X-pand into the Future

e u r e x *circular 043/00*

Date: Frankfurt, 25 May 2000
Recipients: All Eurex members and vendors
Authorised by: Jürg Spillmann

Release 4.1/EEX and IC Release 2000 – Further Information

Related Eurex Circulars: 041/00

Contact: Eurex Member Readiness: Tel. +49 (0)69-2101-1700

Content may be most important for:	**Attachments:**
➲ **Front Office / Trading** ➲ **Middle + Back Office** ➲ **IT / System Administration** ➲ **Auditing / Security Administration**	1. Eurex 4.1/EEX Preliminary Functional Release Notes 2. Eurex 4.1/EEX Preliminary Technical Release Notes 3. IC Release 2000 Preliminary Functional Release Notes 4. IC Release 2000 Preliminary Technical Release Notes 5. IC Release 2000 Member Brochure 6. Eurex 4.1/EEX VALUES Modification Announcement - Call Interface 7. Eurex 4.1/EEX VALUES Modification Announcement - Application Requests, Responses and Subscriptions 8. Eurex 4.1/EEX, IC Release 2000 Information Calendar

Following the announcement in Eurex Circular 041/00 of IC Release 2000 and Eurex 4.1/EEX, we are attaching a number of related documents giving further information on the content and changes to be introduced in October / November 2000.

Separate Preliminary Functional and Technical Release Notes are issued for Eurex 4.1/EEX and for IC Release 2000.

An overview of the Integrated Clearing facilities available with IC Release 2000 are covered by the attached Member Brochure.

Modifications to the VALUES API are described in documents which cover the updates to the common Call Interface and the Eurex-specific Application Requests, Responses and Subscriptions.

Application developers and vendors should pay particular attention to section 3.3 of the Modification Announcement of the Call Interface, which defines a new protection mechanism preventing abuse of VALUES re-entrancy constraints and thread usage.

You will also find attached the calendar for publication of documentation relating to the new releases.

Eurex Deutschland
Börsenplatz 7 - 11
D-60313 Frankfurt am Main
www.eurexchange.com

Eurex Member Readiness
Tel. +49 (0)69-2101-1700
Fax +49 (0)69-2101-1701

Alternative
Tel. +49 (0)69-9770-1700
Fax +49 (0)69-9770-1701

Management Board:
Dr. Jörg Franke, Otto E. Nägeli
Andreas Preuß, Jürg Spillmann

X-pand into the **Future**

Eurex Release 4.1/EEX

Preliminary Functional Release Notes

© Eurex 2000

All proprietary rights and interest in this publication shall be vested in Eurex Administration and Management (" Eurex") and all other rights including, but without limitation, patent, registered design, copyright, trade mark, service mark, connected with this publication shall also be vested in Eurex.

Whilst all reasonable care has been taken to ensure that the details contained in this publication are accurate and not misleading at the time of publication, no liability is accepted by Eurex for the use of information contained herein in any circumstances connected with actual trading or otherwise. Neither Eurex, nor its servants nor agents, is responsible for any errors or omissions contained in this publication which is published for information only and shall not constitute investment advice. This brochure is not intended for solicitation purposes but only for the use of general information.

All descriptions, examples and calculations contained in this publication are for guidance purposes only and should not be treated as definitive. Eurex reserves the right to alter any of its rules or contract specifications, and such an event may affect the validity of information in this publication.

® Eurex is a registered trademark.

Table of Contents

1	**General Information**	**2**
2	**Functional Changes for Eurex Release 4.1**	**4**
2.1	**Product State HOLIDAY**	**4**
2.2	**New Duration Formula for OTC Basis Trades**	**4**
2.3	**OTC Block Trades for Futures**	**5**
2.4	**Multiple Entry Functionality for OTC Block Trade Entry Window**	**6**
3	**Introduction of European Energy Exchange (EEX)**	**7**
3.1	**Characteristics of EEX compared to Eurex**	**7**
3.2	**New Reports for EEX**	**8**
3.2.1	Liquidating Values Report for EEX Products (RPTCC042)	8
3.2.2	Additional Margin Report for EEX Products (RPTCC047)	9
3.2.3	EEX Open Delivery Positions Report (RPTCE120)	9
4	**Modified Screens/Windows and Reports**	**10**
5	**Appendix A – List of Modifications**	**11**
5.1	**Screens**	**11**
5.2	**Windows – Trading System**	**12**
5.3	**Windows – New Trading System**	**12**
5.4	**Windows – Clearing System**	**14**
5.5	**Reports**	**15**
6	**Appendix B – Eurex Documentation**	**17**

1 General Information

This document contains the preliminary functional release notes for Eurex Release 4.1 and EEX.

The focus of Eurex Release 4.1 is the introduction of the following features:

- Product state HOLIDAY,
- New Duration formula for OTC Basis Trades
- System support for OTC Block trading for Futures, price-time matched as well as pro-rata matched Futures,
- Multiple entry functionality for OTC Block Trade Entry Window

Another focus is the introduction of the European Energy Exchange (EEX). EEX provides a facility to trade commodity derivatives where the underlying commodity is electricity. Technically EEX will run as a part of the technical environment of the Eurex system.

Eurex/EEX is providing a new additional graphical user interface (GUI) for Trading. Only changes related to business functionality are described in detail in this document. Other enhancements concern the following areas:

- Printing
- Audio signalling
- Sorting
- Additional filtering
- Columns freeze
- Delete last order
- Update button

For further detailed information about the changed Trading GUI functionality please refer to the new Eurex Trading System User Guide for the new GUI version, to be published in August 2000. The existing graphical user interface for Trading will also be supported for Eurex Release 4.1 but not made available for EEX members.

Eurex/EEX is providing enhancements for the graphical user interface (GUI) for Clearing. Only changes related to business functionality are described in detail in this document. Other enhancements concern the following areas:

- Print functionality
- Changes in Exercise Overview

For further detailed information about the changed Clearing GUI functionality please refer to the Eurex Clearing System User Guide, to be published in August 2000.

The system changes for Eurex Release 4.1/EEX are rolled out in two steps. The first part will be rolled out on 30.10.2000. The second part will be rolled out in November 2000. It is stated at the respective places in this document when the system capabilities for a specific functionality will become available. The following table gives an overview:

Changed/New Functionality	Availability
Product state HOLIDAY	30.10.2000
New Duration formula for OTC Basis Trades	30.10.2000
OTC Block trading for Futures	To be announced[1]
Enhancements for the Graphical User Interface for Clearing	30.10.2000
New Graphical User Interface for Trading (including multiple entry functionality for OTC Block Trade Entry Window)	November 2000
European Energy Exchange (EEX)	November 2000[2]

A list of new and updated documentation is attached in Appendix B. It will be provided in August 2000.

In this document the term ' Eurex Release 4.1' refers to the electronic system that serves both organizations Eurex *and* EEX in common.

[1] Technically available on all front-end platforms from November 2000.
[2] Amendments to screens and reports for later support of EEX will be introduced on 30.10.2000.

2 Functional Changes for Eurex Release 4.1

2.1 Product State HOLIDAY

With Eurex Release 4.1 a new product state HOLIDAY (HOLID) is introduced to indicate that a product cannot be traded because it is on holiday. All trading associated transactions are disabled for products in the product state HOLIDAY. This includes give-ups/take-ups, posting, position maintenance, trade adjustments and exercise/notification.

Historical trade transfer and historical give ups / take ups are not possible for a product on the day after the holiday.

Margining calculation for products in the state HOLIDAY is not changed.

The functionality for the product state HOLIDAY will become available on 30.10.2000.

2.2 New Duration Formula for OTC Basis Trades

With Eurex Release 4.1 a new Duration formula in the Eurex OTC- Basis Trade Facility (BTF) is introduced in order to calculate the correct Hedge Ratio (Cash Bond/Future). The Duration Method is the most commonly used hedge type to adjust the sensitivity of the bond on the yield curve.

The new duration formula will become available on 30.10.2000.

The hedge ratio is calculated as follows:

(1) First Step: Calculation of the Duration formula:

$$MacaulyDuration = \frac{\sum_{t=1}^{M} T_t * \frac{CF_t}{(1+y)^{T_t}}}{\sum_{t=1}^{M} \frac{CF_t}{(1+y)^{T_t}}}$$

t = Period when cash flow received

CF_t = value of cash flow at time t

T_t = time in years to cash flow t

M = total numbers of cash flows

y = yield to maturity

(2) Second Step: Calculate the Modified Duration

$$ModifiedDuration = \frac{MacaulyDuration}{\left(1+\frac{y}{k}\right)}$$

k = number of coupons per year

(3) Third Step: Calculate the Hedge Ratio

$$HedgeRatio = \frac{FaceAmount_{CB}}{NotionalSize_{Fut}} * \frac{ModD_{CB}}{ModD_{CTD}} * \frac{Dirty\ Price_{CB}}{Dirty\ Price_{CTD}} * PF_{CTD}$$

$FaceAmount_{CB}$	=	Nominal Value of the Cash Bond
NotionalSizeFut	=	Contract Value
$ModD_{CB}$	=	Modified Duration Cash Bond
$ModD_{CTD}$	=	Modified Duration CTD
$DirtyPrice_{CB}$	=	$CashPrice_{CB}$+$AccruedInterest_{CB}$
$DirtyPrice_{CTD}$	=	$CashPrice_{CTD}$+$AccruedInterest_{CTD}$
PF_{CTD}	=	Price factor CTD

2.3 OTC Block Trades for Futures

OTC Block Trade Entry enables Eurex members to clear OTC contracts through the clearing system of Eurex. This feature allows members to trade large orders without the risk of several partial executions.

Currently OTC Block Trades are only supported for Options. With Release 4.1 the Eurex trading system will support an OTC Block Trade Entry for Futures, price-time matched as well as for pro-rata matched Futures.

The system support for OTC Block Trades of Futures on all front-end platforms will become available in November 2000. The decision to release this functionality will be done individually per product.

An OTC Block Trade Entry for Futures consists of same steps as for Options. The steps are outlined here:

First, the buyer of the contract enters a request for an OTC Block Trade via *Add*. After a successful entry, he receives a transaction number from the system that he must transmit to the seller.

Second, to complete the OTC Block Trade, the seller of the contract must approve the request. For that purpose he uses the transaction number that he has received from the buyer to retrieve the transaction.

With Release 4.1 the trade types ‘ O’ for OTC Block Trades and ‘ B’ for OTC Basis Trades will be displayed additionally on several screens and windows. The trade type is introduced as filter criteria on several windows.

2.4 Multiple Entry Functionality for OTC Block Trade Entry Window

Currently with the graphical user interface for Trading OTC Block Trades must be submitted or approved separately. With Eurex Release 4.1 for the new graphical user interface for Trading a new list box is introduced in the OTC Block Trade Entry window that allows specifying multiple OTC Block Trades. The handling is analogous to the Mass Quote Entry Window. The buyer may enter multiple OTC Block Trades and submit them afterwards with one action. The seller is allowed to retrieve several Block Trades, collecting them in the list box and to approve them afterwards with one action.

Multiple entry functionality for OTC Block Trade entry will become available in November 2000.

3 Introduction of European Energy Exchange (EEX)

The EEX (European Energy Exchange) is a separate legal exchange entity using the Eurex system infrastructure. EEX products are commodity derivatives (Futures) where the underlying commodity is energy (i.e. Electricity). During EEX trading hours, exchange members can trade EEX Futures and create open positions. An open position represents the quantity of the underlying energy commodity that an exchange member has to deliver (short position) or accept delivery (long position) upon expiration of the Futures contract.

The system capabilities for EEX will become available in November 2000. Amendments to screens and reports supporting EEX will be introduced earlier on 30.10.2000.

3.1 Characteristics of EEX compared to Eurex

- EEX and Eurex will share the same hardware, system software and business application software infrastructure.
- The trading and clearing front-end that are provided for EEX are the new GUI-based trading application of the Eurex system and the GUI-based clearing application of the Eurex system. EEX trading and clearing is not supported via the UD application of the Eurex. EEX members are provided with the GUI front end (Trading and Clearing) and the Ported FMS screens. The current functionality provided by the Trading and Clearing API will be available to EEX members.
- EEX energy Futures are incorporated in the Eurex system as products. Normally they are not processed differently from Eurex products by the trading engine, the clearing interfaces or reports.
- EEX members will be allowed to trade EEX products only. EEX members are provided with an own member ID. In case that a legal entity being member at Eurex and EEX it has two different member IDs, one member ID for EEX allowing to trade and clear EEX products only and one member ID for Eurex allowing to trade and clear Eurex products only.
- Futures on energy are traded like financial Futures in the current Eurex system. A new type of " Over the Counter" (OTC) trade, called " Exchange of Futures for Physicals" (EFP), can be entered into the system for EEX products.
- Due to the introduction of the EFP functionality for EEX the following areas/functionality are enhanced to support EFP trades:
  - Give Up / Take Up functionality
  - Several reports (compare to appendix A)
- The trading unit of an EEX contract varies based on the number of delivery days within a delivery month according to the EEX contract specifications.
- A delivery month is assumed to be identical to the appropriate calendar month, according to the EEX contract specifications.

- All EEX products master data and public EEX market data are distributed via Financial Data Dissemination (FDD) and are available as for Futures. The variable contract unit for the EEX products is sent as contract size information where applicable.
- The following enhancements/amendments in the margining area are provided for EEX products:
  - Additional Margin calculation is based on a contract level and not margin class level. This means that the long and short positions for different expiration months will not be netted against each other at the margin class level.
  - No spread margin will be calculated for EEX products, i.e., no position netting (long and short position) between different contracts within a product is done, as futures contracts on electricity do not correlate in the same way as financial derivatives.
  - A new delivery margin will be introduced, to cover the financial risk during the phase of physical delivery of a contract.
- Some new reports are introduced and several existing reports are enhanced (refer to the following section and appendix A)
- Several windows and screens are enhanced (refer to appendix A)

3.2 New Reports for EEX

3.2.1 Liquidating Values Report for EEX Products (RPTCC042)

A new Liquidating values report will be created to show the " Variation" per contract and not per margin class for EEX products. This is necessary in order to prevent netting between contracts.

```
EUREX                                    LIQUIDATING VALUES FOR EEX PRODUCTS                              PAGE:      149
RPTCC042                                          (DOWNSIDE)                                  AS OF DATE: 08-11-00
                                                                                                RUN DATE: 08-11-00

CLEARING MEMBER: ABCFR ABC BANK                                ACCOUNT: PP                      CURRENCY: EUR
EXCHANGE MEMBER: TRD001 TRADER 1
MARGIN GROUP: FELX                                             MARGIN CLASS:  EEX - ELECTRICITY
     PRODUCT/              NET       UNIT          CURRENT              MINIMUM              RISK
     CONTRACTS             POS       VAL           VALUE                VALUE                VALUE          VARIATION
--------------------   --------  ----------  ------------------   ------------------   ------------------  --------------
FEX1                                                    99.50                98.80                98.80

FEX1 DEC 00                10 L   1000.0000          995,000.00-          988,000.00-          988,000.00-       7,000.00-
FEX1 JAN 01                20 S   1000.0000        2,000,000.00         1,986,000.00         1,986,000.00       14,000.00-
FEX1 FEB 01                30 L   1000.0000        3,045,000.00-        3,024,000.00-        3,024,000.00-      21,000.00
```

3.2.2 Additional Margin Report for EEX Products (RPTCC047)

A new Additional Margin Report will be created to show the margin requirement for EEX products on a contract basis.

```
EUREX                                    ADDITIONAL MARGIN FOR EEX PRODUCTS                                    PAGE:        8
RPTCC047                                                                                                AS OF DATE: 08-11-00
                                                                                                          RUN DATE: 08-11-00

CLEARING MEMBER: ABCFR ABC BANK                                    ACCOUNT: PP                  CLEARING CURRENCY: EUR
EXCHANGE MEMBER: TRD001 TRADER 1
MARGIN GROUP:  FELX
MARGIN CLASS:  EEX - ELECTRICITY                              MARGIN CLASS CURRENCY: EUR

   PRODUCT/          UPSIDE          DOWNSIDE      OFFSET                    ADJUSTED        ADJUSTED       ADDITIONAL
   CONTRACTS       CLASS CURR      CLASS CURR     FACTOR   EXCHANGE RATE   UPSIDE (EUR)   DOWNSIDE (EUR)    MARGIN
-----------------  ---------------  -------------  ------  --------------- --------------- --------------- ---------------
FEX1 DEC 00              7,000.00       7,000.00-   0.00          1.000000        7,000.00            0.00        7,000.00
FEX1 JAN 01             14,000.00      14,000.00-   0.00          1.000000       14,000.00            0.00       14,000.00
FEX1 FEB 01             21,000.00-     21,000.00    0.00          1.000000            0.00       21,000.00       21,000.00
                                                                               --------------- ---------------
FELX   TOTAL:                                                                       21,000.00       21,000.00
```

3.2.3 EEX Open Delivery Positions Report (RPTCE120)

The EEX Open Delivery Positions Report (RPTCE120) is a new report tailored for EEX products. The report lists all open positions for expired EEX contracts after the last trading day per exchange member and differentiated by agent accounts (both long and short open positions) and the proprietary accounts (netted open positions). The listed open positions will be delivered physically. The report is distributed to the EEX Exchange Members and EEX Clearing Members.

```
Eurex                                    EEX OPEN DELIVERY POSITIONS REPORT                                    PAGE:        1
RPTCE120                                                                                                AS OF DATE: 18-10-00
                                                                                                          RUN DATE: 18-10-00

CLEARING MEMBER: DEFEX DEF BANK (1)
PRODUCT TYPE   : FENE  FUTURE ON ENERGY (2)
CONTRACT       : FEN1 NOV 00 (3)                                                                  CURRENCY: EUR (4)
TRADING UNIT   :         285 (5)

     (6)      (7)       (8)           (9)              (10)            (11)             (12)
EXC MBR ID LONG (A1) SHORT (A1) NET POSITIONS (PP)  INV AMT LONG (A1) INV AMT SHORT (A1) INV AMT NET (PP)
---------- --------- ---------- -----------------  ----------------- ------------------ ----------------
DEFEX            150        -50            -50             150,000.00         -50,000.00       -50.000.00
```

4 Modified Screens/Windows and Reports

A list of all modified and added screens and reports including a brief description of the changes can be found in appendix A.

Detailed descriptions will be published in Eurex Member User Manual Clearing (X0004000), Eurex Member User Manual Trading (X0003900), Eurex Clearing System User Guide (X0006100), Eurex Trading System User Guide (X0003800) and the manual for the new graphical user interface for Trading.

5 Appendix A – List of Modifications

In the following the screens, windows and reports are listed that have been modified for Eurex Release 4.1/EEX.

Modifications to the layouts of screens, windows and reports will be introduced on 30.10.2000 with the exception of the new graphical user interface (GUI) for Trading that will become available in November 2000.

New field entries for Eurex will become available in November 2000 with the exception of the new product state HOLIDAY that will become available on 30.10.2000. New field entries for EEX will become available with the start of EEX.

5.1 Screens

ID	Screen long name	Org.	Short description of change
A047	USER SETUP - GUI INQUIRY	EEX	This screen is enhanced to include an entry for the resource of the new EFP Trading VALUES application requests.
C080	ONLINE TIME AND SALES SHEET	Eurex, EEX	The Online Time and Sales Sheet screen (C080) is enhanced to accept the trade types “ E” and “ O” to distinguish OTC Block Trades (“ O”), OTC Basis Trades (“ B”), EFP Trades (“ E”) and other on-exchange trades.
F020	POSITION DETAIL INQUIRY SCREEN	EEX	The Position Detail Inquiry screen (F020) is enhanced to support EFP trades. The trade type indicator column (TT) is enhanced to identify also EFP Trades by displaying an “ E” in the respective column.
N020	GIVE-UP DESIGNATION BY ORDER	Eurex	The Give Up Designation by Order screen (N020) is enhanced to display the trade type to distinguish between OTC Basis Trades (“ B”) and other on-exchange trades.
N030	GIVE-UP DESIGNATION BY TRANSACTION	EEX	The Give Up Designation by Transaction screen (N030) is enhanced to distinguish EFP Trades from other on-exchange trades. The prompt field TRADE TYPE is enhanced to accept the new type “ E” for retrieving EFP Trades.

ID	Screen long name	Org.	Short description of change
N050	TAKE-UP ACCEPTANCE BY ORDER	Eurex	The Take-up Acceptance by Order (N050) is enhanced to display the trade type to distinguish OTC Basis Trades (“ B”) and other on-exchange trades.
N060	TAKE-UP ACCEPTANCE BY TRANSACTION	EEX	The Take-up Acceptance by Transaction (N060) is enhanced to distinguish EFP Trades from on-exchange trades. The prompt field TRADE TYPE is enhanced to accept the new type “ E” for retrieving EFP Trades.
G010	DAILY MARGIN INQUIRY	EEX	The Daily Margin Inquiry screen (G010) is enhanced to display the new delivery margin.

5.2 Windows – Trading System

Window name	Org.	Short description of change
MARKET OVERVIEW	Eurex	The Market Overview Window displays the indicator HOLID for the new product state HOLIDAY.

5.3 Windows – New Trading System

For the windows of the new graphical user interface for Trading only modifications compared to the corresponding windows of the existing graphical user interface for Trading are listed.

Window name	Org.	Short description of change
ONLINE TIME AND SALES SHEET	Eurex, EEX	The Online Time and Sales Sheet window is enhanced to distinguish OTC Block Trades (“ O”), OTC Basis Trades (“ B”), EFP Trades (“ E”) and other on-exchange trades.
OWN TRADE OVERVIEW	EEX	The Own Trade Overview window is enhanced to distinguish EFP Trades from on-exchange trades. The following changes are done for EFP trades: • For the trade type an “ E” will be displayed • For the order type an “ F” will be displayed

Window name	Org.	Short description of change
MAIN MENU WINDOW	Eurex, EEX	A new menu item " OTC" is included. The " OTC Block/Basis Trade" menu items are moved from " Trading" to the " OTC" menu item. A new menu item " EFP Trade Entry" is placed under the " OTC" menu item.
MARKET OVERVIEW	EEX, Eurex	An additional column *TrdUnit* is introduced that displays the contract size. In case of EEX products the contract size is represented by the variable contract unit. The Market Overview Window displays the indicator HOLID for the new product state HOLIDAY.
CONTRACT OVERVIEW	EEX	An additional column *TrdUnit* is introduced that displays the contract size. In case of EEX products the contract size is represented by the variable contract unit.
TRADING FILTER	EEX	**NEW**: The new Trading Filter window replaces the Trade Contract Filter and Trade Profile Filter windows. The Trading Filter window supports all trade types including the new type " E" for EFP Trades.
OTC BLOCK TRADE ENTRY	Eurex	With Eurex Release 4.1 a new list box is introduced that allows to specify multiple OTC Block Trades. The handling is analogous to the Mass Quote Entry Window. The buyer may enter multiple OTC Block Trades and submit them afterwards with one action. The seller is allowed to retrieve several Block trades, collecting them in the list box and to approve them afterwards with one action. OTC Block Trades are now available also for Futures.
EFP TRADE ENTRY	EEX	**NEW:** The *EFP Trade Entry* window is used to enter " Exchange of Futures for Physicals" (EFP) trades into system for clearing and settlement purposes. EFP Trades can only be entered for EEX Futures products traded on the exchange.
DATE/NUMBER FORMAT	Eurex	**NEW**: This is a new window for the Eurex Trading System to configure the format used to display numbers and to choose between European and American date formats. Note that delimiters if enabled are only shown when numbers are displayed. As soon as users start to edit numbers the delimiters are removed and later added again once editing is finished.

5.4 Windows – Clearing System

Window name	Org.	Short description of change
EXERCISE OVERVIEW	Eurex	The filter capabilities for the Exercise Overview window are enhanced. With Eurex Release 4.1 it is possible to filter a profile plus the expiration month/year to inquire on all expiring positions.
POSITION DETAIL OVERVIEW	EEX	The Position Detail Overview window is enhanced to distinguish EFP Trades from on-exchange trades. For EFP Trades, an " E" will appear for the trade type
POSITION DETAIL FILTER	EEX	The Position Detail Filter window supports all trade types including the new type " E" for EFP Trades.
GIVE UP OVERVIEW	EEX	The Give Up Overview window is enhanced to distinguish EFP Trades from on-exchange trades. For EFP Trades, an " E" will appear for the trade type
GIVE UP FILTER	EEX	The Give Up Filter window supports all trade types including the new type " E" for EFP Trades.
TAKE UP OVERVIEW	EEX	The Take Up Overview window is enhanced to distinguish EFP Trades from on-exchange trades. For EFP Trades, an " E" will appear for the trade type
TAKE UP FILTER	EEX	The Take Up Filter window supports all trade types including the new type " E" for EFP Trades.

