X-pand into the Future

e u r e x *circular 041/06*

Date: Frankfurt, February 27, 2006
Recipients: All Eurex members and vendors, CCP members, Eurex Repo members, Eurex Bonds members
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CCP Release 3.1: CCP Connection Alternatives and Sizing Indication and Communication Calendar

Related Eurex Circulars: 257/05, 017/06

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Content may be most important for:	**Attachments:**
➲ All departments	1. CCP Connection Alternatives and Sizing Indication 2. Communication Calendar 3. SIS Power of Attorney

Summary:

Within the scope of the introduction of CCP Release 3.1 we publish today further information with regard to the necessary preparations of the Release start. After consultation with our participants this has been scheduled for **August 14, 2006**. The simulation environment will be available between **June 6, 2006 and August 4, 2006**, thus permitting an extensive test phase.

Please find attached to this circular:

- the document “CCP Connection Alternatives and Sizing Indication”
- the updated communication calendar which gives an overview on the most important dates in this context
- the power of attorney for SIS SegaIntersettle AG (SIS)
- a list of already published forms.

CCP Release 3.1: CCP Connection Alternatives and Sizing Indication and Communication Calendar

Within the scope of the introduction of CCP Release 3.1 we publish today further information with regard to the necessary preparations of the Release start. After consultation with our participants this has been scheduled for **August 14, 2006**. The simulation environment will be available between **June 6, 2006 and August 4, 2006**, thus permitting an extensive test phase.

Please find attached to this circular:

- the document “CCP Connection Alternatives and Sizing Indication”
- the updated communication calendar which gives an overview on the most important dates in this context
- the power of attorney for SIS SegaIntersettle AG (SIS)
- a list of already published forms.

In line with the provision of information with regard to CCP Release 3.1 introduction, Eurex circulars 257/05 and 017/06 announced the publication of legal and technical forms which were published on the Eurex website.

To download your personal copy please visit

www.eurexchange.com > Member Section > Documentation/Manuals CCP > CCP 3.1 > Legal Documents / Setup Accounts

We kindly ask you to return all forms by **March 31, 2006**.

CCP Connection Alternatives and Sizing Indication

With the introduction of CCP Release 3.1 the existing Eurex clearing licence will continue to be used for deliveries from the derivatives market. Nevertheless, each Eurex derivatives clearer will need a technical connection to CCP in order to have access to CCP processes, receive CCP reports and/or execute the Gross Delivery Management.

This document describes in detail the different connection alternatives to the CCP system and the corresponding system requirements on the side of the participant.

Communication Calendar

Attached please find the updated communication calendar for the introduction of CCP Release 3.1.

SIS Power of Attorney

Each derivatives clearing member which holds accounts at SIS and intends to use these for clearing Eurex transactions, must submit a separate power of attorney for each account used. By means of this power of attorney, which is designed as a power of attorney of the account holder vis-à-vis SIS, the account holder authorizes SIS, to give, modify and delete delivery instructions (for securities and cash). The power of attorney must be signed by authorized signatories whose specimen signatures had already been submitted to SIS beforehand.

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List of already Published Forms

- **CBF Power of Attorney**: By means of this power of attorney the account holder authorizes Eurex Clearing AG (ECAG) to give, modify and delete settlement instructions (for securities and cash). This power of attorney is valid for all CCP markets of Eurex Clearing AG (Eurex, FWB, Eurex Bonds GmbH, Eurex Repo GmbH) irrespective of the clearing license and substitutes the power of attorney valid so far.
- **Application for Setup/Deletion/Change of CCP Settlement Accounts for Eurex Deutschland**: A clearing member has to indicate the deposit number of its security deposit(s) used on the Application for Set up/Deletion/Change of Settlement Accounts for Eurex Deutschland.
- **Information Memorandum on Setup/Deletion/Change of Eurex Deutschland Settlement Accounts**: Detailed information about above application.
- **CCP Access Order Form: Order/Cancellation**: Order of a CCP connection alternative. Must only be submitted by a Eurex derivatives clearer who so far has no access to the CCP system.
- **Order Form for Setup/Change/Cancellation of a CCP Report Node:** Setup, change or cancellation of a CCP Member ID to a specific Delivery KV. Only return this form, if a new SNA/SWIFT connection has to be set up or technical changes be made.
- **Order Form for Setup/Change/Cancellation of CCP Settlement Reports File Transfer via z/OS (SNA) or SWIFTnet:** Setup, change or cancellation of reports (CE260 - Pending Deliveries, CE270 - Settled Deliveries) via z/OS File Transfer (SNA) Applications. Only return this form, if a new SNA/SWIFT connection has to be set up or technical changes be made.
- **Order Form for Setup/Change/Cancellation of a CCP Settlement Instruction Data Carrier File Transfer via z/OS (SNA) or SWIFTnet:** Setup**,** change or cancellation of the z/OS File Transfer (SNA) Application for submission of delivery instruction data carriers to the CCP system. Only return this form, if a new SNA/SWIFT connection has to be set up or technical changes be made.
- **Order Form for Setup of CCP User IDs (@X-PERT):** Assignment of read-only and modification rights in the CCP system and assignment of settlement accounts on member-/user level. Only return this form, if the settlement account has not yet been set up in the CCP system.
- **Request for Deletion/Modification/Password Reset of CCP User IDs:** Change and deletion of read-only or modification access rights in the CCP system as well as of settlement accounts on member-/user level. Only return this form, if there are changes to be made to already set-up users.
- **Request for Settlement Account Settings for Eurex Derivatives Deliveries (Previous CSD Selection):** Modify a CM-defined security (ISIN) - CSD relationship.

