X-pand into the Future

e u r e x *circular 027/01*

Date: Frankfurt, 09 April, 2001
Recipients: All Eurex members and vendors
Authorized by: Jürg Spillmann

a/c/e 2.0 (Eurex Release 5.0) Preliminary Functional and Technical Release Notes

Related Eurex Circulars: 014/01

Contact: Functional Member Readiness +49-69-2101-1700

Content may be most important for:	**Attachments:**
➲ All Departments	1. a/c/e 2.0 (Eurex Release 5.0) Preliminary Functional Release Notes 2. a/c/e 2.0 (Eurex Release 5.0) Preliminary Technical Release Notes

You will find attached the Preliminary Functional and Technical Release Notes for a/c/e 2.0 (Eurex Release 5.0). These provide additional details on the changes incorporated in the release, and supplement the information provide in Circular 014/01.

Please note that the Planning version of the Member Front End Development Guide which was scheduled for publication on 02 April, 2001 will not be available until the end of the month. However, the most significant changes to VALUES API have already been provided in the attachment to Circular 014/01 which dealt with the Trade Adjustment modifications.

Eurex Deutschland
D-60485 Frankfurt am Main
www.eurexchange.com

Functional Member Readiness
Tel. +49-69-2101-1700
Fax +49-69-2101-1701

Alternative
Tel. +49-69-9770-1700
Fax +49-69-9770-1701

Management Board:
Rudolf Ferscha, Jürg Spillmann,
Thomas Lenz, Michael Widmer
Daniel Gisler

X-pand into the **Future**

a/c/e 2.0 (Eurex 5.0)

Preliminary Functional Release Notes

© Eurex 2001

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**	**4**
1.1	**UD/MISS Migration**	**4**
1.2	**Withdrawal of Support for IBM AIX Front-Ends**	**5**
1.3	**Upgrade of SUN Solaris Operating System**	**5**
1.4	**Withdrawal of Support for UDP-Broadcast**	**5**
1.5	**Replacement of the Eurex Trading Application X-ceed by @X-ceed**	**5**
2	**Functional Changes for a/c/e 2.0 (Eurex 5.0)**	**6**
2.1	**New OTC Volatility Trade Facility**	**6**
2.1.1	Report Modifications to Separate OTC and Exchange Trades	6
2.2	**Extension of the Basis Trade Facility**	**6**
2.2.1	Hedge Ratio Calculation	7
2.2.2	Dirty Price Calculation	8
2.2.3	Calculation of Modified Duration	8
2.2.4	Calculation of Macauly Duration	9
2.2.5	Yield to Maturity	9
2.2.6	Cash Flow	9
2.3	**Theoretical Price Enhancements for Eurex Options**	**10**
2.3.1	Black-Scholes Model	10
2.3.2	Black-Scholes 76 Model	11
2.4	**Introduction of Cascading Expiration for EEX Futures**	**12**
2.4.1	Naming of the Cascading EEX Futures Products	12
2.4.2	Naming of Cascading EEX Futures Contracts	13
2.4.3	Trading Unit Calculation for EEX Products	13
2.4.4	Example: Expiration and Cascading of EEX Contracts	15
2.4.5	Expiration Month and Delivery Period	16
2.4.6	New Settlement Procedure for the Position Transfer	16
2.4.7	Additional Margin – Cross Margining over Cascading Products	16
2.4.8	New Report: Position Transfer for Expiring EEX Contracts (RPTCB115)	17
2.5	**CSD Selection per Security**	**17**
2.5.1	Criteria for Selection of CSD per Security and Clearing Member	19
2.5.2	Special Requests of Clearing Members concerning the CSD where a Security should be settled	19
2.6	**Automatic Exercise**	**19**
2.7	**New Report: Position Transfer Overview (RPTCB030)**	**20**
2.8	**Increased Number of Trade Adjustments**	**20**
2.9	**New Report: Synchronous Transaction Mix (RPTCB068)**	**23**

3	**Enhanced Java-based Trading and Clearing GUIs and APIs**	**26**
3.1	**Enhancement of @X-ceed Trading GUI and @X-tract Clearing GUI**	**26**
3.1.1	@X-ceed Trading GUI Modifications – Window Flow	26
3.2	**@X-tract Clearing GUI - Modifications**	**27**
3.2.1	@X-tract Clearing GUI Modifications – Window Flow	28
3.2.2	General Functional Changes in the new @X-tract Clearing GUI	29
4	**Modified Windows and Reports**	**31**
4.1	**Windows – @X-ceed Trading System**	**31**
4.1.1	Main Trading Menu	31
4.1.2	Menu Item “Market Information“	31
4.1.3	Menu Item “Trading“	32
4.1.4	Menu Item “Own Menu“	33
4.1.5	Menu Item “OTC“	33
4.1.6	Menu Item “Trading Support“	34
4.1.7	Menu Item “Security“	35
4.2	**Windows – @X-tract Clearing System**	**36**
4.2.1	Main Clearing Menu	36
4.2.2	Menu Item “Trade Management“	37
4.2.3	Menu Item “Settlement“	41
4.2.4	Menu Item “Collateral“	44
4.2.5	Menu Item “Risk Management“	44
4.2.6	Menu Item “Cash“	46
4.2.7	Menu Item “Info“	47
4.2.8	Menu Item “Member“	48
4.2.9	Menu Item “CSD“	49
4.2.10	Menu Item “Security“	50
4.3	**New and Modified Reports for Trading and Clearing**	**51**
5	**Appendix A – Relation between FMS Screens and Windows**	**56**
6	**Appendix B – Eurex Functional Documentation**	**60**
7	**Appendix C – Glossary of Terms and Abbreviations**	**61**

1 General Information

This document contains the Preliminary Functional Release Notes for a/c/e 2.0 (Eurex 5.0).

The functional focus of a/c/e 2.0 (Eurex 5.0) is the introduction or enhancement of the following features:

- New OTC Volatility Trade Entry
- New set of formulas in the Eurex OTC - Basis Trade Facility (BTF)
- Theoretical Price Enhancements for Eurex Options
- Introduction of Cascading Expiration for EEX Products.
- Completion of Clearing GUI (including Security Windows)
- New CSD Selection per security
- Changed automatic exercise of in-the-money options
- An increased number of Trade Adjustments

Eurex/EEX is providing extended graphical user interfaces (GUIs) for Trading and Clearing. The updated Java-based trading and clearing front-end (@X-ceed and @X-tract) GUIs will include the functionality of the current FMS screens, therefore the separate MISS-based FMS application will become obsolete.

For further details about the enhanced Trading and Clearing GUI functionality please refer to the updated Eurex Trading and Clearing User Guides for the enhanced GUI versions, to be published in a simulation version in July 2001.

A list of new and updated documentation is attached in Appendix B. A simulation version of the documentation will be provided in July 2001, the final production versions will be available in September 2001.

In this document the term ‘Eurex 5.0’ refers to the electronic system that serves both organizations Eurex *and* EEX in common.

If applicable, there will be separate release notes for CBoT.

Due to the severe member impact, here all scheduled technical changes[1] are summarized:

1.1 UD/MISS Migration

With the introduction of a/c/e 2.0 (Eurex 5.0), the switch from User Devices to MISS technology will be complete. Members who still use User Devices exclusively and who have not yet informed Eurex of their migration plans are urged to contact Eurex Customer Services as quickly as possible.

[1] As announced in Circular 014/2001

Furthermore Eurex would like to remind its members that withdrawal of support for User Devices will also mean that the MEMPI (BOF, PMI and TRAD) and ORPI programmable interfaces will no longer be available. Applications which are still based exclusively on these interfaces must also be converted to the VALUES API by the introduction of a/c/e 2.0 (Eurex 5.0).

Eurex recommends all members to complete their migration to the MISS architecture by 01 August, 2001 in order to separate the migration exercise from the release change and take full advantage of the release simulation period.

1.2 Withdrawal of Support for IBM AIX Front-Ends

As announced in Circular 019/00, with the introduction of the new release, Eurex will also withdraw support for front ends based on the IBM AIX platform, including MISS-based front ends. Eurex therefore also requests members with IBM AIX systems to inform Customer Services in good time of their migration plans. Further information on this subject can be found in the Preliminary Technical Release Notes.

1.3 Upgrade of SUN Solaris Operating System

Associated with the introduction of a/c/e 2.0 (Eurex 5.0), Eurex is planning to upgrade the operating system software for SUN Solaris front-ends. With the new release, the installation of SUN Solaris 8 is mandatory for all SUN MISSs and Workstations. To provide members with an opportunity to perform an early upgrade, from the Summer of 2001 the current Eurex Release 4.1 will be supported on Solaris 2.6 as well as on Solaris 8. Further information on this subject can be found in the Preliminary Technical Release Notes.

1.4 Withdrawal of Support for UDP-Broadcast

The new release a/c/e 2.0 (Eurex 5.0) will be based on a new version of the GATE communications software (GATE Release 3.0). This version of the software will only support IP-Multicast. Support for UDP-Broadcast will be withdrawn, and the Broadcast Bridge software will consequently become obsolete. On 23 February, 2001 members had the opportunity to attend a workshop in Frankfurt on the use of IP-Multicast in relation to GATE 3.0. The slides of the presentation delivered at that workshop are now available on the web-site “www.eurexchange.com ” in the area “Info for Members -> Special -> a/c/e 2.0”. Further information on this subject can be found in the Preliminary Technical Release Notes.

1.5 Replacement of the Eurex Trading Application X-ceed by @X-ceed

The Galaxy-based trading application X-ceed will be replaced by the Java-based application @X-ceed made available at the end of February, 2001. As previously announced, the Galaxy-based X-ceed will therefore no longer be provided with a/c/e 2.0 (Eurex 5.0). Further information on this subject can be found in the Preliminary Technical Release Notes.

2 Functional Changes for a/c/e 2.0 (Eurex 5.0)

2.1 New OTC Volatility Trade Facility

The new OTC Vola Trade Entry window enables members to enter combined futures and options trades that have been negotiated outside the system directly with another trader/member. These trades are posted to the exchange clearing and settlement system in order to get the trades settled.

Functionally, this can be considered as the simultaneous buy of a Call option (sell of a Put option) and sell (buy) of the respective future even though these events do not occur at the same time. The delta of the options trade is used to calculate the correct number of futures which can be exchanged.

Either the buyer or the seller of the Vola Trade can add the Vola Trade. The Add transaction has to contain a valid Trade ID and Product ID of an existing option trade, this can be either an on-exchange or OTC Block trade.

The future contract entered must have the same underlying as the option contract (for index options) whereas the future contract used must be the underlying of the option contract (for interest rate options). The future price used must be between the daily high and low of the future, the quantity must be greater than the minimum defined by the exchange. Also total used quantity of the options trade must not exceed the quantity of the original options trade (i.e. this equals the maximum option quantity), and is to be stored in case this particular option trade is used for another Vola Trade. After successful entry a transaction number is generated by the system. The trade can be deleted only by the party which actually entered the trade assuming the Vola Trade has not been approved.

To complete the OTC Vola Trade, the counterparty of the options trade must approve the trade using the transaction number received from the member which entered the Vola Trade. Requests that are not approved will be deleted after end of trading (during batch) on the day of entry.

The new trade type “V” is introduced to distinguish Vola Trades from the existing OTC Trades on windows and reports. (“B” = Basis Trades, “O” = Block Trades, “E” = EFP Trades, “ ” = Exchange Trades, “V” = Vola Trades and “*” for all trade types).

2.1.1 Report Modifications to Separate OTC and Exchange Trades

Two trading reports RPTTC540 (Daily Order Maintenance) and RPTTC545 (Daily Block Trade Maintenance) are separated, so that all OTC Trades are shown in the RPTTC545 report and all other orders are shown in RPTTC540.

2.2 Extension of the Basis Trade Facility

With a/c/e 2.0 (Eurex 5.0) the Basis Trade Facility (BTF), which was limited to German Government Bonds with annual coupon payment, is extended for Euro denominated foreign government bonds with other coupon payment frequency.

In order for Eurex to include bonds with more than one coupon payment per year in the Basis Trade Facility, the coupon frequency needs to be configurable so that the following are generated correctly:

- Cash Flow
- Hedge Ratio
- Modified Duration
- Macauly Duration
- Yield to Maturity.

2.2.1 Hedge Ratio Calculation

The formula to calculate the Hedge Ratio is defined as:

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

where

$FaceAmount_{CB}$ = *Nominal Value of the Cash Bond (CB)*

$NotionalSize_{Fut}$ = *Contract Value of Future (Fut); fixed value*

$DirtyPrice_{CB}$ = *$CashPrice_{CB}$+$AccruedInterest_{CB}$; calculated by Dirty Price (percentage) formula (see below)*

$DirtyPrice_{CTD}$ = *$CashPrice_{CTD}$ + $AccruedInterest_{CTD}$; both for Cheapest To Deliver (CTD), calculated by Dirty Price (percentage) formula (see below)*

$ModD_{CB}$ = *Modified Duration Cash Bond (CB); calculated by the Modified Duration formula (see below)*

$ModD_{CTD}$ = *Modified Duration Cheapest To Deliver (CTD); calculated by the Modified Duration formula (see below)*

PF_{CTD} = *Price factor CTD; fixed value*

Note that while this formula is the same as the current one, the input Modified Durations (see below) can be calculated using a specifiable Coupon Frequency.

The coupon frequency (k) is needed to calculate both the correct cash flow and the yield of the respective bond and therefore the exact Modified and the Macauly Duration formulas (see below). At the moment the coupon frequency in the Eurex system is set to 1 (i.e. an annual coupon payment)

2.2.2 Dirty Price Calculation

The dirty price is calculated as follows:

DirtyPrice = *CashPrice + AccruedInterest*

$$AccruedInterest = \left(\left(\frac{CouponRate}{k} \right) * \frac{(Settlement\,Date - LastPayout\,Date)}{DaysCurrentCouponPeriod} \right)$$

where

CashPrice = *Price of the Cash Bond*

CouponRate = *Rate of the Coupon by year; constant value (i.e.: 7% = 7,00)*

SettlementDate = *Settlement Date*

LastPayoutDate = *Last Coupon Date or respectively First Settlement Date; constant value*

DaysCurrentCouponPeriod = *Number of days in the current coupon period*

k = *number of coupons per year (coupon frequency)*

2.2.3 Calculation of Modified Duration

The modified duration is calculated as follows:

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

where

y = *yield to maturity; calculated by Yield to Maturity formula (see below)*

k = *number of coupons per year (coupon frequency)*

2.2.4 Calculation of Macauly Duration

The Macauly duration is calculated as follows:

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

where

t = *Period when cash flow received; t=1,2,3, … ,M*

CF_t = *value of cash flow at time t; calculated by the Cash Flow formula (see below)*

$T_{t/k}$ = *time in years to next cash flow t; it is the fraction between the settlement day and the day when the cash flow is received*

k = *number of coupon payments per year*

M = *total numbers of cash flows; defined as: rounded (always nested to the next higher full value) value (number of years between settlement and maturity day) * k (number of coupons per year)*

2.2.5 Yield to Maturity

The Yield to Maturity is defined as the solution y of the following equation:

$$DirtyPrice - \sum_{t=1}^{M} \frac{CF_t}{(1+y)^{T_{t/k}}} = 0$$

where

M = *total numbers of cash flows; defined as: rounded (always nested to the next higher full value) value (number of years between settlement and maturity day) * k (number of coupons per year)*

2.2.6 Cash Flow

The Cash Flow CF is defined as:

$$CF = \frac{CouponRate}{k} * \frac{(NextPayoutDate - LastPayoutDate)}{DaysCurrentCouponPeriod}$$

where

NextPayoutDate = *Next Coupon Date after Settlement Date*

k = *number of coupon payments per year*

For the maturity period (last coupon period) the Cash Flow CF is defined as:

$$CF = \frac{CouponRate}{k} + 100$$

2.3 Theoretical Price Enhancements for Eurex Options

Previously there was only one model used for option pricing: Cox-Ross-Rubinstein on all involved Eurex systems. This model does not reflect specifics of certain products, especially index options and money-market derivatives. Thus the following changes are implemented:

Currently there are several Eurex option types available. For some of them the Cox-Ross-Rubinstein is not very suitable. Therefore the Black-Scholes model for the European style of options that do not pay dividends (index options) and the Black-Scholes 76 model for money-market product options will be used.

With the introduction of a/c/e 2.0 (Eurex 5.0) all back-end theoretical prices sub-systems for index options will use the future on the index like an underlying, instead of the presently used index itself, for the calculation of theoretical prices. The implied volatility calculation will be affected by the modified theoretical price calculation.

