XETRA Circular 162/04

Deutsche Börse

To the Xetra® Members and Vendors

Recipients: Project Coordinators

New Stock Market Pricing: November 18, 2004
Member Simulation Information in the Context
of Xetra Release 7.1 Simulation and
Permanent Simulation

Dear Sir or Madam,

With this circular we provide you with information on simulation of the new Stock Market Pricing model.

The simulation will be provided between November 22 and December 10, 2004 and conducted in the context of Xetra Release 7.1 Simulation and the following Permanent Simulation (Xetra, CCP and related systems). As already announced with Xetra circular 138/2004, the new Stock Market Pricing model will be launched on January 3, 2005.

The document "Member Simulation Information" describes the simulation concept for the new Stock Market Pricing model. It serves as planning basis for the preparation and execution of members' activities in order to enable a successful simulation and gives an overview of key data (for example simulation calendar, affected reports).

To participate in Stock Market Pricing simulation and production launch, no additional member front end software installation is necessary.

The document "Member Simulation Information" is immediately available on our website for downloading under the path:

www.deutsche-boerse.com > Trading & Clearing > Trading Members > Members Only > Xetra/Floor > Xetra Documentation.

XETRA

Xetra Central Circular Management
Tel.: +49-69-211-1 96 20, Fax: +49-69-211-1 44 91
E-Mail: circular.xetra@deutsche-boerse.com, Internet: www.xetra.de

Should you have any further questions or need additional information please do not hesitate to contact the Customer Support Team at

telephone   +49-69-211-1 16 40
fax   +49-69-211-1 16 41.

For technical questions please contact the Xetra Technical Helpdesk at

telephone   +49-69-211-1 84 00
fax   +49-69-211-1 84 01.

Yours faithfully

Jens Hachmeister   Axel Birk

Enclosure

Stock Market Pricing

Member Simulation Information

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1 Introduction

1.1 General Simulation Concept for Stock Market Pricing (SMP) and for new Fee Structure of Clearing and Settlement of Frankfurt Stock Exchange Trades

Starting on January 1, 2005, Deutsche Börse is introducing a new pricing model for equities trading. The most significant changes are a differentiation of fees for all three steps of the process chain trading, clearing and settlement, as well as a redefinition of the pricing basis in clearing.

In the new pricing model, clearing costs will be displayed separately from settlement costs, and the settlement fee will be calculated according to the resulting settlement instructions. Participants benefit in settlement directly from the consolidation of transactions in clearing (netting).

Moreover, the clearing charge for Xetra transactions in no longer calculated based on partial executions within a trade, but on the basis of executed orders. This pricing model makes it possible for participants to calculate not only the trading charge, but also the fees for clearing before an order is executed.

For details refer to related SMP documents (listed in section 1.4).

The Member Simulation Information describes the simulation approach for the new Stock Market Pricing. It provides an overview of key dates for the preparation and successful execution activities in simulation. It contains all necessary information (schedule, calendar).

Deutsche Börse offers an opportunity to simulate and familiarize with the new transaction and service fees for the Stock Market. This is provided on the basis of the Xetra Release 7.1 Simulation and the current CCP Permanent Simulation. Due to differing simulation calendars, XONTRO systems will not participate in SMP Simulation (please be aware that a new XONTRO release will be launched in production on November 22, 2004).

The entire process chain, including CCP, Risk Engine and CBF/CASCADE, is available for three weeks, from November 22, 2004 to December 10, 2004. In Xetra Release 7.1 Simulation, the new fee parameters have already been effective since business day November 2, 2004. All other changes will become effective with simulation start on November 22, 2004.

1.2 Intended Audience

This document is intended for the members' project coordinators responsible for the introduction of new Stock Market Pricing. Various member departments as well as third parties may be involved in the effort for Stock Market Pricing simulation, such as:

- Trading Departments

- Back office and settlement functions, including members' clearing banks if applicable

- IT departments

- Organizational departments

- Software vendors

We recommend that this document is communicated as soon as possible within the members' project teams and beyond to the line organizations where applicable.

1.3 Objectives of the Simulation

The purpose of Stock Market Pricing simulation is to provide an opportunity for members and vendors to become familiar with the new pricing scheme and to prepare for production.

This will be enabled by granting access to the new pricing scheme in simulation, which will support the members in practicing the skills required to handle the new and changed features (for example new CCP reports).