5.5 Reports

Report ID	Report Short Name	Org.	Short Description of Change
RPTTC540	DAILY ORDER MAINTENANCE	EEX	The Daily Order Maintenance report is enhanced to include EFP Trades. The following changes are introduced: • In the column " MNT COD" the following convention is used for EFP Trades: " AE" EFP Trade order add " ME" EFP Trade order match OTC Block Trades do not appear on this report. • The order type field contains " EFP" for EFP Trades.
RPTTC545	DAILY BLOCK TRADE MAINTENANCE	Eurex	This report additionally contains Block Trades on Futures.
RPTTC810	DAILY TRADE CONFIRMATION	EEX	The Daily Trade Confirmation report is enhanced to include EFP Trades. The following changes are introduced for EFP trades: • The column " TRAD TYP" shows the code " E" in case of an EFP trade. • The column " ORDER TYPE CODE" shows the code " EFP" in case of an EFP trade.
RPTTD975	TRADING VOLUME & MARKET SHARE FUTURES	Eurex	This report additionally contains Block Trades on Futures.
RPTTD976	YEAR-TO-DATE TRADING VOLUMES BY MEMBER-FUTURES	Eurex	The Year-to-Date Trading Volumes by Member-Futures report is enhanced to additionally contain Block Trades on Futures.

Report ID	Report Short Name	Org.	Short Description of Change
RPTCB010	POSITION DETAIL	EEX	The Position Detail report is enhanced to include EFP Trades. The column " T/C" shows the code " E" in case of an EFP trade.
RPTCB140	ACCEPTED GIVE-UP TRADES	EEX	The Accepted Give-up Trades report is enhanced to include EFP Trades. The column " TRD TYP" shows the code " E" in case of an EFP trade.
RPTCB160	ACCEPTED TAKE-UP TRADE	EEX	The Accepted Take-up Trade report is enhanced to include EFP Trades. The column " TRD TYP" shows the code " E" in case of an EFP trade.
RPTCC042	LIQUIDATING VALUES FOR EEX PRODUCTS	EEX	**NEW:** A new Liquidating values report is created to display the " Variation" per contract and not per margin class for EEX products. This is necessary in order to prevent netting between contracts
RTPCC047	ADDITIONAL MARGIN FOR EEX PRODUCTS	EEX	**NEW**: A new Additional Margin Report is created to display the margin requirement for EEX products on a contract basis.
RPTCC060	DAILY MARGIN SUMMARY	EEX	This Daily Margin Summary Report is enhanced to include Delivery Margin. A new column for " Delivery Margin" is inserted into the current layout of the report. Delivery Margin is converted to the displayed currency.
RPTCE120	OPEN DELIVERY POSITIONS REPORT	EEX	**NEW**: Report RPTCE120 is only generated on the expiration day (last day of trading) for the currently expiring EEX contracts only. The EEX Open Delivery Positions Report (RPTCE120) is a new report tailored for EEX products. The report lists all open positions for expired EEX contracts after the last trading day per exchange member differentiated by agent accounts (both long and short open positions) and the proprietary accounts (netted open positions). The listed open positions will be transferred into physical delivery. The report is distributed to the EEX Exchange Members and EEX Clearing Members.

6 Appendix B – Eurex Documentation

The new and updated documentation will be available in August 2000. Final versions will be distributed in October 2000.

A new document will be created that describes the new graphical user interface for Trading. The new document will have the same scope as the Eurex Trading System User Guide.

Updated Eurex Documentation	
Document ID	**Name of the Document**
X0001200	Eurex Financial Data Disseminator
X0003400	Member Interface Specification File Interface
X0003600	Eurex Programmable Interfaces
X0003800	Eurex Trading System User Guide
X0003900	Eurex Member User Manual Trading
X0004000	Eurex Member User Manual Clearing
X0004100	Eurex User Manual Information Manual/System Overview/ System Security
X0004300	Financial Data Disseminator Interface Specifications
X0005700	Eurex Front End Installation Guide
X0005900	Eurex Front End Operations Guide
X0006100	Eurex Clearing System User Guide
X0006600	Eurex MISS Based Front End Technical Overview
X0006700	Eurex Member Network Set-up

X-pand into the **Future**

Eurex Release 4.1/EEX

Preliminary Technical Release Notes

© Eurex 2000

All proprietary rights and interest in this publication shall be vested in Eurex Administration and Management (" Eurex") and all other rights including, but without limitation, patent, registered design, copyright, trade mark, service mark, connected with this publication shall also be vested in Eurex.

Whilst all reasonable care has been taken to ensure that the details contained in this publication are accurate and not misleading at the time of publication, no liability is accepted by Eurex for the use of information contained herein in any circumstances connected with actual trading or otherwise. Neither Eurex, nor its servants nor agents, is responsible for any errors or omissions contained in this publication which is published for information only and shall not constitute investment advice. This brochure is not intended for solicitation purposes but only for the use of general information.

All descriptions, examples and calculations contained in this publication are for guidance purposes only and should not be treated as definitive. Eurex reserves the right to alter any of its rules or contract specifications, and such an event may affect the validity of information in this publication.

_® Eurex is a registered trademark

Table of Contents

1	**Introduction**	**2**
2	**General Information**	**4**
2.1	**Product State HOLIDAY**	**4**
2.2	**OTC Block Trades for Futures**	**4**
2.3	**Introduction of European Energy Exchange (EEX)**	**4**
3	**User Device Interfaces**	**5**
3.1	**BackOffice Interface (BOF)**	**5**
3.2	**Pricing Model Input (PMI)**	**5**
4	**Raw Data Interface**	**7**
4.1	**NEW – Raw Data File RAWCC042**	**7**
4.2	**NEW – Raw Data File RAWCE120**	**11**
4.3	**Raw Data File RAWCB010**	**13**
5	**Financial Data Disseminator (FDD)**	**14**
5.1	**Maintenance Message**	**14**
5.2	**Market Messages**	**15**
6	**Appendix: Operating System Versions**	**16**

1 Introduction

This document describes the changes to member interfaces, which are introduced as part of Eurex Release 4.1 and EEX. Changes of the VALUES interface are not described in this document.

The following interfaces (excluding VALUES) change as a result of functional enhancements:

- User Device Interfaces
  - BackOffice Interface (BOF)
  - Pricing Model Input (PMI)
- Raw Data Interface
- Financial Data Disseminator (FDD)

For changes regarding the VALUES interface, please refer to the related announcements:

- VALUES API – Modification Announcements Overview and Volume 1 – Call Interface
- VALUES API – Modification Announcements Volume 2 – Eurex Application Requests, Responses and Subscriptions

Detailed descriptions will be published in the forthcoming documentation. The latest version can be found on the Eurex web-site (www.eurexchange.com) under " Entrance Hall / Access to Eurex / Programming to Eurex " .

For changes regarding GATE, please refer to the related GATE documentation – GATE 2.1 Technical Release Notes (to be published in August 2000).

For changes to Operating Systems of the UD and SAT refer to the Appendix. Sizing Information will be provided as a separate document.

Familiarity with the Eurex MEMPI Programmable Interface Specifications (Document X0003600), Eurex Member Interface Specifications – File Interfaces (Document X0003400) and Eurex Financial Data Disseminator (Document X0001200) is assumed.

The technical changes described in this document result from the following Eurex Release 4.1 functional enhancements (refer to the Preliminary Functional Release Notes):

- Introduction of Product State HOLIDAY,
- Introduction of system support for OTC Block trading of Futures, price-time matched as well as pro-rata matched Futures,

and from the introduction of the European Energy Exchange (EEX).

The system changes for Eurex Release 4.1/EEX are rolled out in two steps. The first part will be rolled out on 30.10.2000. The second part will be rolled out in November 2000. It is stated at the respective places in this document when the system capabilities for a specific functionality will become available. The following table gives an overview:

Changed/New Functionality	Availability
Product state HOLIDAY	30.10.2000
New Duration formula for OTC Basis Trades	30.10.2000
OTC Block trading for Futures	To be announced[1]
Enhancements for the Graphical User Interface for Clearing	30.10.2000
New Graphical User Interface for Trading (including multiple entry functionality for OTC Block Trade Entry Window)	November 2000
European Energy Exchange (EEX)	November 2000[2]

In this document the term ‘ Eurex Release 4.1’ refers to the electronic system that serves both organizations Eurex *and* EEX in common.

[1] Technically available on all front-end platforms from November 2000.
[2] Amendments to screens and reports for later support of EEX will be introduced on 30.10.2000.

2 General Information

This chapter gives a short overview of changes that affect the technical environment of the Eurex and EEX system.

2.1 Product State HOLIDAY

A new product state HOLIDAY (HOLID) is introduced to indicate that a product cannot be traded because it is on holiday. All trading associated transactions are disabled for products in the product state HOLIDAY. This includes give-ups/take-ups, posting, position maintenance, trade adjustments, and exercise/notification.

The functionality for the product state HOLIDAY will become available on 30.10.2000.

2.2 OTC Block Trades for Futures

Currently OTC Block Trades are only supported for Options. With Release 4.1 the Eurex trading system supports OTC Block trading for Futures, price-time matched as well as for pro-rata matched Futures.

The system support for OTC Block Trades of Futures will become available in November 2000. The decision to release this functionality will be done individually per product.

2.3 Introduction of European Energy Exchange (EEX)

European Energy Exchange (EEX) products are commodity derivatives where the underlying commodity is electricity. During EEX trading hours, exchange members can trade EEX Futures and create open positions. An open position represents the quantity of the underlying energy commodity that an exchange member has to deliver (short position) or accept delivery (long position) upon expiration of the Futures contract.

The system capabilities for EEX will become available in November 2000. Amendments to screens and reports supporting EEX will be introduced earlier on 30.10.2000. EEX is only available to MISS users. **EEX is not supported on UD configurations.**

The raw data interface changes due to the introduction of EEX.

The Financial Data Disseminator (FDD) interface is supported for EEX. The variable contract unit for the EEX products is sent as contract size information where applicable.

The following interfaces are not supported for EEX:

- BackOffice Interface (BOF)
- Pricing Model Interface (PMI)
- Trading Interface (TRAD)

3 User Device Interfaces

3.1 BackOffice Interface (BOF)

The BackOffice Interface is provided on designated Eurex User Devices to enable member applications to update their BackOffice accounting systems. Information resulting from trading and position maintenance is sent by BOF messages to the member BackOffice systems. The transferred data can be divided into member-specific data (mainly position transactions) and broadcast information (capital adjustment, contract changes, settlement prices, status messages and margining parameters). The transferred data is then processed by member-specific BackOffice applications. The BackOffice Interface provides information to members using different transaction record layouts.

BOF Status Message Transaction

With the introduction of Eurex Release 4.1 a special handling is necessary to ensure sending of specific BOF messages for products on holiday. A back-office message will be sent out with the new product state HOLIDAY. A new status code for the BOF Status Message Transaction is introduced for that purpose:

This functionality will become available on 30.10.2000.

Field Name	Type	Description	Length (Byte)
status	character array	This field contains a code that identifies the status message. With Eurex Release 4.1 a new value is added: 006 – Product in state HOLIDAY	3

3.2 Pricing Model Input (PMI)

The Pricing Model Input interface (PMI) provides market data of options, Futures and their underlying instruments for use by Member Pricing Model Systems. Additionally the Pricing Model Input interface (PMI) provides quote request, cross request data and status messages.

A change is necessary to the member application that uses the PMI interface. With the introduction of Eurex Release 4.1 a new status transition message will be generated to incorporate the transition into the product state HOLIDAY. A new status code will be introduced for that purpose:

This functionality will become available on 30.10.2000.

Pricing Model Input Status Transaction:

Field Name	Type	Description	Length (Byte)
status	long integer	This field contains a code that identifies the status message. With Eurex Release 4.1 a new value (11) is added: PMI_PROD_STS_HOLID – 11 <product> set to HOLIDAY	4

4 Raw Data Interface

The RAW DATA INTERFACE provides a specified set of reports in a structure that can be processed by in-house applications.

With the roll out of the system enhancements for EEX new raw data files are provided for EEX Exchange Members and EEX Clearing Members additionally. The raw data files will not contain data before the start date of the EEX.

Report No.	Report Name
RPTCC042	Liquidating Values for EEX Products
RPTCE120	Open Delivery Positions

4.1 NEW – Raw Data File RAWCC042

This new raw data file is generated and sent to EEX exchange members and EEX clearing members. It is used as input to calculate the additional margin amount required for members holding open positions in a Futures contract on electricity.

The functionality for producing the raw data file RAWCC042 will be available on 30.10.2000.

FIELD	DESCRIPTION
RAW-ID-COD-RWCC042	This field contains the identification code of the raw data-stream. Values include: RAWCC042 - valid data-record ENDCC042 - end of raw data-stream
RAW-EFF-DAT-RWCC042	This field identifies the business day of which the raw data-stream is created. The format of this field is: YYYYMMDD
RAW-CRT-PROC-DAT-RWCC042	This field identifies the creation-day of the raw data-stream. The format of this field is:YYYYMMDD
ENV-NO-TXT-RWCC042	This field identifies the environment this raw-data file belongs to. 00 - production environment 01 - simulation environment
MBR-CLG-ID-COD-RWCC042	This field contains the identification code of the Clearing Member
MBR-EXC-ID-COD-RWCC042	This group field contains the identification code of the Exchange Member

FIELD	DESCRIPTION
ACCT-TYP-COD-GRP-RWCC042	This group field contains the account.
MGN-GRP-COD-RWCC042	This field contains the margin-group which consists of two or more margin-classes
MGN-CLS-COD-RWCC042	This field contains an alphanumeric code which represents the margin-class
CURR-TYP-COD-RWCC042	This field contains the identification code of the currency
UD-IND-RWCC042	This field contains an indicator showing whether the projected underlying price is less than (downside) or greater than (upside) the closing price of the underlying. Field values include: U – Upside, D - Downside
SECU-ID-COD-RWCC042	This field contains the unique identification code that Eurex has assigned to the product
SERI-CLAS-COD-RWCC042	This field contains the class of an options series. Field values include: C – Call, P – Put This field will be formatted with a space for futures contracts.
SERI-EXP-DAT-RWCC042	This field contains the year and month when an options series expires or a futures contract is settled. The format of this field is: YYMM
EXER-PRC-RWCC042	This field contains the price at which an options series can be exercised. This field will be formatted with zeros for futures contracts.
SERI-VERS-NO-RWCC042	This field contains the version number assigned to each options series at creation. A non-zero value in this field indicates that the series has been changed as a result of a capital adjustment.
SECU-LST-CLS-PRC-RWCC042	This field contains the closing price of the underlying instrument.
MAX-MIN-UNDER-VAL-RWCC042	This field contains the lowest or highest price of the underlying
NET-LNG-SHT-POS-RWCC042	This field contains the net position of the options series or futures contract. This field is filled only for series records
LNG-SHT-IND-RWCC042	This field contains the net indicator. Field values include: L – Long S – Short

FIELD	DESCRIPTION
	E – Exercised A - Assigned Note: This field is filled only for series records.
TRD-UNT-VAL-RWCC042	This field contains the contract size. Note: This field is filled only for series records.
SERI-CURR-VALUE-RWCC042	This field contains either the current value of the underlying or the liquidating values of the net position per series or per contract at the liquidation of the position. The liquidating values are calculated as follows: Net Position * Trade Unit Value * Current Options or Futures Price Note: This field is filled only for series records.
MAX-MIN-SERI-VAL-RWCC042	This field contains either the lowest or highest value of the underlying or the liquidating values of the net position per series or per contract at the liquidation of the position. The values are calculated as follows: Net Position * Trade Unit Value * Theoretical Options series or Futures Contract Price. Note: This field is filled only for series records.
RISK-VALUE-RWCC042	This field contains the risk value per series or contract. Note: This field is filled only for series records.
THEO-VALUE-RWCC042	This field contains the theoretical value per series or contract. This value is calculated as follows: Net position * Trade Unit Value * Theoretical Options series or Futures Contract Price. Note: This field is filled only for series records.
COMP-SHT-RWCC042	This field states the Short Option Compensation Potential for each expiry.
USED-FOR-COMP-RWCC042	This field describes the out-of-the-money short positions covered by existing long positions with the same or longer time to expiration and corresponding strike values.
NET-FUT-POS-RWCC042	Number of net futures positions per account within a margin class with days to maturity > 1.
OPT-EQU-TRD-UNT-VAL-RWCC042	Options equivalent trading unit value of the future. The value is calculated as follows: Trading Unit Value of future / Trading Unit Value of options within the same margin class.

FIELD	DESCRIPTION
MINMAX-THEO-VAL-RWCC042	Theoretical Value of compensated part of not fully compensated short position for Minimum/Maximum Liquidating Value.
RISK-THEO-VAL-RWCC042	Theoretical Value of compensated part of not fully compensated short position for Risk Liquidating Value.

```
01  RWCC042-WS-REC.
      05  RAW-KEY-GRP-RWCC042.
          10  RAW-ID-COD-RWCC042              PIC X(8).
          10  RAW-DAT-GRP-RWCC042.
              15  RAW-EFF-DAT-RWCC042         PIC 9(8).
              15  RAW-CRT-PROC-DAT-RWCC042    PIC 9(8).
          10  ENV-NO-TXT-RWCC042.
              15  ENV-NO-TXT-1-RWCC042        PIC X(1).
              15  ENV-NO-TXT-2-RWCC042        PIC X(1).
          10  MBR-CLG-ID-COD-RWCC042          PIC X(5).
          10  MBR-EXC-ID-COD-RWCC042.
              15  MBR-IST-ID-COD-RWCC042      PIC X(3).
              15  MBR-BRN-ID-COD-RWCC042      PIC X(2).
          10  ACCT-TYP-COD-GRP-RWCC042.
              15  ACCT-TYP-COD-RWCC042        PIC X(1).
              15  ACCT-TYP-NO-RWCC042         PIC X(1).
          10  MGN-GRP-COD-RWCC042             PIC X(5).
          10  MGN-CLS-COD-RWCC042             PIC X(5).
          10  CURR-TYP-COD-RWCC042            PIC X(3).
          10  UD-IND-RWCC042                  PIC X(1).
          10  SERI-GRP-ID-COD-RWCC042.
              15  SECU-ID-COD-RWCC042         PIC X(4).
              15  SERI-CLAS-COD-RWCC042       PIC X(1).
              15  SERI-EXP-DAT-RWCC042.
                  20  EXPI-YR-DAT-RWCC042     PIC 9(2).
                  20  EXPI-MTH-DAT-RWCC042    PIC 9(2).
              15  EXER-PRC-RWCC042            PIC 9(5).
              15  SERI-VERS-NO-RWCC042        PIC 9(1).
      05  REPT-DATA-GRP-RWCC042.
          10  REPT-REC-1-GRP-RWCC042.
              15  SECU-LST-CLS-PRC-RWCC042    PIC X(11).
              15  MAX-MIN-UNDER-VAL-RWCC042   PIC X(11).
          10  REPT-REC-2-GRP-RWCC042.
              15  NET-LNG-SHT-POS-RWCC042     PIC -----9.
              15  LNG-SHT-IND-RWCC042         PIC X(1).
              15  TRD-UNT-VAL-RWCC042         PIC 9(9).9(4).
              15  SERI-CURR-VALUE-RWCC042     PIC -------------9.9(2).
              15  MAX-MIN-SERI-VAL-RWCC042    PIC -------------9.9(2).
          10  REPT-REC-1-VALUE-RWCC042.
              15  RISK-VALUE-RWCC042          PIC X(11).
          10  REPT-REC-2-VALUE-RWCC042.
              15  THEO-VALUE-RWCC042          PIC -------------9.9(2).
              15  COMP-SHT-RWCC042            PIC -----9.
              15  USED-FOR-COMP-RWCC042       PIC -----9.
              15  NET-FUT-POS-RWCC042         PIC -----9.
              15  OPT-EQU-TRD-UNT-VAL-RWCC042 PIC 9(5).9(4).
              15  MINMAX-THEO-VAL-RWCC042     PIC ------------9.9(6).
              15  RISK-THEO-VAL-RWCC042       PIC ------------9.9(6).
```

4.2 NEW – Raw Data File RAWCE120

This new raw data file is generated and sent to EEX exchange members and EEX clearing members. It lists the open positions of expired EEX contracts per exchange member that will go into physical delivery.

The functionality for producing the raw data file RAWCE120 will become available on 30.10.2000.

FIELD	DESCRIPTION
RAW-ID-COD-RWCE120	This field contains the identification code of the raw data-stream. Values include: RAWCE120 - valid data-record ENDCE120 - end of raw data-stream
RAW-EFF-DAT-RWCE120	This field identifies the business day of which the raw data-stream is created. The format of this field is: YYYYMMDD
RAW-CRT-PROC-DAT-RWCE120	This field identifies the creation-day of the raw data-stream. The format of this field is: YYYYMMDD
ENV-NO-TXT-RWCE120	This field identifies the environment this raw-data file belongs to. 00 - production environment 01 - simulation environment
MBR-CLG-ID-COD-RWCE120	This field contains the identification code of the Clearing Member
MEMB-EXC-ID-COD-RWCE120	This group field contains the identification code of the Exchange Member
CURR-TYP-COD-RWCE120	This field contains the identification code of the currency
PROD-TYP-COD-GRP-RWCE120	This field contains the product type code
SECU-ID-COD-RWCE120	This field contains the unique identification code that Eurex has assigned to the product
SERI-CLAS-COD-RWCE120	This field contains the class of an options series. Field values include: C – Call, P – Put This field will be formatted with a space for futures contracts.

FIELD	DESCRIPTION
SERI-EXP-DAT-RWCE120	This field contains the year and month when an options series expires or a futures contract is settled. The format of this field is: YYMM
EXER-PRC-RWCE120	This field contains the price at which an options series can be exercised. This field will be formatted with zeros for futures contracts.
SERI-VERS-NO-RWCE120	This field contains the version number assigned to each options series at creation. A non-zero value in this field indicates that the series has been changed as a result of a capital adjustment.
SECU-TRD-UNT-NO-RWCE120	Trading unit
POST-LNG-TOT-A1-RWCE120	Open long positions for agent account A1
POST-SHT-TOT-A1-RWCE120	Open short positions for agent account A1
POST-NET-TOT-PP-RWCE120	Open net positions for proprietary account PP
INV-AMNT-LNG-TOT-A1-RWCE120	Invoice amount for long positions for agent account A1
INV-AMNT-SHT-TOT-A1-RWCE120	Invoice amount for short positions for agent account A1
INV-AMNT-NET-TOT-PP-RWCE120	Invoice amount for net positions for proprietary account PP

```
01  RWCE120-WS-REC.
   05  RAW-KEY-GRP-RWCE120.
      10  RAW-ID-COD-RWCE120              PIC X(8).
      10  RAW-DAT-GRP-RWCE120.
          15  RAW-EFF-DAT-RWCE120         PIC 9(8).
          15  RAW-CRT-PROC-DAT-RWCE120    PIC 9(8).
      10  ENV-NO-TXT-RWCE120.
          15  ENV-NO-1-TXT-RWCE120        PIC X(1).
          15  ENV-NO-2-TXT-RWCE120        PIC X(1).
      10  MBR-CLG-ID-COD-RWCE120          PIC X(5).
      10  MEMB-EXC-ID-COD-RWCE120.
          15  MEMB-IST-ID-COD-RWCE120     PIC X(3).
          15  MEMB-BRN-ID-COD-RWCE120     PIC X(2).
      10  CURR-TYP-COD-RWCE120            PIC X(3).
      10  PROD-TYP-COD-GRP-RWCE120.
          15  PROD-LINE-COD-RWCE120       PIC X(1).
          15  PROD-TYP-COD-RWCE120        PIC X(3).
      10  SERI-GRP-ID-COD-RWCE120.
          15  SECU-ID-COD-RWCE120         PIC X(4).
          15  SERI-CLAS-COD-RWCE120       PIC X(1).
          15  SERI-EXP-DAT-RWCE120.
              20  EXPI-YR-DAT-RWCE120     PIC 9(2).
              20  EXPI-MTH-DAT-RWCE120    PIC 9(2).
          15  EXER-PRC-RWCE120            PIC 9(6).
          15  SERI-VERS-NO-RWCE120        PIC 9(1).
05  REPT-DATA-GRP-RWCE120.
10  REPT-REC-1-GRP-RWCE120.
```

```
15  SECU-TRD-UNT-NO-RWCE120      PIC 9(4).9(4).
15  POST-LNG-TOT-A1-RWCE120      PIC --------9.
15  POST-SHT-TOT-A1-RWCE120      PIC --------9.
15  POST-NET-TOT-PP-RWCE120      PIC --------9.
15  INV-AMNT-LNG-TOT-A1-RWCE120  PIC ----------9.99.
15  INV-AMNT-SHT-TOT-A1-RWCE120  PIC ----------9.99.
15  INV-AMNT-NET-TOT-PP-RWCE120  PIC ----------9.99.
16
```

4.3 Raw Data File RAWCB010

The raw data file RAWCB010 corresponds to the Position Detail report (RPTCB010).