For further information about the already published forms please see the referenced circulars or the document **"CCP Connection Alternatives and Sizing Indication**". The documents are available for download under the path **www.eurexchange.com > Member Section > Documentation/Manuals CCP > CCP 3.1.**

The presentation for participants shown in workshops on CCP Release 3.1 was published in the Member Section of the Eurex website. To download your personal copy please visit:

www.eurexchange.com > Member Section > Documentation/Manuals CCP > CCP 3.1 > Functional Manuals > CCP 3.1 Roadshow Presentation.

Frankfurt, February 27, 2006

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CCP Release 3.1

CCP Connection Alternatives and Sizing Indication

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1 Introduction

With the implementation of CCP Release 3.1 Delivery Harmonization (CCP 3.1) Eurex Clearing AG integrates the processing of deliveries out of Notification/Allocation and Exercise/Assignment from the Eurex platform into the existing Central Counterparty platform (CCP).

Eurex deliveries are settled at CBF and SIS. Cash Settlement Locations are Deutsche Bundesbank and Swiss National Bank.

Dutch and US instruments denominated in Euro are newly added. This includes as well Dutch and US instruments from the cash market.

This document addresses market participants involved in deliveries of Eurex transactions and other Eurex Clearing Members. It provides an overview for CCP participants' connection alternatives and an indication regarding system sizing, to facilitate their participation in CCP Release 3.1. **The document focuses on the Eurex Derivatives market and does not cover member connectivity of other market segments.** The focus is to provide participants with fast and efficient access to the extended clearing services which will be implemented in CCP Release 3.1.

The foreseen connectivity options are in accordance with those in scope for the Equity CCP as well as FI CCP. Should a Eurex Derivatives market participant already have a CCP infrastructure in place for equities or the Eurex Bonds or Eurex Repo trading, this can be used for CCP 3.1, as further described in the following chapters. Apart from this, the **CCP connection alternatives for existing CCP members remain unchanged**.

The document contains necessary CCP member connectivity information, dependant on the member role, respectively selected function, in connection with trading, clearing and settlement. In addition, this document provides an indication of the recommended sizing for the CCP member-related infrastructure.

Chapter two describes the mandatory and optional information delivered from the various systems of Eurex Clearing AG according to the participant's future functions.

This could lead to modifications of the members' connectivity configuration where connections from Deutsche Börse AG / Eurex Clearing AG and the member already exist.

Chapter three provides an overview of the network architecture and the operating system environment. The following connection alternatives and combinations are offered:

- Via 64 Kbit/s or 128 Kbit/s on two leased lines (Premium)
- Via 64 Kbit/s or 128 Kbit/s on one leased line and an Internet VPN connection (Combined)
- Via 64 Kbit/s or 128 Kbit/s Internet VPN connection (iAccess)
- Usage of a existing Premium Eurex or Xetra connection

Additionally to the above mentioned options a z/OS Mainframe Connection can be used for receiving SWIFT-based reports intraday as well as for sending Member Settlement Instruction File (MSIF).

Chapter four provides an indication for the sizing of CCP MISS Installations when using the Browser Based User Interface.

2 Functional Connection Requirements

2.1 Member Functions

With the migration of the clearing functionality from Eurex Clearing to the CCP, the current Eurex Clearing Member structure, as well as the current member structure introduced with the CCP remains mainly unchanged.*

A member can perform the functions associated with trading and/or clearing and/or settlement, given it complies with the associated requirements and has been accordingly admitted.

Hence, the CCP differentiates between the following participant roles:

- Trading Member (TM)
  Trading Members in case of the CCP are financial institutions, financial services institutions and banking organizations, which participate in the Eurex Derivative trading. They are entitled to execute proprietary trades and agent trades.

  TMs are not intended to operate directly with the CCP, but can receive reports depending on the permission of their respective Clearing Member.

  As defined by Eurex Clearing, Trading Members who do not act as Clearing Members are also referred to as Non-Clearing Members (NCMs).

- Clearing Member (CM)
  A CM in case of the CCP is entitled to perform the clearing of deliveries out of Notification/Allocation and Exercise/Assignment. In addition, CMs are liable for the timely fulfillment of all payment and delivery obligations resulting from trades.

  Clearing members can have several clearing licenses, which are granted by Eurex Clearing for the clearing of different markets, i.e. the equity market (Xetra/FWB (Xontro)), Eurex Bonds, Eurex Repo and Eurex (Derivatives).

- Settlement Institution (SI)
  SIs** perform securities settlement via their accounts at one or several of the supported CSDs and/or cash settlement via accounts at one or several of the supported payment locations. They provide securities and/or cash settlement services between Eurex Clearing AG and the CM. However, the responsibility towards Eurex Clearing AG to fulfill trades by means of orderly settlement remains with the CM.

* For a detailed descriptions of the Eurex Clearing Member structure please refer to the Eurex Clearing Conditions

** "From a legal perspectives the CCP differentiate between Settlement Institute (SI) which is the owner of the respective settlement account and a possible third party who performs the Gross Delivery Management system and therewith the settlement. This third party is named as Settlement Agent (SA) or Gross Delivery Manager. There is no technical difference between SI and SA."

The following table shows all functions and available combination possibilities that participants may assume.

	Trading	Clearing	Settlement	Eurex Terminology
1	X			TM *(i.e. NCM)*
2	X	X		TM and CM is no SI, but is still liable for settlement
3	X	X	X	TM, CM and SI
4	X		X	TM *(i.e. NCM)* and SI
5		X		CM is no SI, but is still liable for settlement
6		X	X	CM and SI
7			X	SI

TM – Trading Member, CM – Clearing Member, SI – Settlement Institution, NCM – Non-Clearing Member

2.2 Information Groups

Depending on the future function or combination of selected functions the set of mandatory and optional information delivered from the various systems of Deutsche Börse AG / Eurex Clearing AG differs. There are the following major groups of information.