As there are no options on EEX products, only Eurex option products are affected by these changes.

It is assumed that the reader is familiar with the Cox-Ross-Rubinstein model, therefore only the new models are briefly shown here.

2.3.1 Black-Scholes Model

This model was developed for European-style options on underlyings that do not pay dividends.

Following equations define the model:

$$c = S_0 N(d_1) - Xe^{-rT} N(d_1 - s\sqrt{T})$$
$$p = Xe^{-rT} N(s\sqrt{T} - d_1) - S_0 N(-d_1)$$
$$d_1 = \frac{\ln(\frac{S_0}{X}) + (r + \frac{s^2}{2})T}{s\sqrt{T}}$$

where

c theoretical price of the European style call option that does not pay dividends

p theoretical price of the European style put option that does not pay dividends

N(x) cumulative probability distribution function for a variable that is normally distributed i.e.

$$N(x) = \int_{-\infty}^{x} \frac{e^{\frac{-y^2}{2}}}{2p} dy$$

S_0 actual underlying price less the present value of the expected dividends

X option strike price

e Euler's constant

r continuously compounded risk-free interest rate

σ volatility of the underlying price

T time to maturity of the option

2.3.2 Black-Scholes 76 Model

This model is optimal for evaluation of European style options on futures contracts. Using the notation from the previous section, and defining S_0 as the price of the futures contract, the formula is defined as follows:

$$c = S_0 e^{-rT} N(d_1) - X e^{-rT} N(d_1 - s\sqrt{T})$$

$$p = X e^{-rT} N(s\sqrt{T} - d_1) - S_0 e^{-rT} N(-d_1)$$

$$d_1 = \frac{\ln(\frac{S_0}{X}) + \frac{s^2}{2} T}{s\sqrt{T}}$$

2.4 Introduction of Cascading Expiration for EEX Futures

The European Energy Exchange (EEX) Derivatives Market was launched in March 2001. EEX offers futures for electricity. For electricity futures it is essential that it is clear how much energy should be delivered in which time period. For EEX futures, a delivery calendar defines the days when electricity shall be delivered. It is fixed together with the number of delivery time units per day and the amount of electricity to be delivered per time unit. In the current situation futures are supported that cover the delivery of electricity for an entire month.

Having a position in a futures contract for one year is equivalent to having a position in each of the futures contracts that cover the months. In order to make use of this relation it is desirable to settle the big contracts for one year by creating positions in the smaller monthly contracts. Only the monthly contracts are finally settled individually, which lead to the introduction of a settlement cascade.

These cascades will allow grouping of products with the same parameters but different delivery periods in a way that only the product with the shortest period is settled.

Each existing EEX product will be assigned to a product cascade. If there is not more than one product in the cascade and this product is the finally settled base product (monthly settled product), the settlement is the same as before in the non-cascaded case.

As already implemented in the EUREX System, all EEX Future Orders will still be processed by the Futures Price-Time Matcher.

For further details on Cascading EEX Futures, please consult the updated @X-tract Clearing User Guide, which will be available in a simulation version in July 2001.

2.4.1 Naming of the Cascading EEX Futures Products

The product name in the system is a mnemonic consisting of 4 characters $X_1X_2X_3X_4$. The delivery period of the Cascading EEX Futures will be encoded within the product name.

The following naming conventions are used:

	Function	**Values**
X_1X_2	Indicates the product line	F0 - Futures
X_3	Indicates the delivery time	B – Baseload P – Peakload
X_4	Indicates the delivery period	Y – Year S – Seasonal Q – Quarter A – Month (Base) E – Month (Peak)

Examples: FOBY is a base load product with a delivery period of one year.
FOPE is a peak load product with a delivery period of one month.

2.4.2 Naming of Cascading EEX Futures Contracts

For EEX products, the contract name contains the delivery year and the first delivery month. Using the given naming convention for the products we have the following examples:

Three following contracts	Delivery Period
FOBA Jan 01 FOBA Feb 01 FOBA Mar 01	Delivery period is the month indicated in the contract specification.
FOBQ Jan 01 FOBQ Apr 01 FOBQ Jul 01	Delivery period is the quarter starting with the month in the contract specification
FOBS Apr 01 FOBS Oct 01 FOBS Apr 02	Delivery period is the season (half a year) starting with the month in the contract specification
FOBY Jan 01 FOBY Jan 02 FOBY Jan 03	Delivery period is the year starting with the month in the contract specification.

2.4.3 Trading Unit Calculation for EEX Products

For financial futures the Contract Trading Unit is usually the same as the Product Trading Unit. For EEX products, only the Contract Trading Unit is required. The Trading Unit for a particular contract is based on the number of delivery days within a delivery month, which is the same as a calendar month, and the units of energy to be delivered per day. The Trading Unit is shown on the Market Overview and Contract Overview windows on the trading application.

Trading Unit (in MWh) = Deliverable amount of energy per time unit (in MW) *
Delivery Time Unit per day (h/day) *
Number of delivery days per contract maturity (day).

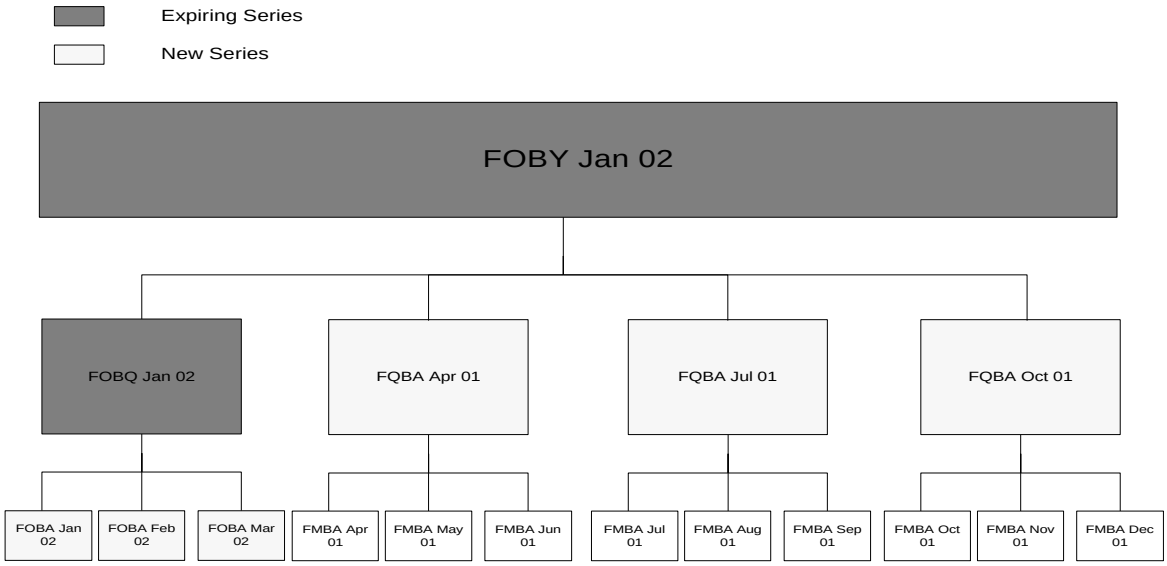
The Trading Unit for a new annual or quarterly contract (T) is directly calculated by creating the sum of the Trading Units of the bottom level contracts. For instance the Trading Unit of the quarterly contract is always the sum of the Trading Units (T) of the three months (i=1..3) that build up the quarter.

$$T = \sum_{i=1}^{NoOfBottomContracts} T_i$$

2.4.4 Example: Expiration and Cascading of EEX Contracts

When a contract expires it is checked whether the appropriate product is the product with the lowest level. In this case the contract will be settled as it is already practiced within the current Eurex system. For the higher level products the positions are removed and new positions in each of the resulting contracts of the products of a deeper level are created.

Cascading of the Parent Contract will take place on Expiration Day. A contract is deemed a “Parent” if it has a subordinate level set and the exact cascade pattern is determined by the Position Break Down Level, which is an indicator (integer number) that tells what position transitions are allowed for settlement. The following example is built without seasonal products.



For the example shown, contract FOBY Jan 02 expires in December. It has a Position Break Down Level 3. On Expiration Day, positions in this annual product will be cascaded down to positions in the first three monthly contracts and positions in the second, third and fourth quarter. This processing is always the same for the expiration of annual contracts and is also the same for the expiration of seasonal contracts, in the latter case the contract will cascade into the first three monthly contracts and the following quarter.

If the monthly contract also expires at the current business day, the contract is settled in a normal manner, i.e. either physically or cash settled. The same is valid for the first month of an expiring seasonal contract. It is possible to process two cascading steps on the same day.

A contract may cascade directly from an annual to a monthly contract. Initially there will be 4 levels: Annual, Seasonal, Quarterly, Monthly. However, it has to be mentioned that an annual contract cannot cascade to a seasonally but to quarterly and monthly contract. However, seasonal contracts are tradable and can themselves cascade to quarterly or monthly contracts.

It should be mentioned that within a cascade only one product per level is allowed.

2.4.5 Expiration Month and Delivery Period

For Cascading Products the delivery period for

- Annual contracts always will begin in January,
- Seasonal products always will begin in April and in October,
- Quarterly contracts always will begin in January, April, July and October.

Annual, Seasonal and Quarterly contracts expire in the month before the Delivery Period. For example the FOBY Jan 02 contract expires in December 2001, the FOBQ Apr 02 contract expires in March 2002.

For the expiration of monthly contracts there are two possibilities:

First, the contract can expire within the month indicated by the contract specification (for cash settled products). In this case the FOBA Jan 02 contract would expire in January 2002.

The second possibility is to expire in the preceding month (possible for cash settled and physically settled products). In that case the FOBA Jan 02 contract would expire in December 2001.

The settlement procedure that will take place in the end depends on how the monthly product was set up - with physical settlement or cash settlement.

2.4.6 New Settlement Procedure for the Position Transfer

For higher level products within a cascade a new settlement procedure is introduced, the settlement by Position Transfer on expiration day.

For the base contracts (monthly) the settlement procedure is either cash settlement or physical settlement.

2.4.7 Additional Margin – Cross Margining over Cascading Products

For EEX futures, positions can be held in annual, seasonal, quarterly and monthly contracts simultanously. Here, long term contracts can fully overlap short term contracts.

In terms of the risk of a potential loss on the next trading day it may be possible that gains in one contract can partially compensate losses in other overlapping contracts. In the following portfolio the potential liquidation costs will be less than the costs of liquidating the individual positions:

10 Long for FOBQ Jan 01

10 Short for FOBA Jan 01

This will be true independent of the direction in which the prices of the single contracts move. However it cannot be preset that the prices of all products in a cascade are positively correlated for all contracts. Therefore the current Eurex approach with margin groups does not fit.

The functional solution by EEX is the following:

1. All positions in cascaded EEX futures are split in one part that is not covered by a position in a long term product (non-crossed position) and another part which is covered by a position in a long term product (crossed position).
2. For all non-crossed positions, additional margin is required as it is now.
3. For all crossed positions, a reduced volatility is assumed which is determined as the volatility of the product times a reduction factor that can be entered by Market Supervision.
4. For all crossed positions, the Additional Margin is computed with the reduced volatility.

A calculation example on “Additional Margin – Cross Margining over Cascading Products” is given in the updated Eurex Information Manual, which will be available in a simulation version in July 2001.

2.4.8 New Report: Position Transfer for Expiring EEX Contracts (RPTCB115)

This report supports the control of position transfers between contracts of different products belonging to a cascade due to contract expirations of a cascading EEX products. The report contains only EEX members and is available for Market Supervision, NCMs and GCMs.

```
EUREX                                POSITION TRANSFER FOR EXPIRING EEX CONTRACTS                    PAGE:        1
RPTCB115                                                                                  AS OF DATE: 20-12-01
                                                                                            RUN DATE: 20-12-01

CLEARING MEMBER: ABCFR ABC BANK CORPORATION                                  CASCADE ID  : CASC1
EXCHANGE MEMBER: DEFGH DEF BANK CORPORATION                                  ACCOUNT     : P1

                                          ---MOVEMENT---
      CONTRACT                  TRAN ID CODE     LONG   SHORT
------------------              ------------     -----   -----
  FOBY JAN 02                                     100-     0
  FOBQ JAN 02                   0000489           100+     0
  FOBQ APR 02                   0000490           100+     0
  FOBQ JUL 02                   0000491           100+     0
  FOBQ OKT 02                   0000492           100+     0

  FOBQ JAN 02                                     100-    50-
  FOBA JAN 02                   0000493           100+    50+
  FOBA FEB 02                   0000494           100+    50+
  FOBA MAR 02                   0000495           100+    50+

CLEARING MEMBER: ABCFR ABC BANK CORPORATION                                  CASCADE ID  : CASC1
EXCHANGE MEMBER: DEFGH DEF CORPORATION                                       ACCOUNT     : P2

                                          ---MOVEMENT---
      CONTRACT                  TRAN ID CODE     LONG   SHORT
------------------              ------------     -----   -----
  FOBY JAN 02                                       0      9-
  FOBQ JAN 02                   0000496             0      9+
  FOBQ APR 02                   0000497             0      9+
  FOBQ JUL 02                   0000498             0      9+
  FOBQ OKT 02                   0000499             0      9+

  FOBQ JAN 02                                       0      9-
  FOBA JAN 02                   0000500             0      9+
  FOBA FEB 02                   0000501             0      9+
  FOBA MAR 02                   0000502             0      9+
```

2.5 CSD Selection per Security

With a/c/e 2.0 (Eurex 5.0) the functional concept for allowing clearing members to select Central Securities Depositories (CSDs) on a security basis on the Eurex Clearing System is introduced.

The current exchange clearing system implementation supports and maintains a single ("home") CSD per clearing member based on the clearing member's country of domicile. One deposit account number and three collateral account numbers must be maintained per clearing member at its "home" CSD.

The Eurex Clearing System currently sends instructions for physical deliveries versus payment (DVP) / receive versus payment (RVP) to two CSDs:

- SIS (SegaInterSettle) for CHF denominated products
- CBF (Clearstream Banking, Frankfurt) for EUR and all other "non-Eurex currency" denominations.

In case both clearing members involved in the delivery process do not have the same “home” CSD and the product they have to settle is denominated in the currency of their “home” CSD, both CSDs get an advice.

Eurex clearing members will (and already do) maintain several relationships with CSDs which could also be used for physical delivery transactions.

For clearing members market supervision maintains a list of CSDs they use for settlement. There is no limitation that one clearing member can use only one account per CSD. The accounts are either own or custodian accounts. Therefore the settlement process is enhanced by the custodian CSD account functionality, subject to approval by the Eurex Board. An example:

A clearing member can use

- His own account at CBF to clear German equities
- His own account at SIS to clear Swiss equities
- ABCFR as custodian to clear French equities. ABCFR has an account at CBF
- DEFFR as custodian to clear Dutch equities. DEFFR also has an account at CBF.

Physically delivered securities have a list of CSDs where they can be settled and to which Eurex has an interface.

To each combination of clearing member and deliverable securities one of the clearing member’s CSDs is assigned automatically depending on a priority given to the different settlement accounts of the clearer.

The clearing member can modify the selected CSD and account per security. The clearing member is also able to change his security / CSD selection.

When settlement instructions are created in the batch the selected CSD and determined account is used.

In a first step with a/c/e 2.0 (Eurex 5.0) no new CSDs for share settled options will be added to the existing ones (CBF and SIS). The settlement of notional bonds will be done with the Integrated Clearer (IC), therefore - for bond deliveries - Euroclear (EOC) will be supported additionally.

2.5.1 Criteria for Selection of CSD per Security and Clearing Member

One of the clearing member's CSDs is selected automatically as default for the settlement of a security.

The automatic CSD selection is performed when a new share settled option is introduced or when new deliverable bonds are assigned to notional futures. The selection algorithm is as follows:

The list of CSDs per clearing member is compared against the list of CSDs per security:

Each of the clearing member's CSD is compared against the security CSD list and the first matching CSD is used. The CSD account list of the clearing member is ordered by a priority defined by the clearer. The CSD account with the highest priority is at top and therefore matches more probably than the others.

It is assumed that every clearing member has at least one account where he can settle a security.

2.5.2 Special Requests of Clearing Members concerning the CSD where a Security should be settled

The clearing member can overwrite the automatically selected CSD in a newly created window. A validation takes place that the entered CSD can settle the ISIN.