To participate in SMP simulation and for SMP production start no member front end software installations are necessary. SMP simulation is an open simulation where members are free to define and process their own simulation scenarios.

1.4 Related Documentation

The following documentation is available in English and in German and can be found in the member section of the www.deutsche-boerse.com website.

Name	Description	Publication Date
SMP Announcement	Overview of new Stock Market Pricing including rationale and new price lists (German/English): circulars Xetra 138/2004 and Eurex 133/2004.	Sept. 28, 2004
CCP: new Fee Calculation and Changes to Fee Reports	Calculation procedure for the separated clearing and settlement fees. Reporting of the clearing and settlement fees. Impacts on the invoicing process. Changed and enhanced CCP service types (German/English): circulars Xetra 141/2004 and Eurex 137/2004.	Sept. 30, 2004

Figure 1: Overview of related documents

1.5 Helpdesks

On exchange trading days, members can reach Deutsche Börse with their questions and comments regarding simulation using the familiar helpdesk numbers:

Customer Support Team Xetra

Tel. +49 (69) 211 – 1 16 40   Monday – Friday: 9.00am – 6.00pm
Fax +49 (69) 211 – 1 16 41
E-Mail: customer.support@deutsche-boerse.com

Customer Support Team Eurex

Tel. +49 (69) 211 – 1 17 00   Monday – Friday: 9.00am – 6.00pm
Fax +49 (69) 211 – 1 17 01
E-Mail: customer.support@deutsche-boerse.com

Functional Helpdesk Xetra

Tel. +49 (69) 211 - 1 14 00   Monday – Friday: 8.00am – 6.00pm
Fax +49 (69) 211 - 1 14 01
E-Mail: marketsupervision.xetra@deutsche-boerse.com

Functional Helpdesk CCP

Tel. +49 (69) 211 - 1 19 40   Monday – Friday: 8.00am – 6.00pm
Fax +49 (69) 211 - 1 19 41
E-Mail: ccp@deutsche-boerse.com

Technical Helpdesk

Tel. +49 (69) 211 – 1 28 00   Monday – Friday: 8.00am – 6.00pm
Fax +49 (69) 211 – 1 84 01
E-Mail: xetra-help@deutsche-boerse.com

2 Simulation Approach

The simulation will be set up and run as production-like as possible. In this context, production-like refers to technical as well as functional aspects. Software, interfaces, tools, techniques and processes have to be used according to their use in production.

2.1 General Information

The following characteristics will be applied for successful accomplishment of Stock Market Pricing simulation:

Simulation schedule and availability

SMP simulation will last three weeks. During that time there will be five end-of-day processing and one month-end processing. The business days always correspond to the calendar days providing an end-of-day processing.

End-of-day processing days alternate with non-end-of-day processing days on which simulation environment remains open for 24 hours. Additionally the simulation environment is accessible on weekends.

On end-of-day / month-end processing days, the simulation system will close earlier than production in order to avoid any influences on end-of-day processing operations in production. A detailed schedule can be found in section 3.3.

Open Simulation

SMP simulation is defined as an open or free-style simulation, where participants are free to define and process their own simulation scenario to best handle the new functionality according to their internal processing. Furthermore, members can generally participate at any available time in the simulation provided the technical and application architecture is up and running.

Simulation Reference Data

Member-specific and instrument-specific master data will basically be taken over from the current data set-up of the Xetra Release 7.1 Simulation and CCP Permanent Simulation environment. Same holds for setup of related simulation system CBF/CASCADE.

2.2 Participating Systems

For the Stock Market Pricing simulation, the already established Xetra Release 7.1 Simulation, CCP Permanent Simulation and CBF/CASCADE simulation system will be used. For members, the main focus of the simulation will be on the Xetra and CCP systems.

System	Short Description
Xetra	Electronic cash market trading system (order entry, order administration, trade enrichment, etc.). Xetra will run in the Xetra Release 7.1 Simulation and Xetra Permanent Simulation respectively.
CCP	Central Counterparty System (delivery management, cash management, report and data dissemination, Corporate Actions processing). CCP will run in CCP Permanent Simulation.
Clearstream (CBF) (CASCADE, KADI, LION)	Central Security Depository systems (settlement, delivery management, corporate actions processing, etc.). CBF operated systems will run on simulation environment IMS23.
Risk Engine	Risk Based Margining Calculation (risk position determination, necessary margin requirement calculation, etc.). Risk Engine will run on the Eurex simulation environment.