- Trade Confirmations
- Gross Delivery Management
- Settled Delivery (batch reporting)
- Settled Delivery (continuous reporting)
- Risk Management
- Corporate Actions
- Cash
- Collateral Management

The following table describes the information groups with regard to:

Type: dialog (D) or file based report (R)

Recipient: Trading Member, Clearing Member and Settlement Institution, either mandatory (M), optional (O) or not applicable (N/A)

Access Path: Eurex, CCP and z/OS Mainframe Connection*

The access path description “CCP” indicates that a connection to the CCP Back-End is required which can be established by different alternatives as described in chapter 1.

* Access via z/OS Mainframe Connection is limited in respect of GDM functionalities. Please refer to CCP 3.1 Release Notes

Information Group	Type	Recipient			Access Path
	R/D	Trading	Clearing	Settlement	via
Trade Confirmations	R	M	n/a	n/a	Eurex
Gross Delivery Management	D / R	n/a	M ***(read only)***	M	CCP or z/OS
Delivery (end-of-day)	R	O*	M	M	CCP
Settled/ Pending Delivery (intra-day/end-of-day)	R	O*	M	M	CCP or z/OS
Risk Management	R	O*	M	n/a	Eurex
Corporate Actions	R	O*	M	M	CCP
Cash	R	n/a	M	M	CCP
Collateral Management	D/R	n/a	M	n/a	Eurex

D = dialog, R = file based report, M = mandatory, O = optional, N/A = not applicable

* The Trading Member may receive the reports if permitted by its Clearing Member.

2.3 Network Requirements

Based on the mandatory and optional information groups, the network requirements for each participant structure are summarized below. To evaluate the individual connectivity options for CCP 3.1, we recommend each member to refer to the chapter which describes the own combination of performed functions with respect to trading and/or clearing and/or settlement.

	Trading	Clearing	Settlement	Connection to CCP Back-End	Relevant Chapter
1	X			optional CCP access	see 2.4.1
2	X	X		CCP access	see 2.4.2
3	X	X	X	CCP access	see 2.4.3
4	X		X	CCP access	see 2.4.4
5		X		CCP access	see 2.4.5
6		X	X	CCP access	see 2.4.6
7			X	CCP access	see 2.4.7

CCP connection alternatives to the CCP Back-End for Eurex Derivatives market participants are as follows:

1. via 64 or 128 Kbit/s on two leased lines (Premium)
2. via 64 or 128 Kbit/s on one leased line and an Internet VPN connection (Combined)
3. via 64 or 128 Kbit/s Internet VPN connection (iAccess)
4. Usage of an existing Premium Eurex or Xetra connection (see Note below)
   - 8 Kbit/s on a Eurex connection to connect to the CCP Back-End
   - 16 Kbit/s on a Xetra connection to connect to the CCP Back-End

Note: In case an existing Xetra connection is used which is not running across a 2 Mbit/s leased line, a z/OS connection is required to receive the intra-day reports. On a Eurex 2 Mbit/s line the FTP channel will be used for CCP reports (RAW and print format), hence in this case a z/OS connection is not necessary to receive intraday-reports.

A Multi-Member-MISS has to be connected via a Premium connection. Implementing an Internet connection is ruled out as a possibility for using the Multi-Member-MISS constellation.

Additionally the information groups Gross Delivery Management and Settled/Pending Delivery can be received via a z/OS (Mainframe) connection, e.g. if Swift-based reports are required. Although this connection alternative is possible for some of the reports, it is not recommended specifically, due to the fact that certain functionalities like e.g. linking are not available.

Should a member already have a CCP connection in place, e.g. for clearing and/or settlement in the equities or fixed income markets, this connection can be used.

Note: A Premium, Combined, iAccess or the usage of a existing Premium Eurex or Xetra trading connection is necessary. A Swift-Net connection only or z/OS connection only is not sufficient.

In general, it is recommended to use a dedicated CCP connection. However, in certain cases, the bandwidth of existing dedicated Xetra or Eurex lines can be shared with the CCP.

The bandwidth sharing of an existing Xetra and Eurex line is suitable for participants who

- are planning a moderate amount of inquiries,
- intend to make moderate use the CCP features which are offered on the CCP Front-End (e.g. linking of trades), or VALUES API based applications
- are considering that bandwidth sharing on existing Eurex lines may cause noticeable slow screen updates of the CCP Front-End,

Therefore, we would like to emphasize that the re-use of line bandwidth is not recommended for participants planning to make extensive use of CCP features* (e.g. linking of trades) or VALUES API based applications.

More detailed descriptions of the connection alternatives outlined above can be found in chapter 3.3 and in the following sections, of which each is dedicated to a listed combination of functions.

The aforementioned conditions should be borne in mind when evaluating the connectivity options described in the following.

* Please refer to CCP 3.1 Release Notes for additional information regarding the Gross Delivery Management functionality available via the CCP, z/OS.

2.4 Connection Requirements for each Participant Function

The following sections outline the connection requirements for possible member roles and respective function details.

To ease the search for the suitable connection requirements the reader should focus on the description of his individual combination of functions.

Participants that provide additional clearing or settlement services for other participants have to consider these functions separately and must combine the resulting connection requirements with their existing configuration.

2.4.1 Eurex Trading Member

The Eurex Trading Members will utilize their existing Eurex network unchanged.