With the introduction of Eurex Release 4.1 the raw data file is enhanced to include EFP Trades. The field ORDR-CMB-TRD-TYP-COD-RWCB010 will also indicate EFP Trades.

This functionality will become available on 30.10.2000.

FIELD	DESCRIPTION
ORDR-CMB-TRD-TYP-COD-RWCB010	This field contains for single leg orders the trade type and for double leg orders the combination type. With Eurex Release 4.1 a new value is added: E – EFP Trade

5 Financial Data Disseminator (FDD)

The Eurex Financial Data Disseminator (FDD) Service provides an electronic interface for customer computers to receive real-time data about the financial instruments traded on the exchange.

5.1 Maintenance Message

A Maintenance Message is sent when a contract is added, deleted, or changed.

With the introduction of Eurex Release 4.1 the existing data field called SHARES_PER_CONTRACT is renamed to CONTRACT_SIZE. The new field name is necessary to cover the enlarged scope of the field. For EEX products the variable contract unit is sent as contract size information. For Non-EEX products the data content is not changed, i.e. the number of shares per contract is sent as contract size information. The structure of the message is not changed.

The EEX data will become available after the start date of EEX.

The data section is structured as follows:

DATA_SECTION Maintenance Message

Field	Bytes	Type
STRIKE_PRICE:	6	Alphanumeric
VERSION_NUMBER	1	Alphanumeric
EXPIRATION_DATE:	6	Alphanumeric
MAINTENANCE_TEXT:	6	Alphanumeric
CONTRACT_SIZE (old name: SHARES_PER_CONTRACT)		
INTEGER_PART:	4	Alphanumeric
DECIMAL_POINT:	1	Alphanumeric
FRACTION_PART:	4	Alphanumeric

5.2 Market Messages

Market Messages contain information on Exchange trading activity, daily open interest quantity, settlement prices, and product state transitions for an instrument.

Market Messages for State Transitions (State Transition Messages)

With the introduction of Eurex Release 4.1 a state transition message is generated for the transition into the product state HOLIDAY. A new Product State Transition Identifier is introduced for that purpose.

This functionality will become available on 30.10.2000.

New Product State Transition Identifier

Value	Description	Interpretation of DATE_OR_TIME field
Hex 56	Product State HOLIDAY	Time

All state transition messages indicate the start of the respective period.

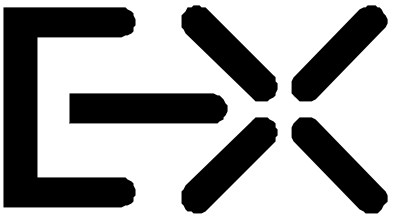
6 Appendix: Operating System Versions

The following table shows which operating system versions of the UD and the SAT will be supported with Eurex Release 4.1. Patch levels for the operating systems will be described in the Sizing Guidelines. For changes regarding the Operating System Versions for the MISS-based Front End refer to the VALUES API – Modifications Announcements Overview and Volume 1 – Call Interface.

Product name	**Release 4.1**
OpenVMS UD/SAT	7.1-2 & 7.2.-1
FMS Runtime	2.4
AIX UD/SAT	4.3.3
Microfocus Cobol *	13.10

* Will be delivered by Eurex with the Eurex software .

X-pand into the **Future**



Eurex Clearing AG

Preliminary Functional Release Notes

IC Release 2000

© Eurex 2000
All proprietary rights and interest in this publication shall be vested in Eurex Administration and Management (" Eurex") and all other rights including, but without limitation, patent, registered design, copyright, trade mark, service mark, connected with this publication shall also be vested in Eurex.
Whilst all reasonable care has been taken to ensure that the details contained in this publication are accurate and not misleading at the time of publication, no liability is accepted by Eurex for the use of information contained herein in any circumstances connected with actual trading or otherwise. Neither Eurex, nor its servants nor agents, is responsible for any errors or omissions contained in this publication which is published for information only and shall not constitute investment advice. This brochure is not intended for solicitation purposes but only for the use of general information.
All descriptions, examples and calculations contained in this publication are for guidance purposes only and should not be treated as definitive. Eurex reserves the right to alter any of its rules or contract specifications, and such an event may affect the validity of information in this publication.
® Eurex is a registered trademark

Table of Contents

1	**General Information**	**2**
2	**Functional Changes**	**3**
2.1	**Trading Locations & Products**	**3**
2.1.1	RepoCoupon Compensations	3
2.2	**Membership**	**3**
2.3	**Central Counterparty Role**	**4**
2.4	**Trade Management**	**4**
2.5	**Risk Management**	**4**
2.5.1	Objectives	4
2.5.2	Risk management of positions arising from Bond Trades	5
2.5.3	Detailed Description of Position Valuation Methods	7
2.5.3.1	Risk Positions	7
2.5.3.2	Calculation of Current Liquidating Value (CLV)	9
2.5.3.3	Calculation of Worst Case Losses	14
2.5.4	Calculation of Margin Requirements	15
2.5.4.1	Current Liquidating Margin	15
2.5.4.2	Additional Margin	15
2.5.4.3	Overall Margin Requirement	16
2.6	**Delivery Management**	**16**
2.6.1	Interface to Settlement Locations	16
2.6.2	Cross Border Settlement	17
2.6.3	Partial Deliveries	17
2.6.4	Cash Transactions	17
3	**Reports**	**18**
4	**Appendix – Description of Reports**	**19**
4.1	**Pending Trades**	**19**
4.2	**Open Repo Trades**	**21**
4.3	**Repo Coupon Compensation**	**23**
4.4	**Delivery / Settlement**	**25**
4.4.1	Pending Delivery	25
4.4.2	Settled / Cancelled Deliveries	28
4.4.3	Daily Cash Account Statement	31
4.5	**Margin**	**32**
4.5.1	Current Liquidating Margin	32
4.5.2	Theoretical Values II	35
4.5.3	Liquidating Value II	36
4.5.4	Daily Margin	39
4.5.5	Daily Margin Summary	40

1 General Information

This document describes the planned expansion of Eurex Clearing AG activities. The introduction of the new Integrated Clearer (IC) functionality is planned in October 2000.

The focus of the new release is

- to extend Eurex Clearing AG's clearance activities to include spot, forward and Repo(repurchase agreement) transactions in fixed income securities (referred to as "bond trades")
- to extend the eligible settlement locations for Eurex Clearing AG's business to include other relevant settlement locations (e.g. Euroclear) based on member needs for bond trades
- to include bond trades in the risk based margining system of Eurex Clearing AG, allowing cross margining and cross collateralization between Eurex products and bond trades
- to open Eurex Clearing AG's membership structure to include Clearing and Non-Clearing memberships for Participants who are not Eurex Exchange Participants but who wish to have Eurex Clearing AG clear their bond trades. Clearing Membership requirements are the same for all Market Participants in all trading locations and remain unchanged.

Changes in member back offices due to Notification/ Allocation being taken out of the Eurex core system is expected to be covered by adaptations in Eurex rules and regulations.

2 Functional Changes

2.1 Trading Locations & Products

Eurex currently provides clearing functionality for Eurex Derivatives. With the new release, Eurex Clearing AG will be able to receive trades from various trading systems and will provide clearing services for

- existing Derivatives trades from the Eurex exchange
- cash and forward trades (up to maximum 364 days) in high by liquid fixed rate government bonds
- Repo trades on the above mentioned bonds which comply with the following conditions:
  - exclusively fixed term Repos
  - fixed price Repos, i.e. without rate resets during the life of the repo
  - one security per Repo
  - there are no substitutions (underlying bond traded in both legs of a Repo cannot be changed during the life of the Repo)

2.1.1 Repo Coupon Compensations

In the event of a coupon payment on a security for which there is an outstanding Repo closing leg position, the Clearinghouse will process a transfer of the coupon amount from the buyer to the seller under the repo. The Clearinghouse will collect the coupon amount from the buyer by debiting its account (or the account of the buyer's Clearing Member) at the LZB or SNB. The Clearinghouse will transfer the same amount to the seller at its account (or the account of the seller's Clearing Member) at the LZB or SNB.

2.2 Membership

Market Participants need not be Eurex Exchange Participants in order to become NCMs, GCMs or DCMs of Eurex Clearing AG and to utilize the clearing services of Eurex Clearing AG for bond trades (GCMs and DCMs together are referred to as Clearing Members, or CMs). The requirements for membership for Market Participants wishing to clear only bond trades will be the same as for Eurex Exchange Participants, including requirements related to capital, regulatory status and clearing agreements for NCMs. An NCM may choose only one Clearing Member to clear its trades.

2.3 Central Counterparty Role

Eurex Clearing AG will be interposed between the primary counterparties and consequently take over the role as central counterparty. The following benefits will be realized for members:

- reduction of counterparty risk, as each market participant will have Eurex Clearing AG as its counterparty in place of the market participant with whom the trade was concluded
- trade anonymity will be extended through the settlement process. All Clearing Members will clear and settle their trades against Eurex Clearing AG
- consolidation of risk positions, allowing for a maximum of margin offset by applying the existing collateralization process

2.4 Trade Management

Trades on electronic trading locations using Eurex Clearing AG as its central counterparty will be routed automatically to the Clearinghouse for processing.

Members will not have direct access to the Eurex Clearing trade management functionality. If applicable, trade management functionality will be performed by the respective trading locations.

2.5 Risk Management

2.5.1 Objectives

With the extension of Eurex Clearing AG' s activities into the clearing bond trades, the risk based margining system of Eurex Clearing AG will be extended to cover such transactions. The extension of the risk based margining system has been conceived to achieve the following objectives

- to incorporate positions arising from bond trades
- to maintain the same degree of risk coverage for Eurex Clearing AG as is presently the case
- to require no systems changes for Eurex Exchange Participants that do not engage in bond trades to be cleared by Eurex Clearing AG
- to require no changes in amounts of margin to be provided by Eurex Exchange Participants that do not engage in bond trades to be cleared by Eurex Clearing AG
- to leave intact the margining system as it applies to Non-Clearing Members, Direct Clearing Members and General Clearing Members
- to allow cross margining between derivative positions and related positions resulting from bond trades

- to provide members with electronic information necessary to reconcile all calculations performed in the risk based margining system

2.5.2 Risk management of positions arising from Bond Trades

Bond trades will be set up as new products in Eurex Clearing AG and will be assigned to new margin classes that will only include positions arising from bond trades.

Repo transactions will be treated as two separate bond transactions with two different settlement dates. For example, a Repo with T+3 settlement of the spot leg and maturity of the term leg one week later will be broken down into two separate transactions, one with a maturity on T+3 and the other with maturity T+10. Cash amounts will be as agreed between the parties for each leg of the transactions. Margin calculations for each leg of a Repo transaction will be calculated as for individual security transactions as described below.

The risk management approach for bond trades will be similar to that employed by derivatives. Daily price moves in the value of the bond trade positions will be calculated and collateral calls will be made to cover losses. Potential worst case moves will also be simulated and lead to additional margin requirements.

The risk management process for bond trades takes place in the following steps.

1. The cash and securities elements of each transaction will be considered separately. Each cash amount will be assigned a value equal to the cash amount discounted back to the calculation date using appropriate money market interest rate for the currency of the payment in question. Each security position will be assigned a value based on the current spot price including accrued interest as of the settlement date for a spot settlement of the security. These values are referred to as Current Liquidating Values, or CLVs. All CLVs for transactions in a margin class will be added to arrive at a CLV for the class. All CLVS for the margin classes in a margin group will be added to arrive at the Liquidating Value Margin requirement for the margin group.
2. Based on volatilities, maximum price moves will be used to calculate worst case value changes for each position, and, in their sum, for a margin class. The Additional Margin requirement for a margin group will be calculated according to existing methods, feeding the worst case value changes for each margin class into the calculation of Additional Margin for a group.
3. The margin requirement for a margin group will be equal to the sum of Liquidating Value Margin, Additional Margin and Premium Margin for the margin group, but may not be below zero. The overall margin requirement for the member will be equal to the sum of the margin requirements for each of the margin groups.

Margin calculations will be prepared according to the above methodology for both the clearing member overall and for each of the clearing member's NCMs. Information for each NCM from current liquidating values through to the final margin requirements will be provided to each clearing member.

The following diagram (Types of Margin) illustrates the overall risk based margining system of Eurex Clearing AG, with new elements related to bond trades.

	Timeframe: yesterday to today				Timeframe: today to tomorrow	
EUREX Products	**Premium Margin**	**Variation Margin**	**Current Liquidating Value**		**Additional Margin**	**Futures Spread Margin**
Equities and Index Options				+		
Futures				+	for non-spreads	for spreads
Options on Futures				+		
Bond and Repo Trades			**NEW**	+	**NEW**	

Diagram: Types of Margin

Relevant margin type for the respective product

Margin type not relevant for the respective product

2.5.3 Detailed Description of Position Valuation Methods

2.5.3.1 Risk Positions

First, Repo transactions are split into separate bond trade positions, one opening leg and one closing leg of the repo. Then, all bond trade positions are split for calculation purposes into separate cash and bond positions. Additionally, income transfer payments[1] that will be processed under Repo transactions are also identified and set up as cash positions. Notifications and allocations will be considered as pending trades in an underlying bond until they successfully settle. The following table shows, from a member point of view, the positions that are created according to different bond trade types.

	Bond Positions	Cash Positions
Bond selling trade	Short	Long
Bond buying trade	Long	Short
Opening leg for a seller of a repo	Short	Long
Closing leg for a seller of a repo	Long	Short
Opening leg for a buyer of a repo	Long	Short
Closing leg for a buyer of a repo	Short	Long
Repo Coupon Compensation for buyer of a repo	-	Short
Repo Coupon Compensation for a seller of a repo	-	Long

The bond long and short positions are kept per member (CM and NCM) account, security (ISIN), and settlement date. The cash long and short positions are kept per member (CM and NCM), account, security (ISIN)[2], currency, and settlement date.

[1] Future coupon payments on repo transactions during the repo period.
[2] Having the security (ISIN) as a grouping parameter allows linking of cash positions to bond positions at the level of classes.

Signs

The following sign convention is used in risk based margining calculations and reports. For member short positions, where Eurex Clearing AG is due to receive cash or bonds, the associated value will be assigned a positive sign, consistent with the fact that this position is of positive value to Eurex Clearing AG. For member long positions, where Eurex Clearing AG is due to deliver cash or bonds, the associated value will be assigned a negative sign. When summed together, positions with a total net value that is positive represent net positive value from the perspective of the Eurex Clearing AG and will give rise to positive margin requirements. The opposite is true for positions whose total net value is negative. Please note that different sign conventions are used in certain other (i.e. non risk based margining) calculations and reports.

Examples

Example 1:

A bond trade for a member, to buy 107,000.120 EUR nominal amount of bond X at price 99.00000% to be settled at day d in the proprietary account P leads for this member to

- bond long positions 107,000.120 EUR nominal amount for
  - account P,
  - bond X, and
  - settlement date d,

  and
- cash short positions 105,930.1188 EUR (percentage multiplied by nominal amount) for
  - account P,
  - currency EUR,
  - corresponding to bond X, and
  - settlement date d.

Example 2:

On day T, a member has made following trades with bond B (nominal value 100,000):

1) Purchase nominal amount 1,000,000 of bond B at price 110% with delivery in T+3.
2) Sell 200,000 nominal amount of bond B at price 111% with delivery in T+3.
3) Sell Repo (based on bond B) with 500,000 nominal amount with opening leg at price 109% in T+2 and closing leg at price 111% in T+10.

Risk positions in bond B as of day T are as follows:

Day	Bond short	Bond long	Bond net
T+2	500,000	0	500,000
T+3	200,000	1,000,000	-800,000
T+10	0	500,000	-500,000

Day	Cash short	Cash long	Cash net
T+2	0	545,000	-545,000
T+3	1,100,000	222,000	878,000
T+10	555,000	0	555,000

2.5.3.2 Calculation of Current Liquidating Value (CLV)

CLV of a Cash Position

The current liquidating value of a cash position will be its value as of valuation date after performing a time value of money adjustment. For cash positions to be paid in the future, the CLV will be lower than the nominal amount of the cash position. Money market interest rates will be used to make these adjustments.

More specifically, the CLV of a cash payment will be calculated by the following formulae

CLV = C / (1+ r ∗ t /365) for cash payments in the future or

CLV = C for past due cash payments, where

- C is the size of the cash payment,
- t is the number of days from the valuation date to the payment date, and
- r is a money market rate for the time period from the valuation date to the payment date

In order to protect Eurex Clearing AG against shifts in market rates, the CLV of a cash payment will be calculated with a degree of conservatism to protect Eurex Clearing AG against any default. The rate used to discount positive cash positions (r_D) will be below market rates, thereby overstating the value to the Eurex Clearing AG of the expected cash receipt (called " Risk adapted market interest rate – down"). The rate used to discount negative cash positions (r_U) will be above market rates, thereby understating the cost of the cash flow to Eurex Clearing AG (called " Risk adapted market interest rate – up"). The combined effect of the above is to overstate the value to Eurex Clearing AG of its net cash positions, resulting in a higher current liquidating value of transactions and therefore a higher margin requirement, i.e. providing greater protection to the Eurex Clearing AG. R_D and r_U will be set by Market Supervision to create the appropriate level of protection against market movements in short term rates.

The formulae for valuing a cash position will therefore be:

$CLV_{cash} = C / (1+ r_D * t /365)$, for positive Cs, i.e. for member cash short positions

$CLV_{cash} = C / (1+ r_U * t /365)$, for negative Cs, i.e. for member cash long positions

CLV of a Bond Position

Bond values will be calculated by reference to market prices as of the valuation date. With the exception of cases where there are coupon payments between valuation date and settlement date, bond valuation will not (and need not) take account of the settlement date of the bond position.

The approach to bond valuation will be (i) to ascertain the spot market price of the bond as quoted on the valuation date, (ii) to determine the amount of cash that would be exchanged for the bond based on such price, (iii) to determine the date on which the bond would be exchanged for cash at such price (e.g. on trade date plus 2 days for T+2 securities), and (iv) to discount the cash amount back to the current valuation date.

For securities that are quoted on a clean price basis, the amount of cash that would be exchanged for bond on the spot settlement date, as a percentage of nominal, would be:

$MV_{SpotSettlement\ Date} = P + A$

where

- P is the clean price, i.e. a price quote exclusive of accrued interest, expressed as a percentage of nominal, and
- A is the amount of accrued interest (expressed as a percentage of nominal) on the bond as of the spot settlement date. Accrued interest will be calculated according to the convention adopted for the bond in question, e.g. on an actual/actual basis for German government bonds

This market value is as of the settlement date for a spot transaction in the bond and must, therefore, be adjusted back to the current valuation date. The market price of the bond as of valuation date is therefore:

$MV_{valuation\ date} = (P + A)/ (1+r * t' /365)$, where

- t' is the number of days between (i) the valuation date and (ii) the settlement date of a spot transaction concluded on the valuation date for the relevant security (please note that t' is not the number of days between valuation date and settlement date of the position), and
- r is the relevant interest rate for the period between the valuation date and the date of settlement of a spot transaction[3]

The value of a bond position can be calculated from the above by taking into account the nominal size of the bond position and by adjusting for any coupons that may fall due between the valuation date and the settlement date of the position (this is described in detail below). The full formula is

$CLV_{bond} = X * \{(P+ A) / (1+r * t' /365) +/- \text{Coupon Adjustments}\}$, where

- X is the nominal size of the position, with a positive sign for member short positions and a negative sign for member long positions

Coupon Adjustments

Coupon adjustments are required when the bond position includes different coupons than those reflected in the spot price for the bond and the calculations performed above. Two examples where there is a discrepancy between the two are shown below.

[3] Note that we do not use the r_U and r_D rates as for cash. This is because the additional margin for bonds covers the risk of price movements in bonds.

Example 1 ("missing coupon")

Assumptions: The settlement date for a closing leg of a 1-month Repo transaction is one day prior to coupon payment date, valuation date is 2 days prior to coupon payment date, settlement period for a spot transaction in the security is T+3. In this case, the valuation formula would include only one day of accrued interest because settlement of a spot transaction would be one day after the upcoming coupon date. This generates a valuation of the bond excluding the upcoming coupon. On the other hand, the bond position assumes settlement one day prior to coupon, i.e. the bond position represents a right to receive the upcoming coupon. In this case the value of the upcoming coupon needs to be added to the result of the standard computation.

Example 2 ("extra coupon")

Assumptions: Position settlement date is one week after coupon payment date, valuation date is 1 week prior to coupon payment date, settlement period for a spot transaction in the security is T+3. In this example, the valuation formula would yield a price consistent with the assumption that a buyer of a security is purchasing the upcoming coupon as well as all remaining coupons and bond principal. Computationally, this is represented by fact that almost an entire interest period' s accrued interest would be added to the clean price in the valuation formula. On the other hand, the settlement date for the position is subsequent to the coupon date. This means that the actual bond obligation between the Clearinghouse and the member involves the bond without the upcoming coupon. Looking at this in terms of present value, the position represents the right, on the position' s settlement date, to purchase the principal payment and the coupons remaining as of the settlement date, i.e. excluding the upcoming coupon. Due to its settlement date, this position is less valuable than that of a spot transaction, which necessitates a downward adjustment of the result of the standard computation.

The calculation of the coupon adjustment proceeds in four steps.

1. Identify the coupon discrepancies, i.e. determine the differences, if any, between the coupons valued in the standard valuation formula and the coupons that are covered by the bond position in question. For longer term transactions in bonds with coupons paid more frequently than annually, the discrepancy could be more than one coupon. This is performed as follows.

- Find the coupons that should be valued in the position: all coupons that are due on a date **after** the **settlement date** for the position
- Find all coupons that are included in the normal valuation (i.e. prior to making any coupon adjustment) for the bond: These will be all coupons that are due on a date **after** the **valuation date** plus the standard settlement cycle
- Identify: (i) " extra" coupons in normal bond valuation and/or coupons " missing" therefrom

Extra and missing coupons give rise to a coupon adjustment, calculated for each individual " missing" or " extra" coupon.

2. For each coupon requiring adjustment, determine whether the adjustment is a " +" or a–"" adjustment

- " extra" coupons➔ "–"
- " missing" coupons➔ " +"

3. Determine whether the coupon adjustment should be performed using the present value or the future value formula

- If coupon payment date >= Valuation Date ➔ use the " present value formula"
- If coupon payment date < Valuation Date ➔ use " future value formula"

4. Add together the coupon values calculated immediately above.

Present value calculation

In most cases, the adjustment will involve adding or subtracting the present value of a future coupon. In case of settlement delays extending beyond the coupon date, the adjustment could relate to a past coupon, necessitating a future value calculation.

In the case of future coupons, the expression used is

$d / (1 + r * t /365)$

In the case of past coupons, the expression used is

$d * (1 + r * t /365)$

where,

- d is the coupon, expressed as a percentage of nominal
- t is the number of days from the valuation date to the coupon payment date
- r is the money market interest rate applicable for this period

2.5.3.3 Calculation of Worst Case Losses

Worst case losses are calculated for bond positions only. Eurex Clearing AG is protected against movements in short term rates and their impact on cash payments by the choice of r_U and $r_{D,}$ as described above.

Worst case losses in bond positions can result from upward or downward movements in prices, depending on whether a position is long or short. For this reason, it is necessary to calculate the change in the CLV of a bond position that would result from a worst case upward or downward movement in the price of the bond. The change in CLV is calculated by adjusting the current clean price upward and downward by a volatility factor. These modified clean prices are then inserted into the CLV formula presented above to arrive at the CLV for the position for the worst case upward and downward price movement in the bond. Mathematically, the calculations are performed as follows.

The highest and lowest possible clean price, PU and PD, is predicted for each underlying bond using the current clean bond price P and the largest relative movement, δ, in percent. δ is based on the historical volatility.

Projected prices:

upside-price PU = P ∗ (1 + δ),

downside-price PD = P ∗ (1 – δ)

The upside and downside change in value for a net bond position is computed for each net bond position for each settlement date by computing the liquidating value of the bond position based on the clean upside-price and down-side price and using the CLV formula. In the notation below, LV and ΔLV, denote liquidating value and change in liquidating value, respectively.

$$\Delta LV_{up} = \left[LV_{bond/net}(PU) - CLV_{bond/net}\right]$$

$$\Delta LV_{down} = \left[LV_{bond/net}(PD) - CLV_{bond/net}\right]$$

These calculated value changes are then used at the class level building up to the Additional Margin requirement as described in the next section.

2.5.4 Calculation of Margin Requirements

The calculation of Current Liquidating Margin (CLM) and of Additional Margin (AM) is performed according to established Eurex Clearing AG calculation logic, utilizing margin classes and groups. Having performed the specific value calculations for positions arising from bond trades, it remains to feed these values into the existing methodology, as will be described below.

2.5.4.1 Current Liquidating Margin

The CLM calculation is performed in the following steps.

1. For each margin class, the CLVs of all bond and related cash positions will be added together to arrive at the CLV of the margin class.
2. The CLVs of each class within a group will be added to arrive at the CLM of the Group.

