clear to trade

eurex clearing *circular 097/13*

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⚠ **High priority**

Introduction of C7, Eurex Clearing's new clearing architecture: Information on scope and timeline

Related Eurex Clearing Circular: 065/13, 072/13
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Content may be most important for:	**Attachments:**
➲ All departments	none

Summary:

C7, Eurex Clearing's new clearing architecture, will replace the existing Eurex Clearing classic system in a stepwise approach. As announced in Eurex Clearing circular 065/13, Eurex Clearing has revised the scope and timeline for the introduction of Eurex Clearing's C7. This circular provides relevant information on the adjusted scope and implementation timeline for the initial release of Eurex Clearing's C7.

The initial release of C7 will feature the following optional functionality for Clearing Members (CMs) and Non-Clearing Members (NCMs) for derivatives listed at Eurex Exchange:

- Technical optimization of the segregation of transactions, positions, margin requirements, collateral and cash flows for premium/variation margin. For instance, it will be simplified for a CM or NCM to segregate customers or individual funds in an own customizable structure.
- Within C7, average pricing will allow merging of multiple transactions into one transaction with an average price calculated by Eurex Clearing, thereby increasing operational efficiency.

The initial release of C7 will be launched in simulation in **April 2014** and in production in **June 2014**. To pave the way for C7, Eurex Clearing will decommission VALUES API and the MISS infrastructure on **10 December 2013**, as announced in Eurex Clearing circular 065/13.

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Introduction of C7, Eurex Clearing's new clearing architecture: Information on scope and timeline

1. Introduction

C7, Eurex Clearing's new clearing architecture, will replace the existing Eurex Clearing classic system in a stepwise approach. As announced in Eurex Clearing circular 065/13, Eurex Clearing has revised the scope and timeline for the introduction of Eurex Clearing's C7. This circular provides relevant information on the adjusted scope and implementation timeline for the initial release of Eurex Clearing's C7.

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- Technical optimization of the segregation of transactions, positions, margin requirements, collateral and cash flows for premium/variation margin. For instance, it will be simplified for a CM or NCM to segregate customers or individual funds in an own customizable structure.
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The initial release of C7 will be launched in simulation in April 2014 and in production in June 2014. To pave the way for C7, Eurex Clearing will decommission VALUES API and the MISS infrastructure on 10 December 2013, as announced in Eurex Clearing circular 065/13.

C7 will be introduced in a stepwise approach, i.e. the Eurex Clearing classic system will remain in place serving the existing functionality, until all functionality is migrated to C7[2]. Accordingly, the initial release of C7 will be optional. However, the new functionality mentioned above will only be supported by C7. With further releases, C7 will take over more and more functionality from the Eurex Clearing classic system.

From an interface perspective, the current @X-tract GUI will continue to provide access to the existing functionality in the Eurex Clearing classic system (via WebTrading), whereas the new C7 Derivatives Clearing GUI will provide access to the functionality available in C7 (described in chapter 3 of this circular). The Eurex Clearing FIXML Interface will only have optional changes for the new functionality and will allow connecting to both systems, as it will remain the electronic interface of choice for Eurex Clearing.

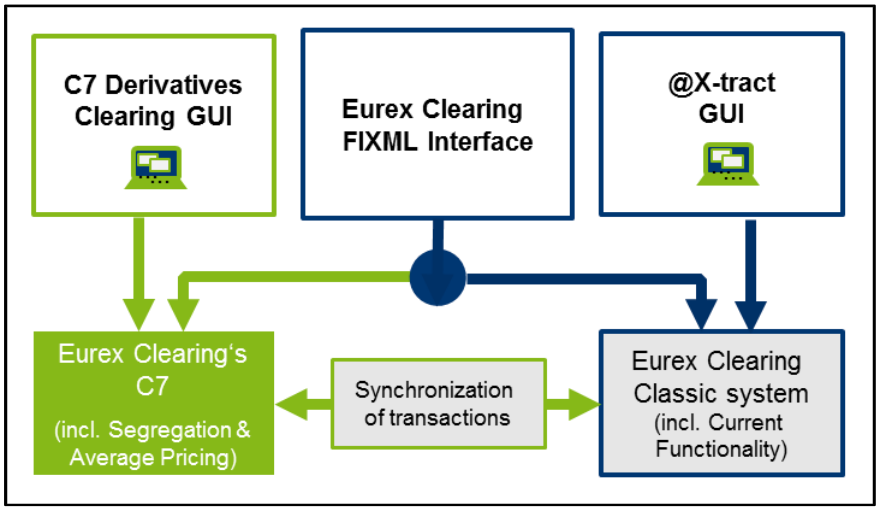


Diagram: Access options to clearing systems offered by Eurex Clearing

[1] Currently excluding EurexOTC Flexible Contracts.
[2] This is not affected by decommissioning of VALUES API and the MISS infrastructure.