Figure 2: Overview participating systems

3 Simulation Schedule

3.1 Overview

The following key dates have to be taken into account as a basis for SMP simulation planning:

Calendar days:

- Fee Parameters Change in Xetra R7.1 Simulation
  effective on business day Nov 2, 2004   Fri   Oct. 29, 2004

- CCP software changes in CCP Permanent Simulation
  effective on business day Nov. 22, 2004   Mon   Nov. 22, 2004

- Start of SMP simulation in Xetra 7.1 Simulation   Mon   Nov. 22, 2004

- End of Xetra Release 7.1 simulation   Wed   Nov. 24, 2004

- Month-end processing in Permanent Simulation   Mon   Nov. 29, 2004

- End of SMP simulation   Fri   Dec. 10, 2004

- Fee Parameters Change for production,
  effective in Xetra Release 7.1 Production   Mon   Jan. 03, 2005

- CCP software changes for production,
  effective in CCP Production   Mon   Jan. 03, 2005

- Production launch of SMP   Mon   Jan. 03, 2005

The following figure illustrates the schedule of Xetra Release 7.1, CCP and SMP simulation:
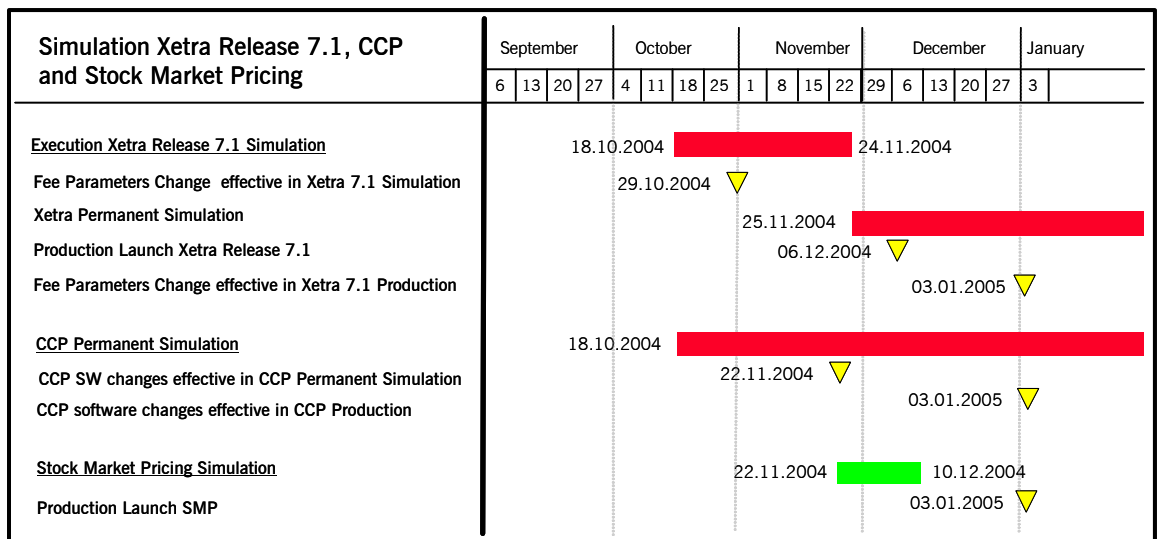

Figure 3: Simulation schedule Xetra Release 7.1, CCP and SMP (dates are calendar dates)

3.2 Simulation Calendar

The Member Simulation of Stock Market Pricing will run between November 22, 2004 and December 10, 2004. During that period all Xetra and CCP members ought to take part in the Stock Market Pricing simulation. The simulation will last three weeks and will provide as much simulation time as possible to allow vendors and members to adapt and test their software.