A CCP network connection is required if the Trading Member requests one or several optional reports as listed in the table and if its Clearing Member permits this. This can be established via a new CCP connection or by sharing an existing bandwidth.

The reports are transmitted using the CCP network. If a z/OS Mainframe Connection exists for the member, the SWIFT-based intra-day reports; i.e. "CE270 - Settled Delivery" may be transmitted via the z/OS Mainframe Connection.

The table below summarizes the connection alternatives:

Information Group	Type	Recipient			Network
	R/D	Trading	Clearing	Settlement	Access Path
Trade Confirmations	R	M			Eurex
Settled Delivery (end-of-day)	R	O			CCP
Settled/ Pending Delivery (intra-day/end-of-day)	R	O			CCP or z/OS
Risk Management	R	O			Eurex
Corporate Actions	R	O			CCP

D = dialog, R = file based report, M = mandatory, O = optional, N/A = not applicable

2.4.2 Trading Member and Clearing Member

The Eurex Trading Members will utilize their existing Eurex network unchanged.

Network connections are required for collateral management, the Gross Delivery Management access and for the reports as listed in the table below.

Several options are available for report dissemination and additional information transfer:

1. All reports are transmitted using the CCP network. If a z/OS Mainframe Connection exists for the members the SWIFT-based intra-day reports i.e., "CE 270 Settled Delivery" may be transmitted via the z/OS Mainframe Connection.
2. A Clearing Member with a Eurex clearing license requires a Eurex network connection. For CCP, a CCP network connection is required. This can be established via a new CCP connection or by sharing an existing bandwidth.
3. The access to Gross Delivery Management is possible via the CCP network for the Clearing Member.

The table below summarizes the connection alternatives:

Information Group	Type	Recipient			Network
	R/D	Trading	Clearing	Settlement	Access Path
Trade Confirmations	R	M	n/a		Eurex
Gross Delivery Management	D	N/A	M *(read only)*		CCP
Settled Delivery (end-of-day)	R	O	M		CCP
Settled/ Pending Delivery (intra-day/end-of-day)	R	O	M		CCP or z/OS
Risk Management	R	O	M		Eurex
Corporate Actions	R	O	M		CCP
Cash	R	N/A	M		CCP
Collateral Management	D/R	N/A	M		Eurex

D = dialog, R = file based report, M = mandatory, O = optional, N/A = not applicable

2.4.3 Trading Member, Clearing Member and Settlement Institution

The Eurex Trading Members will utilize their existing Eurex network unchanged.

Network connections are required for collateral management, Gross Delivery Management access and for the reports as listed in the table below.

Several options are available for report dissemination and additional information transfer:

1. All reports are transmitted using the CCP network. If a z/OS Mainframe Connection exists for the member the SWIFT-based intra-day reports i.e., "CE270 - Settled Delivery" may be transmitted via the z/OS Mainframe Connection.
2. A Clearing Member with a Eurex clearing license requires a Eurex network connection. For CCP, a CCP network connection is required. This can be established via a new CCP connection or by sharing an existing bandwidth.
3. The performance of Gross Delivery Management activities is possible via the dedicated CCP network for the member in its role as a Settlement Institution. In addition, the z/OS Mainframe Connection could be used by the member to perform Gross Delivery Management activities.

The table below summarizes the connection alternatives:

Information Group	Type	Recipient			Network
	R/D	Trading	Clearing	Settlement	Access Path
Trade Confirmations	R	M	n/a	n/a	Eurex
Gross Delivery Management	D / R	N/A	M *(read only)*	M	CCP or z/OS
Settled Delivery end-of-day	R	O	M	M	CCP
Settled/ Pending Delivery (intra-day/end-of-day)	R	O	M	M	CCP or z/OS
Risk Management	R	O	M	N/A	Eurex
Corporate Actions	R	O	M	M	CCP
Cash	R	N/A	M	M	CCP
Collateral Management	D/R	N/A	M	N/A	Eurex

*D = **d**ialog, R = file based **r**eport, M = **m**andatory, O = **o**ptional, N/A = **n**ot **a**pplicable*

2.4.4 Trading Member and Settlement Institution

The Eurex Trading Members will utilize their existing Eurex network unchanged. Network connections are required for Gross Delivery Management access and for the reports as listed in the table below.

Several options are available for report dissemination and additional information transfer:

1. All reports are transmitted using the CCP network. If a z/OS Mainframe Connection exists for the member, the SWIFT-based intra-day reports i.e., "CE270 - Settled Delivery" may be transmitted via the z/OS Mainframe Connection.
2. Gross Delivery Management is possible via the dedicated CCP network for the member acting as a Settlement Institution. The CCP network connection can thus be established via a new dedicated CCP connection or by sharing an existing bandwidth. In addition, the z/OS Mainframe Connection could be used by the member to perform Gross Delivery Management activities.**

The table below summarizes the connection alternatives:

Information Group	Type	Recipient			Network
	R/D	Trading	Clearing	Settlement	Access Path
Trade Confirmations	R	M		n/a	Eurex
Gross Delivery Management	D / R	N/A		M	CCP or z/OS
Settled Delivery (end-of-day)	R	O*		M	CCP
Settled/ Pending Delivery (intra-day/end-of-day)	R	O*		M	CCP or z/OS
Risk Management	R	O*		N/A	Eurex
Corporate Actions	R	O*		M	CCP
Cash	R	N/A		N/A	CCP

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* The Trading Member may receive the reports if permitted by its Clearing Member.

2.4.5 Clearing Member

Network connections are required for the collateral management, the Gross Delivery Management access and for the reports as listed in the table below.