Eurex Clearing recommends that all CMs & NCMs, i.e. firms active in clearing and/or trading of listed derivatives, start preparing for Eurex Clearing's C7 soon and contact their Independent Software Vendors and Multi-Member Service Providers to evaluate the impact and agree on software tests and migration stages if participation in C7 is desired from the beginning.

2. Functional overview

The following provides an overview of the new functionality to be introduced with the initial release of C7. More details of the functionality provided with this initial step will be available at a later point in time in the functional documentation, which can be found on the Eurex Clearing website www.eurexclearing.com under the following path:

Technology > Eurex Clearing's C7 > System Documentation

2.1. Functional Segregation

Eurex Clearing's C7 will optimize the functionality for flexible segregation of client business as needed by the respective CM or NCM.

It will be possible to segregate client transactions and positions into a practically unlimited number of accounts. It will also be possible to keep collateral for risk margining segregated on the same level or on any aggregated level. Premium and variation margin can be reported and instructed on the same level.

The diagram below illustrates how functional segregation can be technically structured on different levels: for positions via additional agent accounts, for margin requirements via risk netting units and for collateral via collateral pools. Further details will be given in this circular later on.

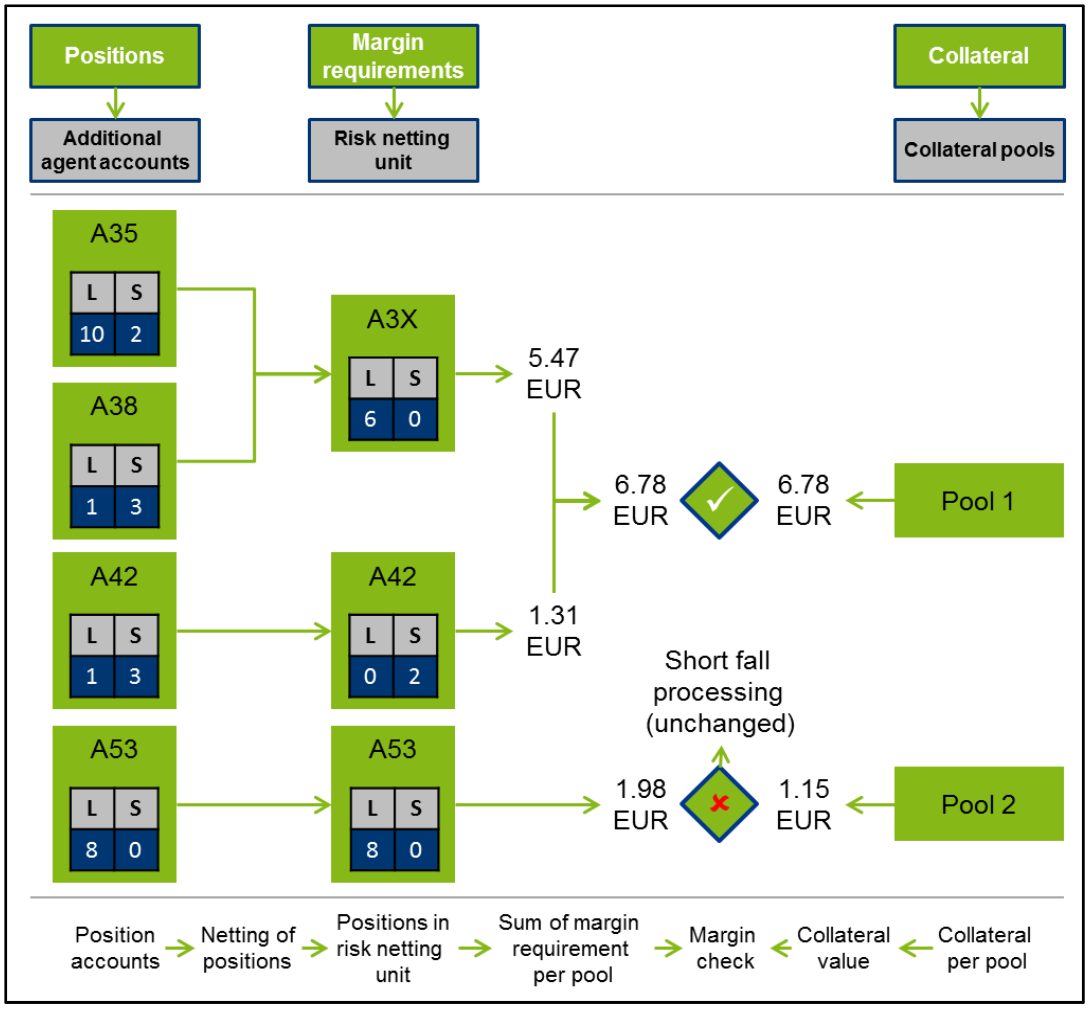


Diagram: Functional segregation on different levels in C7

Resulting from the chosen clearing model, restrictions on the technical options of segregation may apply.

2.1.1. Functional segregation of transactions and positions

New additional agent accounts introduced with C7 will enable functional segregation of client transactions and positions on a granular level. Reporting, transaction adjustments and position adjustments will be available for these additional agent accounts. Further details will be provided via the C7 functional manuals. Usage of additional agent accounts will be optional as the existing functional structure supporting segregation (NCMs, RCs, existing accounts) will remain unchanged.