The simulation calendar below gives the relevant data for each day[1]:

Overall Simulation Calendar SMP						
November 22, 2004 - December 19, 2004 (All times are CET)						
48th week	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
Calendar Day	**22.11.2004**	**23.11.2004**	**24.11.2004**	**25.11.2004**	**26.11.2004**	**27.11.2004**	**28.11.2004**
Simu. Time	00:00 - 16:00	10:00 - 16:00	10:00 - 16:00	10:00 - 24:00	00:00 - 24:00	00:00 - 24:00	00:00 - 24:00
Event	SMP Simulation Xetra 7.1 Simu.: Focus Cycle #4 (DAY 1) cont. Trading	SMP Simulation Xetra 7.1 Simu.: Focus Cycle #4 (DAY 2) cont. Trading + Intraday Auction	SMP Simulation End Xetra 7.1 Simu.: Focus Cycle #4 (DAY 3) IPO-Auction	SMP Simulation Permanent Simulation	SMP Simulation Permanent Simulation Distr. Xetra 7.1 Production Kit	SMP Simulation Permanent Simulation	SMP Simulation Permanent Simulation
Batch Day	Yes	Yes	Yes	No	No	No	No
Business Day	22.11.2004	23.11.2004	24.11.2004	29.11.2004	29.11.2004	29.11.2004	29.11.2004
49th week	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
Calendar Day	**29.11.2004**	**30.11.2004**	**01.12.2004**	**02.12.2004**	**03.12.2004**	**04.12.2004**	**05.12.2004**
Simu. Time	10:00 - 16:00	10:00 - 24:00	00:00 - 24:00	00:00 - 24:00	00:00 - 24:00	00:00 - 24:00	00:00 - 24:00
Event	SMP Simulation Permanent Simulation Monthend Processing	SMP Simulation Permanent Simulation Distr. Xetra 7.1 Production Kit	SMP Simulation Permanent Simulation	SMP Simulation Permanent Simulation	SMP Simulation Permanent Simulation	SMP Simulation Permanent Simulation	SMP Simulation Permanent Simulation
Batch Day	Yes	No	**Yes**	No	No	No	No
Business Day	29.11.2004	01.12.2004	01.12.2004	09.12.2004	09.12.2004	10.12.2004	10.12.2004
50th week	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
Calendar Day	**06.12.2004**	**07.12.2004**	**08.12.2004**	**09.12.2004**	**10.12.2004**	**11.12.2004**	**12.12.2004**
Simu. Time	00:00 - 24:00	00:00 - 24:00	00:00 - 24:00	00:00 - 16:00	10:00 - 24:00	00:00 - 24:00	00:00 - 24:00
Event	SMP Simulation Production Launch Xetra 7.1	SMP Simulation Permanent Simulation	SMP Simulation Permanent Simulation	SMP Simulation Permanent Simulation	End SMP Simulation Permanent Simulation	Permanent Simulation	Permanent Simulation
Batch Day	**No**	No	No	Yes	No	No	No
Business Day	09.12.2004	09.12.2004	09.12.2004	09.12.2004	13.12.2004	13.12.2004	13.12.2004

Figure 4: Simulation Schedule

3.3 Daily Schedule

Simulation days will either be end-of-day processing days or online days. End-of-day processing days are November 22 through 24, December 1 and 9, 2004. A month-end processing is scheduled for November 29, 2004. The time-table in simulation will differ to the one in production. The online day starts at 10.00 am in case an end-of-day processing has been processed the day before and it ends 15.45 pm on each batch day. On online days the simulation system is permanently up and running. Furthermore the business days correspond with the calendar days providing an end-of-day processing.

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[1] In the simulation calendar below, end-of-day processing is called "batch day".

The following table shows an overview of the schedule of a Xetra Release 7.1 simulation end-of-day batch processing day for the different trading models.

Phase	Instruments in Continuous Trading	Instruments in One Auction Only
Pre-Trading	10:00 a.m. – 10:15 a.m.	10:00 a.m. – 12:00 a.m.
Opening Auction Call	10:15 a.m.	
Continuous Trading	ca 10:30a.m. – 12:00a.m.	–
Intraday Auction Call	12:00a.m.	12:00a.m. – 12.15 a.m.
Continuous Trading	ca 12:15 a.m. – 02:00 p.m.	–
Intraday Auction Call	02:00 p.m.	
Continuous Trading	ca 02:15 p.m. – 03:30 p.m.	
Closing Auction Call	03:30 p.m.	–
Post-Trading	ca 03:45 p.m. – 04:00 p.m.	
Price Determination Closing Auction	From 03:45 p.m. on	–
Ready for Batch	04:00 p.m.	04:00 p.m.
Report Distribution	From 08:00 p.m. on	From 08:00 p.m. on

Figure 5: Xetra Trading schedule for an end-of-day batch processing day (for the different trading models).