For further details on Selection of CSD per Security and Clearing Member please consult the updated @X-tract Clearing User Guide, which will be available in a simulation version in July 2001.

2.6 Automatic Exercise

Currently the Eurex Clearing System performs an Automatic Exercise for In-The-Money (ITM) cash settled option products. Therefore a Minimum In-The-Money Amount per product and account type is defined by Eurex Market Supervision. Though Market Supervision may provide Minimum In-The-Money Amounts for all option products, the functionality of Automatic Exercise is limited to cash settled options. If an option contract is beyond the predefined Minimum In-The-Money Amount on Expiration Day, the Automatic Exercise will be released.

Currently Clearing Members do not have any chance to interfere in the process of Automatic Exercise.

The new Automatic Exercise for a/c/e 2.0 (Eurex 5.0) will enable members to define the Minimum In-The-Money Amount individually, so that every open option position with a defined Minimum In-The-Money Amount may be exercised automatically on Expiration Day.

Additionally every option position can be removed from Automatic Exercise by the member.

When new products are introduced, Market Supervision will have the possibility to define a default value for the In-The-Money amount. The member will then have the opportunity to stay with the pre-set value or to define its own value which might also be a minimum ITM amount or 99.999,99 as high value. On conversion day, when the new release will be implemented, all minimum ITM-amounts already defined by Market Supervision (cash settled options), will be assigned the default value. For physically settled options the high value will be set as default value.

Automatic exercise will be performed on expiration day only, regardless of whether the options are European or American style.

For further details on Automatic Exercise for ITM cash settled option products please consult the updated @X-tract Clearing User Guide, which will be available in a simulation version in July 2001.

2.7 New Report: Position Transfer Overview (RPTCB030)

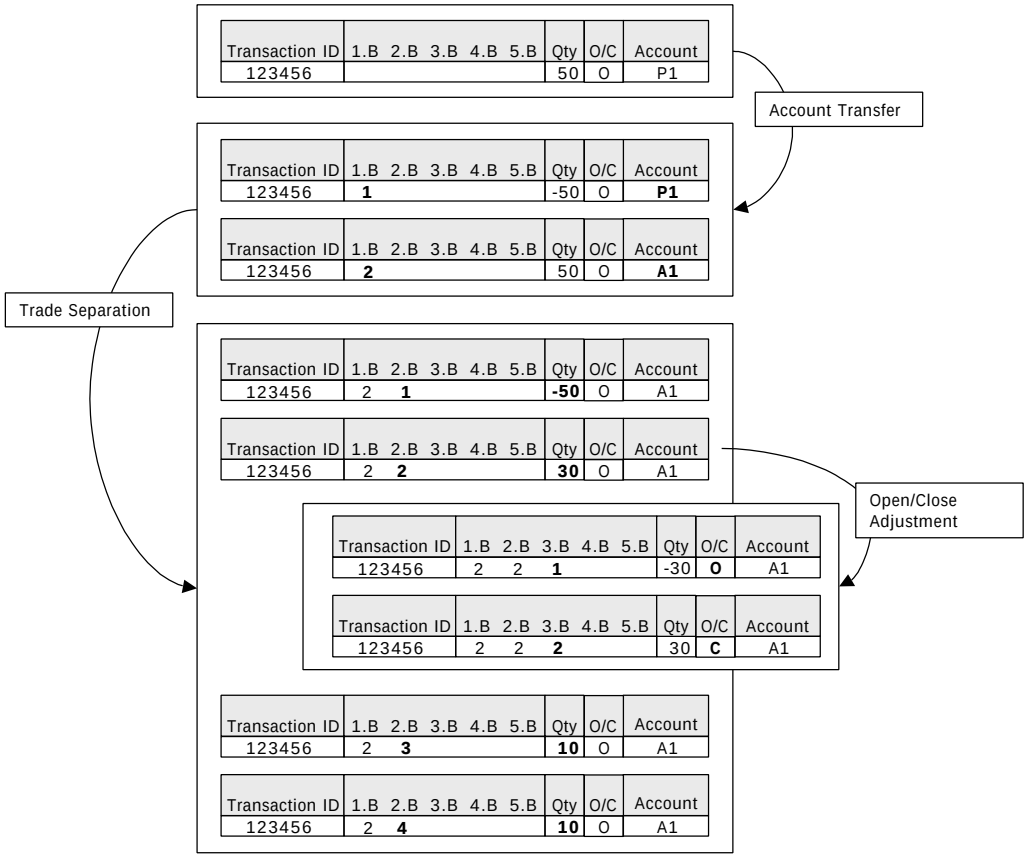
RPTCB030 is a new report listing details on the respective (partial) position transfer transactions of a member.

```
1         2         3         4         5         6         7         8         9        10        11
   12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678
01|EUREX                                    POSITION TRANSFER OVERVIEW                          PAGE:        1
02|RPTCB030                                                                                AS OF DATE: 27-01-99
03|                                                                                        RUN DATE  : 27-01-99
04|
05|CLEARING MEMBER ID : ABCFR DEUTSCHE SIMULATIONSBANK
06|EXCHANGE MEMBER ID : DEFFR DEUTSCHE TESTMEMBER BANK
07|TRANSACTION TYPE: 502 : PARTIAL TRANSF REQ
08|SEND
09|
10|TRAN ID  CONTRACT              TRAN ID   ACCT     TRANSF POSITION            COUNTERPARTY   ACCT    ADJUSTMENT   CUR
11|                                CODE     TYPE       LONG    SHORT           EXCH   CLEAR   TYPE    FEE
12|-------  --------------------  -------   ----   -------  -------         ------- -------   ----    ----------   ---
13|
14|007003   C BAY  JUN 99  4000     234561     A1         0        8          ABCFR   DEFDU    A1          2.00   EUR
15|
16|
```

2.8 Increased Number of Trade Adjustments

The Eurex system currently supports only a limited number of adjustments to a position transaction record. Each trade is tracked by writing an audit trail record. Each adjustment of a position transaction is tracked by writing new records with the same transaction ID as the original record and new suffix numbers extending the transaction ID for each single detail record describing the adjustment. Each adjustment formats an additional byte of the suffix ID in order to link the related detail records per adjustment and to track the sequence of adjustments. This results in a maximum of 5 adjustments per trade as the suffix ID has a length of 5 bytes.

The following figure shows an example of the current situation:



Current Situation of Trade Adjustments

With the intoduction of a/c/e 2.0 (Eurex 5.0), the Eurex Clearing System will allow a number of trade adjustment records up to 49,999.

Therefore the system supports a sufficient number of trade adjustments from a functional point of view.

The Suffix ID will be changed from an alphanumeric 5-field-group to a numeric field containing 5 digits.

This Suffix ID is simply increased by 1 with each adjustment (from 1 to 49,999).

To reproduce the sequence of adjustments the original Parent Suffix ID has to be stored with the transaction as well.

An adjustment indicator is introduced to show whether a transaction is (a) already adjusted, (b) a reversal (Storno) transaction or (c) available for further adjustments

Another flag shows if the adjusted transaction results from a Historical Trade Transfer or from a Historical Give-Up.

The following diagram shows an example of the future situation:



Future Situation Of Trade Adjustments (Take-up plus Account Transfer)

This leads to the following impacts for members and vendors:

- All interfaces (Values API) and reports where the Suffix ID is used may have to be adapted. Affected reports include:
    - RPTCB010 - Position Detail and RAWCB010 - Position Detail (Raw Data)
    - RPTCB110 - Account Transfer Exception
    - RPTCB102 - Cash Settled Contracts and RAWCB102 - Cash Settled Contracts (Raw Data)
    - RPTCB130 - Give-Up Trade History
    - RPTCB140 - Accepted Give-Up Trades
    - RPTCB150 - Take-Up Trade History
    - RPTCB160 - Accepted Take-Up Trades
- The Sort order of the Transactions in the above reports and raw data files will change.
- The Sort order of Values API inquiries will change.
- The new Parent Suffix ID and the Adjustment flag helps to identify the original transaction.

- The new Adjustment flag helps to identify which transactions can be further adjusted.

For full details regarding the VALUES interface changes, please refer to the VALUES modifications announcements, which will be published end of April, 2001. The changes to VALUES application requests concerning Trade Adjustments are briefly summarized in the Preliminary Technical Release Notes.

For further details on the extension of the Trade Adjustment facility please consult the member Circular 014/2001 as well as the updated @X-tract Clearing User Guide, which will be available in a simulation version in July 2001.

2.9 New Report: Synchronous Transaction Mix (RPTCB068)

With the introduction of the MISS architecture the possibilities how Eurex members can request data (i.e. profiles containing contracts, products and external underlyings) has dramatically increased.

To provide Eurex members with detailed information about their transaction behavior a new member report “Eurex Synchronous Transaction Details” (RPTCB068) was implemented.

RPTCB068 is a new report divided into three parts:

The first part of the report contains a member-specific summary of the number of generated transactions per underlying product:

```
          1         2         3         4         5         6         7         8         9         10        11
 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678
01|EUREX                                          TRANSACTION MIX REPORT                                        PAGE:        1
02|RPTCB068                                                                                                AS OF DATE: 13-02-01
03|                                                                                                          RUN DATE: 13-02-01
04|                                              PRODUCT TRANSACTION DETAILS
05|
06|
07|MEMBER: ABCFR DEUTSCHE SIMULATIONSBANK AG       TOTAL TRANSACTION COUNT: 8109
08|
09|     PROD UNDERLYING                     NO TRANS    LIMIT EXCEEDED BY
10|     ---- ------------------------------ -------- -------- ----------------------------------------------
11|     **** UNSPECIFIC PRODUCT                  746     3000
12|     AAR  OPT ON ABN AMRO                       2     4000
13|     ADS  OPT ON ADIDAS AG                    239     4500
14|     ALV  OPT ON ALLIANZ AG HOLDING           215     4500
15|     BAS  OPT ON BASF AG -ST-                 190     4500
16|     DBK  OPT ON DEUTSCHE BANK AG             603     4500
17|     DTE  OPT ON DEUTSCHE TELEKOM AG         1232     4500
18|     EOA  OPT ON E.ON AG                      226     4500
19|     FDAX FUT ON DAX INDEX                    427     7000
20|     FESX FUT ON EURO STOXX 50 INDEX          207     6000
21|     FEU3 THREE-MONTH-EURIBOR FUT. (ACI)      148     8000
22|     FGBM FUT 4 1/2-5 1/2Y.GOV.BONDS 6%      1145    12000
23|     HEN3 OPT ON HENKEL KGAA VZ.               68     4500
24|     HVM  OPT ON HYPOVEREINSBANK AG           157     4500
25|     IFX  OPT ON INFINEON                     270     4500
26|     KAR  OPT ON KARSTADT QUELLE AG           152     4500
27|     LIN  OPT ON LINDE AG                       4     4500
28|     MAN  OPT ON MAN AG -ST-                  105     4500
29|     MUV2 OPT ON MUENCHNER RUECKVERS AG       225     4500
30|     NOA3 OPT ON NOKIA CORP. A FM 5           355     4000
31|     ODAX OPTION ON THE DAX INDEX             668     7000
32|     OESX OPTION ON EURO STOXX 50 INDEX        10     6000
33|     OGBL OPTION ON BUND FUTURE                54    12000
34|     OGBS OPTION ON SHAZ FUTURE                 8    12000
35|     SCH  OPT ON SCHERING AG                  291     4500
36|     TKA  OPT ON THYSSEN KRUPP AG             137     4500
37|     VOW  OPT ON VW AG -ST-                   225     4500
38|                                          --------
39|          TOTAL                              8109
40|
41|
```

The second part of the RPTCB068 report shows the transaction count for every node of the member:

```
          1         2         3         4         5         6         7         8         9        10        11
 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890
01|EUREX                                          TRANSACTION MIX REPORT                                PAGE:        2
02|RPTCB068                                                                                    AS OF DATE: 13-02-01
03|                                                                                              RUN DATE: 13-02-01
04|                                          NODE TRANSACTION DETAILS
05|
06|
07|       NODE TXN COUNT    NODE TXN COUNT    NODE TXN COUNT    NODE TXN COUNT    NODE TXN COUNT    NODE TXN COUNT
08|       ---- ---------    ---- ---------    ---- ---------    ---- ---------    ---- ---------    ---- ---------
09|       0299       239    0300       215    2410       207    2485      1232    2486      2192    2487      2939
10|       4073      1001    4074         2    4436        68    4471         4    4472        10
11|            ---------
12|       TOTAL     8109
13|
14|
15|
```

The third part of the report shows the number of transactions, the originating node, the transaction code and a description of the transaction sorted by the traders of the member:

```
          1         2         3         4         5         6         7         8         9        10        11
 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890
01|EUREX                                          TRANSACTION MIX REPORT                                PAGE:        3
02|RPTCB068                                                                                    AS OF DATE: 13-02-01
03|                                                                                              RUN DATE: 13-02-01
04|                                          NODE TRANSACTION DETAILS
05|
06|
07|    TRADER: ABCFR2MC02D
08|                    COUNT TXN    PROD NODE DESCRIPTION
09|                    ----- ------ ---- ---- --------------------------------------------------
10|                        2 340023 FGBM 0299 Goto TRAD
11|                        4 340029 FGBL 0299 Goto FUTS
12|                        3 341022 FGBL 0299 Goto OODT Scroll
13|                        5 341023 FGBL 0299 Goto TRAD Scroll
14|                        1 341026 FGBL 0299 Goto OVER Scroll
15|                        1 341026 FGBM 0299 Goto OVER Scroll
16|                        1 350010 FGBL 0299 Futures: Order Add
17|                        1 350010 FGBM 0299 Futures: Order Add
18|                        4 3C100D FGBL 0299 Tr 5.1.3 Session Profile
19|                        4 3C100P **** 0299 Tr 5.1.3 Session Profile
20|                        4 3SIGN0 **** 0299 Sign On
21|                    -----
22|           TOTAL       30
23|
24|    TRADER: ABCFR21M01D
25|                    COUNT TXN    PROD NODE DESCRIPTION
26|                    ----- ------ ---- ---- --------------------------------------------------
27|                        4 340029 FGBL 0299 Goto FUTS
28|                        1 340029 FGBM 0299 Goto FUTS
29|                        1 340029 FGBS 0299 Goto FUTS
30|                        1 341022 FGBL 0299 Goto OODT Scroll
31|                        1 341026 FGBL 0299 Goto OVER Scroll
32|                        1 341029 FGBL 0299 Goto FUTS Scroll
33|                        2 350010 FGBL 0299 Futures: Order Add
34|                        4 3C100D FGBL 0299 Tr 5.1.3 Session Profile
35|                        4 3C100P **** 0299 Tr 5.1.3 Session Profile
36|                        4 3SIGN0 **** 0299 Sign On
37|                    -----
38|            TOTAL      23
39|
```

The availability of this report increases the transparency of the transaction limits and the respective application behavior.

The most important business rationale is that the RPTCB068 allows a much faster reaction on member side if setup or application problems create an unusual transaction load.

3 Enhanced Java-based Trading and Clearing GUIs and APIs

3.1 Enhancement of @X-ceed Trading GUI and @X-tract Clearing GUI

With the introduction of a/c/e 2.0 (Eurex 5.0), the switch from User Devices to MISS technology will be complete. All remaining functionality which used to be exclusively available via the old, User Device style FMS screens will be incorporated in the graphical user interfaces @X-tract (Clearing) and @X-ceed (Trading) with a/c/e 2.0 (Eurex 5.0), which are only available for the MISS/Workstation-Architecture.

The majority of a/c/e 2.0 (Eurex 5.0) GUI changes result from implementation of FMS-screen functionality and only a few enhancements are attributable to additional functionality.