Because the CLVs of the cash and the bond sides of a transaction are included in the same class, the impact of a single transaction on CLM is at most equal to the difference between the CLVs of the bond and cash sides of the transaction.

2.5.4.2 Additional Margin

Additional Margin will be calculated for each margin group. It is important to note that margin classes containing positions from bond trades and margin classes containing Eurex trades may be assigned to the same margin group.

Margin classes for existing Eurex products will be treated in the AM calculation for a group as they are currently. The ΔLV calculations for margin classes for bond trades will be inserted into the AM calculation for the group as follows:

ΔLV_{up} for a class will be inserted into the column titled " UpsideClassCurr" in report RPTCC045 and ΔLV_{down} will be inserted into the column titled " DownsideClassCurr" in the same report. Report RPTCC045 will also include margin classes for Eurex products, whose upside and downside value changes will be inserted into the same columns. Offset factors will be applied as currently to all upside and downside value changes in the group in order to calculate the AM for the group.

2.5.4.3 Overall Margin Requirement

The overall margin requirement will be calculated as follows.

Group A	Other Margin		Additional Margin		CLM		Total>0
Group B	OM	+	AM	+	CLM	→	Max (∑, 0)
...	OM	+	AM	+	CLM	→	Max (∑, 0)
							↓
					Total Margin:		å

2.6 Delivery Management

Settlement of existing Eurex Derivatives will be unchanged (Clearstream Banking AG / SIS SEGAINTERSETTLE AG). Following, the functionalities for Delivery Management described in the subchapters below are only valid for bond and Repo transactions.

With the new release, eligible bond and Repo transactions (see section 2.1) can be settled through the existing CSD links or other relevant settlement locations (e.g. Euroclear) based on member needs.

Members are responsible for ensuring that they have the cash and securities necessary in order to successfully settle all transactions. Settlement instructions that remain unsettled at the end of one settlement day will remain in the settlement locations for settlement for during the next subsequent settlement process.

Settlement of Repo transactions will not be subject to special procedures. Each leg of the Repo will be settled as would any single bond trade due on such date and in such amount.

The Clearinghouse will confirm the upcoming settlements in form of reports (see 4.4) transmitted to each member.

2.6.1 Interface to Settlement Locations

For bonds and Repo transactions the Clearinghouse will have accounts in Clearstream Banking AG / SIS SEGAINTERSETTLE AG and other relevant settlement locations (e.g. Euroclear) based on member needs and will participate directly in batch and real time settlement processes as necessary to ensure full settlement. For each trading location, the member may select which settlement location it wishes to use.

With respect to settlement in Clearstream Banking AG / SIS SEGAINTERSETTLE AG, the Clearinghouse will submit settlement instructions for itself and for its members. The possible procedures for submission of settlement instructions to other settlement locations on behalf of members are currently under consideration. The Clearinghouse will monitor the status of settlement instruction pre-matching and settlement at the relevant settlement location. Settlement instructions will be submitted to settlement locations in the evening of Settlement Day - 3.

2.6.2 Cross Border Settlement

Normally, each member's deliveries and receipts will be settled through Eurex' s account in the member' s chosen settlement location. Due to the fact that underlying trades may be concluded between members preferring different settlement locations, settling in each member' s preferred settlement location generally would lead to imbalances between deliveries from, and receipts into, Eurex Clearing AG' s accounts in each settlement location. In order to balance its settlement accounts, Eurex Clearing AG will determine net cross border settlement transactions for each security for each involved settlement location per settlement day. These calculated settlement transactions will be randomly assigned to members who originally were involved in cross border trades. A member receiving an assignment of such a settlement transaction will be required to deliver from his preferred settlement location to Eurex Clearing AG at a different location.

2.6.3 Partial Deliveries

In the event of fails by members in their delivery obligations to Eurex Clearing AG, Eurex Clearing AG could be left with a long security position that is too small to fulfil any of its remaining unsettled delivery obligations. In such cases, the Clearinghouse will cancel the existing instruction and create two new instructions. One instruction will have an amount of securities equal to the desired partial delivery and the other will have an amount of securities equal to the difference between the original instruction and the partial delivery.

A given partial delivery will be assigned to the clearing member on a random basis.

2.6.4 Cash Transactions

All cash flows initiated by bond and Repo transactions will be added up and incorporated in the overall report " Daily Cash Account Statement" .

3 Reports

The following changed and new reports will be available by the new release 2000. They can be selected on screen J010 – Member Report Selection.

REPORT NAME	CODE	RAW DATA	CHANGE	NEW
Pending Trades	RPTTC700	X		X
Open Repo Trades	RPTTC750	X		X
Coupon Compensation	RPTCD190	X		X
Pending Deliveries	RPTCE200	X		X
Settled / Cancelled Delivery	RPTCE210	X		X
Daily Cash Account Statement	RPTCD010		X	
Current Liquidating Margin	RPTCC011	X		X
Theoretical Values II	RPTCC031	X		X
Liquidating Value II	RPTCC041	X		X
Daily Margin	RPTCC050		X	
Daily Margin Summary	RPTCC060		X	

Detailed field descriptions and layouts of the changed/ new reports can be found in the Appendix.

4 Appendix – Description of Reports

4.1 Pending Trades

Report Name: Pending Trades (new)

Report Code: RPTTC700

Purpose:

This report lists all Non-Derivatives pending trades until settlement. Additionally, the trades settled or deleted during the relevant day are shown.

Notes on format:

This report is also available as a raw data file (RAWTC700)

Fields:

REF	FIELD NAME	DESCRIPTION
1	CLEARING MEMBER	Member ID of Clearing Member
2	MEMBER ID	Code of the Exchange Member
3	ACCOUNT TYPE	Code of the Account Type
4	ISIN	Security identification
5	SETTLEMENT DATE	Date the trade is scheduled to be settled
6	SETTLEMENT CURRENCY	Currency of the Product
7	TRADING LOCATION	Identification of the Trading Location
8	TRADE NUMBER	Unique trade identification
9	TRADE DATE	Date the trade occurred
10	TRADE TIME	Time the trade occurred
11	EXTERNAL TRADE NUMBER	Trade identification at Trading Location

REF	FIELD NAME	DESCRIPTION
12	B / S	Buy / Sell indicator
13	QUANTITY	Nominal amount of the trade
14	PAY/ RECEIVE AMOUNT	Payable/ Receivable Amount (including accrued interest; including Repo interest, if applicable)
15	ACCRUED INTEREST	Accrued interest belonging to the trade
16	STATUS	" PENDING" if either the trade is not passed to Delivery Management or some deliveries of the trade are not settled " SETTLED" if all deliveries of the trade are settled " DELETED" if all deliveries of the trade are deleted " SET/DEL" if all deliveries of the trade are either settled or deleted
17	FREE TEXT	External Free Form Text

Layout:

```
          1         2         3         4         5         6         7         8         9         10        11        12        13
01234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

01|EUREX                                                  PENDING TRADES                                                  PAGE:        1
02|RPTTC700                                                                                                             DATE: 23-10-00
03|
04|CLEARING MEMBER    : ABCFR (1)
05|MEMBER             : ABCFR (2)
06|ACCOUNT TYPE       : PP (3)
07|ISIN               : DE0001170165 (4)
08|SETTLEMENT DATE    : 26-10-2000 (5)
09|SETTLEMENT CURRENCY: EUR (6)
10|TRADING LOCATION   : XYZABC (7)
11|
12|TRADE        TRADE      TRADE      EXTERNAL TRADE    B      QUANTITY         PAY/RECEIVE        ACCRUED      STATUS    FREE TEXT
13|NUMBER       DATE       TIME            NUMBER       S                         AMOUNT          INTEREST
14|------------ ---------- -------- ------------------- - ------------------ ---------------- ---------------- ------- ---------------
15| (8)         (9)       (10)       (11)             (12)      (13)             (14)              (15)        (16)      (17)
16|123456789012 23-10-2000 11:22.52 0234567890123456789 B      25,000,000.00    18,552,500.00-      41,095.89- PENDING 95180-WP
17|123456701234 23-10-2000 15:31.24 1123456789123456799 S      10,000,000.00-    7,412,000.00       16,438.36  PENDING DEP-01234599445
18|
19|
20|
21|
22|
23|
24|
25|
26|
27|
28|
29|
30|
31|
32|
33|
34|
```

4.2 Open Repo Trades

Report Name: Open Repo Trades (new)

Report Code: RPTTC750

Purpose:

Open Repo trades are shown on this report from trade date until both legs are settled. The settlement status of each leg is shown.

Notes on format:

This report is also available as a raw data file (RAWTC750)

Fields:

REF	FIELD NAME	DESCRIPTION
1	CLEARING MEMBER	Member ID of Clearing Member
2	MEMBER	Code of the Exchange Member
3	ACCOUNT TYPE	Code of the Account Type
4	ISIN	Security identification
5	SETTLEMENT CURRENCY	Currency of the Open and Close Leg Payable Amounts
6	TRADE DATE	Date the trade occurred
7	OPEN LEG TRADE NO	Unique trade identification of the opening leg of the repo
8	CLOSE LEG TRADE NO	Unique trade identification of the closing leg of the repo
9	OPEN LEG SETTL. DATE	Settlement Date of the opening leg of the repo
10	CLOSE LEG SETTL. DATE	Settlement Date of the closing leg of the repo
11	B / S	Buy / Sell indicator of the opening leg of the repo
12	QUANTITY	Nominal amount of the securities in the Repo trade

REF	FIELD NAME	DESCRIPTION
13	OPEN LEG PAYABLE AMOUNT	Payable Amount for the opening leg
14	CLOSE LEG PAYABLE AMOUNT	Payable Amount for the closing leg
15	REPO RATE	Repo interest rate
16	STS O/C	Settlement Status of the opening/ closing leg: “ P” for pending, “ S” for settled, “ D” for deleted

Layout:

```
          1         2         3         4         5         6         7         8         9         10        11        12        13
01234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
01|EUREX                                                OPEN REPO TRADES REPORT                                                PAGE:        1
02|RPTTC750                                                                                                                    DATE: 23-10-00
03|
04|CLEARING MEMBER     : ABCFR (1)
05|MEMBER              : ABCFR (2)
06|ACCOUNT TYPE        : PP (3)
07|ISIN:                : DE0001135135 (4)
08|SETTLEMENT CURRENCY : EUR (5)
09|TRADE DATE          : 17-10-2000 (6)
10|
11|OPEN LEG     CLOSE LEG    OPEN LEG   CLOSE LEG  B       QUANTITY          OPEN LEG        CLOSE LEG      REPO RATE  STS
12|TRADE NO     TRADE NO     SETTL.DATE SETTL.DATE S                      PAYABLE AMOUNT   PAYABLE AMOUNT               O/C
13|------------ ------------ ---------- ---------- - ------------------- ---------------- ---------------- ----------- ---
14| (7)            (8)        (9)       (10)     (11)       (12)              (13)            (14)          (15)       (16)
15|
16|123456789012 987654321012 19-10-2000 19-01-2001 B       50,000,000.00    52,150,000.00    52,638,906.00    3.7500   S P
17|123456789020 987654321020 20-10-2000 20-11-2000 B       25,000,000.00    26,195,000.00    26,274,677.00    3.6500   S P
18|123456789013 987654321013 20-10-2000 20-04-2001 B      120,000,000.00   125,190,000.00   127,548,580.00    3.7680   S P
19|
20|
21|
22|
23|
24|
25|
26|
27|
28|
29|
30|
31|
32|
33|
34|
35|
36|
37|
38|
39|
40|
41|
43|
44|
45|
```

4.3 Coupon Compensation

Report Name: Coupon Compensation (new)

Report Code: RPTCD190

Purpose:

This report reflects all future coupon payments on Repo transactions during the Repo period. Members are able to see at any time all future coupon transfers for all concerned Repos. The total amount per member and per clearing member is shown.

Fields:

REF	FIELD NAME	DESCRIPTION
1	CLEARING MEMBER	Member ID of Clearing Member
2	MEMBER	Code of the Exchange Member
3	ACCOUNT TYPE	Code of the Account Type
4	COUPON DUE DATE	Coupon Payment Date
5	DENOMINATION CURRENCY	Settlement Currency of the Product
6	ISIN	Security identification
7	COUPON RATE	Coupon Rate
8	CLOSE LEG SETTL. DATE	Settlement Date of the closing leg or settlement date of the late pending trade
9	OPEN LEG TRADE NO	Unique trade identification of the opening leg
10	CLOSE LEG TRADE NO	Unique trade identification of the closing leg
11	B / S	Buy Sell indicator
12	QUANTITY	Nominal amount of securities
13	COUPON AMOUNT RECEIVE / (PAY)	Indicator for whether the member will receive (positive) or pay (negative) the coupon amount

REF	FIELD NAME	DESCRIPTION
14	CSD	Settlement location of trade (member view)
15	-	Total coupon amount per NCM, per currency, per date
16	-	Total coupon amount per CM, per currency, per date

Layout:

```
          1         2         3         4         5         6         7         8         9         10        11        12        13
01234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

01|EUREX                                              COUPON COMPENSATION                                                PAGE:          1
02|RPTCD190                                                                                                             DATE:   23-10-00
03|
04|CLEARING MEMBER       : ABCFR (1)
05|MEMBER                 : ABCFR (2)
06|ACCOUNT TYPE           : PP (3)
07|COUPON DUE DATE        : 04-01-2001 (4)
08|DENOMINATION CURRENCY : EUR  (5)
09|
10|              COUPON  CLOSE LEG   OPEN LEG     CLOSE LEG   B QUANTITY            COUPON AMOUNT
11|ISIN          RATE    SETTL.DATE  TRADE NO     TRADE NO    S                     RECEIVE/(PAY)     CSD
12|------------ ------- ---------- ------------ ------------ - -------------------- ----------------- ---
13|    (6)        (7)       (8)       (9)          (10)    (11)        (12)             (13)         (14)
14|DE0001135135   5.375 19-01-2001 123456789012 987654321012 B    50,000,000.00        2,687,500.00- EOC
15|DE0001135135   5.375 20-04-2001 123456789013 987654321013 B   120,000,000.00        6,450,000.00- EOC
16|                                                                                  -----------------
17|TOTAL COUPON AMOUNT PER MEMBER: (15)                                                 9,137,500.00-
18|
19|                                                                                  -----------------
20|TOTAL COUPON AMOUNT PER CLEARING MEMBER: (16)                                        9,137,500.00-
21|                                                                                  =================
```

4.4 Delivery / Settlement

4.4.1 Pending Delivery

Report Name: Pending Delivery (new)

Report Code: RPTCE200

Purpose:

This report lists all Pending Deliveries per member.

Notes on format:

This report is also available as a raw data file RAWCE200

Restrictions:

Non-Clearing Members (NCM) do not get this report

Fields:

REF	FIELD NAME	DESCRIPTION
1	CLEARING MEMBER	Member ID of Clearing Member and long name.
2	CSD	Central Securities Depository / Settlement Location
3	MEMBER ACCOUNT	Settlement Account code of member at the settlement location
4	SETTLEMENT CURRENCY	Settlement currency
5	ISIN	Security identification
6	ISIN CURRENCY	Currency associated with security nominal
7	TRAN DATE	Date when the pending delivery transaction was created
8	SETTLEMENT DATE	Settlement date of the pending delivery transaction
9	B / S	Buy Sell indicator

REF	FIELD NAME	DESCRIPTION
10	NOMINAL / QUANTITY	Nominal amount to be received (positive) or to be delivered (negative)
11	SETTLEMENT AMOUNT	Settlement amount to be received (positive) or to be delivered (negative)
12	TRADE REFER	Reference Number to Pending Trade ID
13	CSD	Settlement location of counterpart member
14	ACCOUNT	Settlement Account code of counterpart member at the settlement location
15	REMARK	Free Text field, reference to trade ID for coupon payments
16	TOTAL SETTLEMENT DATE	Total amount per settlement date
17	TOTAL ISIN	Total amount ISIN
18	TOTAL CSD	Total amount per CSD
19	TOTAL CLEARING MEMBER	Total amount per clearing Member

Layout:

```
          1         2         3         4         5         6         7         8         9         10        11        12        13
01234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
01|EUREX                                                PENDING DELIVERY                                                        PAGE:        1
02|RPTCE200                                                                                                                AS OF DATE: 23-10-00
03|                                                                                                                          RUN DATE: 23-10-00
04|
05|CLEARING MEMBER: ABCZH ABC BANK CORPORATION (1)                                                          SETTLEMENT CURRENCY: CHF (4)
06|CSD: SIS (2)
07|MEMBER ACCOUNT: CH1234567891 (3)
08|
09|             ISIN   TRAN   SETTLMNT B                                                                  - COUNTERPART --
10|    ISIN     CURR   DATE     DATE   S   NOMINAL/QUANTITY     SETTLEMENT AMOUNT   TRADE REFER  CSD   ACCOUNT    REMARK
11|------------ ---- -------- -------- - -------------------- -------------------- ------------ --- ------------ ------
12|     (5)     (6)    (7)      (8)   (9)          (10)                (11)           (12)     (13)   (14)      (15)
13|CH1234567890 CHF  18-10-00 23-10-00 S           250,000.00-          255,000.00  612345123645 SIS 123456789012 MANUAL
14|CH1234567890 CHF  18-10-00 23-10-00 S           500,000.00-          540,000.00  612345234567 SIS 23497         MANUAL
15|CH1234567890 CHF  19-10-00 23-10-00 B          (500,000.00)         (540,000.00-)             SIS 23497         CANCEL
16|                                    -------------------- --------------------
17|TOTAL SETTLEMENT DATE: (16)                                      795,000.00
18|                                                               --------------------
19|
20|CH1234567890 CHF  18-10-00 24-10-00 S           250,000.00-          255,000.00               SIS  134567
21|CH1234567890 CHF  19-10-00 24-10-00 S           500,000.00-          540,000.00               SIS  AA1234
22|                                    -------------------- --------------------
23|TOTAL SETTLEMENT DATE:                                            795,000.00
24|                                                               --------------------
25|TOTAL ISIN:(17)                                                 1,590,000.00
26|                                                               ====================
27|
28|CH0987654321 CHF  20-10-00 23-10-00 S           500,000.00-          540,000.00               SIS  112345
29|CH0987654321 CHF  20-10-00 23-10-00 B           500,000.00           540,000.00-              SIS  987AA4321
30|                                    -------------------- --------------------
31|TOTAL SETTLEMENT DATE:                                                 0.00
32|                                                               --------------------
33|TOTAL ISIN:                                                            0.00
34|                                                               ====================
35|TOTAL CSD: (18)                                                 1,590,000.00
36|                                                               ====================
37|
38|TOTAL CLEARING MEMBER: (19)                                     1,590,000.00
39|                                                               ====================
40|
41|
42|
43|CLEARING MEMBER: ABCFR ABC BANK CORPORATION                                                          SETTLEMENT CURRENCY: EUR
44|CSD: CBF
45|MEMBER ACCOUNT: 7199
46|
47|             ISIN   TRAN   SETTLMNT B                                                                  - COUNTERPART --
48|    ISIN     CURR   DATE     DATE   S   NOMINAL/QUANTITY     SETTLEMENT AMOUNT   TRADE REFER  CSD   ACCOUNT    REMARK
49|------------ ---- -------- -------- - -------------------- -------------------- ------------ --- ------------ ------
50|DE0001030005 EUR  20-10-00 24-10-00 B           500,000.00           540,000.00- 123456789012 EOC BBBBBBBBBBB
51|                                    -------------------- --------------------
52|TOTAL SETTLEMENT DATE:                                            540,000.00-
53|                                                               --------------------
54|TOTAL ISIN:                                                       540,000.00-
55|                                                               ====================
56|TOTAL CSD:                                                        540,000.00-
57|                                                               ====================
58|
59|TOTAL CLEARING MEMBER:                                            540,000.00-
                                                                  ====================
```

4.4.2 Settled / Cancelled Deliveries

Report Name: Settled / Cancelled Deliveries (new)

Report Code: RPTCE210

Purpose:

This report reflects all pending deliveries which are settled and " cancelled confirmed" during the day.

Notes on format:

This report is also available as a raw data file RAWCE210

Restrictions:

Non-Clearing Members (NCM) do not get this report

Fields:

REF	FIELD NAME	DESCRIPTION
1	CLEARING MEMBER	Member ID of Clearing Member and long name.
2	CSD	Central Securities Depository / Settlement Location
3	MEMBER ACCOUNT	Settlement Account code of member at the settlement location
4	" SECTION"	Settled Delivery or Cancelled Delivery
5	SETTLEMENT CURRENCY	Settlement Currency
6	EFFECTIVE DATE	Date when settlement / cancellation is effective.
7	ISIN	Security identification
8	ISIN CURR	Associated currency to security nominal
9	TRAN DATE	Date when the pending delivery transaction has been created
10	SETTLMNT DATE	Settlement date of the pending delivery transaction
11	B / S	Buy Sell indicator

REF	FIELD NAME	DESCRIPTION
12	NOMINAL / QUANTITY	Nominal amount to be received (positive) or to be delivered (negative)
13	SETTLEMENT AMOUNT	Settlement amount to be received (positive) or to be delivered (negative)
14	TRADE REFER	Reference Number to Pending Trade ID
15	CSD	Central Securities Depository / Settlement Location of counterparty
16	ACCOUNT	Settlement Account code of counterparty member at the settlement location
17	REMARK	Free Text field, reference to trade ID for coupon payments
18	TOTAL SETTLEMENT DATE	Total amount per Settlement Date
19	TOTAL ISIN	Total amount per ISIN
20	TOTAL CSD	Total amount per CSD
21	TOTAL CLEARING MEMBER	Total amount per Clearing Member

Layout:

```
          1         2         3         4         5         6         7         8         9         10        11        12        13
 0123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

01|EUREX                                          SETTLED / CANCELLED DELIVERIES                                          PAGE:        1
02|RPTCE210                                                                                                          AS OF DATE: 20-10-00
03|                                                                                                                    RUN DATE: 20-10-00
04|
05|CLEARING MEMBER: ABCZH ABC BANK CORPORATION (1)                                                          (5) SETTLEMENT CURRENCY: CHF
06|                                                                                                        (6) EFFECTIVE DATE: 23-10-00
07|CSD: SIS (2)
08|MEMBER ACCOUNT: CH1234567891 (3)
09|
10|SETTLED DELIVERIES (4)
11|
12|             ISIN   TRAN   SETTLMNT B                                                                  - COUNTERPART --
13|    ISIN     CURR   DATE     DATE   S   NOMINAL/QUANTITY     SETTLEMENT AMOUNT   TRADE REFER  CSD   ACCOUNT    REMARK
14|------------ ---- -------- -------- - --------------------- ------------------- ------------ --- ------------ ------
15|     (7)      (8)    (9)     (10) (11)          (12)              (13)          (14)      (15)  (16)        (17)
16|CH1234567890 CHF  18-10-00 22-10-00 S           250,000.00-          255,000.00  612345123456 SIS 123456789012 MANUAL
17|CH1234567890 CHF  18-10-00 22-10-00 S           500,000.00-          540,000.00  612345123456 SIS 456678901234 MANUAL
18|                                   --------------------- --------------------
19|TOTAL SETTLEMENT DATE: (18)                                       795,000.00
20|                                                                --------------------
21|
22|CH1234567890 CHF  19-10-00 23-10-00 S           500,000.00-          540,000.00  343434343434 SIS  11234534455
23|CH1234567890 CHF  19-10-00 23-10-00 B           500,000.00           540,000.00- 454545454545 SIS  987AA432156
24|                                   --------------------- --------------------
25|TOTAL SETTLEMENT DATE:                                               0.00
26|                                                                --------------------
27|TOTAL ISIN: (19)                                                  795,000.00
28|                                                                --------------------
29|TOTAL CSD: (20)                                                   795,000.00
30|                                                                ====================
31|
32|TOTAL CLEARING MEMBER: (21)                                       795,000.00
33|                                                                ====================
34|
35|
36|CLEARING MEMBER: ABCFR ABC BANK CORPORATION                                                        SETTLEMENT CURRENCY: EUR
37|                                                                                                   EFFECTIVE DATE: 23-10-00
38|CSD: CBF
39|MEMBER ACCOUNT: 7199
40|
41|SETTLED DELIVERIES
42|
43|             ISIN   TRAN   SETTLMNT B                                                                  - COUNTERPART --
44|    ISIN     CURR   DATE     DATE   S   NOMINAL/QUANTITY     SETTLEMENT AMOUNT   TRADE REFER  CSD   ACCOUNT    REMARK
45|------------ ---- -------- -------- - --------------------- ------------------- ------------ --- ------------ ------
46|DE0001030005 EUR  20-10-00 25-10-00 B           500,000.00           540,000.00- 987654321098 CBF BBBBBBBBBBB
47|                                   --------------------- --------------------
48|TOTAL SETTLEMENT DATE:                                            540,000.00-
49|                                                                --------------------
50|TOTAL ISIN:                                                       540,000.00-
51|                                                                --------------------
52|TOTAL CSD:                                                        540,000.00-
53|                                                                ====================
54|
55|TOTAL CLEARING MEMBER:                                            540,000.00-
56|                                                                ====================
57|
58|
59|                                                SETTLED / CANCELLED DELIVERIES                                          PAGE:        2
60|RPTCE210                                                                                                          AS OF DATE: 20-10-00
61|                                                                                                                    RUN DATE: 20-10-00
62|
63|CLEARING MEMBER: ABCFR ABC BANK CORPORATION                                                        SETTLEMENT CURRENCY: EUR
64|                                                                                                   EFFECTIVE DATE: 23-10-00
65|CSD: CBF
66|MEMBER ACCOUNT: 7199
67|
68|CANCELLED DELIVERIES
69|
70|             ISIN   TRAN   SETTLMNT B                                                                  - COUNTERPART --
71|    ISIN     CURR   DATE     DATE   S   NOMINAL/QUANTITY     SETTLEMENT AMOUNT   TRADE REFER  CSD   ACCOUNT    REMARK
72|------------ ---- -------- -------- - --------------------- ------------------- ------------ --- ------------ ------
73|DE0001030005 EUR  20-10-00 25-10-00 B           500,000.00           540,000.00- 123456789012 CBF BBBBBBBBBBB CANCEL
74|                                   --------------------- --------------------
75|TOTAL SETTLEMENT DATE::                                           540,000.00-
76|                                                                --------------------
77|TOTAL ISIN:                                                       540,000.00-
78|                                                                --------------------
79|TOTAL CSD:                                                        540,000.00-
80|                                                                ====================
81|
82|TOTAL CLEARING MEMBER:                                            540,000.00-
83|                                                                ====================
```

4.4.3 Daily Cash Account Statement

Report Name: Daily Cash Account Statement (change)

Report Code: RPTCD010

Purpose:

This report contains the details of balances and transactions amounts on the cash account.