Additional agent accounts can be set up in a practically unlimited number. In contrast to the Eurex Clearing classic system, the alphanumeric account identifiers of the new accounts can be defined as desired by the CM or NCM (maximum length of 32 characters, subject to vendors' applications).

2.1.1.1. Aggregation account

The existing A8 account will be used as an aggregation account for the additional agent accounts, providing an aggregated view of the transactions and positions held on the additional agent accounts in C7. The A8 account in the Eurex Clearing classic system as well as the additional agent accounts in C7 will be held gross. Transactions and positions will always be kept in sync between the A8 account and the additional agent accounts (except for average priced transactions).

Please note that the A8 account as used in the past has been technically disabled at the end of June 2013 in order to prepare for the usage as an aggregation account as described above. It will be enabled again for customers using the C7 functionality.

2.1.1.2. Transfer account

New on-exchange and OTC Trade Entry Service trades[3] for the additional agent accounts can be booked as A8 trades. One of the additional agent accounts will serve as a transfer account between C7 and the Eurex Clearing classic system: New transactions (and corresponding positions) booked into the A8-account will simultaneously trigger a booking in the transfer account in C7. Positions and transactions can then be moved within C7 from the transfer account to any of the other additional agent accounts.

In order to move positions and transactions in reverse direction, i.e., from an additional agent account to a standard account (P1, P2, A1-A7 and A9), the transfer account is used in the way as described above. All transactions between standard and additional accounts have to be directed through the transfer account.

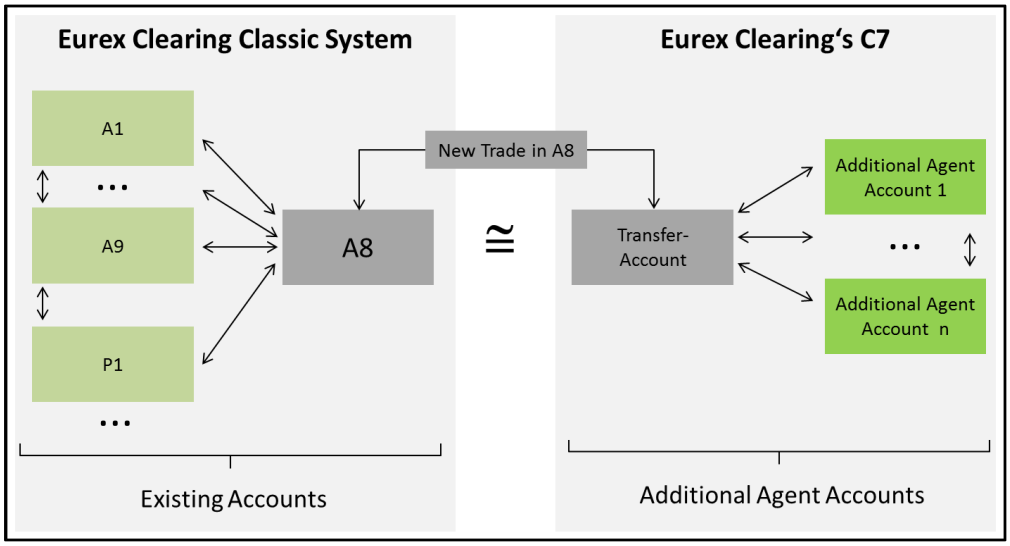


Diagram: Illustrative moving of transactions and positions between accounts

[3] Currently excluding EurexOTC Flexible Contracts.