Several options are available for the dissemination and other information exchange:

1. All reports are transmitted using the CCP network. If a z/OS Mainframe Connection exists for the member the SWIFT-based intra-day reports i.e., "CE270 - Settled Delivery" may be transmitted via the z/OS Mainframe Connection.
2. A Clearing Member with a Eurex clearing license requires a Eurex network connection. CCP network connection can thus be established via a new CCP connection or by sharing the existing bandwidth.
3. The access to Gross Delivery Management is possible via the dedicated CCP network for the Clearing Member.
4. The table below summarizes the connection alternatives:

Information Group	Type	Recipient			Network
	R/D	Trading	Clearing	Settlement	Access Path
Trade Confirmations	R		n/a		Eurex
Gross Delivery Management	D		M *(read only)*		CCP
Risk Management	R		M		Eurex
Settled Delivery (end-of-day)	R		M		CCP
Settled/ Pending Delivery (intra-day/end-of-day)	R		M		CCP or z/OS
Corporate Actions	R		M		CCP
Cash	R		M		CCP
Collateral Management	D/R		M		Eurex

*D = **d**ialog, R = file based **r**eport, M = **m**andatory, O = **o**ptional, N/A = **n**ot **a**pplicable*

2.4.6 Clearing Member and Settlement Institution

A CCP network connection is required for collateral management, the performance of Gross Delivery Management activities and for the reports as listed in the table.

Several options are available for the dissemination and other information exchange:

1. All reports are transmitted using the CCP network. If a z/OS Mainframe Connection exists for the member the SWIFT-based intra-day reports i.e., "CE270 - Settled Delivery" may be transmitted via the z/OS Mainframe Connection.
2. A Clearing Member with a Eurex clearing license requires a Eurex network connection. CCP network connection can thus be established via a new CCP connection or by sharing an existing bandwidth.
3. The performance of Gross Delivery Management activities is possible via the dedicated CCP network for the Clearing Member / Settlement Institution. In addition, the z/OS Mainframe Connection could be used by the Clearing Member / Settlement Institution to perform Gross Delivery Management activities.*

The table below summarizes the connection alternatives:

Information Group	Type	Recipient			Network
	R/D	Trading	Clearing	Settlement	Access Path
Trade Confirmations	R		n/a	n/a	Eurex
Gross Delivery Management	D / R		M	M	CCP or z/OS
Settled Delivery (end-of-day)	R		M	M	CCP
Settled/ Pending Delivery (intra-day/end-of-day)	R		M	M	CCP or z/OS
Risk Management	R		M	N/A	Eurex
Corporate Actions	R		M	M	CCP
Cash	R		M	M	CCP
Collateral Management	D/R		M	N/A	Eurex

*D = **d**ialog, R = file based **r**eport, M = **m**andatory, O = **o**ptional, N/A = **n**ot **a**pplicable*

* Please refer to CCP 3.1 Release Notes for additional information regarding the Gross Delivery Management functionality available via the CCP, z/OS.

2.4.7 Settlement Institution

A CCP network connection is required for the performance of Gross Delivery Management activities and for the reports as listed in the table below.

Several options are available for the dissemination and other information exchange:

1. All reports are transmitted using the CCP network. If a z/OS Mainframe Connection exists for the member the SWIFT-based intra-day reports i.e., "CE270 - Settled Delivery" may be transmitted via the z/OS Mainframe Connection.
2. Gross Delivery Management can be performed via the dedicated CCP network for the member acting in the role of a Settlement Institution. The CCP network access can be established via a new dedicated CCP connection or by sharing the existing bandwidth. In addition, the z/OS Mainframe Connection could be used by the member to perform Gross Delivery Management activities.

The table below summarizes the connection alternatives:

Information Group	Type	Recipient			Network
	R/D	Trading	Clearing	Settlement	Access Path
Trade Confirmations	R			n/a	Eurex
Gross Delivery Management	D / R			M	CCP or z/OS
Settled Delivery (end-of-day)	R			M	CCP
Settled/ Pending Delivery (intra-day/end-of-day)	R			M	CCP or z/OS
Corporate Actions	R			M	CCP
Cash	R			M	CCP

*D = **d**ialog, R = file based **r**eport, M = **m**andatory, O = **o**ptional, N/A = **n**ot **a**pplicable*

3 CCP Network Architecture

3.1 Overview

The CCP Online Management Front-End provides the whole functionality offered by the CCP architecture through a client-server-based system. CCP is a client-/server system consisting of a CCP Back-End and a member installation. Some of the functionality is decentralized on the CCP member's installations (also called in short form CCP Front-End) and other parts are centralized on the CCP Back-End. Communication is realized via a dedicated CCP network or via sharing the current Xetra or Eurex networks.

CCP provides a user interface using web browser technology (HTTP client) as well as a programmable interface.

The programmable interface to the CCP Online Management System is based on the VALUES API (**V**irtual **A**ccess **L**ink **U**sing **E**xchange **S**ervices).