Change:

If applicable, one line with two new (transaction) types will be added to that report in order to include the results of report RPTCD190 “Repo Coupon Compensation” .

Type	Description
190	REPO COUPON COMPENSATION RCV
192	REPO COUPON COMPENSATION PAID

Layout:

```
        1         2         3         4         5         6         7         8         9         10        11        12        13
  0123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
01|EUREX                                          DAILY CASH ACCOUNT STATEMENT                                          PAGE:        1
02|RPTCD010                                                                                                       AS OF DATE: 23-10-00
03|                                                                                                                 RUN DATE: 23-10-00
04|
05|CLEARING MEMBER: AARFR ABN AMRO BANK (DEUTSCHLAND) AG                                                          CURRENCY: EUR
06|
07|  TXN         VALUE
08|  DATE        DATE        REF    TYPE             DESCRIPTION                 DEBIT             CREDIT             BALANCE
09|--------    --------    ------   -----   --------------------------------  ----------------  ----------------  ----------------
10|
11|23-02-00                                  OPENING BALANCE                                                              0.00
12|23-02-00    24-02-00    063576    226     PREMIUM RECEIVED                          0.00         259,567.40
13|23-02-00    24-02-00    063577    235     VAR MARGIN RCV                            0.00       3,954,867.50
14|23-02-00    24-02-00    063603    190     REPO COUPON COMPENSATION RCV      4,214,427.50               0.00
15|23-02-00    24-02-00    063603    206     CASH WITHDRAWAL                           7.40               0.00
16|23-02-00                                  ENDING BALANCE                                                               0.00
```

4.5 Margin

4.5.1 Current Liquidating Margin

Report Name: Current Liquidating Margin (new)

Report Code: RPTCC011

Purpose:

This Report shows current liquidating values for a specific bond and cash position for different dates, as well as the sum of those values.

Notes on format:

This report is also available as a raw data file RAWCC011

Fields:

REF	FIELD NAME	DESCRIPTION
1	CLEARING MEMBER	Member ID of Clearing Member
2	EXCHANGE MEMBER	Code of the Exchange Member
3	ACCOUNT	Code of the Account
4	CURRENCY	Currency of the Product
5	MARGIN CLASS	Margin Class
6	CASH INTEREST RATE	Market Cash Interest Rate of the Currency
7	RISK ADAPTED INTEREST RATE-UP	Currency' s Risk Adapted Interest Rate - Up
8	RISK ADAPTED INTEREST RATE-DOWN	Currency' s Risk Adapted Interest Rate - Down
9	ISIN	ISIN of the security for which the risk positions and the current liquidating margin is shown
10	-	Security Short Name

REF	FIELD NAME	DESCRIPTION
11	CURRENT CLOSING PRICE	Clean market price
12	COUPON RATE	Coupon rate of the bond
13	SETTLMNT DATE	Settlement Date of the risk positions
14	SECURITY NET POSITION	Security net risk positions as nominal amount
15	CASH NET POSITION	Cash net risk positions belonging to the security
16	 D / U P / F	Coupon Adjustments of Current Liquidating Value: “ D” for downward adjustment “ U” for upward adjustment “ P” for adjustment with present value “ F” for adjustment with future value Both columns a space (“ “) if no coupon adjustment.
17	CURRENT LIQ VALUE SECURITY	Current liquidating value of the security net positions of the settlement date
18	CURRENT LIQ VALUE CASH	Current liquidating value of the cash net positions of the settlement date
19	-	Total current liquidating value of all security positions for the ISIN
20	-	Total current liquidating value of all cash positions per security
21	TOTAL CURRENT	Total current liquidating value per class and account

Layout:

```
          1         2         3         4         5         6         7         8         9         10        11        12        13
 0123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

01|EUREX                                          CURRENT LIQUIDATING MARGIN                                                PAGE:        1
02|RPTCC011                                                                                                            AS OF DATE: 23-10-00
03|                                                                                                                      RUN DATE: 23-10-00
04|
05|CLEARING MEMBER: ABCFR BANK CORPORATION   (1)           ACCOUNT: PP (3)                                               CURRENCY: EUR (4)
06|EXCHANGE MEMBER: ABCFR BANK CORPORATION   (2)
07|                                                                                                  (7)          (8)
08|MARGIN CLASS: BD10 (5) CASH INTEREST RATE:  3.00  (6) RISK ADAPTED INTEREST RATES – UP:  3.50  DOWN:  2.50
09|      (9)            (10)
10|ISIN: DE0001135135 – BUNDANL V.99/10                    CURRENT CLOSING PRICE: 100.56 (11)     COUPON RATE: 5.375 (12)
11|             (13)           (14)              (15)       (16)     (17)            (18)
12|           SETTLMNT    SECURITY NET         CASH NET      DP   CURRENT LIQ.      CURRENT LIQ.
13|             DATE        POSITION           POSITION      UF  VALUE SECURITY     VALUE CASH
14|           --------  -----------------  ----------------- -- -----------------  -----------------
15|           19-01-01     50,000,000.00      52,638,906.00- DP    49,765,820.00      52,323,531.00-
16|           20-04-01    120,000,000.00     127,548,580.00- DP   119,437,969.00     126,003,739.00–
17|                                                           -----------------------------------
18|                                                          (19) 169,203,789.00     178,327,270.00-(20)
19|                                                             ===================================
20|
21|ISIN: DE0001170165 – BD.FDSV90 VIII(96-10)LS             CURRENT CLOSING PRICE:  74.00         COUPON RATE: 3.000
22|
23|           SETTLMNT    SECURITY NET         CASH NET      DP   CURRENT LIQ.      CURRENT LIQ.
24|             DATE        POSITION           POSITION      UF  VALUE SECURITY     VALUE CASH
25|           --------  -----------------  ----------------- -- -----------------  -----------------
26|           26-10-00     25,000,000.00-     18,552,500.00        18,542,928.00-     18,547,165.00
27|           26-10-00     10,000,000.00       7,412,000.00-        7,417,171.00       7,410,477.00-
28|           15-12-00      5,000,000.00       3,695,000.00-        3,708,586.00       3,681,635.00-
29|                                                           -----------------------------------
30|                                                              7,417,171.00-      7,455,053.00
31|                                                           ===================================
32|
33|TOTAL CURRENT LIQUIDATING MARGIN FOR CLASS AND ACCOUNT                          9,085,599.00–  (21)
34|                                                                               =================
```

4.5.2 Theoretical Values II

Report Name: Theoretical Values II (new)

Report Code: RPTCC031

Purpose:

This report derives from RPTCC030 (Theoretical Values (I)) and shows the theoretical liquidating value for bonds. Possible maximum up and down price movements are shown here. Additional information required for the risk based margining is also shown. All figures are displayed in the product currency.

Notes on format:

This report is also available as a raw data file RAWCC031

Fields:

REF	FIELD NAME	DESCRIPTION
1	MARGIN CLASS	Margin Class
2	MARGIN PARAMETER	Parameter for the expected maximum up and down movement of the security
3	CASH INTEREST RATE	Market cash interest rate of the security
4	ISIN	ISIN of the security for which the information is shown
5	COUPON	Coupon rate of the bond
6	CURRENT CLOSING PRICE	Current closing price of the security
7	MAX UP MOVEMENT	Maximal expected price For bonds it is the expected clean price as a percentage
8	MAX DOWN MOVEMENT	Minimal expected price For bonds it is the expected clean price as a percentage
9	CPN DATE	Coupon date
10	CPN ADJ	Coupon adjustment expressed as a percentage per annum

Layout:

```
          1         2         3         4         5         6         7         8         9         10        11        12        13
01234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

01|EUREX                                                THEORETICAL VALUES II                                                    PAGE:        1
02|RPTCC031                                                                                                                AS OF DATE: 23-10-00
03|                                                                                                                          RUN DATE: 23-10-00
04|
05|MARGIN CLASS: BD10 (1)         MARGIN PARAMETER:   1.60 (2)                                                               CURRENCY: EUR
06|CASH INTEREST RATE:  3.000 (3)
07|
08|    ISIN      COUPON  CURRENT CLOSING PRICE  MAX UP MOVEMENT   MAX DOWN MOVEMENT  CPN DATE    CPN ADJ
09|------------  ------  ---------------------- -----------------  -----------------  --------    --------
10|DE0001135135   5.375            100.56              102.16              98.95     04-01-00     5.504
11|                                                                                  04-01-01     5.342
12|DE0001170165   3.000             74.00               75.18              72.82     03-10-00     3.005
13|                                                                                  03-10-01     2.916
14|  (4)           (5)              (6)                  (7)                 (8)        (9)       (10)
15|
16|
17|
18|
19|
20|
```

4.5.3 Liquidating Value II

Report Name: Liquidating Value II (new)

Report Code: RPTCC041

Purpose:

This report is presented for bond products. It shows “ positions” for every day and product (ISIN), where all transactions (buy/sell) of single product will be summed up. Liquidating value up and down and the difference to the current liquidating value will then be shown for these “ positions” .

Only up and down maximums and no strikes in between (as there are no options in the margin classes) are used for the calculation of liquidating values.

Notes on format:

This report is also available as a raw data file RAWCD041

Fields:

REF	FIELD NAME	DESCRIPTION
1	CLEARING MEMBER	Member ID of Clearing Member
2	EXCHANGE MEMBER	Code of the Exchange Member
3	ACCOUNT	Code of the Account
4	CURRENCY	Currency of the Product
5	MARGIN GROUP	Margin Group

REF	FIELD NAME	DESCRIPTION
6	MARGIN CLASS	Margin Class
7	CASH INTEREST RATE	Market Cash Interest Rate of the Currency
8	RISK ADAPTED INTEREST RATE - UP	Currency' s Risk Adapted Interest Rate - Up
9	RISK ADAPTED INTEREST RATE - DOWN	Currency' s Risk Adapted Interest Rate - Down
10	ISIN	ISIN of the security for which the risk positions and the liquidating value is shown
11	-	Security Short Name
12	COUPON RATE	Coupon rate of the bond
13	CURR PRICE	Current Security Price. For bonds the clean market price as a percentage price
14/15	MAX UP PRICE MAX DOWN PRICE	Maximal expected price, respectively minimal expected price
16	SETTLEMENT DATE	Settlement Date of the risk positions
17	SECURITY POSITION NET	Net security risk positions as nominal amount
18	CURRENT LIQ VALUE SECURITY	Current liquidating value of the security net positions of the settlement date
19	LIQUIDATING VALUE UP	Liquidating value of the net positions, assuming the maximal expected price
20	LIQUIDATING VALUE DOWN	Liquidating value of the net positions, assuming the minimal expected price
21	LIQUIDATING VALUE DIFF UP	Difference between Current Liquidating value and Liquidating value of the net positions, assuming the maximal expected price
22	LIQUIDATING VALUE DIFF DOWN	Difference between Current Liquidating value and Liquidating value of the net positions, assuming the minimal expected price
23	-	Total " liquidating value difference up" of net positions per

REF	FIELD NAME	DESCRIPTION
		security
24	-	Total “ liquidating value difference down” of net positions
25/26	TOTAL LIQUIDATING VALUE DIFF UP/ DOWN FOR CLASS	Total “ liquidating value difference up/ down” per class and account

Layout:

```
          1         2         3         4         5         6         7         8         9         10        11        12        13
01234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

01|EUREX                                                LIQUIDATING VALUE II                                                    PAGE:        1
02|RPTCC041                                                                                                                AS OF DATE: 23-10-00
03|                                                                                                                         RUN DATE: 23-10-00
04|
05|CLEARING MEMBER: ABCFR BANK CORPORATION (1)          ACCOUNT: PP (3)                                                    CURRENCY: EUR (4)
06|EXCHANGE MEMBER: ABCFR BANK CORPORATION (2)
07|                                                                                                                                (8)          (9)
08|MARGIN GROUP: BND1 (5) MARGIN CLASS: BD10 (6) CASH INTEREST RATE:  3.000 (7) RISK ADAPTED INTEREST RATES – UP:  3.500  DOWN:  2.500
09|      (10)           (11)
10|ISIN: DE0001135135 – BUNDANL.V. 99/10                COUPON RATE:  5.375 (12)
11|CURR/ MAX UP/ MAX DOWN PRICE:  100.56    102.16    98.95  (13/14/15)
12|  (16)           (17)             (18)              (19)              (20)              (21)              (22)
13|SETTLEMENT  SECURITY POSITION    CURRENT LIQ.     LIQUIDATING VALUE  LIQUIDATING VALUE  LIQUIDATING VALUE  LIQUIDATING VALUE
14|  DATE            NET           VALUE SECURITY          UP                DOWN              DIFF. UP          DIFF. DOWN
15|----------  ----------------  ----------------  ----------------  ----------------  ----------------  ----------------
16|  19-01-01      50,000,000.00      49,765,820.00     50,570,069.00     48,961,572.00         804,248.00         804,248.00-
17|  20-04-01     120,000,000.00     119,437,969.00     121,368,165.00     117,507,773.00       1,930,196.00       1,930,196.00-
18|                                                                                          ----------------  ----------------
19|                                                                                    (23)  2,734,444.00       2,734,444.00- (24)
20|
21|ISIN: DE0001170165 – BD. FDSV 90 VIII (96-10)          COUPON RATE:  3.000
22|CURR/ MAX UP/ MAX DOWN PRICE:   74.00     75.18    72.82
23|
24|SETTLEMENT  SECURITY POSITION    CURRENT LIQ.     LIQUIDATING VALUE  LIQUIDATING VALUE  LIQUIDATING VALUE  LIQUIDATING VALUE
25|  DATE            NET           VALUE SECURITY          UP                DOWN              DIFF. DOWN        DIFF. UP
26|----------  ----------------  ----------------  ----------------  ----------------  ----------------  ----------------
27|  26-10-00      25,000,000.00-      18,542,928.00-     18,838,859.00-     18,246,997.00-       295,931.00-       295,931.00
28|  26-10-00      10,000,000.00       7,417,171.00       7,535,543.00       7,298,799.00         118,372.00         118,372.00-
29|  15-12-00       5,000,000.00       3,708,586.00       3,767,772.00       3,649,399.00          59,186.00          59,186.00-
30|                                                                                          ----------------  ----------------
31|                                                                                               118,373.00-       118,373.00
32|
33|                                                                                          ----------------  ----------------
34|TOTAL LIQUIDATING VALUE DIFF. UP/DOWN FOR CLASS:                                    (25)     2,616,071.00       2,616,071.00-(26)
35|                                                                                          ================  ================
36|
```

4.5.4 Daily Margin

Report Name: Daily Margin (change)

Report Code: RPTCC050

Purpose:

Report RPTCC050 deals with the daily margin requirements (or margin credit) of each Market Member Account. The margin requirement is calculated based on the Option Premium Margin, Futures Spread Margin and Additional Margin; all margin components are shown here. All figures are displayed in the product currency. No changes for bonds positions and corresponding cash positions are required, bond products are treated like any other product.

Change:
Column " Options premium margin" is renamed to Premium / Current Liquidating Margin.

Layout:

```
          1         2         3         4         5         6         7         8         9         10        11        12        13
 0123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

01|EUREX                                                DAILY MARGIN                                                      PAGE:        1
02|RPTCC050                                                                                                        AS OF DATE: 23-10-00
03|                                                                                                                  RUN DATE: 23-10-00
04|
05|CLEARING MEMBER: ABCFR ABC BANK CORPORATION           ACCOUNT: PP                                                 CURRENCY: EUR
06|EXCHANGE MEMBER: ABCFR ABC BANK CORPORATION
07|
08|
09|                          PREMIUM /              FUTURES                                          UNADJUSTED
10|MARG      MARG            CURR. LIQ.             SPREAD                  ADDITIONAL               MARGIN
11|GROUP     CLASS           MARGIN                 MARGIN                    MARGIN                 REQUIREMENT
12|------    ------    --------------------    --------------------    --------------------    ------------------------
13|
14|          AUA                30,000.00-                  0.00            199,881.30                  169,881.30
15|BND1                                                                      10,234.00                   10,234.00
16|                    --------------------    --------------------    --------------------    ------------------------
17|
18|ACCOUNT TOTAL:               30,000.00-                  0.00            210,115.30                  180,115.30
19|                    ====================    ====================    ====================    ========================
20|
21|
22|
```

4.5.5 Daily Margin Summary

Report Name: Daily Margin Summary (change)

Report Code: RPTCC060

Purpose:

Report RPTCC060 gives the daily margin requirements for all Exchange and Clearing Members. All figures are displayed in the margin currency.

Change:

The total margin requirement for all risk positions are shown (i.e. for Eurex derivative positions, bond positions, and cash positions). No other changes presented.

Layout:

```
         1         2         3         4         5         6         7         8         9         10        11        12        13
  0123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

01|EUREX                                              DAILY MARGIN SUMMARY                                                PAGE:        1
02|RPTCC060                                                                                                          AS OF DATE: 23-10-00
03|                                                                                                                    RUN DATE: 23-10-00
04|
05|CLEARING MEMBER: ABCFR ABC BANK CORPORATION (1)                                                                     CURRENCY: ATS (2)
06|
07|                             PREMIUM /          FUTURES                          UNADJUSTED          TOTAL
08|EXCHANGE                     CURR. LIQ.         SPREAD          ADDITIONAL         MARGIN           MARGIN
09|MEMBER        ACCT          MARGIN             MARGIN            MARGIN         REQUIREMENT      REQUIREMENT
10|--------      ----        ------------       ------------     -------------    --------------     -------------
11|  (3)          (4)            (5)               (6)              (7)              (8)               (9)
12|ABCFR           PP          30,000.00-            0.00        199,881.30        169,881.30        169,881.30
13|                                                                                                 -------------
14|                                                                                                      (10)
15|EXCHANGE MEMBER TOTAL:                                                                            169,881.30
16|
17|XYZFR           PP          30,000.00             0.00      1,000,091.70      1,030,091.70      1,030,091.70
18|                                                                                                 -------------
19|                                                                                                      (10)
20|EXCHANGE MEMBER TOTAL:                                                                          1,030,091.70
21|
22|                                                                                                 -------------
23|                                                                                                      (11)
24|CLEARING MEMBER TOTAL:                                                                          1,199,973.00
25|                                                                                                 =============
26|
27|
28|
29|
30|
```

X-pand into the **Future**

Eurex Clearing AG

Preliminary Technical Release Notes

IC Release 2000

© Eurex 2000

All proprietary rights and interest in this publication shall be vested in Eurex Administration and Management (" Eurex") and all other rights including, but without limitation, patent, registered design, copyright, trade mark, service mark, connected with this publication shall also be vested in Eurex.

Whilst all reasonable care has been taken to ensure that the details contained in this publication are accurate and not misleading at the time of publication, no liability is accepted by Eurex for the use of information contained herein in any circumstances connected with actual trading or otherwise. Neither Eurex, nor its servants nor agents, is responsible for any errors or omissions contained in this publication which is published for information only and shall not constitute investment advice. This brochure is not intended for solicitation purposes but only for the use of general information.

All descriptions, examples and calculations contained in this publication are for guidance purposes only and should not be treated as definitive. Eurex reserves the right to alter any of its rules or contract specifications, and such an event may affect the validity of information in this publication.
® Eurex is a registered trademark

Table of Contents

1	**Introduction**	**2**
2	**General Information**	**3**
2.1	**Trade Management**	**3**
2.2	**Risk Management**	**3**
2.3	**Delivery Management**	**4**
3	**File Transfer Interface**	**5**
3.1	**Risk Management**	**5**
3.1.1	File FPMGBPRM - Security Margin Class and Group Information File	5
3.1.2	File FPTHEB - Theoretical Values II	6
3.1.3	File FPTHEC - Bond Coupon Parameters	7
4	**Raw Data Interface**	**9**
4.1	**Trade Management**	**9**
4.1.1	Raw Data File RAWTC700 - Pending Trades	9
4.1.2	Raw Data File RAWTC750 - Open Repo Trades	11
4.2	**Repo Coupon Compensations**	**13**
4.3	**Risk Management**	**13**
4.3.1	Raw Data File RAWCC011 – Current Liquidating Margin	13
4.3.2	Raw Data File RAWCC041 – Liquidating Values II	16
4.4	**Delivery Management**	**18**
4.4.1	Raw Data File RAWCE200 - Pending Deliveries	19
4.4.2	Raw Data File RAWCE210 - Settled / Cancelled Deliveries	21

1 Introduction

This document describes the changes to Member Back Office Systems interfaces which will be introduced as part of the IC Release 2000 release in October 2000. Familiarity with the Eurex Member Interface Specifications – File Interfaces (Document X0003400) is assumed.

All changes necessary to Back Office systems are only necessary for Members (or their non-clearing members) that participate in Eurex as well as the bond trading platform. In general, the changes to be made on the Back Office Systems for new Raw Data and other files are only relevant for clearing members.

The release does not contain of any Front End changes, nor any changes to the Operating Systems. The implementation of the clearing release does not affect the Sizing Guidelines.

The technical changes described in this document result from the following functional enhancements (for further information refer to Preliminary Functional Release Notes):

- Trade Management (Bond Trades)
- Risk Management (Cross Margining of Bond and Derivatives)
- Delivery Management (Bond Trades)

The interfaces listed below will change as a result of the above-mentioned functional enhancements:

- File Interface
- Raw Data Interface

2 General Information

This chapter provides a short overview of the functional changes which will affect the technical environment of Eurex. The functional descriptions below provide the context for the subsequent technical changes.

The focus of the new release is

- To extend Eurex Clearing AG's clearance activities to include spot, forward andrepo (repurchase agreement) transactions in fixed income securities (referred to as "bond trades")
- To extend the eligible settlement locations for Eurex Clearing AG's business to include other relevant settlement locations (e.g. Euroclear) based on member needs
- To include bond trades in the risk based margining system of Eurex Clearing AG, allowing cross margining and cross collateralization between Eurex products and bond trades
- To extend Eurex Clearing AG's membership structure to include Clearing and Non-Clearing memberships for Participants who are not Eurex Exchange Participants but who wish to have Eurex Clearing AG clear their bond trades

2.1 Trade Management

Eurex currently provides clearing functionality for Eurex derivatives. With the new release, Eurex Clearing AG will be able to receive trades from other trading systems and will provide clearing services for the existing derivatives trades from the Eurex exchanges as well as cash, basis and repo trades.

The interface from the existing Eurex trading to the Eurex clearing system will remain unchanged. Trades on electronic trading platforms using Eurex Clearing AG as its central counterpart will be routed automatically to the Clearinghouse for processing.

2.2 Risk Management

With the extension of Eurex Clearing AG's activities into the clearing of Bond Trades, the risk based margining system of Eurex Clearing AG will be extended to cover such transactions. Bond Trades will be set up as new products in Eurex Clearing AG and will be assigned to new margin classes that will only include positions arising from Bond Trades.

Eurex Clearing AG will calculate the profits and losses in the positions from Bond Trades. Each Bond Trade position will be valued according to current market prices resulting in a "Current Liquidating Value" (CLV), for each position. TheCLVs of positions will be aggregated at the level of margin classes and margin groups and will contribute to the overall level of collateral margin, "Current Liquidating Margin" (CLM), required from the Member.