The following table shows an overview of the CCP Permanent Simulation batch day schedule:

CCP batch day schedule	Information, Activity
10:06 a.m.	- Latest for trade inquiry or modification for SDS1, for trades reaching the contractual Settlement Day - Latest to send MT 523
10:52 a.m.	GDM available again for trades reaching the contractual Settlement Day
01:07 p.m.	- Latest for trade inquiry or modification for SDS2, for trades reaching the contractual Settlement Day - Latest to send MT 523
01:52 p.m.	GDM available again for trades reaching the contractual Settlement Day
03:22 p.m.	- Latest for trade inquiry or modification for STD for trades reaching the contractual Settlement Day - Latest to send MT 523
04:00 p.m.	End of day batch start

Figure 6: CCP permanent simulation batch day schedule.

4 Member Activities

4.1 Simulation Preparation

The Xetra members shall use the preparation period to get ready for successful participation in the Stock Market Pricing simulation.

Prior to the start of the Stock Market Pricing simulation, several preparatory activities will have to be completed by all participating members to avoid delays. The following activities should be completed before the start of the simulation in order to ensure readiness.

- Self-developed or third party software ready, if its usage is intended.

- Related in-house systems setup to simulate subsequent processing, for example adaptation of pricing schemes related to the new Stock Market Pricing and processing of new reports.

- Resources for participation in simulation on the days specified in the simulation calendar (see section 3.2) are identified and confirmed.

- Member specific simulation objectives and scenarios - if desired.

- Member-internal issue management process and organization established.

4.2 Simulation Execution

The simulation is the final opportunity to attain functional and technical readiness before the Stock Market Pricing will be rolled out into production. Stock Market Pricing simulation is an open simulation. Members are free to choose their main focus for this simulation period. They are encouraged to simulate the processes necessary for their company's individual situation, to acquire the knowledge and competence in working with the new functionalities to be prepared for a seamless start into production.

Each member is encouraged to check and adjust the selection of reports that the respective member wishes to receive in the Report Selection windows available in Xetra and CCP. The Xetra and CCP reports impacted by the new Stock Market Pricing are listed in section 5.3.

It is not planned to execute any high volume tests or performance tests during SMP simulation.

5 Simulation Data and Parameters

5.1 Simulation Data

For Stock Market Pricing simulation, <u>the same setup as for Xetra Release 7.1 Simulation and CCP Permanent Simulation will be provided</u> to support members' simulation activities:

- Stock Market Pricing simulation will be executed in the existing Xetra and CCP simulation environments using the existing reference data for members and instruments. Additionally members are free to conduct any change of data on member side as well as requesting changes to be conducted by the exchange as it is already established procedure during regular simulation.

5.2 Instruments

A detailed list of all instruments available during the Stock Market Pricing simulation can be found on our websites

www.deutsche-boerse.com (for Xetra)
under *Trading & Clearing -> Members Only Xetra/Floor -> Xetra Simulation*

www.eurexchange.com (for CCP)
under *Member Section -> Software Releases CCP -> Simulation Environment*.

5.3 Reports

5.3.1 Xetra Reports, impacted by new Stock Market Pricing

The following table gives an overview of the respective Xetra Reports:

Report Name	Print Report Format	Raw Data Report
Daily Trade Confirmation	RPTTC810	RAWTC810
Daily Open OTC Maintenance	RPTTC820	RAWTC820
Daily Trade Statistics	RPTTC930	not available
Fee Per Executed Order	RPTCB042	RAWCB042
Fee Overall Summary	RPTCB050	not available
Fee Statement	RPTCB060	not available

Figure 7: Overview of Xetra reports, impacted by new Stock Market Pricing

5.3.2 CCP Reports, impacted by new Stock Market Pricing

The following table gives an overview of the respective CCP Reports:

Report Name	Print Report Format	Raw Data Report
Fee Reports		
Daily Clearing Fees	RPTCB300	RAWCB300
New: Daily Settlement Fees	**RPTCB305**	**RAWCB305**
Daily Service Fees	RPTCB310	RAWCB310

Figure 8: Overview of CCP reports, impacted by new Stock Market Pricing

The new report CB305 has to be added to the Report Selection window. As the result of the VALUES request "Inquire Report Selection" is assembled dynamically out of the CCP Report master data. Changed report CB300 is renamed to "Daily Clearing Fees".