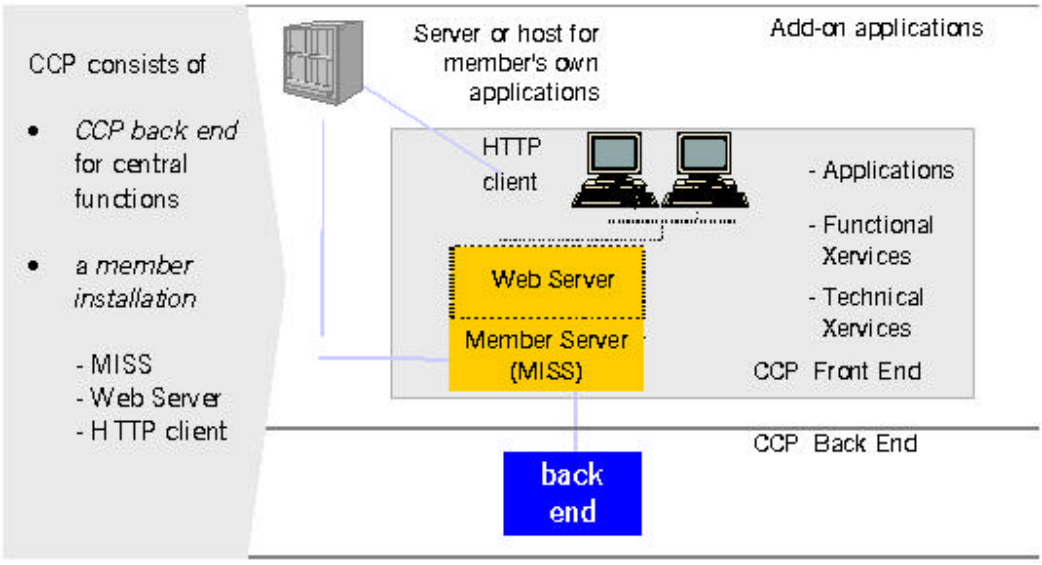


Figure 3-1: CCP architecture (Back-End and Front-End)

A members* installation consists of one or more member servers (MISS = **M**ember **I**ntegration **S**ystem **S**erver), which can be configured to provide a failover capability in case of a failure of a single MISS. The MISS acts as a server to connect Workstation computers or HTTP clients running the browser based user interface.

The member's front architecture mainly consists of two components: GATE (**G**eneric **A**ccess **T**o **E**xchange) and CCP BESS (**Back-End S**ub **S**ystem).

GATE serves as common architecture component and provides access to the Technical Xervices**. The CCP BESS components provide the CCP Functional Service. This architecture concept allows an

* If not mentioned explicitly a member shall be a Trading Member or Clearing Member or Settlement Institution
** Xervice (eXchange Services) are modules, which provide common execution and operation services to Front-End Exchange applications, e.g. CCP, Eurex, Xetra.

integration of different electronic Deutsche Börse platforms via the programmable VALUES interface on one MISS infrastructure, e.g. CCP, Eurex and Xetra. See also Figure 3-2.

Additionally, the programmable interface can be provided on an architectural CCP client of the member server. This client is called workstation and is optional. The workstation gives the member the option to distribute own third party applications within its member in-house LAN.

A member installation can be built up in different ways to meet different levels of availability. Eurex Clearing AG recommends installing two MISSes within one LAN in order to build up a MISS group. The MISSes within a MISS group provide a backup for each other. A member installation consisting of two MISSes within one LAN, both are registered as one MISS group, is called a “high availability” configuration.*

In contrary to the high availability configuration, a minimum configuration would be built up by one instead of two MISSes. This type of configuration provides a low cost and a low availability member installation. It is possible to get connection to CCP with a stand-alone MISS as single-user system.

Member configurations can be scaled according to their needs as changes can be requested in advance (e.g. additional MISS) to be registered within the CCP. If a member wants to start with a connection via a minimum configuration, the member can upgrade this configuration in the future. The necessary Change Management is done by Technical Member Readiness a unit of the section Customer Technical Support of Deutsche Börse Systems.

The base connection for a member is to have one or two member servers (MISS) being connected to the CCP, Eurex, or Xetra network.

It is possible to have a dedicated CCP MISS or an existing Eurex and/or Xetra MISS to be used for connection to the CCP. In order to establish connectivity to the CCP, network connections can be realized either via bandwidth on leased lines or via the internet

* Eurex Clearing AG highly recommends implementing a "high availability" configuration for all clearing members and settlement institutions.

3.2 Web Browser Based User Interface

The user interface provided by Deutsche Börse is browser based and runs on a HTTP client supporting Microsoft Internet Explorer 6.0 and Mozilla 1.7.2. The browser connects via http with the Tomcat webserver servlet container. The Tomcat webserver is running on the MISS.