As for other Eurex products, Eurex Clearing AG will perform a "worst case loss" calculation in order to properly integrate price change risk in Bond Trade positions into the overall Additional Margin requirement of the Member.

Further adjustments are made to take into account the benefit of an upcoming coupon payment or deduction of a of a coupon payment if it should not be included. Further details on the changes and calculations for risk based margining can be found in the Preliminary Functional Release Notes.

2.3 Delivery Management

Changes in member back offices due to Notification/ Allocation being taken out of the Eurex core system is expected to be covered by adaptations in Eurex rules and regulations.

For cash bonds and repurchase agreement transactions settlement, the Clearinghouse will support settlement in Clearstream Banking AG, SIS SEGAINTERSETTLE AG and other relevant settlement locations (e.g. Euroclear) based on member needs. The Clearinghouse will have settlement accounts in all settlement locations and will participate directly in batch and real time settlement processes as necessary to ensure maximal settlement. As mentioned above, the settlement of Repo transactions will not be subject to special procedures. Each leg of the Repo will be settled as would any single bond trade due on such date and in such amount.

The Clearinghouse will confirm the upcoming settlements in the form of a settlement Report transmitted to each member. The Clearinghouse will submit settlement instructions for itself and for its members to the settlement locations selected by the members. The Clearinghouse will monitor the status of settlement instruction pre-matching at the relevant settlement location.

Members and Eurex Clearing AG are each responsible for ensuring that they have the cash and securities necessary to successfully settle all transactions. The Clearinghouse will be responsible for timely delivery only to the extent members deliver to it on a timely basis. Failed settlement instructions will remain in the settlement locations for settlement in a subsequent settlement process.

In the event of settlement fails, the Clearinghouse might be forced to carry a long securities position from one day to the next. In such a case the Clearinghouse will modify unsettled instructions in order to make partial deliveries. The partial deliveries will be assigned to the Clearinghouse participant whose unsettled receipt from the Clearinghouse is the smallest and, should there be more than one such Eurex Clearing AG member, the partial will be assigned on a random basis. In this case, Eurex Clearing AG will inform the member of the modified and new settlement instructions, and the Clearinghouse will submit the associated settlement instructions and for itself to the relevant settlement locations.

The current Eurex penalty mechanism will apply to all fails.

For a detailed description on the functional changes and implications, see the Preliminary Functional Release notes.

3 File Transfer Interface

3.1 Risk Management

3.1.1 File FPMGBPRM - Security Margin Class and Group Information File

To enable Clearing Members to calculate additional margining, the Back Office Systems are provided with information on the new margin class mapping for bond securities resulting from the Bonds trading platform. The information is sent to the Members via the Security Margin Class and Group Information File (FPMGBPRM).

Similar to the current procedure for the FPMGPARM file, this file is created during the End of day processing, before the Eurex batch starts its margin calculation, and is published on the internet. The layout of the FPMGBPRM file is as follows:

Field	Format	Description
01 RMMGBPRM-WS-REC		
05 DATA-GRP-RMMGBPRM		
10 MGN-GRP-COD-RMMGBPRM	X(5)	Margin Group Code
10 GRP-OFF-SET-RMMGBPRM	–9(3)	Offset Factor
05 DATA-CLS-RMMGBPRM		
10 MGN-CLS-COD-RMMGBPRM	X(5)	Margin Class Code
05 SECU-ISIN-RMMGBPRM	X(12)	ISIN of the security
05 DATA-VOL-RMMGBPRM		
10 MGN-PAR-RMMGBPRM	9(3).9(3)	Margin Parameter. This is the maximum fluctuation which a security can be expected to have during the next day. Based on the historical volatility.
10 MGN-PAR-FLG-RMMGBPRM	PIC X	Indicator, if the margin parameter is given in absolute (A) or percentage (P).
05 DATA-CURR-RMMGBPRM		
10 CURR-TYP-COD-RMMGBPRM	X(3)	Currency Code
10 DCML-SHFT-NO-RMMGBPRM	9(1)	
10 FORX-EXC-RAT-RMMGBPRM	9(3).9(9)	Exchange Rate
05 DATA-BOND-RMMGBPRM		Bond parameters
10 STD-STL-PERIOD-RMMGBPRM	9(3)	Standard settlement Period in days per Bond

3.1.2 File FPTHEB - Theoretical Values II

The Theoretical Values II file provides Members with the security parameters used for the current liquidating margin calculation and parameters for additional margin evaluation.

Similar to the current procedure for the FPTHEA file, this file is sent during the End of day processing, before the Eurex batch starts its margin calculation, and is also published on the internet. The file will be sent to all Eurex clearing members. The layout of the FPTHEB file is as follows:

Field	Format	Description
01 RMTHEB-WS-REC.		
05 KEY-GRP-RMTHEB.		
10 SECU-ISIN-RMTHEB	PIC X(12)	ISIN of the security for which the information is shown
05 DATA-CLS-RMTHEB.		
10 MGN-GRP-COD-RMTHEB	PIC X(5).	Margin group code.
10 MGN-CLS-COD-RMTHEB	PIC X(5).	Margin class code. Identification of the margin class
10 MGN-PAR-RMTHEB	PIC 9(3).9(3).	Margin Parameter. This is the maximum fluctuation which a security can be expected to have during the next day. Based on the historical volatility.
10 MGN-PAR-FLG-RMTHEB	PIC X.	Indicator, if the margin parameter is given in absolute (A) or percentage (P).
05 DATA-SECU-RMTHEB.		
10 SECU-PRC-RMTHEB	PIC 9(10).9(2)	Security price used for risk based margining.
10 SECU-MAX-UP-PRC-RMTHEB	9(10).9(2).	Maximum expected price For bonds it is the expected clean price as percentage
10 SECU-MAX-DWN-PRC-RMTHEB	9(10).9(2).	Minimum expected price For bonds it is the expected clean price as percentage
10 SECU-NEAR-STL-DATE-RMTHEB	PIC 9(8).	Nearest settlement date (Actual date plus standard settlement period for a bond).

Field	Format	Description
10 SECU-AI-METHOD-RMTHEB	PIC X(2).	Accrued interest method. " 01" 30/360 days/year, " 02" 30/365 days/year, " 03" 30/360 days/year, including Italian tax, and " 04" actual/actual (ICMA standard).
10 SECU-ACCRU-INT-RMTHEB	PIC 9(3).9(9).	Accrued interest for next coupon p.a.
10 SECU-FREQ-RMTHEB	PIC 9(3).	Number of coupon payments per year.
10 SECU-CDAYS-ACCRU-RMTHEB	PIC 9(5).	Number of days since last coupon – counted according to specific accrued interest method
10 SECU-CDAYS-IN-PER-RMTHEB	PIC 9(5).	Number of days between last and next coupon – counted according to specific accrued interest method
05 DATA-CURR-RMTHEB.		
10 CURR-TYP-COD-RMTHEB	PIC X(3).	Currency Type Code (ISO Code), e.g.: EUR, CHF
10 CURR-INTR-RATE-RMTHEB	PIC 9(2).9(3).	Market Cash Interest Rate of the Currency
10 RSK-ADPT-INTR-RATE-RMTHEB		Risk Adapted Interest Rates
15 UP-ADPT-INTR-RATE-RMTHEB	PIC 9(2).9(3).	Currency' s Risk Adapted Interest Rate – Up
15 DWN-ADPT-INTR-RATE-RMTHEB	PIC 9(2).9(3).	Currency' s Risk Adapted Interest Rate – Down

3.1.3 File FPTHEC - Bond Coupon Parameters

The Bond Coupon Parameters file contains coupon dates and rates for all bond securities. It serves as an additional source for the evaluation of the current liquidation margin.

Similar to the current procedure for the FPTHEA file, this file is sent during the End of day processing, before the Eurex batch starts its margin calculation, and is also published on the internet. The file will be sent to all clearing members. The layout of the FPTHEC file is as follows:

Field	Format	Description
01 RMTHEC-WS-REC		
10 SECU-ISIN-RMTHEC	PIC X(12).	ISIN of the security
10 SECU-CPN-DATE-RMTHEC	PIC 9(8).	Issue / Maturity / Coupon Date – depending on the flag below
10 SECU-CPN-RATE-RMTHEC	PIC 9(2).9(3).	Coupon Rate (0 for Issue Date)
10 SECU-CPN-ADJ-RMTHEC	9(3).9(5).	Coupon Adjustment
10 SECU-CPN-FLAG-RMTHEC	PIC X(1).	Issue / Maturity / Coupon Flag – The coupon rate and date fields are set for - Issue of the bond if the flag is set to: ‘ I’ - Maturity of the bond if the flag is set to: ‘ M’ - Regular Coupon if the flag is set to: ‘ C’

4 Raw Data Interface

4.1 Trade Management

For Trade Management, the following new raw data reports will be generated daily by Eurex and sent to clearing members that participate in the Bond trading platform, either through their own participation or their non-clearing members' participation

RAWTC700 (Pending Trades)

RAWTC750 (Open Repo Trades)

4.1.1 Raw Data File RAWTC700 - Pending Trades

The raw data file RAWTC700 contains all pending trades (including the repo trade legs). Additionally, the trades settled or deleted during the day are shown. I.e. a trade is shown during its lifetime as "pending" until it is either shown on the day of the settlement as "settled" or the day of the deletion of the corresponding deliveries as "deleted". Remark: all numbers are positive and have to be interpreted with the buy/ sell indicator.

The copybook layout for the file is as follows:

Field	Format	Description
01 RWTC700-WS-REC.		
05 RAW-KEY-RWTC700		
10 RAW-ID-COD-RWTC700	PIC X(8).	This field contains the identification code of the raw data-stream. Values include: RAWTC700 – valid data-record ENDTC700 – end of raw data-stream
10 RAW-DAT-GRP-RWTC700.		
15 RAW-EFF-DAT-RWTC700	PIC 9(8).	This field identifies the business-day of which the raw data-stream is created: The format of this field is: YYYYMMDD
15 RAW-CRT-PROC-DAT-RWTC700	PIC 9(8).	This field identifies the creation-day of the raw data-stream. The format of this field is: YYYYMMDD
10 ENV-NO-TXT-RWTC700	PIC X(2)	This field identifies the environment this raw data file belongs to. Possible values are: 00 – production environment 01 – simulation

Field	Format	Description
10 MBR-CLG-ID-COD-RWTC700	PIC X(5).	This field contains the identification code of the Clearing Member (IC)
10 MBR-EXC-ID-COD-RWTC700	PIC X(5)	This field contains the identification code of the Exchange Member (IC).
10 ACCT-TYP-COD-RWTC700		This group field contains the account. Field values include: " A1" – Agent accounts " PP" – Proprietary accounts
15 ACCT-TYP-COD-RWTC700	PIC X(1).	
15 ACCT-TYP-NO-RWTC700	PIC X(1).	
10 SECU-ISIN-RWTC700	PIC X(12).	ISIN of the security
10 STL-DATE-RWTC700	PIC 9(8).	Settlement date. The format of this field is: YYYYMMDD
10 STL-CURR-TYP-COD-RWTC700	PIC X(3).	Settlement currency type code. Identification of settlement currency (ISO).
10 TRD-LOC-RWTC700	PIC X(4).	Trading location code. Identification of trading location. (MIC Code)
05 RAW-DATA-GRP-RWTC700		
10 TRD-NUM-RWTC700	PIC 9(12).	Internal trade number.
10 TRD-DATE-RWTC700	PIC 9(8).	Trade date.
10 TRD-TIME-RWTC700	PIC 9(6).	Trade time
10 EXT-TRD-NUM-RWTC700	PIC 9(19).	External Trade number.
10 BUY-SELL-FLG-RWTC700	PIC X(1).	Buy / Sell flag.
10 TRD-QTY-RWTC700	PIC 9.9(5)	Trade quantity. Positive for buy and negative for sell
10 PAY-RCV-AMOUNT-RWTC700	PIC 9.9(2)	Payable / Receivable amount. Negative for buy and positive for sell.
10 ACC-INTR-RWTC700	PIC 9.9(2)	Accrued interest. Negative for buy and positive for sell.

Field	Format	Description
10 TRD-STS-RWTC700	PIC X(7).	Status of the trade in the pending trade book. ' Pending' if some deliveries of the trade are not settled. ' Settled' if all deliveries of the trade are settled. ' Deleted' if all deliveries of the trade are deleted. ' Set/Del' if all deliveries of the trade are either settled or deleted.
10 FREE-TXT-RWTC700	PIC X(20).	External Free Form Text.
10 LEG-NO-RWTC700	PIC 9(2).	For repo trades the leg number (1 for opening and 2 for closing leg). 1 for spot trades.
10 MOD-ID-RWTC700	PIC X(10).	Modification identification. The trading locations, together with the external trade number, the buy/ sell indicator, the leg number, and the modification identification uniquely identify a trade.

4.1.2 Raw Data File RAWTC750 - Open Repo Trades

The raw data file RAWTC750 contains the open repo trades. The trades will appear in this report from the trade day until both legs are settled. The settlement status of each leg is shown.
Remark: all numbers are positive and have to be interpreted with the buy/ sell indicator.

The copybook layout for the file is as follows:

Field	Format	Description
01 RWTC750-WS-REC.		
05 RAW-KEY-RWTC750		
10 RAW-ID-COD-RWTC750	PIC X(8).	This field contains the identification code of the raw data-stream. Values include: RAWTC750 – valid data-record ENDTC750 – end of raw data-stream
10 RAW-DAT-GRP-RWTC750.		

Field	Format	Description
15 RAW-EFF-DAT-RWTC750	PIC 9(8).	This field identifies the business-day of which the raw data-stream is created: The format of this field is: YYYYMMDD
15 RAW-CRT-PROC-DAT-RWTC750	PIC 9(8).	This field identifies the creation-day of the raw data-stream. The format of this field is: YYYYMMDD
10 ENV-NO-TXT-RWTC750	PIC X(2).	This field identifies the environment this raw data file belongs to. Possible values are: 00 – production environment 01 – simulation
10 MBR-CLG-ID-COD-RWTC750	PIC X(5).	This field contains the identification code of the Clearing Member.
10 MBR-EXC-ID-COD-RWTC750	PIC X(5)	This field contains the identification code of the Exchange Member.
10 ACCT-TYP-COD-RWTC750		This group field contains the account. Field values include: " A1" – Agent accounts " PP" – Proprietary accounts
15 ACCT-TYP-COD-RWTC750	PIC X(1).	
15 ACCT-TYP-NO- RWTC750	PIC X(1).	
10 SECU-ISIN-RWTC750	PIC X(12).	ISIN of the security
10 STL-CURR-TYP-COD-RWTC750	PIC X(3).	Settlement Currency Type Code (ISO Code), e.g.: EUR, CHF
10 TRD-DATE-RWTC750	PIC 9(8).	Trade date.
05 RAW-DATA-GRP-RWTC750		
10 OPN-LEG-TRD-NUM-RWTC750	PIC 9(12).	Internal trade number of the opening leg.
10 CLS-LEG-TRD-NUM-RWTC750	PIC 9(12).	Internal trade number of the closing leg.
10 OPN-LEG-STL-DATE-RWTC750	PIC 9(8).	Settlement date of the opening leg of the repo. The format of this field is: YYYYMMDD

Field	Format	Description
10 CLS-LEG-STL-DATE-RWTC750	PIC 9(8).	Settlement date of the closing leg of the repo. The format of this field is: YYYYMMDD
10 BUY-SELL-FLG-RWTC750	PIC X(1).	Buy / Sell indicator.
10 TRD-QTY-RWTC750	PIC 9(10).9(5)	Trade Quantity
10 OPN-PAY-AMOUNT-RWTC750	PIC 9(10).9(2)	Payable amount for opening leg.
10 CLS-PAY-AMOUNT-RWTC750	PIC 9(10).9(2)	Payable amount for closing leg.
10 REPO-RATE-RWTC750	PIC 9(4).9(6)	Repo interest rate (percentage)
10 REPO-INTR-AMT-RWTC750	PIC 9(10).9(2)	Repo interest amount
10 FREE-TXT-RWTC750	PIC X(20).	Free text
10 STL-STATUS-OPN-LEG-RWTC750	PIC X(1).	Settlement status of the opening leg. ' S' for settled or ' P' for pending.
10 STL-STATUS-CLS-LEG-RWTC750	PIC X(1).	Settlement status of the closing leg. ' S' for settled or ' P' for pending.

4.2 Repo Coupon Compensations

Report CD190 "Coupon Compensations" will also be provided as raw data.

4.3 Risk Management

For Risk Based Margining, the following new raw data reports will be generated daily by Eurex and sent to clearing members that participate in the Bond trading platform, either through own participation or their non-clearing members participation:

RAWCC011 (Current Liquidating Margin)

RAWCC041 (Liquidating Values II)

4.3.1 Raw Data File RAWCC011 – Current Liquidating Margin

The raw data file RAWCC011 provides members with their bond and cash positions in securities, the current liquidation margin evaluation and several parameters required for the calculation thereof. The copybook layout for the file is as follows:

Field	Format	Description
01 RWCC011-WS-REC.		
05 RAW-KEY-GRP-RWCC011.		
10 RAW-ID-COD-RWCC011	PIC X(8).	This field contains the identification code of the raw data-stream. Values include: RAWCC011 – valid data-record ENDCC011 – end of raw data-stream
10 RAW-DAT-GRP-RWCC011.		
15 RAW-EFF-DAT-RWCC011	PIC 9(8).	This field identifies the business-day of which the raw data-stream is created: The format of this field is: YYYYMMDD
15 RAW-CRT-PROC-DAT-RWCC011	PIC 9(8).	This field identifies the creation-day of the raw data-stream. The format of this field is: YYYYMMDD
10 ENV-NO-TXT-RWCC011.	PIC X(2).	This field identifies the environment this raw data file belongs to. Possible values are: 00 – production environment 01 – simulation environment
10 MBR-CLG-ID-COD-RWCC011	PIC X(5).	This field contains the identification code of the Clearing Member.
10 MBR-EXC-ID-COD-RWCC011.	PIC X(5).	This group field contains the identification code of the Exchange Member.
10 ACCT-TYP-COD-GRP-RWCC011.		This group field contains the account. Field values include: “ A1” – Agent accounts “ PP” – Proprietary accounts

Field	Format	Description
15 ACCT-TYP-COD-RWCC011	PIC X(1).	
15 ACCT-TYP-NO-RWCC011	PIC X(1).	
10 CURR-TYP-COD-RWCC011	PIC X(3).	Currency Type Code (ISO Code), e.g.: EUR, CHF
10 MGN-CLS-COD-RWCC011	PIC X(5).	Margin class code. Identification of the margin class
05 RAW-DATA-GRP-RWCC011.		
10 CURR-INTR-RATE-RWCC011	PIC 9(2).9(3)	Merket Cash Interest Rate of the Currency
10 RSK-ADPT-INTR-RATE-RWCC011		Risk Adapted Interest Rates
15 UP-ADPT-INTR-RATE-RWCC011	PIC 9(2).9(3)	Currency' s Risk Adapted Interest Rate – Up
15 DWN-ADPT-INTR-RATE-RWCC011	PIC 9(2).9(3)	Currency' s Risk Adapted Interest Rate – Down
10 SECU-ISIN-RWCC011	PIC X(12).	ISIN of the security for which the risk positions and the current liquidation margin is shown
10 SECU-PRC-RWCC011	PIC 9(10).9(2)	Security price used for risk based margining.
10 SECU-CPN-RATE-RWCC011	PIC 9(2).9(3).	Coupon Rate of the bond
10 STL-DAT-RWCC011	PIC 9(8).	Settlement Date of the risk positions. The format of this field is: YYYYMMDD
10 POST-SECU-NET-RWCC011	PIC ---------9.9(2).	Security net risk positions as nominal amount
10 CASH-POS-NET-RWCC011	PIC ---------9.9(2).	Cash net risk positions belonging to the security
10 CLV-COUPON-ADJ-RWCC011.		Coupon Adjustments of Current Liquidation Value: Both columns have a space (" ") if no coupon adjustment.
15 CLV-DU-ADJ-RWCC011.	PIC X(1).	" D" for downside adjustment " U" for upside adjustment

Field	Format	Description
15 CLV-PF-ADJ-RWCC011.	PIC X(1).	" P" for adjustment with present value " F" for adjustment with future value
10 AMT-CLV-SECU-RWCC011	PIC --------- 9.9(2).	Current liquidation value of the security net positions of the settlement date
10 AMT-CLV-CASH-RWCC011	PIC --------- 9.9(2).	Current liquidation value of the cash net positions of the settlement date

4.3.2 Raw Data File RAWCC041 – Liquidating Values II

The raw data file RAWCC041 provides members, per security, with positions for every day, with all transactions (buy/sell) summed. In the report, liquidating values up and down and the difference from the current liquidating value is shown. The necessary parameters needed for the calculation are also provided with this file. Only up and down maximums and no strikes in between (as there are no options in the margin classes) are used for the calculation of liquidating values. The copybook layout for the file is as follows:

Field	Format	Description
01 RWCC041-WS-REC.		
05 RAW-KEY-GRP-RWCC041.		
10 RAW-ID-COD-RWCC041	PIC X(8).	This field contains the identification code of the raw data-stream. Values include: RAWCC041 – valid data-record ENDCC041 – end of raw data-stream
10 RAW-DAT-GRP-RWCC041.		
15 RAW-EFF-DAT-RWCC041	PIC 9(8).	Raw data date. Effective date of the Raw data. The format of this field is: YYYYMMDD
15 RAW-CRT-PROC-DAT-RWCC041	PIC 9(8).	Raw data date. Creation date of the Raw data. The format of this field is: YYYYMMDD

Field	Format	Description
10 ENV-NO-TXT-RWCC041	PIC X(2).	This field identifies the environment this raw data file belongs to. Possible values are: 00 – production environment 01 – simulation environment
10 MBR-CLG-ID-COD-RWCC041	PIC X(5).	This field contains the identification code of the Clearing Member.
10 MBR-EXC-ID-COD-RWCC041.	PIC X(5).	This group field contains the identification code of the Exchange Member.
10 ACCT-TYP-COD-GRP-RWCC041.		This group field contains the account. Field values include: " A1" – Agent accounts " PP" – Proprietary accounts
15 ACCT-TYP-COD-RWCC041	PIC X(1).	
15 ACCT-TYP-NO-RWCC041	PIC X(1).	
10 MGN-GRP-COD-RWCC041	PIC X(5).	Margin group code. Identification of the margin group.
10 MGN-CLS-COD-RWCC041	PIC X(5).	Margin class code. Identification of the margin class
10 CURR-TYP-COD-RWCC041	PIC X(3).	Currency Type Code (ISO Code), e.g.: EUR, CHF
05 RAW-DATA-GRP-RWCC041.		
10 CURR-INTR-RATE-RWCC041	PIC 9(2).9(3).	Market Cash Interest Rate of the Currency
10 RSK-ADPT-INTR-RATE-RWCC041		
15 UP-ADPT-INTR-RATE-RWCC041	PIC 9(2).9(3).	Currency' s Risk Adapted Interest Rate – Up
15 DWN-ADPT-INTR-RATE-RWCC041	PIC 9(2).9(3)	Currency' s Risk Adapted Interest Rate – Down
10 SECU-ISIN-RWCC041	PIC X(12).	ISIN of the security for which the risk positions and the liquidation value is shown
10 SECU-CPN-RATE-RWCC041	PIC 9(2).9(3)	Coupon Rate of the bond

Field	Format	Description
10 SECU-PRC-RWCC041	PIC 9(10).9(2)	Security price used for risk based margining.
10 SECU-MAX-UP-PRC-RWCC041	PIC 9(10).9(2)	Maximum expected price
10 SECU-MAX-DWN-PRC-RWCC041	PIC 9(10).9(2).	Minimum expected price
10 STL-DAT-RWCC041	PIC 9(8)	Settlement Date of the risk positions. The format of this field is: YYYYMMDD
10 SECU-POS-NET-RWCC041	PIC ---------- 9.9(2).	Net security risk positions as nominal amount
10 AMT-CLV-SECU-RWCC041	PIC ---------- 9.9(2).	Current liquidation value of the security net positions of the settlement date
10 AMT-LV-MAX-UP-RWCC041	PIC ---------- 9.9(2).	Liquidating value of the net positions, assuming the maximum expected price
10 AMT-LV-MAX-DWN-RWCC041	PIC ---------- 9.9(2).	Liquidating value of the net positions, assuming the minimum expected price
10 AMT-LV-UP-DIFF-RWCC041	PIC ---------- 9.9(2).	Difference between Current Liquidating value and Liquidating value of the net positions, assuming the maximum expected price
10 AMT-LV-DWN-DIFF-RWCC041	PIC ---------- 9.9(2).	Difference between Current Liquidating value and Liquidating value of the net positions, assuming the minimum expected price