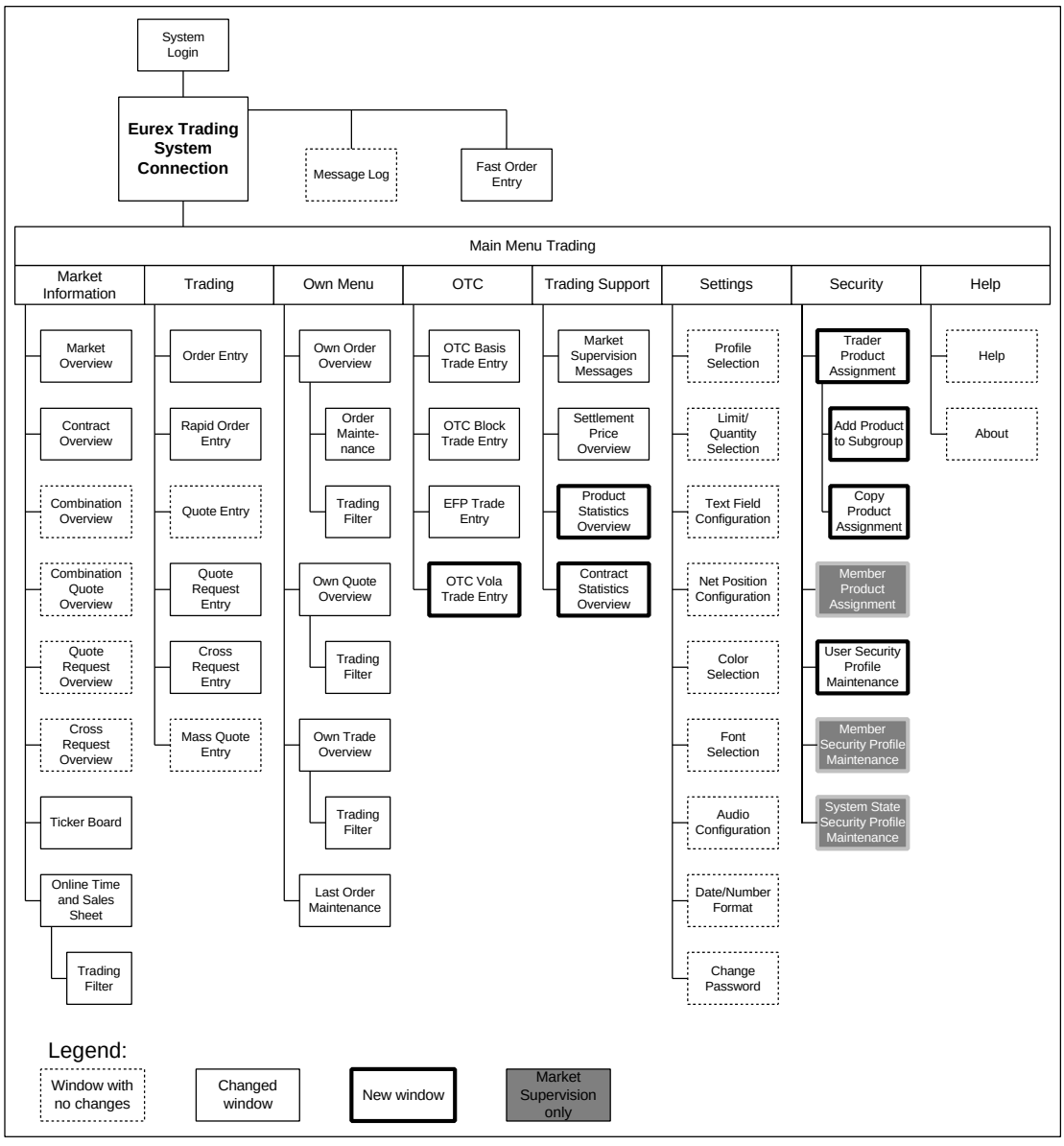
In the following, all changes in the @X-ceed and @X-tract applications are described in detail. An overview of the applications' menu structure is provided and new, changed or common Windows are distinguished.

The Trading and Clearing GUIs and the extended APIs will become available in October 2001, the simulation phase for the updated @X-ceed and @X-tract applications and the extended APIs will start in August 2001.

3.1.1 @X-ceed Trading GUI Modifications – Window Flow

A high level overview of the additions and modifications to the @X-ceed Trading GUI Application is shown below. At the top level a new entry is added to the Trading GUI menu bar – *Security*. The window flow below shows the new menu entry, the new windows, changed windows and unchanged windows in context.

In addition to the new *Security* menu entry, some new windows have been added and a number have been modified, abstracts of the window changes are listed in section 4.1.



Trading GUI Menu Structure Overview

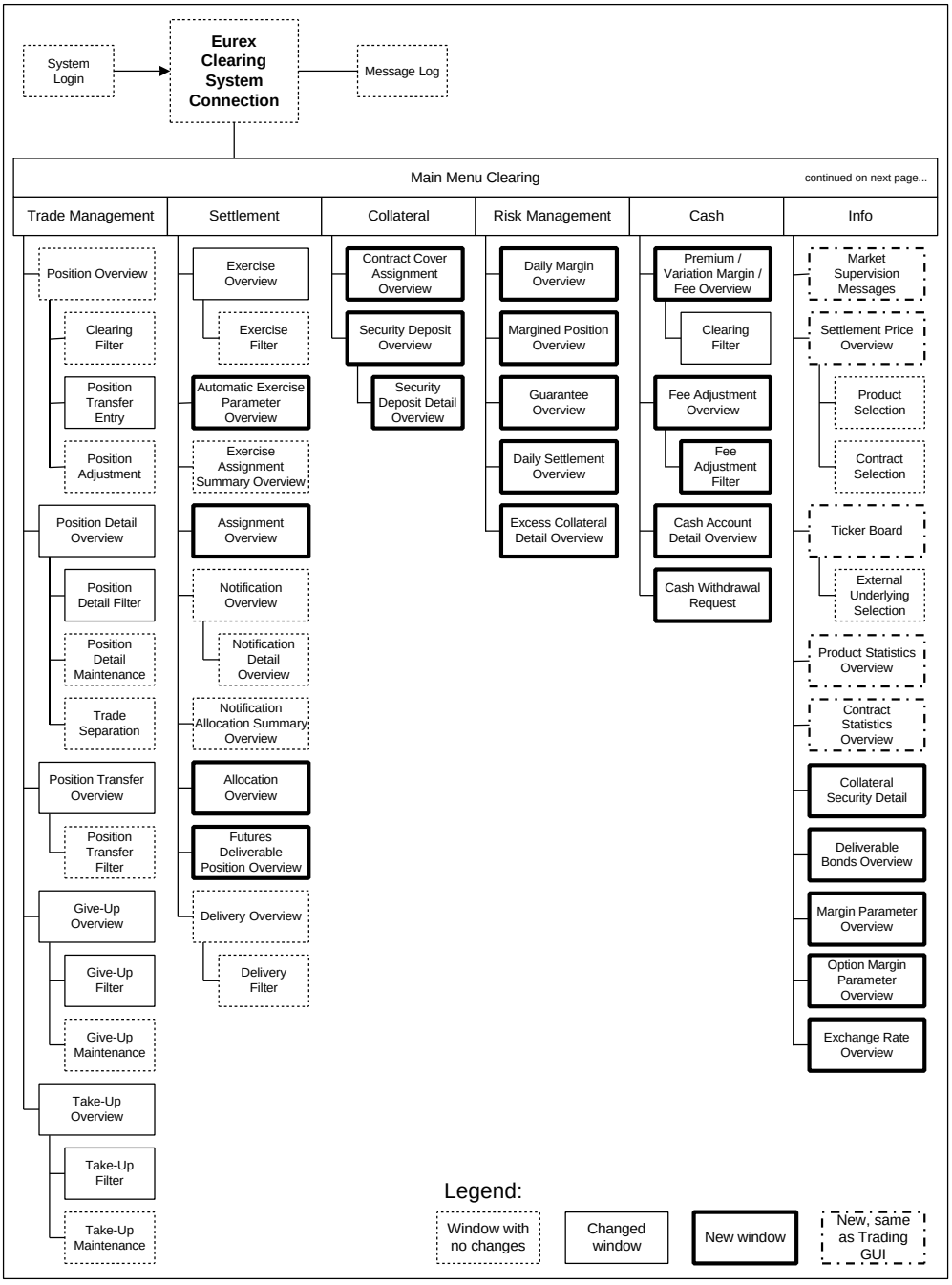
3.2 @X-tract Clearing GUI - Modifications

Starting with a/c/e 2.0 (Eurex 5.0), the support of the User Devices will be completely terminated. This includes all FMS screens, the SHIFT (Screen Handling Image For Trading) and the BOF handling is then only available over MISS. The related executables will no longer be rolled out to the members. Validations in the application will ensure that these screens can no longer be used.

The clearing GUI @X-tract and the API are enhanced to cover all clearing functionality currently provided by the FMS application.

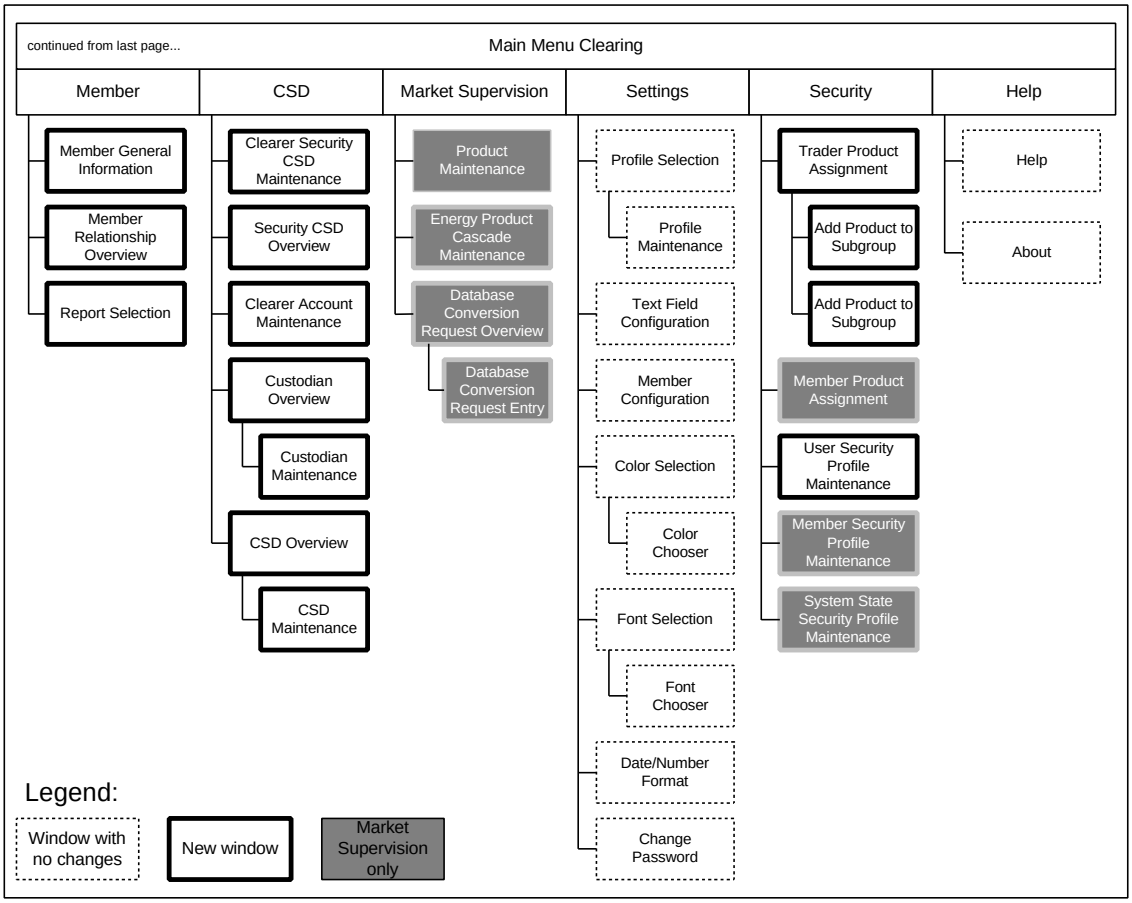
The enhanced @X-tract Clearing GUI and API will become available in October 2001, the simulation phase for the new GUI will start in August 2001.

3.2.1 @X-tract Clearing GUI Modifications – Window Flow



Here a high level overview of the additions and modifications to the @X-tract Clearing GUI application is shown. At the top level several new entries are added to the Clearing GUI menu bar –*Collateral*, *Risk Management*, *Cash*, *Member*, *CSD*, and *Security*. The window flow below shows the new menu entries, the new windows, changed windows and unchanged windows in context.

Clearing GUI Menu Structure Overview – Part 1



Clearing GUI Menu Structure Overview – Part 2

In addition to the new menu entries, some new windows have been added and a number have been modified, abstracts of the window changes are all listed in section 4.2.

3.2.2 General Functional Changes in the new @X-tract Clearing GUI

Due to the complete reworking of the underlying GUI Application Framework, new functionalities are introduced:

- A flexible Sort Functionality allows a user defined sorting in applicable windows
- A freeze column functionality is offered in the listboxes of applicable windows

- A manual stop of an inquiry is not needed any longer, because the user gets fluent responses, he has not to wait any more until the whole response arrived. The “Stop Inquiry” buttons are thus removed.
- The Market Supervision Messages window was replaced by the version from the existent @X-ceed Trading application. A single instead of a double left-click on a headline in the upper list box displays the entire message in the lower box and the headline in the field in the middle of the window.
- The Eurex Clearing System Connection window displays a message “Login in Progress” in the message line when the login button was pressed until the response from the backend arrives.
- The Eurex Clearing System Connection window blanks the Password entry field in case the login is rejected.
- A window pops up to inform the users when Market Supervision changes already approved settlement prices. The information contains the contract ID and the old and new settlement price.
- A confirmation window pops up when the user wants to delete a position transfer record on the Position Transfer Overview window.

4 Modified Windows and Reports

A list of all modified and added windows and reports for a/c/e 2.0 (Eurex 5.0) including a brief description of the changes is shown in the following sections.

Detailed descriptions will be published in the Eurex @X-ceed Trading User Guide (X0006900) and in the Eurex @X-tract Clearing User Guide (X0006100). First versions of the updated user guides will be available in July 2001.

Modifications to the layouts of windows and reports will be introduced on October 01, 2001.

4.1 Windows – @X-ceed Trading System

For the windows of the enhanced Trading GUI @X-ceed only modifications compared to the corresponding windows of the existing Galaxy-based Trading GUI X-ceed are listed below.

4.1.1 Main Trading Menu

Window name	Org.	Short description of change
MAIN TRADING MENU WINDOW	Eurex/ EEX	A new menu item “Security” is included, where the functionality of relevant legacy FMS screens is made available to the members.
FAST ORDER ENTRY	Eurex/ EEX	Users will be able to select the G1 or G2 accounts for combination orders. These will be accepted as valid input in the *Act* field.

4.1.2 Menu Item “Market Information“

Window name	Org.	Short description of change
MARKET OVERVIEW	EEX, Eurex	New features are the inclusion of Inter-Product Spread (IPS) information and the net price change in relation to the previous settlement price.
CONTRACT OVERVIEW	EEX, Eurex	An additional field will be added to the upper row that will contain the net change since previous settlement price (*NetChg*).

Window name	Org.	Short description of change
TICKER BOARD	EEX, Eurex	Where Eurex products are concerned, the definition of the field *NetChg* will be changed so that it becomes the difference between the Last Trading Price and the Last Settlement Price instead of the difference between the Last Trading Price and the Previous Closing Price. For Non-Eurex external information/products the definition of the field *NetChg* will remain unchanged: the difference between the Last Trading Price and the previous Closing Price.
TRADING FILTER	EEX, Eurex	The Trading Filter window supports all trade types including the new type “V” for OTC Vola Trades. The behavior of the *TrdTyp* field will be dependent on the calling window. If the window is called from the *Own Trade Overview* window, the TrdTyp field will be filled with “*”, otherwise it will be blank. If it is called from either the *Own Trade Overview* window or the *Online Time and Sales Sheet* window it is an editable window and can accept the values “*”, “ ”, “B”, “O”, “E” or “V”. When called from any of the other windows, it is a display window.

4.1.3 Menu Item “Trading“

Window name	Org.	Short description of change
ORDER ENTRY	EEX, Eurex	Users will be able to select the G1 or G2 accounts for combination orders.
RAPID ORDER ENTRY	EEX, Eurex	If the user has chosen one of the *G1* or *G2* accounts on the *Fast Order Entry* window and has then done a *Save Settings* operation, then the selected G account will also be available for combination orders in this *Rapid Order Entry* window.