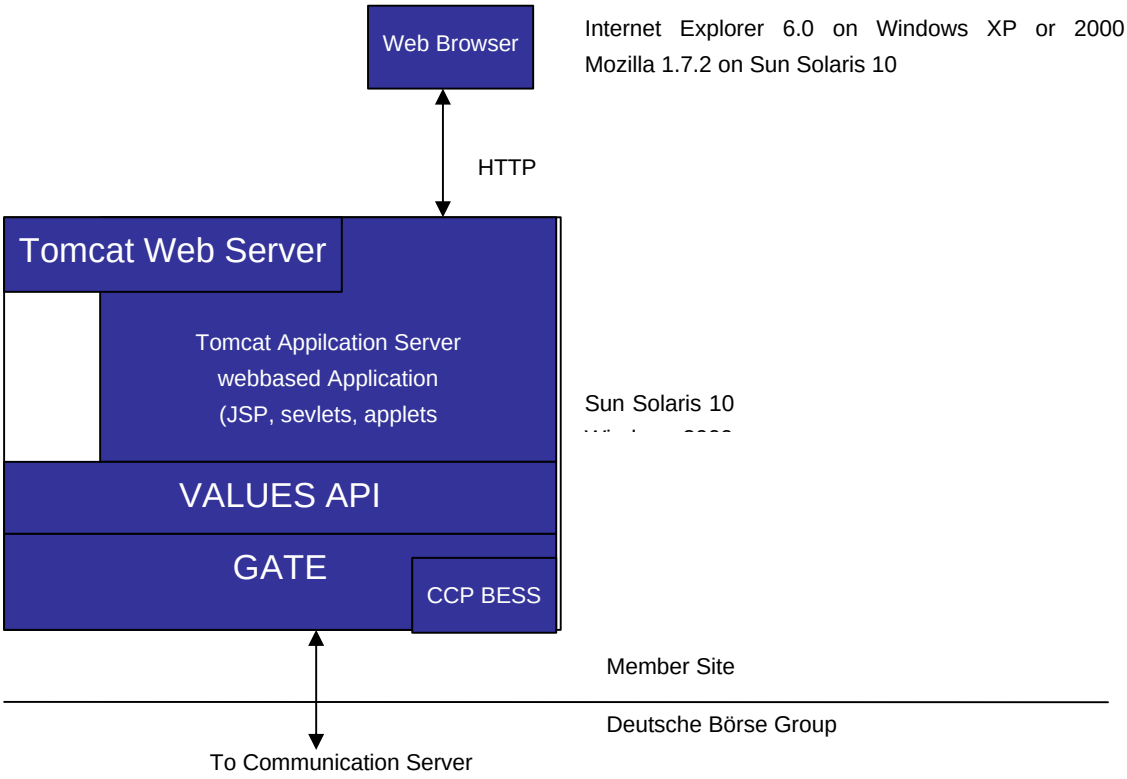


Figure 3-2: CCP MISS based Browser Front-End - Architecture

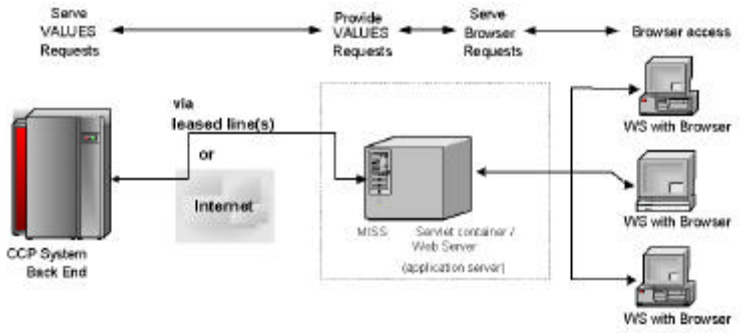


Figure 3-3: CCP MISS based Browser Front-End - Connection

The Web Server and Tomcat servlet container will be provided as part of the CCP software and cannot be replaced by analogous software.

3.3 Operating System Platforms

The CCP MISS Software supports the following platforms:

- Sun Solaris 10 hardware revision 03/05 or higher
- MS Windows 2000 Server (Intel, English standard version) Service Pack 4

The CCP Workstation Software supports the following platforms:

- Sun Solaris 10 hardware revision 03/05 or higher
- Microsoft Windows 2000 Professional Version (Intel) English Service Pack 4
- Microsoft Windows XP Professional Version (Intel) English Service Pack 2

Note: The following Table shows the supported combinations of MISSes and Workstations:

	Solaris Workstation	**Windows 2000 Workstation**	**Windows XP Workstation**
Solaris MISS	supported	supported	supported
Windows 2000 MISS	***not supported***	supported	supported

Note: The number of computers accessing and using services of Windows 2000 Professional is limited from a license perspective on the Microsoft Windows platform. In case that a specific installation exceeds the license regulation, Microsoft Windows 2000 Server (Intel) English Service Pack 4 must be installed instead.

4 Sizing Indication

This chapter gives an indication for the sizing of CCP MISS installations when using the Browser Based User Interface based on Tomcat Servlet Container. It does not provide sizing information for MISS or Workstation installations using 3rd party applications.

The MISS is designed to run several services (i.e., CCP, Eurex, and Xetra) in parallel. For installations running combinations of services on a single system the total sizing can be determined by adding the sizing requirement for each individual service. It should be considered that in installations with only one MISS running several services, all services would be unavailable after the failure of the MISS when no failover is provided.

The following sizing guidelines cover only the CCP MISS software recommendations. They do not include requirements caused by the operating system, layered products (e.g. NFS or NIS) or other application software.

All CPU sizing figures are given as SPECInt2000 values.

Note: The SPEC organization has collected all official measured SPECint2000 values. SPEC provides these values on the website http://www.spec.org for free access.

4.1 Assumptions

The guidelines are based on the following assumption:

- The sizing indication is only valid for MISS installations with Tomcat Servlet Engine serving Browser Based HTTP Clients.
- The sizing indication does not cover MISS or Workstation installations with 3rd party software.
- For the sizing of the HTTP Clients please refer to the specification of the used browser.

4.2 Sizing Drivers

The CCP Front-End sizing requirements are driven by the number of parallel served users and the level of activity to be supported. The Front-End essential activities are mainly the processing of requests and responses triggered by the users.

4.3 Sizing Indication CCP MISS

The figures in the following chapters are valid for installations serving up to 30 HTTP Clients in parallel. For higher requirements, scaling can be achieved by using multiprocessor systems and adding more physical memory.