2.1.2. Functional segregation of margin requirements and collateral

In order to use segregated collateral for specific positions, it will be possible to let Eurex Clearing calculate margin requirements on different levels, using the Risk-based Margining methodology.

Currently, margin requirements are calculated on the level of the existing accounts. With the initial release of C7, calculation of margin requirements can be performed separately per additional agent account or across multiple additional agent accounts.

To calculate net margin requirements across various accounts, the additional agent accounts in question must be assigned to a so-called risk netting unit. First, all positions of the accounts within each risk netting unit are netted. Afterwards, the margin and collateral requirements are calculated.

Today, collateral can be segregated by directly assigning a collateral pool to an account, according to the clearing model that has been chosen by the CM. With the initial release of C7, this can be done by assigning a collateral pool to a risk netting unit. Margin requirements will be validated against the collateral in the corresponding pool, before processing a possible short fall.

Calculation of margin requirements and collateral requirements for existing accounts remains unchanged except for the calculation on the A8 account which will not be executed any longer, since the calculation will be covered by C7 on the level of the risk netting units. Pending deliveries for additional agent accounts will continue to be margined on A8 account level.

2.1.3. Functional segregation of premium and variation margin

The initial release of C7 will support settlement of premium and variation margin on additional agent account level. Settlement for these will be instructed using the collateral pool ID assigned to the risk netting unit of the additional agent account.

Other cash settlements (e.g. payments for cash settled options) will be instructed as today.

2.2. Average pricing

The average pricing functionality allows merging of multiple transactions into one transaction with an average price calculated by Eurex Clearing. This feature will exclusively be provided for additional agent accounts, introduced with C7.

As a matter of fact, the average price is only known by the initiating CM or NCM. None of the counterparties of the trades will be able to view the price.

2.2.1. Triggering average priced transaction & Forecast of the average price

Multiple transactions (either buy or sell side) have to be selected in order to create one average priced transaction. This can be done via the new C7 Derivatives Clearing GUI or the Eurex Clearing FIXML Interface.

The new C7 Derivatives Clearing GUI provides a forecast for all selected transactions. When the customer has validated this forecast manually, he can submit it to Eurex Clearing and the average priced transaction will be created.

Using Eurex Clearing's FIXML Interface, a CM or NCM can submit an optional forecast for the average price, the residual and the quantity within the request. If the forecast is within the range of the values calculated by C7, the transaction is processed, otherwise it is not processed. If the forecast fields are empty, no forecast check will be performed and the average price process continues.

2.2.2. Algorithm and residual

A volume-based averaging formula is used for average pricing.

Either a positive or negative residual for premium or variation margin can arise after the original transactions have been re-priced at the average. This residual amount is “attached” to the new average priced transaction and remains with it, even in case of further transaction separation. Therefore, average pricing is cash flow neutral. The residual amount is shown on the new C7 Derivatives Clearing GUI. It is also available via the Eurex Clearing FIXML Interface and in the new reports CB012 and CB015 (see chapter 6.).

As an exception to other transactions, average priced transactions are not synchronized between C7 and the Eurex Clearing classic system.