4.4 Delivery Management

For Delivery Management, the following new raw data reports will be generated daily by Eurex and sent to clearing members that participate in the Bond trading platform, either through own participation or their non-clearing members participation:

RAWCE200 (Pending Deliveries)

RAWCE210 (Settled / Cancelled Deliveries)

4.4.1 Raw Data File RAWCE200 - Pending Deliveries

The raw data file RAWCE200 provides the Member with a list of all pending deliveries. For the raw data CE200 and CE210 the same file layout will be used. The copybook layout for the file is as follows:

Field	Format	Description
01 RWCE200-WS-REC		
05 RAW-KEY-GRP-RWCE200		
10 RAW-ID-COD-RWCE200	PIC X(8)	This field contains the identification code of the raw data-stream. Values include: RAWCE200/ RAWCE210 - valid data-record ENDCE200/ ENDCE210 - end of raw data-stream
10 RAW-DAT-GRP-RWCE200		
15 RAW-EFF-DAT-RWCE200	PIC 9(8)	This field identifies the business-day of which the raw data-stream is created: The format of this field is: YYYYMMDD
15 RAW-CRT-PROC-DAT-RWCE200	PIC 9(8)	This field identifies the creation-day of the raw data-stream. The format of this field is: YYYYMMDD
10 ENV-NO-TXT-RWCE200	PIC X(2)	This field identifies the environment this raw data file belongs to. Possible values are: 00 - production environment 01 - simulation environment
10 MBR-CLG-ID-COD-RWCE200	PIC X(5)	This field contains the identification code of the Clearing Member.
10 STL-CURR-TYP-COD-RWCE200	PIC X(3)	Settlement Currency
10 CSD-RWCE200	PIC X(6)	Central Securities Depository/ Settlement Location of Member

Field	Format	Description
10 EFF-DAT-RWCE200	PIC 9(8)	Empty for RAWCE200. For RAWCE210: Date the delivery was effectively settled/cancelled. The format of this field is: YYYYMMDD
05 RAW-DATA-GRP-RWCE200		
10 SECU-ISIN-RWCE200	PIC X(12)	ISIN of the security
10 ISIN-CURR-TYP-COD-RWCE200	PIC X(3)	Associated Currency to Security Nominal
10 TRAN-DAT-RWCE200	PIC 9(8)	Date when the Pending Delivery Transaction was created. The format of this field is: YYYYMMDD
10 STL-DAT-RWCE200	PIC 9(8)	Settlement Date of the Pending Delivery Transaction. The format of this field is: YYYYMMDD.
10 STL-ACCOUNT-RWCE200	PIC X(12)	Settlement Account Code of the Member at the Settlement Location
10 BUY-SEL-RWCE200	PIC X(1)	Buy/Sell indicator
10 QTY-RWCE200	PIC ----------9.9(2)	Nominal Amount to be Received (positive) or to be Delivered (negative)
10 AMT-RWCE200	PIC ----------9.9(2)	Settlement Amount to be Received (positive) or to be Delivered (negative)
10 REF-TRD-ID-RWCE200	PIC 9(12)	Reference Number to Internal Trade ID
10 CPTY-CSD-RWCE200	PIC X(6)	Settlement Location of Counterparty
10 CPTY-STL-ACCOUNT-RWCE200	PIC X(12)	Settlement Account Code of Counterparty at the Settlement Location
10 REMARK-RWCE200	PIC X(6)	Text field i.e. MANUAL for manual creation of partial deliveries or CANCEL for a manual cancellation.
10 REF-DELV-ID-RWCE200	PIC 9(8)	For partial deliveries the cancelled original delivery ID
10 DELV-ID-RWCE200	PIC 9(8)	Delivery ID

Field	Format	Description
10 DELV-STS-COD-RWCE200	PIC X(2)	Status of the delivery. The status codes will be mapped in the following manner: '01' - 'New' '02' - 'Sent' '03' - 'Settled' '04' - 'Cancelled' '05' - 'Cancellation Sent' '06' - 'Cancel Confirmed'

4.4.2 Raw Data File RAWCE210 - Settled / Cancelled Deliveries

The raw data file RAWCE210 provides the Member with a list of all pending deliveries, which are settled and " cancelled confirmed" during the day (same effective settlement completion date)For the raw data CE200 and CE210 the same file layout will be used.

X-pand into the **Future**

Eurex Clearing AG

Extension of Services

IC Release 2000 - Member Brochure

© Eurex 2000

All proprietary rights and interest in this publication shall be vested in Eurex Administration and Management (" Eurex") and all other rights including, but without limitation, patent, registered design, copyright, trade mark, service mark, connected with this publication shall also be vested in Eurex.

Whilst all reasonable care has been taken to ensure that the details contained in this publication are accurate and not misleading at the time of publication, no liability is accepted by Eurex for the use of information contained herein in any circumstances connected with actual trading or otherwise. Neither Eurex, nor its servants nor agents, is responsible for any errors or omissions contained in this publication which is published for information only and shall not constitute investment advice. This brochure is not intended for solicitation purposes but only for the use of general information.

All descriptions, examples and calculations contained in this publication are for guidance purposes only and should not be treated as definitive. Eurex reserves the right to alter any of its rules or contract specifications, and such an event may affect the validity of information in this publication.

® Eurex is a registered trademark.

Table of Contents

1	**Introduction**	**2**
2	**Vision**	**3**
2.1	**Central Counterparty**	**3**
2.2	**Integrated Risk Management**	**3**
2.3	**Extension across Products and Trading Locations**	**4**
2.4	**Open to Settlement Locations**	**4**
3	**IC Release 2000 Functionality**	**5**
3.1	**Product Coverage**	**5**
3.1.1	Repurchase Agreements	5
3.2	**Functional Description**	**5**
3.2.1	Interfaces to Trading Systems	5
3.2.2	Membership	6
4	**Settlement**	**7**
4.1.1	Repo Coupon Transfers	7
4.1.2	Risk Management	7
4.1.3	Reporting	8
4.2	**Clearing Membership Requirements**	**9**

1 Introduction

Eurex Clearing AG is planning to expand its scope of activities. As a part of Eurex Release 4.1 and referred to in this document as IC Release 2000, Eurex Clearing AG's central counterparty services will be extended to include bond cash, forward and repurchase agreement transactions ("Repos"). In subsequent phases, Eurex Clearing AG's functionality will extend to cover additional markets. Through IC Release 2000, Eurex Clearing AG will be able to offer its members the following benefits :

- Balance sheet netting in repurchase agreements and other markets where this may be relevant.
- Reduced credit risk by positioning Eurex Clearing AG, with its risk management system, as counterparty to all trades.
- For electronic trading platforms, trade anonymity will be extended through the final settlement of transactions.
- Reduced collateral requirements via cross margining and cross collateralization between the physical fixed income markets and Eurex.
- Operating efficiencies by consolidating transactions with a single counterparty that offers a single consistent interface and reporting infrastructure and a single transaction margining system.

The purpose of this document is to describe the longer term vision for the extended services of Eurex Clearing AG (hereinafter also referred to as "Clearinghouse") and to present the first phase development.

2 Vision

This section provides an overview of the long-term vision for the Clearinghouse, indicating its primary functional elements and the main benefits that will be realized by the market through its introduction.

2.1 Central Counterparty

Eurex Clearing AG will be interposed between the primary counterparties to financial transactions in the market segments and trading locations served by the Clearinghouse. Eurex Clearing AG will be the original counterparty to trades that are concluded on automated trading platforms, and it will become counterparty to trades in OTC markets via a process of validation and registration. The following benefits will be realized through the central counterparty structure.

- Counterparty risk is reduced because each market participant will have the Clearinghouse as its counterparty in place of other market participants, which in most cases will not have the same credit quality as Eurex Clearing AG.
- Trade anonymity can be extended through the settlement process because market participants will settle their trades against the Clearinghouse rather than against the party who they were matched against on trading platforms that offer anonymous trade matching.
- Risk positions are consolidated with the Clearinghouse, allowing for a maximum of margin offset in the risk management process and facilitating collateralization by applying a single collateralization process to a maximum of trading activities.
- Settlement volumes are reduced through order level and multilateral netting performed by the Clearinghouse. Net settlement instructions are calculated by the Clearinghouse and may be inserted into the relevant settlement systems on behalf of the member.
- Balance sheet relief for members can also be achieved through the netting process. In certain business areas and jurisdictions, this benefit can be dramatic and highly valued by members. Repurchase agreements is one market segment that Eurex Clearing AG will target in its first implementation step in order to offer immediate benefits to its members.

2.2 Integrated Risk Management

An integrated risk management process, implemented in a single technical environment, promises member benefits through a reduction of margin requirements achieved with the reliability and advantageous cost structure of the Eurex Clearing AG technical environment.

By consolidating exposures under Eurex Clearing AG as central counterparty, members receive the maximum benefits arising from the correlations between risk positions and portfolio diversification. A risk based margining system based on value at risk methodologies allows for the maximum benefit to members while maintaining the Clearinghouse' s financial soundness at the levels targeted by the risk carrying community.

2.3 Extension across Products and Trading Locations

Eurex Clearing AG intends to serve all markets for which members see potential benefit arising from the application of the Clearinghouse' s services. Assuming that risk management and operational standards of Eurex Clearing AG can be maintained, there would be no restrictions on the markets that the Clearinghouse could cover. Organized exchanges, ECN' s and OTC markets can all be serviced by the Clearinghouse. Eurex Clearing AG is conceived to span geographic regions to capture cross margining benefits and to offer the advantages of a single consolidated point of risk management for members. The Clearinghouse will extend to new products and regions as directed by the financial community.

2.4 Open to Settlement Locations

The Clearinghouse will work with its members and their preferred settlement locations to ensure that the business routed through Eurex Clearing AG can be settled with a maximum of efficiency and minimum of costs from members' perspective.

3 IC Release 2000 Functionality

This section will describe the new functionalities to be introduced in IC Release 2000 in the 4th quarter 2000. This initial implementation plan includes the functionalities that are of priority to clients and address the requirements of new trading platforms to be established in 2000.

3.1 Product Coverage

Eurex Clearing AG will continue as the central counterparty for the existing Eurex products. Repurchase agreements and spot and forward transactions in highly liquid Government bonds and agency securities will be accepted by the Clearinghouse in the first stage of implementation. Eurex Clearing AG will be capable of acting as the central counterparty for all trades concluded on electronic trading platforms and will accept transactions concluded in the OTC market for the products mentioned above.

3.1.1 Repurchase Agreements

Eurex Clearing AG will provide central counterparty services to participants in the market for repurchase agreements. The Clearinghouse will process Repos in the securities mentioned above. In the first phase, Repo processing will be limited to fixed term Repo and buy/sell transactions with a maturity up to 364 days and to Repo transactions in single securities with a fixed Repo rate. The Clearinghouse will not offer Repo substitution functionality, although the same effect can be achieved by the parties to the original transaction inputting new trade instructions under which the new and the old securities are exchanged. The Clearinghouse will handle Repo transactions as two separate bond trades for purposes of risk management and settlement. In these areas, no distinction will be made between a bond trade arising as a leg of a Repo transaction and a bond trade submitted as a single bond transaction. Specific Repo functionality will be provided in respect of transferring coupons received on securities subject to an outstanding Repo transaction and Reporting of outstanding Repo transactions. These functionalities will be described in detail in the relevant sections below.

3.2 Functional Description

3.2.1 Interfaces to Trading Systems

Trades on electronic trading platforms using Eurex Clearing AG as its central counterparty will be routed automatically to the Clearinghouse for processing. Electronic platforms where a central counterparty is not mandatory will allow market participants to agree whether a particular transaction should have Eurex Clearing AG as central counterparty. If trading members so decide, the transaction will be routed automatically to Eurex Clearing AG for processing.

3.2.2 Membership

All Eurex Clearing AG members, meeting the requirements (see 4.2), will be eligible to participate in the extended services. In addition, market participants who are not Eurex exchange participants but would like to employ Eurex Clearing AG' s new clearing services may become member of Eurex Clearing AG. Membership terms will be uniform (in respect of products covered; e.g. derivatives); they will not differ according to the trading location on which the member is active.

4 Settlement

Settlement of existing Eurex derivatives will be unchanged (Clearstream Banking AG / SIS SEGAINTERSETTLE AG).

For cash bonds and repurchase agreement transactions settlement, the Clearinghouse will support settlement in Clearstream Banking AG, SIS SEGAINTERSETTLE AG and other relevant settlement locations (e.g. Euroclear) based on member needs. The Clearinghouse will have settlement accounts in all settlement locations and will participate directly in batch and real time settlement processes as necessary to ensure maximal settlement. As mentioned above, the settlement of Repo transactions will not be subject to special procedures. Each leg of the Repo will be settled as would any single bond trade due on such date and in such amount.

The Clearinghouse will confirm the upcoming settlements in the form of a settlement Report transmitted to each member. The Clearinghouse will submit settlement instructions for itself and for its members to the settlement locations selected by the members. The Clearinghouse will monitor the status of settlement instruction pre-matching at the relevant settlement location.

Members and Eurex Clearing AG are each responsible for ensuring that they have the cash and securities necessary to successfully settle all transactions. The Clearinghouse will be responsible for timely delivery only to the extent members deliver to it on a timely basis. Failed settlement instructions will remain in the settlement locations for settlement in a subsequent settlement process.

In the event of settlement fails, the Clearinghouse might be forced to carry a long securities position from one day to the next. In such a case the Clearinghouse will modify unsettled instructions in order to make partial deliveries. The partial deliveries will be assigned to the Clearinghouse participant whose unsettled receipt from the Clearinghouse is the smallest and, should there be more than one such Eurex Clearing AG member, the partial will be assigned on a random basis. In this case, Eurex Clearing AG will inform the member of the modified and new settlement instructions, and the Clearinghouse will submit the associated settlement instructions and for itself to the relevant settlement locations.

The current Eurex penalty mechanism will apply to all fails.

4.1.1 Repo Coupon Transfers

In respect of Repo transactions, the Clearinghouse will monitor the payment of coupon interest on underlying securities. In the event of a coupon payment, the Clearinghouse will initiate a transfer of the coupon amount to the original seller of the securities. It will collect the coupons from the member who was the original purchaser of the securities by debiting its accounts.

4.1.2 Risk Management

The existing risk-based margining system for Eurex will continue to function as presently. It will be augmented by a conceptually consistent margining system for cash bonds and repurchase agreement transactions.

For risk management purposes, repurchase agreement transactions will be treated as two separate bond transactions with two different settlement dates. For example, a repurchase agreement with T+2 settlement of the spot leg and maturity of the term leg one week later will be broken down into two separate transactions, one with a maturity on T+2 and the other with maturity T+9. Cash amounts will be as agreed between the parties for each leg of the transactions. Margin calculations for each leg of a repurchase agreement transaction will be calculated as for individual security transactions as described below.

All new transactions will be assigned to new margin classes. These new margin classes will then be assigned to margin groups. Margin groups may include margin classes for Eurex products and for the new products cleared by the Eurex Clearing AG, allowing cross margining between derivatives and bond cash, forward and Repo transactions.

Margin requirements for security transactions, be they spot and forward or related or unrelated to an underlying repurchase agreement, will be calculated by the following methodology.

1. The cash and securities elements of each transaction will be considered separately. Each cash amount will be assigned a value equal to the cash amount discounted back to the calculation date using the appropriate money market interest rate for the maturity and currency of the payment in question. Each security position will be assigned a value based on the current spot price including accrued interest as of the settlement date for a spot settlement) of the security. These values are referred to as Current Liquidating Values, or CLVs.
2. Based on volatilities, maximum price moves will be used to calculate maximum value changes for each position, and, in their sum, for a margin class. All CLVs for transactions in a margin class will be added to arrive at a CLV for the class. All CLVS for the margin classes in a margin group will be added to arrive at the Liquidating Value Margin requirement for the margin group. The Additional Margin requirement for a margin group will be calculated according to existing methods, using the maximum up/down value changes for each margin class mentioned above.
3. The margin requirement for a margin group will be equal to the sum of Liquidating Value Margin, Additional Margin and Premium Margin for the margin group, but may not be below zero. The overall margin requirement for the member will be equal to the sum of the margin requirements for each of the margin groups.

Margin calculations will be prepared according to the above methodology for both the clearing member overall and for each of the clearing member' sNCMs. Information for each NCM from current liquidating values through to the final margin requirements will be provided to each clearing member.

4.1.3 Reporting

Members will be provided with a range of Reports and Raw data via the existing Eurex Reporting interface. The following report types are envisioned:

- Pending Trades
- Open Repo Trades

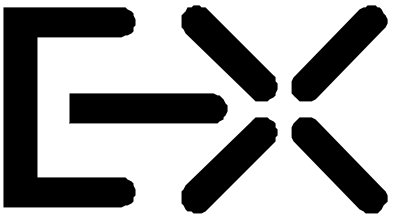
- Income Transfers
- Delivery and Settlement
- Margin Reports

4.2 Clearing Membership Requirements

Eurex Clearing AG will allow all members located in the EU/EFTA to become a clearing-member and provide clearing services to their customers. The following requirements have to be met:

- Banks or Financial Institutions which are regulated like banks seated in the EU/EFTA (Banking Coordination Directive). Supervision by local authorities must be granted.
- Capital Requirements (Tier One + Tier Two as defined by BIS) are €175 Mio. for GCMs and € 17.5 Mio. for DCMs. Capital can be substituted by guarantees, securities and cash. (The capital requirements for Clearinghouse members, clearing derivatives only, will remain unchanged).
- Contributions to the Clearing Fund will be determined by Eurex Clearing AG. Guarantees, securities and cash are allowed.
- Members are required to have an account with LZB/SNB for cash margin calls, coupon transfers and other cash transactions with the Clearinghouse.
- For purposes of providing the Clearinghouse securities as collateral, all Clearinghouse members must maintain collateral-securities accounts with Clearstream Banking AG / SIS SEGAINTERSETTLE AG.
- For settlement purposes, all Clearinghouse members must maintain settlement accounts with the chosen settlement locations.

X-pand into the **Future**



Eurex 4.1/EEX

VALUES API Modification Announcement

Overview and Volume 1 - Call Interface

© Eurex 2000

All proprietary rights and interest in this publication shall be vested in Eurex Administration and Management (" Eurex") and all other rights including, but without limitation, patent, registered design, copyright, trade mark, service mark, connected with this publication shall also be vested in Eurex.

Whilst all reasonable care has been taken to ensure that the details contained in this publication are accurate and not misleading at the time of publication, no liability is accepted by Eurex for the use of information contained herein in any circumstances connected with actual trading or otherwise. Neither Eurex, nor its servants nor agents, is responsible for any errors or omissions contained in this publication which is published for information only and shall not constitute investment advice. This brochure is not intended for solicitation purposes but only for the use of general information.

All descriptions, examples and calculations contained in this publication are for guidance purposes only and should not be treated as definitive. Eurex reserves the right to alter any of its rules or contract specifications, and such an event may affect the validity of information in this publication.

® Eurex is a registered trademark.

Table of Contents

1	**Overview**	**2**
2	**Xervices and Xervice Classes**	**3**
3	**Changes to VALUES API Call Interface**	**4**
3.1	**Constants for Xervice Classes**	**4**
3.2	**Xervice Information available via GATE**	**4**
3.3	**VALUES Validation for Threading Usage and Reentrancy**	**5**
4	**Upgrade of Operating System, Compiler and Linker**	**6**
5	**New Error Messages in Status Data returned by VCI_Connect()**	**7**

1 Overview

The VALUES API (Virtual Access Link Using Exchange Services Application Programming Interface) has proven to be a stable and reliable interface to electronic exchange services. This Modification Announcement states the amendments to the Call Interface introduced with GATE Release 2.1, as compared to the previous version included in Eurex Release 4.0, GATE Release 2.0. In addition to that, it announces an upgrade of the supported versions of operating systems and the recommended versions of compiler and linker.

With GATE Release 2.1, support for Multi-Exchange-capable applications will be introduced, allowing for access to new exchanges without any changes to Front End applications.

For this purpose, the concept of Xervice Classes (Exchange Service Classes) will be implemented. In addition, GATE Release 2.1 will supply basic information about the exchanges available on the MISS. This information can be received and evaluated by VALUES-based applications before logging in to the exchanges.

Using these enhancements is optional. The Call Interface Version number (CVN) will change to CVN_011, designating the Call Interface Version 1.1. Backward compatibility to the old Call Interface version 1.0 (CVN_010) is supported with GATE Release 2.1, but the enhancements introduced with this release will not be available in this case. Xetra R5.0 does not support backward compatibility.

The existing constraints regarding multi-threading and reentrant API usage will be protected by VALUES when using Call Interface Version 1.1.

2 Xervices and Xervice Classes

A Xervice (Exchange Service) is a service offered to a VALUES-based Front End application by an electronic exchange. A single exchange can offer multiple Xervices, e.g. Eurex offers the Xervices " EUREX" (the transactionXervice) and " EUREX_RETRANSMISSION" . To access a Xervice, a VALUES-based Front End application has to authenticate using VCI_Login(). After this, the Xervice can be used to issue Application Requests using VCI_Submit(). This Xervice concept will not change within GATE Release 2.1.

With GATE Release 2.1, the new concept of Xervice Classes will be introduced. For each Xervice, a Xervice Class will be specified. If two or more electronic exchanges offer identical VALUES functionality in equal release versions of Exchange software, equivalent Xervices share the same Xervice Class across exchanges.

A VALUES-based Front End application can use the Xervice Class information to identify exchanges that it is ready to handle. An application designed to work with an existing electronic exchange will be able to work with other exchanges that have the same Xervice Classes and application version number (AVN). As an example, an application using the Xervice Classes XETRA_TXN_XCLASS (the class for transaction Xervices at exchanges using Xetra®) and XETRA_CAQ_XCLASS (continuous auction quoting) with version number AVN_050 will be able to work with any electronic exchange offering these classes in the same version. This includes access to exchanges that were unknown at application compile time.

GATE Release 2.1 supplies basic information about Xervices, as they become available. To obtain this information, the VALUES-based Front End application is not required to log in. It is sufficient to establish a VALUES session, using VCI_Connect().

3 Changes to VALUES API Call Interface

This chapter outlines the enhancements in the VALUES API Call Interface.

3.1 Constants for Xervice Classes

For each Xervice Class, a symbolic constant will be defined in VALUES' header files.

```
/* Xervice Class Definitions */

#define GATE_SEC_XCLASS                 1000

#define XETRA_TXN_XCLASS                1100
#define XETRA_RETRANSMISSION_XCLASS     1101
#define XETRA_CAQ_XCLASS                1102

#define EUREX_TXN_XCLASS                1200
#define EUREX_RETRANSMISSION_XCLASS     1201

#define CBOT_TXN_XCLASS                 1300
#define CBOT_RETRANSMISSION_XCLASS      1301
```

These constants will be added to the header file *exid.h*.

3.2 Xervice Information available via GATE

Beginning with GATE Release 2.1, information characterizing the available Xervices will be offered by GATE. The data will be transmitted via the callback function registered by the application when calling VCI_Connect() (connect callback), whenever this callback is invoked by VALUES to announce one of the following events:

- ELB_TECH_XERVICE_AVAILABLE
- ELB_TECH_XERVICE_NOT_AVAILABLE
- ELB_TECH_LOGGED_OUT
- ELB_TECH_NONTRANSPARENT_FAILOVER

An application can identify these events by checking statusDataGlobal->techComplCode.

In these cases, the pointer passed to the connect callback as appData->appRespData, which was marked reserved in previous releases of GATE software, references a structure defined as follows:

```
#define MAX_APPLID                      4
#define MAX_DSCRNAME                    40

typedef struct
{
   int          applClass;
   int          applVersion;
   int          applPrevVersion;
   char         exchApplId[MAX_APPLID];
   char         exchDscrName[MAX_DSCRNAME];
}  XerviceInfoT;
```

This structure type will be defined in the *Values.h* header file.

The fields have the following contents:

applClass: This field specifies the Xervice Class assigned to the Xervice that triggered the callback. As an example, for the XETRA_WBAG_RETRANSMISSION Xervice offered by Xetra Vienna, this field will contain XETRA_RETRANSMISSION_XCLASS.

applVersion: This is the electronic exchange' s Application Version Number (AVN), as known from earlier versions of GATE.

applPrevVersion: If backward compatibility to the previous AVN is available, this field contains the previous AVN. If no backward compatibility is offered, this field contains the same value as applVersion.

exchApplId: This field identifies the exchange that offers the Xervice, by a four byte standard abbreviation (MIC). Examples are XEUR, XETR.

exchDscrName: This field supplies a free text descriptive name for the electronic exchange offering the Xervice, e.g. " XETRA FRANKFURT" , as a NULL-terminated string.

The numeric identifier for an individual Xervice (dbApplId) can be obtained in the connect callback (in reqControl->dbApplId) the same way as in previous GATE releases. Therefore, Xervice information is fully available at run time and no longer required at compile time. The previously defined constants, like XETRA_XID etc., will be removed from exid.h.