4.1.4 Menu Item "Own Menu"

Window name	Org.	Short description of change
ORDER MAINTENANCE	EEX, Eurex	Users will be able to select the G1 or G2 accounts for combination orders. Since the subgroup of the order, which is to be modified, is predefined by the selection of the subgroup in the window from which the order was entered, the change-subgroup functionality cannot be supported for Order Maintenance. The current possibility to change the subgroup from the 'Select' menu item therefore will be removed with a/c/e 2.0 (Eurex 5.0).
OWN TRADE OVERVIEW	EEX, Eurex	For selected rows certain accumulations and averages are calculated on demand. Six new fields and two buttons are added to the window. The six fields are *TimeFrom, TimeTo, AccBuyQty, AvgBuyPrice, AvgSellPrice* and *AccSell* and the buttons are *Calculate* and *Clear.*
LAST ORDER MAINTENANCE	EEX, Eurex	Users will be able to select the G1 or G2 accounts for combination orders. Since the subgroup of the last entered order is predefined by the selection of the subgroup in the window from which the last order was entered, the change-subgroup functionality cannot be supported for Last Order Maintenance. The current possibility to change the subgroup from the 'Select' menu item therefore will be removed with a/c/e 2.0 (Eurex 5.0).

4.1.5 Menu Item "OTC"

Window name	Org.	Short description of change
OTC VOLA TRADE ENTRY	Eurex	NEW: The *OTC Vola Trade Entry* window allows the user to enter, modify, delete and approve off-exchange vola trade Future products. A list-box is used to collect several trades which then can be processed together.

4.1.6 Menu Item "Trading Support"

Window name	Org.	Short description of change
MARKET SUPERVISION MESSAGES	Eurex, EEX	The *Market Supervision Messages* window displays in its upper list box an overview of the market supervision messages already published or scheduled to be published by the exchange (e.g. new products, delay in trading start, suspension of a product, etc.).
PRODUCT STATISTICS OVERVIEW	Eurex, EEX	NEW: The *Product Statistics Overview* window delivers a quick overview on the derivatives market showing trade amounts for futures and options, with a distinction between call and put options. The *Product Statistics Overview* window displays all traded products as well as their trading currency and the traded volumes for the current day. For each derivatives market product the *Product Statistics Overview* window also displays the underlying name with its price, currency and trading exchange. The information displayed in the *Product Statistics Overview* window list box are sorted by product. The member can access the *Product Statistics Overview* window from the *Trading Support* menu.
CONTRACT STATISTICS OVERVIEW	Eurex, EEX	NEW: The *Contract Statistics Overview* window delivers a detailed overview on all tradable contracts of a selected product or profile. For any option product selected by the user the *Contract Statistics Overview* window displays a broad range of information. For every Options contract, it lists the last, day's highest and day's lowest price, trading volume, previous day's trading volume, average volume over the previous five days and open positions on the last trading day for both Call and Put contract. The same set of statistics is also presented for Futures contracts together with the volume of IPS contracts traded.

4.1.7 Menu Item “Security“

Window name	Org.	Short description of change
TRADER PRODUCT ASSIGNMENT MAINTENANCE	Eurex, EEX	NEW: The *Trader Product Assignment Maintenance* window is used to set up product assignments of traders. This window has two additional menu items *Add Product to Subgroup* and *Copy Product Assignment*. These items each display a popup dialogue (child window) to execute additional features. The window is static and therefore not dynamically updated. Assignments displayed in the *Trader Product Assignment Maintenance* list boxes are sorted by product Id.
ADD PRODUCT TO SUBGROUP	Eurex, EEX	NEW: The *Add Product to Subgroup* window enables the user to add a new product and associated maximum quantity to the list of products in which a trader subgroup may trade, or to amend the maximum quantity associated with the product.
COPY PRODUCT ASSIGNMENT	Eurex, EEX	NEW: The *Copy Product Assignment* window accepts the names of the source (“from”) and target (“to”) traders and passes them on to the back end for processing. For the last three characters of the target trader Id, a wildcard is accepted.
USER SECURITY PROFILE MAINTENANCE	Eurex, EEX	NEW: The *User Security Profile Maintenance* window is used to control the access of users to the exchange functions and to maintain security profiles of users. It displays the system functions and the user’s current access levels in several tab panes. The tabs group the functions by functional areas: Trading, Clearing, Security, and Administration.

4.2 Windows – @X-tract Clearing System

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

4.2.1 Main Clearing Menu

Window name	Org.	Short description of change
MAIN CLEARING MENU WINDOW	Eurex/ EEX	In the menu Settlement are the new items *Assignment Overview*, *Allocation Overview* and *Futures Deliverable Position Overview* introduced. A new menu *Collateral* is introduced, with items for *Contract Cover Assignment Overview* and *Security Deposit Overview*. A new menu *Risk Management* is introduced, with items for *Daily Margin Overview, Margined Position Overview, Guarantee Overview, Daily Settlement Overview* and *Excess Collateral Detail Overview.* A new menu *Cash* is introduced, with items for *Premium Variation Margin Fee Overview, Fee Adjustment Overview, Cash Account Detail Overview and Cash Withdrawal Request*. In the menu *Info* are the new items *Ticker Board, Product Statistics Overview, Contract Statistics Overview, Collateral Security Detail, Deliverable Bonds Overview, Margin Parameter Overview, Option Margin Parameter Overview* and *Exchange Rate Overview* introduced. A new menu *Member* is introduced, with items for *Member General Information, Member Relationship Overview* and *Report Selection.* A new menu *CSD* is introduced, with items for *Clearer Security CSD Maintenance, Security CSD Overview, Clearer Account Maintenance, Custodian Overview, CSD Overview.* A new menu *Security* is introduced, with items for *Trader Product Assignment Maintenance and User Security Profile Maintenance.*

4.2.2 Menu Item "Trade Management"

Window name	Org.	Short description of change
POSITION OVERVIEW	Eurex/ EEX	In the *Position Overview* window a new column is implemented displaying the abandoned positions from Automatic Exercise (AbandPos).
POSITION TRANSFER ENTRY	Eurex/ EEX	The validation of *Long* and/or *Short* quantity entered against the long and/or short positions available for transfer, as displayed in the *Position Overview* window is taken out.
POSITION DETAIL OVERVIEW	Eurex/ EEX	Additional optional filter criteria are added to the *Position Detail Filter* window. The criteria are as follows: trade type, transaction ID (without Suffix) from/to, order number, trader ID and the selection between full and active trade history. The full trade history includes reversals and original transaction. The active trade history displays the trades that are available for modification. The added *TrdUnit* field displays the trade unit of the contract. The items *Print* and *Export* are added to the menu item *Window*. Four new columns are implemented to display the following information: SuffixId (indicates the sequence number of a trade adjustment in chronological order), ParentSuffixId (indicates the parent-child relation of the adjustments), HIT (Historical Trade flag indicating if the underlying trade or trade adjustment is of the current or the previous trading day), and A/R (Adjustment/Reverse flag indicating if any tap is feasible, i.e. if the indication is A for adjusted or R for Reverse, no further adjustments can be done. Otherwise if it indicates N for New, any further adjustment is possible). The Position Detail Overview window is enhanced to distinguish OTC Vola Trades from on-exchange trades. For OTC Vola Trades, a "V" will appear for the trade type.
POSITION DETAIL MAINTENANCE	Eurex/ EEX	The *Position Detail Maintenance* window allows the exchange member to perform O/C trade adjustments and account transfers. There will be the same new implementation within the *Position Detail Maintenance* window as in the *Position Detail Overview* window.

Window name	Org.	Short description of change
TRADE SEPARATION	Eurex/ EEX	Within the *Trade Separation* window two new information fields are implemented: • SuffixId The Suffix ID indicates the sequence number of a trade adjustment in chronological order. • HIT The Historical Trade flag indicates if the underlying trade or trade adjustment is of the current or the previous trading day.
POSITION DETAIL FILTER	Eurex/ EEX	Additional optional filter criteria are added to the *Position Detail Filter* window. The criteria are as follows: trade type, transaction ID (without Suffix) from/to, order number and trader ID. To select trades with all trade types, the TrdTyp field is pre-filled with “*”. To select trades with the trade type " " - blank can be entered. Additional trade types: "E" - EFP Trade, "B" - OTC Basis Trade, "O" - OTC Block Trade, "V" - OTC Vola Trade. The radio button group *Full/Active* offers the possibility to change the display mode of the *Position Detail Overview* window to show either all trades including reversals and original transactions or trades that are available for modification.

Window name	Org.	Short description of change
GIVE-UP OVERVIEW	Eurex/ EEX	The *Give-up Overview* window displays all trade transactions that are valid for Give-up and allows the Give-up Member and his Clearing Member to handle trades or transactions for Give-up and Give-up acceptance. Give-up Exchange Members are allowed to modify and delete Give-up transactions or orders which are in Status “M“ (Give-up accepted). The Status is changed to “G“ (if Modified) or “ “ (blank if Deleted). To specify a contract or a product as filter criteria the entry line at the top of the window can be used. This entry line is disabled as long as no filter has been selected. Within the *Give-up Overview* window two new columns are implemented, displaying the following information: • SuffixId - The Suffix ID indicates the sequence number of a trade adjustment in chronological order. • HIT - The Historical Trade flag indicates if the underlying trade or trade adjustment is of the current or the previous trading day.
GIVE-UP FILTER	Eurex/ EEX	To select trades with all statuses, the Status field is pre-filled with “*”. To select trades with the status “ “ blank can be entered. Additional trade types: "E" - EFP Trade, "B" - OTC Basis Trade, "O" - OTC Block Trade, "V" - OTC Vola Trade. To select trades within a tranId-range the optional fields TranIdFrom and TranIdTo can be used. To select trades within a price-range the optional fields PriceFrom and PriceTo can be used.
GIVE-UP MAINTENANCE	Eurex/ EEX	Within the *Give-up Maintenance* two new columns are implemented, displaying the following information: • SuffixId - The Suffix ID indicates the sequence number of a trade adjustment in chronological order. • HIT - The Historical Trade flag indicates if the underlying trade or trade adjustment is of the current or the previous trading day.

Window name	Org.	Short description of change
TAKE-UP OVERVIEW	Eurex/ EEX	The *Take-up Overview* window displays all Give-up trades designated to the Exchange Member and allows the Exchange Member and his general Clearing Member to handle trades or transactions for Take-up and Take-up acceptance. To specify a contract or a product as filter criteria the entry line at the top of the window can be used. This entry line is disabled as long as no filter has been selected. Within the *Take-up Overview* window two new columns are implemented displaying the following information: • SuffixId - The Suffix ID indicates the sequence number of a trade adjustment in chronological order. • HIT - The Historical Trade flag indicates if the underlying trade or trade adjustment is of the current or the previous trading day.
TAKE-UP FILTER	Eurex/ EEX	To select trades with all statuses, the Status field is pre-filled with “*”. To select trades with the status “ “ blank can be entered. Additional trade types: "E" - EFP Trade, "B" - OTC Basis Trade, "O" - OTC Block Trade, "V" - OTC Vola Trade. To select trades within a tranId-range the optional fields TranIdFrom and TranIdTo can be used. To select trades within a price-range the optional fields PriceFrom and PriceTo can be used.
TAKE-UP MAINTENANCE	Eurex/ EEX	The *Take-up Maintenance* window allows the Take-Up Exchange Member to handle transactions or orders for Take-Up. Within the *Take-up Maintenance* two new columns are implemented, displaying the following information: • SuffixId - The Suffix ID indicates the sequence number of a trade adjustment in chronological order. • HIT - The Historical Trade flag indicates if the underlying trade or trade adjustment is of the current or the previous trading day.

4.2.3 Menu Item “Settlement“

Window name	Org.	Short description of change
EXERCISE OVERVIEW	Eurex	The *Exercise Overview* window displays the Exchange Member's open long positions. Additionally, the exercise and exercise adjustment of open long positions are possible via this window. In the *Exercise Overview* window new column (Aband Pos) which displays the positions abandoned from Automatic Exercise is implemented. The new Abandon function is implemented with the same logic as shown for exercising. To avoid false data entry the Abandon function will be implemented as a tab pane. The front pane will be the existing Exercise part of the window and the back pane will be the new Abandon function. On the Abandon tab there will be one entry field: AbandonPartial. In the AbandonPartial field the quantity of the selected positions which are to be abandoned from Automatic Exercise will be entered. To reduce the existing positions from abandonment a negative sign has to be entered before the number. If the field *All* is clicked all current open long positions of the selected rows will be abandoned. To prevent all future positions of a contract from automatic exercise, a maximum value or the high value has to be entered in the AbandonPartial field. If the *UnAbandonAll* field is clicked all the abandoned positions so far will be unabandoned, i.e. the values will be set to zero. With the Abandon button the action of abandoning will be initiated. The Clear button blanks the entry field. The quantity of abandoned positions will be independent of the current open long positions. There will be no automatic adjustment of the quantity of abandoned positions and no validation according to the changes in the open long positions.

Window name	Org.	Short description of change
AUTOMATIC EXERCISE PARAMETER OVERVIEW	Eurex	NEW: The Automatic Exercise Parameter Overview window allows the user to enter, modify, delete and view Minimum In-The-Money Amount limits for Automatic Exercise. It enables members to define an individual Minimum In-The-Money Amount per option product and per account either as an absolute quantity or as a percentage of the underlying price. In case automatic exercise is not desired, the Manual Exercise function automatically inserts the high value of 99,999.99. In the last two columns either the absolute Minimum In-The-Money Amount (code A), the percentage of the underlying price (code P) or the high value (code A) will be displayed. A multi-selection of one or more rows in the list-box will be possible.
ASSIGNMENT OVERVIEW	Eurex	NEW: The *Assignment Overview* window displays the number of assigned contracts per options series per exchange member per account. Positions displayed in the *Assignment Overview* listbox are sorted by exchange member and contract as listed in the profile. The *Sort* item on the Window menu allows the Trader to choose a user defined sorting.
ALLOCATION OVERVIEW	Eurex	NEW: The *Allocation Overview* window displays the ISIN, the name of the related underlying, the number of the assigned loans per bond futures contract and the settlement amount. The *Allocation Overview* window is not accessible to Non-Clearing Members. Positions displayed in the *Allocation Overview* listbox are sorted by clearing member, exchange member, contract(as listed in the profile), account and ISIN. A user-defined sorting can be set with the menu item Window – Sort.
FUTURES DELIVERABLE POSITION OVERVIEW	Eurex	NEW: The *Futures Deliverable Position Overview* window displays information about short, long, notified and pending give-up positions for bond futures that are at notification. The *Futures Deliverable Position Overview* window is not accessible to Non-Clearing Members. The listbox is sorted by exchange member and contract as listed in the profile. A user-defined sorting can be set with the menu item Window – Sort.

4.2.4 Menu Item “Collateral“

Window name	Org.	Short description of change
CONTRACT COVER ASSIGNMENT OVERVIEW	Eurex	NEW: The *Contract Cover Assignment Overview* window displays short option positions and allows the clearing member to cover them. The *Contract Cover Assignment Overview* window is not accessible to Non-Clearing Members. Positions displayed in the *Contract Cover Assignment Overview* listbox are sorted by clearing member, exchange member and contract as listed in the profile. The *Sort* item on the Window menu allows the Trader to choose a user defined sorting.
SECURITY DEPOSIT OVERVIEW	Eurex	NEW: The *Security Deposit Overview* window displays the balances and movements of the collaterals in the security deposit account. The *Security Deposit Overview* window is not accessible to Non-Clearing Members. The records in the *Security Deposit Overview* listbox are sorted by currency and ISIN. The *Sort* item on the Window menu allows the Trader to choose a user defined sorting.
SECURITY DEPOSIT DETAIL OVERVIEW	Eurex	NEW: The *Security Deposit Detail Overview* window displays the detailed transactions of the security deposit for a single security. The *Security Deposit Detail Overview* window is not accessible to Non-Clearing Members. Security transactions in the *Security Detail Overview* listbox are sorted by transaction day and transaction number. The *Sort* item on the Window menu allows the trader to choose a user defined sorting.

4.2.5 Menu Item “Risk Management“

Window name	Org.	Short description of change
DAILY MARGIN OVERVIEW	Eurex, EEX	NEW: The *Daily Margin Overview* window displays the options premium margin, futures spread margin, additional margin, unadjusted margin and total margin requirements for an Exchange Member. Exchange member and currency sort margin information is displayed in the Daily Margin Overview listbox.