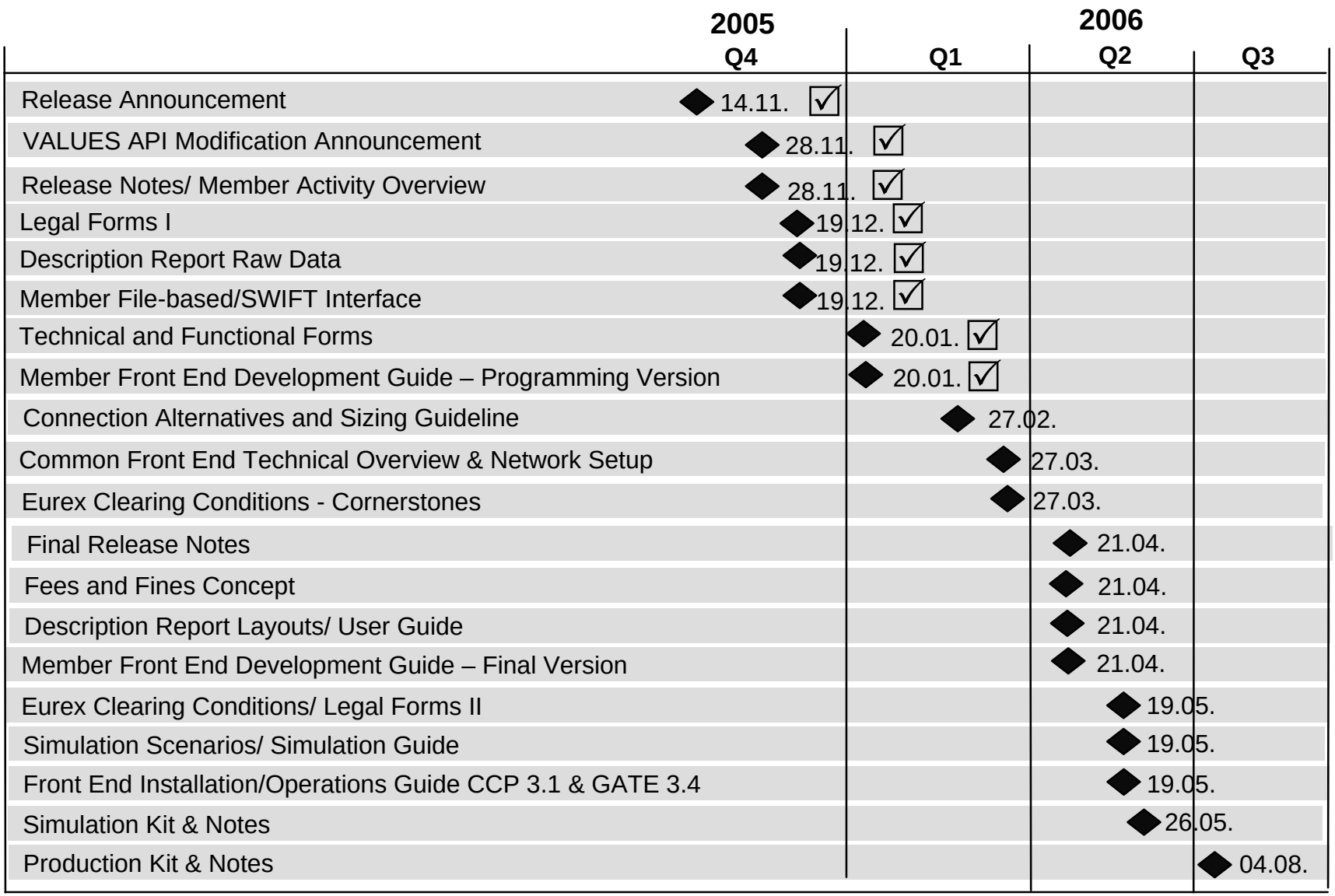
4.4 CPU

As a minimum configuration for a CCP MISS serving 30 HTTP Clients a CPU with at least 375 SPECint2000 is required. This applies to SUN Solaris as well as Microsoft Windows 2000.

4.5 Physical Memory

As a minimum configuration for a CCP MISS serving 30 HTTP Clients at least 1024 MB of physical memory is required. This applies to SUN Solaris as well as Microsoft Windows 2000.

CCP Release 3.1 Communication Calendar



Power of Attorney

From:

_____

(the "SIS Participant")

To:

Eurex Clearing AG
Neue Börsenstraße 1
60487 Frankfurt am Main
Deutschland

The SIS Participant appoints EUREX Clearing AG, Neue Börsenstraße 1, 60487 Frankfurt am Main, Deutschland (the "Attorney") to be its attorney for the following purposes:

a) to transmit, to change or to cancel any settlement instructions on behalf of the SIS Participant resulting from the clearing of transactions in accordance with, or purporting to be in accordance with, the Clearing License granted by the Attorney to the SIS Participant or to a third party, on the following account of the SIS Participant at SIS SegaInterSettle AG

Brandschenkestrasse, CH-8002 Zürich ("SIS"):

_____

_____

b) to receive from SIS all information of any kind on the status of the instructions transmitted by the Attorney.

All instructions, notifications or communications given by the Attorney to SIS shall be carried out in compliance with the format, modes of communication and procedures notified by SIS.

The SIS Participant agrees that it shall be fully liable for any and all obligations created on its behalf pursuant to the authority or legitimately purported authority of this power of attorney and agrees that it shall be bound to whatever the Attorney causes to be done under the authority or legitimately purported authority of this power of attorney.

This power of attorney shall remain valid until notice of revocation or amendment is received from the Attorney by Registered Letter. Any such revocation or amendment shall take effect on the second business day in Frankfurt after receipt of the notice by SIS or such other later date specified in the notice accordingly. The Attorney shall inform SIS immediately about the revocation of this power of attorney.

The Attorney is a recognized clearing house within the meaning of Section 36 letter b of the SIS General Terms and Conditions. Accordingly, the SIS Participant (the “Principal”) accepts the credit transfer orders transferred by the Attorney of SIS as its own, and SIS is authorized, pursuant to such orders – as described above under a and b – to execute the relevant entries.

This power of attorney is governed by and shall be construed in accordance with the laws of the Federal Republic of Germany.

_____

Name of SIS Participant

_____

Date, Name of Signatory, Signature