3.3 VALUES Validation for Threading Usage and Reentrancy

When using Call Interface version 1.1, the already existing constraints stating that VALUES API

- is not thread safe and
- does not allow for VCI-calls inside callbacks triggered by VCI_Dispatch()

will be protected by a library check that makes sure no further VALUES call is currently active. Offending VCI-calls will simply fail with status ELB_TECH_NOT_REENTRANT instead of possibly creating unspecific Front End application problems.

4 Upgrade of Operating System, Compiler and Linker

This chapter specifies the required versions of the operating systems.

Furthermore, the recommended versions of the linkers and compilers that can be used for developing VALUES API-based applications are listed. Eurex no longer supports VALUES on the Compaq OpenVMS platform, and will phase out IBM AIX with Eurex Release 5.0. Xetra Release 5.0 will continue to support IBM AIX.

Operating System	**Version**	Compiler/Linker
IBM AIX	4.3.3	IBM C/C++ 3.6.6
Microsoft Windows NT (Intel)	4.0 (Service Pack 5)	Visual C++ 6.0
Sun Solaris	2.6	Sun C/C++ 5.0

Table 4.1: Supported Operating Systems and recommended Compiler and Linker/Platform Configurations

5 New Error Messages in Status Data returned by VCI_Connect()

When trying to use VCI_Connect() with GATE not available on the respective machine, an application will receive ELB_TECH_TECHSRVC_NOT_AVAILABLE. If GATE is running but the Security Xervice is not, the return code will be ELB_TECH_XERVICE_NOT_AVAILABLE.

Previous versions of GATE software returned ELB_TECH_INTERNAL_ERROR in both cases. The new error messages offer more specific information. The application does not need to expect GATE to become available again without a restart after receiving the new error messages.

X-pand into the **Future**

Eurex Release 4.1

VALUES API Modification Announcement

Volume 2 – Eurex Application Requests, Responses, and Subscriptions

© Eurex 2000

All proprietary rights and interest in this publication shall be vested in Eurex Administration and Management (" Eurex") and all other rights including, but without limitation, patent, registered design, copyright, trade mark, service mark, connected with this publication shall also be vested in Eurex.

Whilst all reasonable care has been taken to ensure that the details contained in this publication are accurate and not misleading at the time of publication, no liability is accepted by Eurex for the use of information contained herein in any circumstances connected with actual trading or otherwise. Neither Eurex, nor its servants nor agents, is responsible for any errors or omissions contained in this publication which is published for information only and shall not constitute investment advice. This brochure is not intended for solicitation purposes but only for the use of general information.

All descriptions, examples and calculations contained in this publication are for guidance purposes only and should not be treated as definitive. Eurex reserves the right to alter any of its rules or contract specifications, and such an event may affect the validity of information in this publication.

® Eurex is a registered trademark.

Table of Contents

1	**Overview**	**2**
2	**Changed Application Requests**	**3**
2.1	**Enter Block Trade**	**3**
2.2	**Modify Block Trade**	**6**
2.3	**Approve Block Trade**	**9**
2.4	**Delete Block Trade**	**11**
2.5	**Inquire Block Trade**	**13**
3	**New Application Requests**	**16**
3.1	**Enter EFP Trade**	**16**
3.2	**Modify EFP Trade**	**18**
3.3	**Approve EFP Trade**	**19**
3.4	**Delete EFP Trade**	**21**
3.5	**Inquire EFP Trade**	**22**

1 Overview

This document provides a high level overview of the enhancements to the current version of the VALUES API Member Front End Development Guide (Volume 2 – Eurex Application Requests, Responses and Subscriptions) that become effective with the introduction of Eurex Release 4.1.

With Eurex Release 4.1, OTC Block Trade functionality will be extended to also cover Eurex futures contracts. The application requests involved will be changed accordingly.

For members of the European Energy Exchange (EEX), Eurex Release 4.1 will introduce support for trading EEX contracts. In addition to normal trading functionality, a new type of OTC trading will be available for these new contracts, the Exchange of Futures contracts for Physicals (EFP) Trade. VALUES API will support this functionality by offering five new application requests. The standard OTC Block Trade functionality will currently not be available for EEX contracts.

2 Changed Application Requests

The introduction of OTC Block Trade functionality for futures contracts affects the following application requests:

- Enter Block Trade
- Modify Block Trade
- Approve Block Trade
- Delete Block Trade
- Inquire Block Trade

Their amended layouts will be specified in the following sections.

The field usage abbreviations have the following meanings:

Usage Codes	Field Usage Description
m	mandatory – Field must be filled.
o	optional – Field can be filled optionally.
f	fixed – Field must be filled with the original value. For example, when modifying an order a field marked with this usage code must be filled with the same value used when the order was entered. This code is also used in cases where only a single value is possible.
r	reserved – Field reserved for future use. Must be initialized, please refer to Section 2.1.2 in Appendix A for detailed information on field initialization.
w	wildcard – Field can be filled with the wildcard constants (EXCH_CONST_WILDCARD for inquiries requests, SUBSCRIBE_WILDCARD for subscriptions) as provided in the VALUES header files.
*	multiple occurrence – Field can appear multiple times within a response structure.
-	no special usage for this field.

2.1 Enter Block Trade

Description: This application request is used to enter a Block Trade. Only the buyer can enter a Block Trade. Thus, the field buyCod must always be filled with EXCH_CONST_BUY. The seller must approve the trade.

This request is currently not applicable for EEX contracts.

Request ID: DRIV_ENTER_BLOCK_TRADE_RID

Header File Name **EntBlkTrd.hxx**

Component	File Name	Product Line
Header	DataHeader.hxx	all
Basic	OptBscEntBlkTrd.hxx	Options
Basic	FutBscEntBlkTrd.hxx	Futures
Extension	OptExtEntBlkTrd.hxx	Options
Extension	FutExtEntBlkTrd.hxx	Futures

Basic

Options

Request Structure: optBscEntBlkTrdRequestT

Field Name	Usage
buyCod	f
prodId	m
cntrClasCod	m
cntrExpMthDat	m
cntrExpYrDat	m
cntrExerPrc	m
cntrVersNo	m
partSubGrpCod	o
partNo	o
trdQty	m
trdMtchPrc	m
opnClsCod	m
membCtpyIdCod	m

Response Structure: optBscEntBlkTrdResponseT

Field Name	Usage
trnIdNo	-
currTypCod	-
undrId	-

dateLstUpdDat	-

Futures

Request Structure: futBscEntBlkTrdRequestT

Field Name	Usage
buyCod	f
prodId	m
cntrExpMthDat	m
cntrExpYrDat	m
partSubGrpCod	o
partNo	o
trdQty	m
trdMtchPrc	m
opnClsCod	m
membCtpyIdCod	m

Response Structure: futBscEntBlkTrdResponseT

Field Name	Usage
trnIdNo	-
currTypCod	-
dateLstUpdDat	-

Extension

Options

Request Structure: optExtEntBlkTrdRequestT

Field Name	Usage
acctTypCod	m
acctTypNo	m
cust	o
userOrdrNum	o
text	o
membExchIdCodTo	o

Response Structure: optExtEntBlkTrdResponseT

Field Name	Usage
exchIdCod	-
dlyHghPrc	-
dlyLowPrc	-

Futures

Request Structure: futExtEntBlkTrdRequestT

Field Name	Usage
acctTypCod	m
acctTypNo	m
cust	o
userOrdrNum	o
text	o
membExchIdCodTo	o

Response Structure: futExtEntBlkTrdResponseT

Field Name	Usage
dlyHghPrc	-
dlyLowPrc	-

2.2 Modify Block Trade

Description: This application request is used to modify Block Trades. Only the buyer can change Block Trades. Block Trade modification is possible as long as the Block Trade has not yet been approved.

This request is currently not applicable for EEX contracts.

Request ID: DRIV_MODIFY_BLOCK_TRA DE_RID

Header File Name: **ModBlkTrd.hxx**

Component	File Name	Product Line
Header	DataHeader.hxx	all

Basic	OptBscModBlkTrd.hxx	Options
Basic	FutBscModBlkTrd.hxx	Futures
Extension	OptExtModBlkTrd.hxx	Options
Extension	FutExtModBlkTrd.hxx	Futures

Basic

Options

Request Structure: optBscModBlkTrdRequestT

Field Name	Usage
buyCod	f
prodId	f
cntrClasCod	f
cntrExpMthDat	f
cntrExpYrDat	f
cntrExerPrc	f
cntrVersNo	f
trnIdNo	f
partSubGrpCod	o
partNo	o
trdQty	m
trdMtchPrc	m
currTypCod	f
opnClsCod	m
membCtpyIdCod	m
dateLstUpdDat	f

Response Structure: optBscModBlkTrdResponseT

Field Name	Usage
dateLstUpdDat	-

Futures

Request Structure: futBscModBlkTrdRequestT

Field Name	Usage

buyCod	f
prodId	f
cntrExpMthDat	f
cntrExpYrDat	f
trnIdNo	f
partSubGrpCod	o
partNo	o
trdQty	m
trdMtchPrc	m
currTypCod	f
opnClsCod	m
membCtpyIdCod	m
dateLstUpdDat	f

Response Structure: futBscModBlkTrdResponseT

Field Name	Usage
dateLstUpdDat	-

Extension

Options

Request Structure: optExtModBlkTrdRequestT

Field Name	Usage
acctTypCod	m
acctTypNo	m
cust	o
userOrdrNum	o
text	o
membExchIdCodTo	o

Response Structure: No specific response structure

Futures

Request Structure: futExtModBlkTrdRequestT

Field Name	Usage
acctTypCod	m
acctTypNo	m
cust	o
userOrdrNum	o
text	o
membExchIdCodTo	o

Response Structure: No specific response structure

2.3 Approve Block Trade

Description: This application request is used to approve a Block Trade. Only the counterparty selling the contract can approve an existing Block Trade. Thus, the field buyCod must always be filled with constant EXCH_CONST_SELL.

This request is currently not applicable for EEX contracts.

Request ID: DRIV_APPROVE_BLOCK_TRADE_RID

Header File Name: **AppBlkTrd.hxx**

Component	File Name	Product Line
Header	DataHeader.hxx	all
Basic	OptBscAppBlkTrd.hxx	Options
Basic	FutBscAppBlkTrd.hxx	Futures
Extension	OptExtAppBlkTrd.hxx	Options
Extension	FutExtAppBlkTrd.hxx	Futures

Basic

Options

Request Structure: optBscAppBlkTrdRequestT

Field Name	Usage

buyCod	f
prodId	f
trnIdNo	f
partSubGrpCod	o
partNo	o
opnClsCod	m
dateLstUpdDat	f

Response Structure: optBscAppBlkTrdResponseT

Field Name	Usage
trdNo	-
dateLstUpdDat	-

Futures

Request Structure: futBscAppBlkTrdRequestT

Field Name	Usage
buyCod	f
prodId	f
trnIdNo	f
partSubGrpCod	o
partNo	o
opnClsCod	m
dateLstUpdDat	f

Response Structure: futBscAppBlkTrdResponseT

Field Name	Usage
trdNo	-
dateLstUpdDat	-

Extension

Options

Request Structure: optExtAppBlkTrdRequestT

Field Name	Usage
acctTypCod	m
acctTypNo	m
cust	o
userOrdrNum	o
text	o
membExchIdCodTo	o

Response Structure: No specific response structure

Futures

Request Structure: futExtAppBlkTrdRequestT

Field Name	Usage
acctTypCod	m
acctTypNo	m
cust	o
userOrdrNum	o
text	o
membExchIdCodTo	o

Response Structure: No specific response structure

2.4 Delete Block Trade

Description: This application request is used to delete a Block Trade. Block Trade deletion is possible only for the buyer and before approval by the counterparty.

This request is currently not applicable for EEX contracts.

Request ID: DRIV_DELETE_BLOCK_TRADE_RID

Header File Name: **DelBlkTrd.hxx**

Component	File Name	Product Line

Header	DataHeader.hxx	all
Basic	OptBscDelBlkTrd.hxx	Options
Basic	FutBscDelBlkTrd.hxx	Futures

Basic

Options

Request Structure: optBscDelBlkTrdRequestT

Field Name	Usage
trnIdNo	f
prodId	f
partSubGrpCod	o
partNo	o
dateLstUpdDat	f

Response Structure: No specific response structure

Futures

Request Structure: futBscDelBlkTrdRequestT

Field Name	Usage
trnIdNo	f
prodId	f
partSubGrpCod	o
partNo	o
dateLstUpdDat	f

Response Structure: No specific response structure

Extension

Not applicable

2.5 Inquire Block Trade

Description: This application request is used to retrieve information on Block Trades. It is applicable for the originator, the proposed counterparty and the senior traders of both of these parties. Each party (originator and proposed counterparty) can retrieve only their own confidential details. For an inhouse cross trade, all details will be retrieved.

This request is currently not applicable for EEX contracts.

Request ID: DRIV_INQUIRE_BLOCK_TRADE_RID

Header File Name: **InqBlkTrd.hxx**

Component	File Name	Product Line
Header	DataHeader.hxx	all
Basic	OptBscInqBlkTrd.hxx	Options
Basic	FutBscInqBlkTrd.hxx	Futures
Extension	OptExtInqBlkTrd.hxx	Options
Extension	FutExtInqBlkTrd.hxx	Futures

Basic

Options

Request Structure: optBscInqBlkTrdRequestT

Field Name	Usage
trnIdNo	m
partSubGrpCod	o
partNo	o

Response Structure: optBscInqBlkTrdResponseT

Field Name	Usage
buyCod	-
prodId	-
cntrClasCod	-
cntrExpMthDat	-
cntrExpYrDat	-

cntrExerPrc	-
cntrVersNo	-
trdNo	-
trdQty	-
trdMtchPrc	-
currTypCod	-
undrId	-
exchIdCod	-
dateLstUpdDat	-
opnClsCod	*
membCtpyIdCod	*
partSubGrpCod	*
partNo	*

Futures

Request Structure: futBscInqBlkTrdRequestT

Field Name	Usage
trnIdNo	m
partSubGrpCod	o
partNo	o

Response Structure: futBscInqBlkTrdResponseT

Field Name	Usage
buyCod	-
prodId	-
cntrExpMthDat	-
cntrExpYrDat	-
trdNo	-
trdQty	-
trdMtchPrc	-
currTypCod	-
dateLstUpdDat	-
opnClsCod	*

membCtpyIdCod	*
partSubGrpCod	*
partNo	*

Extension

Options

Request Structure: No specific request structure

Response Structure: optExtInqBlkTrdResponseT

Field Name	Usage
dlyHghPrc	-
dlyLowPrc	-
acctTypCod	*
acctTypNo	*
cust	*
userOrdrNum	*
text	*
membExchIdCodTo	*

Futures

Request Structure: No specific request structure

Response Structure: futExtInqBlkTrdResponseT

Field Name	Usage
dlyHghPrc	-
dlyLowPrc	-
acctTypCod	*
acctTypNo	*
cust	*
userOrdrNum	*
text	*
membExchIdCodTo	*

3 New Application Requests

EFP Trades (Exchange of Futures contracts for Physicals) have been created as a new type of Over the Counter (OTC) Trades. EFP Trades are available for EEX products only and can only be entered by EEX members. The following application requests are available:

- Enter EFP Trade
- Modify EFP Trade
- Approve EFP Trade
- Delete EFP Trade
- Inquire EFP Trade

The additional valid value TRD_TYP_EFP ' E' has been added to the field trdTyp to signify EFP trades. For the field ordrTypCod, ORDR_TYP_COD_EFP ' F' has been introduced. Both fields do not occur in the changed requests described within this document, but can show the new valid values within unchanged existing application requests.

3.1 Enter EFP Trade

Description: This application request is used to enter an EFP Trade. Only the buyer can enter an EFP Trade. Thus, the field buyCod must always be filled with EXCH_CONST_BUY. The seller must approve the trade.

This application request is applicable for EEX futures contracts only.

Request ID: DRIV_ENTER_EFP_TRADE_RID

Header File Name: **EntEfpTrd.hxx**

Component	File Name	Product Line
Header	DataHeader.hxx	Futures
Basic	FutBscEntEfpTrd.hxx	Futures
Extension	FutExtEntEfpTrd.hxx	Futures

Basic

Futures

Request Structure: futBscEntEfpTrdRequestT

Field Name	Usage
buyCod	f

prodId	m
cntrExpMthDat	m
cntrExpYrDat	m
partSubGrpCod	o
partNo	o
trdQty	m
trdMtchPrc	m
opnClsCod	m
membCtpyIdCod	m

Response Structure: futBscEntEfpTrdResponseT

Field Name	Usage
trnIdNo	-
currTypCod	-
dateLstUpdDat	-

Extension

Futures

Request Structure: futExtEntEfpTrdRequestT

Field Name	Usage
acctTypCod	m
acctTypNo	m
cust	o
userOrdrNum	o
text	o
membExchIdCodTo	o

Response Structure: No specific response structure

3.2 Modify EFP Trade

Description

This application request is used to modify EFP Trades. Only the buyer can change EFP trades. EFP Trade modification is possible as long as the EFP Trade has not been approved.

This application request is applicable for EEX futures contracts only.

Request ID DRIV_MODIFY_EFP_TRADE_RID

Header File Name **ModEfpTrd.hxx**

Component	File Name	Product Line
Header	DataHeader.hxx	all
Basic	FutBscModEfpTrd.hxx	Futures
Extension	FutExtModEfpTrd.hxx	Futures

Basic

Futures

Request Structure: futBscModEfpTrdRequestT

Field Name	Usage
buyCod	f
prodId	f
cntrExpMthDat	f
cntrExpYrDat	f
trnIdNo	f
partSubGrpCod	o
partNo	o
trdQty	m
trdMtchPrc	m
currTypCod	f
opnClsCod	m
membCtpyIdCod	m
dateLstUpdDat	f

Response Structure: futBscModEfpTrdResponseT

Field Name	Usage
dateLstUpdDat	-

Extension

Futures

Request Structure: futExtModEfpTrdRequestT

Field Name	Usage
acctTypCod	m
acctTypNo	m
cust	o
userOrdrNum	o
text	o
membExchIdCodTo	o

Response Structure: No specific response structure

3.3 Approve EFP Trade

Description: This application request is used to approve an EFP Trade. Only the counterparty selling the contract can approve an existing EFP Trade. Thus, the field buyCod must always be filled with constant EXCH_CONST_SELL.

This application request is applicable for EEX futures contracts only.

Request ID: DRIV_APPROVE_EFP_TRADE_RID

Header File Name: **AppEfpTrd.hxx**

Component	File Name	Product Line
Header	DataHeader.hxx	Futures
Basic	FutBscAppEfpTrd.hxx	Futures
Extension	FutExtAppEfpTrd.hxx	Futures

Basic

Futures

Request Structure: futBscAppEfpTrdRequestT

Field Name	Usage
buyCod	f
prodId	f
trnIdNo	f
partSubGrpCod	o
partNo	o
opnClsCod	m
dateLstUpdDat	f

Response Structure: futBscAppEfpTrdResponseT

Field Name	Usage
trdNo	-
dateLstUpdDat	-

Extension

Futures

Request Structure: futExtAppEfpTrdRequestT

Field Name	Usage
acctTypCod	m
acctTypNo	m
cust	o
userOrdrNum	o
text	o
membExchIdCodTo	o

Response Structure: No specific response structure

3.4 Delete EFP Trade

Description: This application request is used to delete an EFP Trade. EFP Trade deletion is possible only for the buyer and before approval by the counterparty.

This application request is applicable for EEX futures contracts only.

Request ID: DRIV_DELETE_EFP_TRADE_RID

Header File Name: **DelEfpTrd.hxx**

Component	File Name	Product Line
Header	DataHeader.hxx	Futures
Basic	FutBscDelEfpTrd.hxx	Futures

Basic

Futures

Request Structure: futBscDelEfpTrdRequestT

Field Name	Usage
trnIdNo	f
prodId	f
partSubGrpCod	o
partNo	o
dateLstUpdDat	f

Response Structure: No specific response structure

Extension

Not applicable

3.5 Inquire EFP Trade

Description

This application request is used to retrieve information on EFP Trades. It is applicable for the originator, the proposed counterparty and the senior traders of both of these parties. Each party (originator and proposed counterparty) can retrieve only their own confidential details. For an inhouse cross trade, all details will be retrieved.

This application request is applicable for EEX futures contracts only.

Request ID: DRIV_INQUIRE_EFP_TRADE_RID

Header File Name: **InqEfpTrd.hxx**

Component	File Name	Product Line
Header	DataHeader.hxx	Futures
Basic	FutBscInqEfpTrd.hxx	Futures
Extension	FutExtInqEfpTrd.hxx	Futures

Basic

Futures

Request Structure: futBscInqEfpTrdRequestT

Field Name	Usage
trnIdNo	m
partSubGrpCod	o
partNo	o

Response Structure: futBscInqEfpTrdResponseT

Field Name	Usage
buyCod	-
prodId	-
cntrExpMthDat	-
cntrExpYrDat	-
trdNo	-
trdQty	-
trdMtchPrc	-

currTypCod	-
dateLstUpdDat	-
opnClsCod	*
membCtpyIdCod	*
partSubGrpCod	*
partNo	*

Extension

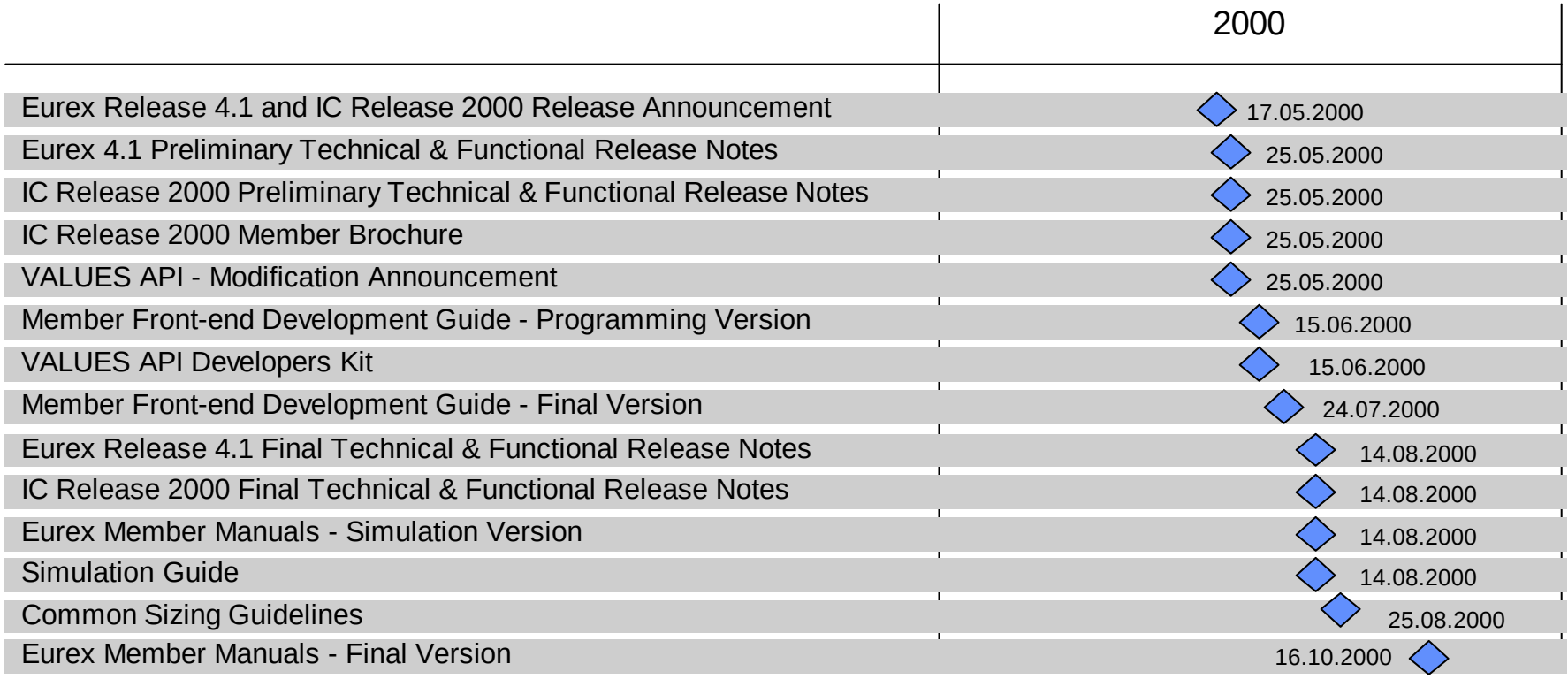
Futures

Request Structure: No specific request structure

Response Structure: futExtInqEfpTrdResponseT

Field Name	Usage
acctTypCod	*
acctTypNo	*
cust	*
userOrdrNum	*
text	*
membExchIdCodTo	*

Eurex 4.1 and IC Release 2000 Information Calendar



Attachment 8 to Eurex Circular 043/00