Window name	Org.	Short description of change
MARGINED POSITION OVERVIEW	Eurex, EEX	NEW: The *Margined Position Overview* window displays the net positions per contract for an Exchange Member. Net Positions displayed in the *Margined Position Overview* listbox are sorted by exchange member, contract as per the selected profile and account type. A user-defined sorting can be set with the menu item Window – Sort.
GUARANTEE OVERVIEW	Eurex, EEX	NEW: The *Guarantee Overview* window displays the clearing guarantees pledged by other members for the specific Clearing Member. The *Guarantee Overview* window is not accessible to Non-Clearing Members. Guarantees displayed in the *Guarantee Overview* list box are sorted by the currency, guarantee type and guarantee number.
DAILY SETTLEMENT OVERVIEW	Eurex, EEX	NEW: The *Daily Settlement Overview* window displays the margin requirements and the margin surplus or shortfall. The cash information displayed in this window is related to previous trading day, which includes the start of day cash balance, the daily cash movement and the end of day cash balance. In addition, the *Daily Settlement Overview* also displays pending withdrawal requests for cash and security. The *Daily Settlement Overview* window is not accessible to Non-Clearing Members. The daily settlement information is displayed and sorted by currency.
EXCESS COLLATERAL DETAIL OVERVIEW	Eurex, EEX	NEW: The *Excess Collateral Detail Overview* window displays the estimated cover value (in a specific currency) that reflects the cash account balance, the evaluated collateral in the security deposit and the guarantee. The *Excess Collateral Detail Overview* window is not accessible to Non-Clearing Members. The total collateral is the sum of the cash amount, the security amount and the guarantee for the displayed excess collateral.

4.2.6 Menu Item “Cash“

Window name	Org.	Short description of change
PREMIUM / VARIATION MARGIN / FEE OVERVIEW	Eurex, EEX	NEW: The *Premium Variation Margin Fee Overview* window displays the premium, variation margin and fee movements per account for one clearing member – exchange member relationship and one currency. The information displayed in the *Premium Variation Margin Fee Overview* window is sorted by exchange member, currency and account. Exchange member or clearing member totals are calculated for all amounts.
FEE ADJUSTMENT OVERVIEW	Eurex, EEX	NEW: The *Fee Adjustment Overview* window displays the fee adjustments for one clearing member – exchange member relationship of the products in the selected profile. The *Fee Adjustment Overview* listbox is sorted by exchange member, product, account and fee type.
FEE ADJUSTMENT FILTER	Eurex, EEX	NEW: The *Fee Adjustment Filter* window specifies the filter criteria for the data to be displayed in the *Fee Adjustment Overview* window. The user can select a profile or product and has to specify the clearing member and the exchange member, optional are fee type and account.
CASH ACCOUNT DETAIL OVERVIEW	Eurex, EEX	NEW: The *Cash Account Detail Overview* window displays the individual cash transactions on the cash account for the selected currency. The currency is selected via the mandatory entry field above the listbox. When the window is opened from the *Daily Settlement Overview* window the transactions for the currency selected there are displayed The *Cash Account Detail Overview* window is not accessible to Non-Clearing Members. Cash transactions displayed in the *Cash Account Detail Overview* listbox are sorted by currency, transaction date and transaction ID.
CASH WITHDRAWAL REQUEST	Eurex, EEX	NEW: The *Cash Withdrawal Request* window displays the member’s cash account. The clearing member can also define a minimum amount to be kept in the account. The *Cash Withdrawal Request* window is not accessible to Non-Clearing Members.

4.2.7 Menu Item “Info“

Window name	Org.	Short description of change
MARKET SUPERVISION MESSAGES	Eurex, EEX	Clearing GUI *Market Supervision Messages* window changes are identical with *Market Supervision Messages* window of enhanced @X-ceed Trading GUI (see section 4.1.6).
SETTLEMENT PRICE OVERVIEW	Eurex, EEX	Clearing GUI *Settlement Price Overview* window changes are identical with *Settlement Price Overview* of enhanced @X-ceed Trading GUI (see section 4.1.6).
TICKER BOARD	Eurex, EEX	Clearing GUI *Ticker Board* window changes are identical with *Ticker Board* of enhanced @X-ceed Trading GUI (see section 4.1.2).
PRODUCT STATISTICS OVERVIEW	Eurex, EEX	Clearing GUI *Product Statistics Overview* window changes are identical with *Product Statistics Overview* of enhanced @X-ceed Trading GUI (see section 4.1.6).
CONTRACT STATISTICS OVERVIEW	Eurex, EEX	Clearing GUI *Contract Statistics Overview* window changes are identical with *Contract Statistics Overview* of enhanced @X-ceed Trading GUI (see section 4.1.6).
COLLATERAL SECURITY DETAIL	Eurex, EEX	NEW: The *Collateral Security Detail* window displays an accepted collateral of the clearing house and its market value as well as the amount recognized as cover value by the clearing house.
DELIVERABLE BONDS OVERVIEW	Eurex	NEW: The *Deliverable Bonds Overview* window displays all deliverable bonds for the selected contracts and the necessary information to calculate the conversion factors of these bonds. Only futures can be entered in the contract entry line or in the contract filter. If a profile is applied that contains options and futures all options are filtered out and not sent to the back end.
MARGIN PARAMETER OVERVIEW	Eurex, EEX	NEW: The *Margin Parameter Overview* window displays risk-based margin parameters, which are subdivided into class parameters and product parameters. The margin group information is displayed for every margin class (if applicable). The information for all margin classes and their corresponding margin groups are displayed in the *Margin Parameter Overview* list box and are sorted by margin group and margin class.

Window name	Org.	Short description of change
OPTION MARGIN PARAMETER OVERVIEW	Eurex	NEW: The *Option Margin Parameter Overview* window displays option margin parameters used for the calculation of the settlement prices using an option-pricing-model (Black-Scholes) and theoretical prices.
EXCHANGE RATE OVERVIEW	Eurex, EEX	NEW: The *Exchange Rate Overview* window displays for all currencies the exchange rates, conversion factors and decimal shift used by the clearing house. The *Exchange Rate Overview* window is not accessible to Non-Clearing Members. The exchange rates displayed in the list box are from the end of the prior day. They are sorted by currency.

4.2.8 Menu Item “Member“

Window name	Org.	Short description of change
MEMBER GENERAL INFORMATION	Eurex, EEX	NEW: The *Member General Information* window allows to inquire the member general information such as the member's address, CSD (Central Security Deposit) information and Give-Up information. The detail information like address, CSD and Give-up information is grouped using tab panes.
MEMBER RELATIONSHIP OVERVIEW	Eurex, EEX	NEW: The *Member Relationship Overview* window displays for a non-clearing member which clearing member he has a clearing agreement with and for a GCM all relations to NCMs. This window also allows the GCM to specify per relationship if give-up or take-up transactions are automatically accepted or not.

Window name	Org.	Short description of change
REPORT SELECTION	Eurex, EEX	NEW: The *Report Selection* window allows the user to select certain reports, which are generated and sent to the member during End of Day processing. Some reports can be obtained in two different types: formatted or raw data. If raw data reports are not available, the *RawRpt* listbox entry is empty. Periodical reports can be requested by selecting one single report listed in the Report Selection listbox, checking the *Standard* checkbox (for a formatted report), the *Raw Data* checkbox (for a raw data report, when appropriate) or both and then clicking the *Update* button. Daily and monthly reports are available. Historical reports can be requested up to four business days before the current day by selecting one single report listed in the Report Selection listbox, checking the *Standard* checkbox (for a formatted report, the *Raw Data* checkbox (for a raw data report, when appropriate) or both, entering a date in the *Date* field and then clicking *Update*. The dates for which historical reports have been requested are only kept on the back-end. The information is sorted by report ID.

4.2.9 Menu Item “CSD“

Window name	Org.	Short description of change
CLEARER SECURITY CSD MAINTENANCE	Eurex, EEX	NEW: The *Clearer Security CSD Maintenance* window allows the Clearing member to modify a CM defined security (ISIN)-CSD account relationship. A listbox is used to display the CM defined Security (ISIN)-CSD account relationship. All ISIN-CSD-relations of a Clearing Member are displayed in the listbox. In a first step the listbox is pre-filled with CM-ISIN-CSD relations that are automatically created from the Eurex System. The Clearing Member has the possibility to enter special requests concerning the CSD account he wants to use for the settlement of a specific security.
SECURITY CSD OVERVIEW	Eurex, EEX	NEW: The *Security CSD Overview* window allows Clearing Members to inquire per security the CSDs where they can be settled.

Window name	Org.	Short description of change
CLEARER ACCOUNT MAINTENANCE	Eurex, EEX	NEW: A clearing member can have accounts at different CSDs. The accounts are either own accounts of the clearing member or custodian accounts. Clearing members inform market supervision about their CSD accounts or used custodian accounts. Market Supervision maintains the accounts related to a clearing member in the *Clearer Account Maintenance* window. The order of the CSD accounts entered and displayed determine the priority of the CSDs used for automatic selection of default accounts per clearing member and security (see window *Clearer Security CSD Maintenance*). Clearing Members can only inquire the data.
CUSTODIAN OVERVIEW	Eurex, EEX	NEW: The *Custodian Overview* window allows Clearing Members to inquire the known custodians.
CUSTODIAN MAINTENANCE	Eurex, EEX	NEW: The Custodian Maintenance window allows Clearing Members to inquire detailed information about custodians.
CSD OVERVIEW	Eurex, EEX	NEW: On the new window *CSD Overview* Clearing Members can inquire all CSDs to which Eurex has an interface.
CSD MAINTENANCE	Eurex, EEX	NEW: On the new window *CSD Maintenance* Clearing Members can inquire further detail information about the CSDs to which Eurex has an interface.

4.2.10 Menu Item “Security“

Window name	Org.	Short description of change
TRADER PRODUCT ASSIGNMENT MAINTENANCE	Eurex, EEX	Clearing GUI security windows are identical with window of enhanced @X-ceed Trading GUI (see section 4.1.7).
ADD PRODUCT TO SUBGROUP	Eurex, EEX	Clearing GUI security windows are identical with window of enhanced @X-ceed Trading GUI (see section 4.1.7).
COPY PRODUCT ASSIGNMENT	Eurex, EEX	Clearing GUI security windows are identical with window of enhanced @X-ceed Trading GUI (see section 4.1.7).
USER SECURITY PROFILE MAINTENANCE	Eurex, EEX	Clearing GUI security windows are identical with window of enhanced @X-ceed Trading GUI (see section 4.1.7).

4.3 New and Modified Reports for Trading and Clearing

Report ID	Report Short Name	Org.	Short Description of Change
RPTCB010, RAWCB010	POSITION DETAIL	Eurex, EEX	The column fees will be deleted due to lack of space. Four new columns will be implemented: Suffix ID, Parent Suffix ID, Historical Indication (HIT), Adjustment/Reverse Indication (A/R) to indicate if an adjustment is either a reversal or an adjustment. Trades allowing further adjustments display a N in this column. The report is also available as Raw Data.
RPTCB030	POSITION TRANSFER OVERVIEW	Eurex, EEX	NEW: This report is a new report listing all Position Transfers of a member. It will be made available to all members.
RPTCB068	SYNCHRONOUS TRANSACTION MIX REPORT	Eurex, EEX	NEW: This report is a new report showing details about member transaction behavior. The three parts of the report show the total transactions of the member, the Transactions per member node and transaction details sorted by trader. The report will be made available to all members.
RPTCB102, RAWCB102	CASH SETTLED CONTRACTS	Eurex, EEX	This report shows the contracts that were settled in cash on the delivery day. The report also contains details of profits and losses produced by these contracts. The suffix id for Trade Adjustments was amended and renamed. The report is also available as Raw Data.

Report ID	Report Short Name	Org.	Short Description of Change
RPTCB110	ACCOUNT TRANSFER EXCEPTION	Eurex, EEX	This report shows the account and position transfers between the different accounts of an Exchange Member. Trade transfers between accounts of the same kind (Proprietary or Market Maker) will not be shown in the report, except for position transfers between M-Accounts. Position transfers are separated into option series and future contracts for each Exchange Member. The position movement is added up per account (Proprietary, Market Maker and Agent). For position transfers the following columns remain empty: "B/S", "O/C", "Price". Two additional columns are implemented: Suffix ID and Historical Indication (HIT).
RPTCB115	POSITION TRANSFER FOR EXPIRING EEX CONTRACTS	EEX	NEW: This report lists position transfers between contracts of different products belonging to a cascade due to contract expirations of a cascading product. The report is available for Market Supervision, NCMs and GCMs.
RPTCB130	GIVE-UP TRADE HISTORY	Eurex, EEX	This report shows all Give-up trades in chronological order.This report shows all pre-designated, designated and rejected Give-up trades. Also Give-up trades accepted by the recipient as Take-up are listed. The report shows detailed information on a Give-up trade history. The column B/S and O/C will be reduced to a one character column. The TRAN ID CODE will be named TRAN ID. Four new columns will be implemented: Suffix ID, Parent Suffix ID, Historical Indication (HIT), Adjustment/Reverse Indication (A/R) to indicate if an adjustment is either a reversal or an adjustment. Trades allowing further adjustments display an “N“ in this column. The Give-up Trade History report is enhanced to include OTC Vola Trades. The column “TRD TYP” shows the code “V” in case of an OTC Vola trade.

Report ID	Report Short Name	Org.	Short Description of Change
RPTCB140	ACCEPTED GIVE-UP TRADES	Eurex/ EEX	This report contains all accepted Give-up trades. Two additional columns will be implemented: Suffix ID and Historical Indication (HIT). The Accepted Give-up Trades report is enhanced to include OTC Vola Trades. The column “TRD TYP” shows the code “V” in case of an OTC Vola trade.
RPTCB150	TAKE-UP TRADE HISTORY	Eurex/ EEX	This report shows all Take-up trades in chronological order. The column B/S and O/C will be reduced to a one character column. Three new columns will be implemented: Suffix ID, Parent Suffix ID, Historical Indication (HIT). The Take-up Trade History report is enhanced to include OTC Vola Trades. The column “TRD TYP” shows the code “V” in case of an OTC Vola trade.
RPTCB160	ACCEPTED TAKE-UP TRADE	Eurex/ EEX	This report shows all accepted Take-up trades for the recipient. Two additional columns will be implemented: Suffix ID, Historical Indication (HIT). The Accepted Take-up Trade report is enhanced to include OTC Vola Trades. The column “TRD TYP” shows the code “V” in case of an OTC Vola trade.
RPTCC030	THEORETICAL VALUES	Eurex/ EEX	An additional field ‘Forward-underlying price’ with the same format like the actual underlying price was added. For the purpose of a Cross Margin Calculation a Position Splitting is performed. The report is modified to distinguish between contracts where there are crossed (overlapping) positions and contracts with non-crossed positions.
RPTCC042	LIQUIDATING VALUES FOR EEX PRODUCTS	EEX	For the purpose of a Cross Margin Calculation a Position Splitting is performed. The report is modified to distinguish between contracts where there are crossed (overlapping) positions and contracts with non-crossed positions.

Report ID	Report Short Name	Org.	Short Description of Change
RTPCC047	ADDITIONAL MARGIN FOR EEX PRODUCTS	EEX	For the purpose of a Cross Margin Calculation a Position Splitting is performed. In order to handle these modified positions correctly on the Additional Margin EEX Report it is modified to distinguish between contracts where there are crossed (overlapping) positions and contracts with non-crossed positions.
RPTCE010	IN-THE-MONEY ADVISORY	Eurex	This report is used to inform members about the balance of In-the-Money Series in the last days before their expiration. The report contains data on the series about to expire and is arranged by Clearing Member, Exchange Member, currency, account and product. It also gives the sum totals, by class and Eurex product as well as totals of the open positions and the total “in-the-money” amount. The existing report is extended by the information concerning the positions abandoned from Automatic Exercise.
RPTCE030	MEMBER EXPIRATION	Eurex	This report shows the current balance of a series in the last days before expiration. The report is arranged by account and gives the details of a series about to expire. Also, it gives the total of open positions and the total in-the-money amount by class, Eurex product and by Exchange Member. The existing report is extended for the information concerning the positions abandoned from Automatic Exercise.
RPTTC540	DAILY ORDER MAINTENANCE	Eurex	The EFP & Basis trades will be moved from the Daily Order Maintenance Report (RPTTC540) to the OTC Block Trade Maintenance Report (RPTTC545). The report will be renamed to OTC Trade Maintenance Report and will also contain the new OTC Vola Trades as described there.

Report ID	Report Short Name	Org.	Short Description of Change
RPTTC545	OTC TRADE MAINTENANCE	Eurex/ EEX	This report is enhanced to contain EFP and Basis Trades as well as the new OTC Vola Trades. The column “TRAD TYP” shows the following codes: • “B” = Basis Trades • “O” = Block Trades • “E” = EFP Trades • “V” = Vola Trades

5 Appendix A – Relation between FMS Screens and Windows

The following table contains a list of the former clearing screens. For each screen the related window is named.

