing between enterprise units, you must link the enterprise units to internal business partners.

You can use enterprise units to do separate financial accounting for parts of your business. For example, you can define enterprise units for separate parts of your organization that belong to one logistic company but that are located in different countries. The accounting of each enterprise unit is performed in each country's national currency and in the financial company linked to the enterprise unit.

external euro initialization
External euro initialization converts to euros the transaction currencies and the transaction amounts of open orders and contracts, that are related to the business partners (customers or suppliers) for which you process the external conversion.

FASB52 translation adjustment
Guidelines for translating amounts in the local home currency with the correct currency rates before reporting in a different currency than the reference currency.

independent currency system
A currency system in which all financial companies and logistic companies that are related to each other in the enterprise structure model use the same two or three home currencies. All transactions are registered in all the home currencies.

Currency rates are defined between the transaction currencies and all home currencies.

Transaction amounts are converted directly from the transaction currency into the home currencies.

internal euro initialization
Internal euro initialization changes the current home currency to euro and converts all the amounts in the current home currency to euros.

local home currency
The home currency that is the legal currency of the country in which the company is established. Tax reporting must usually be done in the local home currency.

logistic area
A combination of logistic companies and financial group companies. A logistic company contains multiple enterprise units. Financial group companies contain one or more financial groups.

The logistic company's enterprise units can be linked to a financial company within one financial group company. The enterprise units can also be linked to financial companies within different financial group companies. Also, enterprise units within different logistic companies can be linked to one financial company. And finally, it is possible that some financial companies within a financial group company are not linked to an enterprise unit.

logistic currency
See: reference currency

reference currency
The home currency that is used for the company's accounting. The reference currency is the base for all calculations with currencies.

If it is unclear which of the home currencies must be used, the reference currency is used. In a multicurrency system, the reference currency is used when the Rotate Currency function is not available.

In a multicurrency system you can use up to three home currencies. One of these must be the same as the reference currency. The three home currencies that you can define for a company are:

- The company's local currency
- Reporting currency 1
- Reporting currency 2

Synonym: logistic currency

standard currency system
Available as of ERP LN FP5, a currency system in which foreign currency transactions are translated straight from the transaction currency to the local currency, without triangulation through the reference currency.
By default, currencies are translated from the transaction currency into the reporting currency. However, reporting currencies can also be translated from the local currency, depending on the particular reporting currency's translation-method setting.
Note: The standard currency system replaces the other currency systems previously used in ERP LN.