Screen ID	Screen Name	Window
0000	Main Menu	**Main Menu**
A000	Member Security Coordinator Menu	n/a
A020	Trader Product Assignment	**Trader Product Assignment Mnt**
A042	User Setup Clearing Member	**User Security Profile Mnt**
A043	User Setup Member Screens	**User Security Profile Mnt**
A044	User Setup Trading Screens	**User Security Profile Mnt**
A045	User Setup Trading Commands	**User Security Profile Mnt**
A046	User Setup Futures Resources	**User Security Profile Mnt**
A047	User Setup API / Trading API	**User Security Profile Mnt**
A048	User Setup Clearing API	**User Security Profile Mnt**
B000	Clearing Main Menu	n/a
C040	**Product Overview**	**Product Statistics Overview**
C050	**Options Contract Overview**	**Contract Statistics Overview**
C060	**Options Market Statistic**	**Contract Statistics Overview**
C055	**Futures Contract Overview**	**Contract Statistics Overview**
C065	**Futures Market Statistics**	**Contract Statistics Overview**
D050	News Board Inquiry/Select	Market Supervision Messages
D055	News Board Display/Update	Market Supervision Messages
E020	Settlement Prices	Settlement Price Overview
F000	Positions Menu	n/a
F010	Position Summary Inquiry	Position Overview
F020	Position Detail Inquiry	Position Detail Overview
F030	Fee Inquiry	Premium / Variation Margin / Fee Overview
F040	Premium Inquiry	Premium / Variation Margin / Fee Overview

Screen ID	Screen Name	Window
F050	Clearing Instructions Selection	Position Detail Overview
F060	Trade Separation	Trade Separation
F070	Trade Open/Close Adjustment	Position Detail Maintenance
F080	Trade Account Transfer	Position Detail Maintenance
F100	Historical Trade Transfer	Position Detail Overview
G000	Daily Margin Menu	n/a
G010	Daily Margin Inquiry	Daily Margin Overview
G020	Margined Position Inquiry	Margined Position Overview
G025	Variation Margin Inquiry	Premium / Variation Margin / Fee Overview
G030	Margin Group Parameters	Margin Parameter Overview
G040	General Margin Parameters	Margin Parameter Overview
G050	Options Margin Parameters	Option Margin Parameter Overview
H000	Exercise/Assignment Menu	n/a
H010	In-The-Money Exercise/Inquiry	Exercise Overview
H020	Exercise Entry/Maintenance	Exercise Overview
H025	Notification Entry/Maintenance	Notification Overview
H030	Exercise/Assignment Delivery Summary	Exercise Assignment Summary Overview
H035	Notification/Allocation Summary	Notification Allocation Summary Overview
H038	Futures Deliverable Position Inquiry	Futures Deliverable Position Overview
H040	Exercise Inquiry	Exercise Overview
H050	Assignment Inquiry	Assignment Overview
H055	Allocation Inquiry	Allocation Overview
H060	Pending Delivery Inquiry	Delivery Overview
H070	Settlement Inquiry	Delivery Overview
I000	Daily Settlement Inquiry	n/a
I010	Cash Account Summary Inquiry	Daily Settlement Overview
I020	Cash Account Detail Inquiry	Cash Account Detail Overview

Screen ID	Screen Name	Window
I030	Contract Cover Assignment Entry	Contract Cover Assignment Overview
I040	Security Movement Inquiry	Security Deposit Overview
I050	Guarantee Inquiry	Guarantee Overview
I060	Security Summary Position Inquiry	Security Deposit Overview
I070	Security Account Detail Inquiry	Security Deposit Detail Overview
I080	Security Valuation Inquiry	Security Deposit Detail Overview
I090	Exchange Rate Inquiry	Exchange Rate Overview
I100	Daily Settlement Inquiry	Daily Settlement Overview
I110	Excess Collateral Inquiry	Excess Collateral Detail Overview
I120	Cash Withdrawal Request	Cash Withdrawal Request
I140	Cash Call Inquiry	Daily Settlement Overview
J000	Member Maintenance Menu	n/a
J010	Member Report Selection	Report Selection
J020	Member Positions	Position Overview/Position Adjustment
K030	Member Clearing General Information	Member General Information
K040	Member Relationships	Member Relationship Overview
K051	Maintain Security – Member Screen	Collateral Security Detail
K055	Deliverable Bond Maintenance	Deliverable Bonds Overview
K060	Transfer Member Positions	Position Transfer Overview
K080	Fee Adjustments	Fee Adjustment Overview
N000	Give-up Trades Main Menu	n/a
N010	Give-up Review	Give-up Overview
N020	Give-up Designation by Order	Give-up Maintenance
N030	Give-up Designation by Transaction	Give-up Maintenance
N040	Take-up Inquiry	Take-up Overview
N050	Take-up Acceptance by Order	Take-up Maintenance

Screen ID	Screen Name	Window
N060	Take-up Acceptance by Transaction	Take-up Maintenance

6 Appendix B – Eurex Functional Documentation

The new and updated documentation will be available in a simulation version in July 2001. Final versions will be distributed in September 2001.

Updated Eurex Documentation	
Document ID	**Name of the Document**
X0001200	Eurex Financial Data Disseminator
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 @X-tract Clearing User Guide
X0006600	Common MISS-Based Front-End Technical Overview
X0006800	Eurex Member Interface – File Interface Layouts
X0006900	Eurex @X-ceed Trading User Guide
X0007000	EurexPTC User Documentation
X0007100	@Eurex Front-End Installation Guide
X0007200	@Eurex Front-End Operations Guide
X0007300	@Eurex User Guide

7 Appendix C – Glossary of Terms and Abbreviations

Term	Resolution
@Eurex	Eurex Trading front end software for trading network access via common Internet access
@X-ceed	Name of the Java-based Eurex Trading front end application
@X-tract	Name of the Java-based Eurex Clearing front end application
a/c/e	Alliance CBoT Eurex
API	Application Programming Interface
A/R	Adjust / Reverse (trade)
BESS	Back-End Specific Subsystems are needed to access the exchange-specific back-end
CBF	Clearstream Banking Frankfurt
CM	Clearing Member (general term for DCMs and GCMs)
CSD	Central Securities Depository
DCM	Direct Clearing Member
DVP	Delivery versus Payment
EEX	European Energy Exchange
EFP	Exchange of Futures for Physicals (commodities)
Eurex®	European Exchange is an electronic trading and clearing system designed to support futures and options.
FDD	Financial Data Dissemination
FDP	Financial Data Providers
FMS	Forms Management System, VMS interface for terminal interactive applications
GATE	Generic Access To Exchange
GCM	General Clearing Member
HIT	Historical Trade flag (not to be confused with HiTT)
HiTT	Historical Trade Transfer
ID	Identification
ISIN	International Security Identification Number
ITM	In-The-Money

Term	Resolution
MISS	Member Integration System Server
NCM	Non-Clearing Member
O/C	Open / Close
OTC	Over-The-Counter (trade type)
Qty	Quantity
RPT	Report
RVP	Receive versus Payment
SIS	SegaInterSettle
UDP	User Datagram Protocol is a communications method (protocol) between computers in a network that uses the Internet Protocol (IP).
VALUES	Virtual Access Link Using Exchange Services is an Exchange developed and supported API, enabling members to interface their own applications to the Exchange.
X-ceed	Name of the legacy non-Java-based Eurex Trading front end application.
X-tract	Name of the Eurex 4.0 Java-based Eurex Clearing Front end application

X-pand into the **Future**

a/c/e 2.0 (Eurex 5.0)

Preliminary Technical Release Notes

© Eurex 2001

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

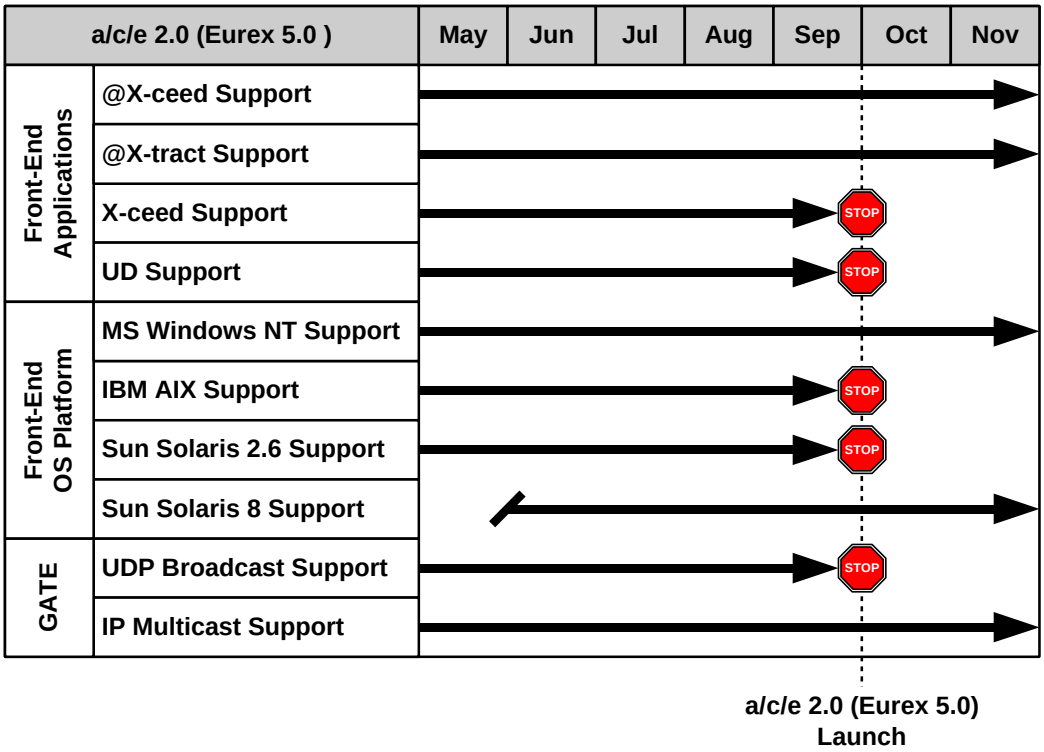
Table of Contents

1	**Introduction**	**3**
1.1	**Front-End - Support**	**3**
1.1.1	User Device Front End - Support Termination	3
1.1.2	MISS-based Front-End – Eurex Application Changes	4
1.2	**Operating System Platform Support**	**4**
1.3	**UDP Multicast to IP Multicast**	**5**
1.4	**Interface Modifications**	**6**
2	**General Information**	**7**
2.1	**Front-End Performance Enhancements**	**7**
2.1.1	Multi-Member MISS	7
2.2	**New Processing of Trade Adjustments – Layout Changes**	**7**
2.2.1	VALUES Change Summary	8
2.2.2	Affected Reports	8
2.2.3	Changes to VALUES application requests	8
3	**Interface Modification Details**	**11**
3.1	**Raw Data Interface**	**11**
3.2	**File Interface Layout Change – File FPICTHEA**	**11**
3.3	**File Interface Layout Change – File FPMGBPRM**	**13**
3.4	**Financial Data Disseminator (FDD)**	**14**
3.4.1	X.25 Protocol Replacement	14
3.4.2	Service Request Layout Changes	14
3.4.3	Changes in FDD Message Format	15
4	**Appendix A - Modification to Reports and Raw Data File Formats**	**16**
4.1	**Report Paths and Filenames**	**17**
5	**Appendix B – Eurex Technical Documentation**	**18**

1 Introduction

This document describes the technical changes to front-end support, operating system support, and member interfaces, as well as general changes which are introduced or modified as part of a/c/e 2.0 (Eurex 5.0). Changes to the GATE and VALUES interfaces are not described in this document, please refer to the related VALUES API modification announcements.

The following diagram shows the simplified a/c/e 2.0 (Eurex 5.0) platform support for 2001:



In this document the term ‘Eurex 5.0’ refers to the electronic system that serves both organizations Eurex *and* EEX in common.

If applicable, there will be separate release notes for CBoT.

1.1 Front-End - Support

1.1.1 User Device Front End - Support Termination

User Device / Satellite technology ceases to be supported with the introduction of a/c/e 2.0 (Eurex 5.0).

Members with existing UD terminals are advised to let the Eurex Help Desk change the UD report node to a MISS report node several weeks before production start of a/c/e 2.0 (Eurex 5.0).

1.1.2 MISS-based Front-End – Eurex Application Changes

The support for the Galaxy-based trading front-end software (X-ceed) will be terminated with the introduction of a/c/e 2.0 (Eurex 5.0). Eurex trading functionality will be exclusively supported with the enhanced Java-based @X-ceed application.

The updated Java-based trading and clearing front-end GUIs (@X-ceed and @X-tract) will include the functionality of the current FMS screens as described in the Preliminary Functional Release Notes, therefore the current separate MISS-based FMS application will become obsolete.

Members replacing the legacy X-ceed trading front-end with the @X-ceed application are advised to consult the Deutsche Börse Front-End Sizing Guidelines for details on the increased hardware requirements of @X-ceed.

Please note that there will be no user profile conversion utility available for the conversion of existing X-ceed profiles to @X-ceed profiles. However, a tool for the conversion of Eurex 4.1 @X-ceed user profiles to Eurex 5.0 @X-ceed user profiles will be distributed together with the a/c/e 2.0 (Eurex 5.0) front-end software kit, if necessary.

1.2 Operating System Platform Support

With the introduction of a/c/e 2.0 (Eurex 5.0), the new Eurex MISS-based Front-End is provided on two platforms:

- Intel PC / Windows NT 4
- Sun / Solaris 8

IBM / AIX support for the MISS-based front-end will be terminated with the introduction of a/c/e 2.0 (Eurex 5.0).

The UD Front-End platform support will not be continued after the 1st of October 2001, UDs have been supported on the following platforms:

- Compaq AXP / OpenVMS
- IBM RS/6000 / AIX

Support for UD OpenVMS or AIX platforms will be finally withdrawn on the 28th of September 2001.

For details on the supported operating system versions, patch levels and hardware requirements for MISSs and WSs, please refer to the Deutsche Börse Front-End Sizing Guidelines.

With the introduction of GATE 3.0 it is mandatory to upgrade existing member Sun Solaris 2.6 front-end machines to Sun Solaris 8. Details on the Sun OS upgrade will be made available in a forthcoming Eurex Circular.

1.3 UDP Multicast to IP Multicast

The GATE middleware application performs the distribution of private and public broadcast data (e.g. trade prices, order confirmation, etc.) between MISS and Workstation.

The introduction of a/c/e 2.0 (Eurex 5.0), scheduled for October 2001, will be based on the GATE version 3.0, which will only support IP Multicast.

Support for the UDP Broadcast protocol will not be continued in GATE Release 3.0. Consequently, the Broadcast Bridge software will become obsolete.

For Eurex members, this means that all MISS/Workstation LANs must be configured to support IP Multicast before the introduction of a/c/e 2.0 (Eurex 5.0). As IP Multicast is already supported in the current GATE 2.1 release, members may make the change at any time.

Members running a combined Eurex/Xetra MISS should also refer to Xetra Circular 014/01.

Members running an a/c/e platform for joint CBoT/Eurex access will be informed about the update procedure at a later date.

The use of IP Multicast requires no changes to the VALUES API, to broadcast data content, or to the sublist.dat file. The use of IP Multicast offers the following advantages:

- MISSs need no longer to be in the same LAN.
- Remote Workstation (broadcast bridge forwarder and broadcast bridge receiver) will become obsolete.
- TTL (Time To Live) scope can be configured.
- Separate multicast addresses can be defined for each broadcast stream type. Therefore filtering based on stream type is possible.
- All machines in a MISS group have to use the same multicast addresses.

For a detailed UDP Broadcast to IP Multicast Migration Overview please consult the forthcoming GATE 3.0 documentation. Current information relating to IP Multicast can be found in the documents “GATE Release 2.0 – IP Multicast” and “Front End Operations Guide – GATE” available on the web-site “www.eurexchange.com” under the path “Info for Members / Manuals / Release 4.1 / Production Manuals Release 4.1 – MISS”.

The documentation of a recently conducted Eurex IP Multicast workshop is available on the web-site “www.eurexchange.com” under the path “Info for Members / Special / a/c/e 2.0”.

1.4 Interface Modifications

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

- Raw Data Interface
- Financial Data Disseminator (FDD)
- File Interface Layout – FPICTHEA
- File Interface Layout – FPMGBPRM

For changes regarding the VALUES and GATE interfaces, 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 “Market Place / Programming to Eurex”.

Updated Sizing Information will be provided in the Deutsche Börse Front-End Sizing Guidelines.

2 General Information

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

The technical changes described in this document result from the following a/c/e 2.0 (Eurex 5.0) functional enhancements as described in the Preliminary Functional Release Notes:

The focus of a/c/e 2.0 (Eurex 5.0) is the introduction of the following features:

- New OTC Volatility Trade Entry
- New set of formulas in the Eurex OTC - Basis Trade Facility (BTF)
- Theoretical Price Enhancements for Eurex Options
- Introduction of Cascading Expiration for EEX Products.
- Completion of Clearing GUI (including Security Windows)
- CSD Selection per security
- Automatic exercise of in-the-money options
- An increased number of Trade Adjustments

Eurex/EEX is providing extended graphical user interfaces (GUIs) for Trading and Clearing. The updated Java-based trading and clearing front-end GUIs (@X-ceed and @X-tract) will include the functionality of the current FMS screens, therefore the separate MISS-based FMS application will become obsolete.

2.1 Front-End Performance Enhancements

On the front-end (MISS/WS) performance enhancements in the broadcast sector are introduced to reduce CPU load of the MISS and network load of the member LAN.

2.1.1 Multi-Member MISS

With the introduction of a configurable access control to private broadcast data on the front-end, the operation of Multi-Member MISSs will be supported.

2.2 New Processing of Trade Adjustments – Layout Changes

Here the changes resulting from the functional enhancement of an increased numbers of trade adjustments as described in the Preliminary Functional Release Notes are summarized.

2.2.1 Trade Adjustments - VALUES Change Summary

The present (Eurex Release 4.1) concept of handling trade adjustments (Trade Separation, Open/Close Adjustment etc.) involves the five-byte field “trnIdSfxNo”, using one byte to signify each adjustment that the trade has already undergone. Consequently, trades that have undergone no adjustment at all have this field blanked out. The concept does not allow for a sequence of more than five adjustments to one trade.

In the enhanced concept to be introduced with a/c/e 2.0 (Eurex 5.0), “trnIdSfxNo” will hold a numeric, consecutive value that uniquely identifies one transaction within the set of all transactions originating from the same trade. It will be possible to identify the “parent” transaction by evaluating the new field “trnIdSfxNoPnt”, which holds the parent transaction’s “trnIdSfxNo”. Please note that several transactions may share the same parent.

The original trade has “trnIdSfxNo”=”00000”; since it does not have a parent transaction the “trnIdSfxNoPnt” field does not hold meaningful data.

In addition, two new fields will be introduced: The first one indicates if a transaction has been subject to a Historical Trade Transfer, the other one specifies if the transaction has already been adjusted, if it is a trade reversal, or if it is still available for adjustment.

For full details regarding the VALUES interface changes, please refer to the related modification announcements.

2.2.2 Trade Adjustments - Affected Reports

The following list of reports will be modified as a result of the new processing of Trade Adjustments:

- RPTCB010 - Position Detail
- RPTCB110 - Account Transfer Exception
- RPTCB102 - Cash Settled Contracts
- RPTCB130 - Give-Up Trade History
- RPTCB140 - Accepted Give-Up Trades
- RPTCB150 - Take-Up Trade History
- RPTCB160 - Accepted Take-Up Trades
- RAWCB010 - Position Detail (Raw Data)

Full details will be provided in the Final Technical Release Notes.

2.2.3 Trade Adjustments - Changes to VALUES application requests

The following application requests use the transaction ID suffix and are therefore subject to change:

2.2.3.1 Sent by end-user application (Request)

- Accept Give-Up Transaction
- Accept Take-Up Transaction
- Delete Give-Up Transaction
- Enter Give-Up Transaction
- Enter Take-Up Transaction
- Modify Give-Up Transaction
- Reject Take-Up Transaction
- Undesignate Give-Up Transaction

2.2.3.2 Received by end-user application (Response):

- Inquire Give-Up
- Inquire Historical Position Transactions
- Inquire Position Detail
- Inquire Take-Up
- Subscribe Give-Up/Take-Up
- Subscribe Trade Confirmation

2.2.3.3 Sent and Received by End-User Application (Request and Response):

- Enter Historical Trade Transfer
- Enter Trade Account Transfer
- Enter Trade Open/Close Adjustment
- Enter Trade Separation

In Request structures, the old-style “trnIdSfxNo” will be replaced by two fields, which are the new-style “trnIdSfxNo” and the “trnHistAdjInd”.

In Response structures, there will be “trnIdSfxNo” (new-style), “trnIdSfxNoPnt”, “trnHistAdjInd” and “trnAdjStsCod”.

2.2.3.4 Backward Compatibility (Layout Compatibility only)

Note: Not all Application Requests are covered.

End-user applications developed and compiled for Eurex Release 4.1, and thus sending AVN_041 as application version identifier, can safely assume to use the layouts (byte offsets of data fields) specified with Eurex Release 4.1, even when using Application Requests with “trnIdSfxNo” inside. However, the field “trnIdSfxNo” itself will not deliver the old-style data available within “native” R4.1. Instead, only minimal information will be supplied: For an original trade, the field will be filled with spaces, otherwise, it will hold a differing value.

Since an end-user application using AVN_041 therefore has no way of knowing the old-style suffix, the following application requests cannot be used in the required way and are not supported at all for end-user applications using R4.1 backward compatibility:

- Enter Historical Trade Transfer
- Enter Trade Account Transfer
- Enter Trade Open/Close Adjustment
- Enter Trade Separation
- Accept Give-Up Transaction
- Accept Take-Up Transaction
- Delete Give-Up Transaction
- Enter Give-Up Transaction
- Enter Take-Up Transaction
- Modify Give-Up Transaction
- Reject Take-Up Transaction
- Undesignate Give-Up Transaction

All end-user applications that cover functionality provided in these application requests have to be changed to implement the new logic, and use the new application version number (AVN_050). In addition, all applications that make use of the field “trnIdSfxNo” (other than checking for spaces) have to be adapted.

3 Interface Modification Details

3.1 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 a/c/e 2.0 (Eurex 5.0) system enhancements, modified raw data files will be provided for members. For a summary of new or modified reports and raw data file formats, please consult Appendix A.

Details about the modifications will be published in the Final Technical Release Notes, which are to be published in June 2001.

3.2 File Interface Layout Change – File FPICTHEA

The file FPICTHEA contains derivative theoretical prices used for margining. Due to the Theoretical Price Enhancements for Eurex Options described in the Preliminary Functional Release Notes the file FPICTHEA layout was extended by a new entry :

10 THEO-UND-PRICE-RMICTHEA PIC X(9)

that is inserted after the CALC-UND-PRICE-RMICTHEA entry.

This entry contains the Forward Underlying price with the same format as the RPTCC030 report.

Further information can be found in the updated Member Interface – File Interface Layouts document.

Listed below is the record layout for the temporary file. The corresponding field level descriptions follow the record layout.

```
01  RMICTHEA-WS-REC.
      10  MGN-CLS-COD-RMICTHEA             PIC  X(5).
      10  SERI-GRP-ID-COD-RMICTHEA.
        15  SECU-ID-COD-RMICTHEA           PIC  X(4).
        15  SERI-CLAS-COD-RMICTHEA         PIC  X(1).
        15  SERI-EXP-DAT-RMICTHEA.
          20  EXPI-YR-DAT-RMICTHEA         PIC  9(2).
          20  EXPI-MTH-DAT-RMICTHEA        PIC  9(2).
        15  EXER-PRC-RMICTHEA              PIC  9(5).
        15  SERI-VERS-NO-RMICTHEA          PIC  9(1).
      10  CALC-BUC-PRICE-RMICTHEA          PIC  X(9).
      10  CALC-UND-PRICE-RMICTHEA          PIC  X(9).
      10  THEO-UND-PRICE-RMICTHEA          PIC  X(9)
      10  UD-IND-RMICTHEA                  PIC  X(1).
      10  STOCK-PRC-IND-RMICTHEA           PIC  X(1).
      10  THEO-VALUE-RMICTHEA              PIC  Z(4)9.9(6).
```

```
        10  EA-THEO-VALUE-RMICTHEA           PIC  X(9).
        10  SHORT-OPT-THEO-RMICTHEA          PIC  Z(4)9.9(6).
        10  SECU-LST-CLS-PRC-RMICTHEA        PIC  X(10).
        10  INTP-LST-CLS-PRC-RMICTHEA        PIC  X(10).
        10  SERI-LST-STL-PRC-RMICTHEA        PIC  X(10).
        10  MGN-INTERVAL-RMICTHEA            PIC  X(11).
        10  IMPLIED-VOL-RMICTHEA             PIC  Z(2)9.9(2).
        10  INTR-RAT-PCT-RMICTHEA            PIC  9(1).9(4).
        10  YIELD-RAT-PCT-RMICTHEA           PIC  9(1).9(4).
        10  SECU-TRD-UNT-NO-RMICTHEA         PIC  Z(3)9.9(4).
        10  SECU-TIC-SIZE-RMICTHEA           PIC  X(7).
        10  SECU-TIC-VAL-RMICTHEA            PIC  Z(3)9.9(2).
        10  SERI-STS-COD-RMICTHEA            PIC  X(1).
        10  MGN-STYLE-FLG-RMICTHEA           PIC  X(1).
        10  EXER-PRC-DECIMALS-RMICTHEA       PIC  9(1).
        10  CURR-DCML-SHFT-GRP-RMICTHEA.
          15  CURR-TYP-COD-RMICTHEA          PIC  X(3).
          15  DCML-SHFT-NO-RMICTHEA          PIC  9(1).
        10  DAYS-TO-EXP-RMICTHEA             PIC  Z(2)9.
        10  SECU-DIV-IDX-RMICTHEA            PIC  X(1).
        10  SECU-DIV-INFO-RMICTHEA.
          15  SECU-DAYS-TO-DIV-RMICTHEA      PIC  Z(2)9.
          15  SECU-FUT-DIV-AMT-RMICTHEA      PIC  Z9.9(2).
    01  RMICTHEA-FILE-INFO-REC REDEFINES RMICTHEA-WS-REC.      (last record)
        05  FILE-END-MARK-RMICTHEA           PIC  X(5).
        05  FILLER                         PIC  X.
        05  FILE-COUNTER-RMICTHEA            PIC  9(8).
        05  FILLER                         PIC  X.
        05  CURR-BUS-DAY-RMICTHEA            PIC  9(8).
        05  FILLER                         PIC  X.
        05  DESCRIPTION-RMICTHEA             PIC  X(80).
        05  FILLER                         PIC  X(79).
```

Field	Description
THEO-UND-PRICE-RMICTHEA	NEW: This entry contains the forward underlying price.

3.3 File Interface Layout Change – File FPMGBPRM

To enable clearing members to calculate additional margining, the back office systems are provided with information on the margin class mapping for bond securities resulting from both trades on Eurex Bonds as well as notification/allocation of a bond future in Eurex. 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.

Due to a modification in a/c/e 2.0 (Eurex 5.0), the field MGN-CLS-COD-RMMGPARM (from PIC X(4) to PIC (X5)) and the corresponding record size in GMMGPARM (from 64 to 65) have to be changed.

10 MGN-CLS-COD-RMMGBPRM X(5).

The new 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

Field	Format	Description
10 STD-STL-PERIOD-RMMGBPRM	9(3).	Standard settlement Period in days per Bond

There are no further changes necessary since margin class code is used with 5 characters everywhere else in the system.

3.4 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.

Technical details of the FDD changes are described in the following documents:

X0001200 EUREX Financial Data Disseminator - Real Time Datafeed

X000430A EUREX FDD File Service

X000430B EUREX FDD Infoboard Service

A preliminary version of these documents will be published at the end of April/beginning of May 2001.

Final versions of the documents will be available in July 2001.

The FDD changes with member impact are summarized below.

3.4.1 X.25 Protocol Replacement

Currently the Financial Data Disseminators (FDDs) use the X.25 communication protocol for the data transmission.

The FDD interface will no longer support the X.25 protocol after the introduction of a/c/e 2.0 (Eurex 5.0). The FDD information is now carried over the TCP/IP protocol.

3.4.2 Service Request Layout Changes

The layout of the service requests will be changed. Instead of the 4-digit Customer ID an 8-digit username has to be provided by the FDD user.

3.4.3 Changes in FDD Message Format

Generally, every message sent by the FDD interface contains a mandatory message type section, which consists of a message type (1 byte) and a length information (2 bytes). This change affects blocked messages and service status messages.

3.4.3.1 Blocked Messages

For blocked messages, a new message type will be introduced. The length field in the message type section defines the length of the whole message. The single FDD messages, which follow the message type section, have the same format as an unblocked data feed message.

3.4.3.2 File and Info Service Messages

For the different type of file and info service requests, a specific message type will be introduced. Additionally, the records sent during file and info service request processing contain a message type section. This section specifies the type of service required and the length of the following record including the message type section length.

4 Appendix A - Modifications to Reports and Raw Data File Formats

In a/c/e 2.0 (Eurex 5.0), the format of the file name of a number of reports and raw data files has been modified or created. The following reports and raw data files are affected:

REPORT NAME	CODE	RAW DATA
Member Position Transfer	RPTCA030	n.a.
Position Detail	RPTCB010	RAWCB010
Position Transfer Overview	RPTCB030	n.a.
Transaction Mix Report	RPTCB068	n.a.
Cash Settled Contracts	RPTCB102	RAWCB102
Account Transfer Exception	RPTCB110	n.a.
Position Transfer For Expiring EEX Contracts	RPTCB115	n.a.
Give-up Trade History	RPTCB130	n.a.
Accepted Give-up Trades	RPTCB140	n.a.
Take-up trade History	RPTCB150	n.a.
Accepted Take-up Trades	RPTCB160	n.a.
Theoretical Values	RPTCC030	n.a.
Liquidating Values for EEX Products	RPTCC042	RAWCC042
Additional Margin for EEX Products	RTPCC047	n.a.
In-The-Money Advisory	RPTCE010	RAWCE010
Member Expiration	RPTCE030	n.a.
Daily Order Maintenance	RPTTC540	n.a.
Daily Block Trade Maintenance	RPTTC545	n.a.

The raw data file formats will be published in the Final Technical Release Notes, which will be available in May 2001.

4.1 Report Paths and Filenames

The path names on the MISS platform are as follows:

- **Windows/NT :** C:\InetPub\ftproot\reports00
- **Sun Solaris :** /opt/gate/transferdir/reports00

The file name structure is as follows:

MEMBER/REPORT_CUR&EFF_DATE/REPORT_NAME.CLI

where:

MEMBER	Is a directory name consisting of Member institution (3 chars) and branch (2 chars)
REPORT_CUR&EFF_DATE	Is a directory name consisting of the current and effective dates without the century (YYMMDDYYMMDD)
REPORT_NAME or RAWDATA_NAME	Is the file name of one of the reports/files referenced above containing RPT (or RAW) and the report/file id (5 chars). If the report/file is split by product, the file name also contains the product type (4 chars) and security id (3 or 4 chars). If present, this is followed by the Clearing Member institution (3 chars) and branch (2 chars). If the file is not split by product, the Clearing Member Id follows the report name. The file extension .CLI follows the Clearing Member Id.

5 Appendix B – Eurex Technical Documentation

The simulation versions of the updated technical documentation will be available in July 2001. Final production versions will be distributed in September 2001.

Updated Eurex Technical Documentation	
Document ID	**Name of the Document**
X0001200	Eurex Financial Data Disseminator
X000430a	Eurex Financial Data Disseminator File Service Interface Specification
X000430b	Eurex Financial Data Disseminator Infoboard Service Interface Specification
X0005700	Eurex Front-End Installation Guide
X0005900	Eurex Front-End Operations Guide
X0006600	Common Front-End Technical Overview
X0006800	Member Interface – File Interface Layouts
X0007000	Eurex PTC User Documentation
X0007100	@Eurex Front-End Installation Guide
X0007200	@Eurex Front-End Operations Guide
XC006100	Deutsche Börse Front-End Sizing Guidelines

The following technical documents can be found on the Eurex web-site (www.eurexchange.com) under “Market Place / Programming to Eurex“. Updated a/c/e 2.0 (Eurex 5.0) versions of the VALUES developer documentation will be available at the end of April/beginning of May 2001.

VALUES API developer documentation (MISS)
Member Front End Development Guide - Overview
Member Front End Development Guide - Volume 1 - Call Interface
Member Front End Development Guide - Volume 2 - Eurex Application Requests, Responses and Subscriptions