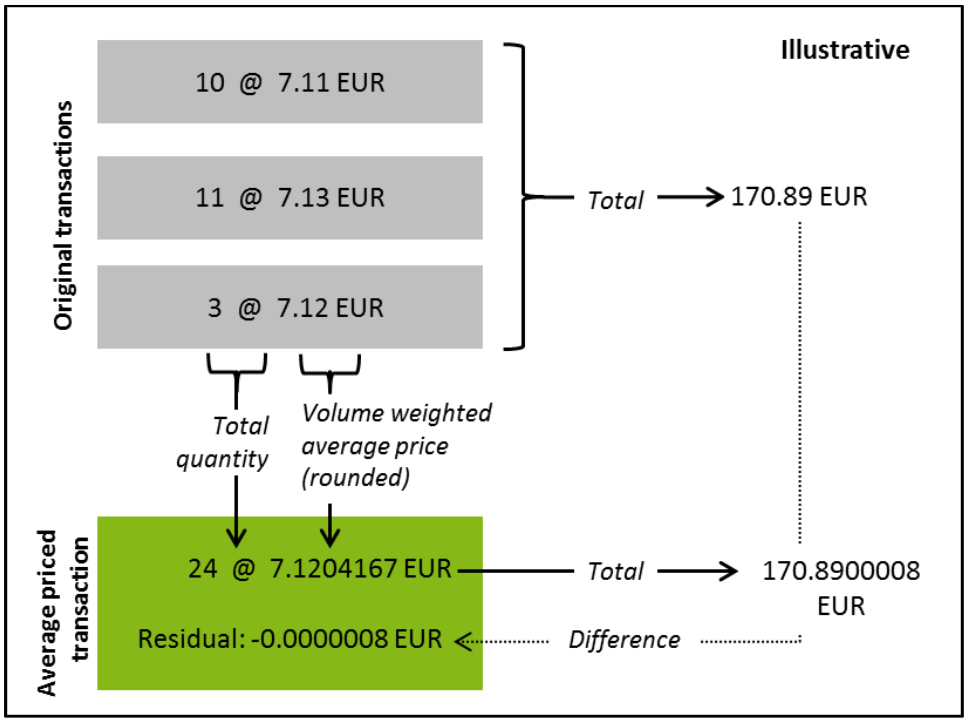


Diagram: Average pricing

2.2.3. Reversal and de-merge

If an average priced transaction contains a single trade that becomes a mistrade, the entire transaction is reversible as all other transactions.

A CM or NCM can request a de-merge, which results in a re-establishment of the original transactions.

2.2.4. Prerequisites for average pricing

The creation of average priced transactions comes with the following prerequisites:

It is only possible in C7

- for additional agent accounts,
- for transactions of the same instrument, account and equal buy or sell side,
- for either on-exchange or EurexOTC transactions (mixed average pricing is not supported),
- if the transactions were not part of an average priced transaction before.

3. Overview of interfaces to access C7

The following chapter provides a high-level overview of the technical impacts for CMs and NCMs resulting from the introduction of Eurex Clearing's C7.

For further information on the decommissioning of VALUES API and the MISS infrastructure in December 2013, which is accompanying the introduction of C7, please refer to Eurex Clearing circular 065/13.

3.1. C7 Derivatives Clearing GUI

A new browser-based GUI, the C7 Derivatives Clearing GUI, will be provided together with the initial release of C7. The new GUI solution is technically based on the Securities Clearing GUI and the EurexOTC Clear GUI. As it is fully based upon web technology, access to the new GUI is very simple and does not require any specific technical prerequisites on the customers' side other than a standard web browser that supports SSL-based client certificates.

Please note that only the new C7 Derivatives Clearing GUI will support handling of the new additional agent accounts. However, clearing functionality on existing accounts will continue to be handled by the current Eurex Clearing GUI @X-tract.

3.2. Eurex Clearing GUI @X-tract via WebTrading

The existing Eurex Clearing GUI @X-tract will still be required by all Eurex Clearing Members and Eurex Exchange participants as it will continue to provide essential clearing functionality for all accounts except for the new additional agent account structure. It will also be required for user maintenance activities, such as assignment of clearing entitlements. With upcoming release steps, more and more functions provided by @X-tract will be migrated to the C7 Derivatives Clearing GUI.

Please note, that in the course of decommissioning the MISS infrastructure, @X-tract will only be available via WebTrading in the future. For further information on WebTrading, please refer to Eurex Clearing circular 072/13.

3.3. Eurex Clearing FIXML Interface

The existing Eurex Clearing FIXML will remain Eurex Clearing's electronic interface of choice for access to the clearing systems. The latest version of the interface (available in production since 27 May 2013) will be the basis for accessing C7.

Together with the introduction of C7 in June 2014, three new optional FIXML requests will be introduced to enhance support of the additional agent accounts. These three requests comprise position close-out, position exercise and average pricing. As existing requests are targeted to remain unchanged, there is no impact to be expected for CMs and NCMs that do not intend to use the three new optional requests.

4. Report changes

The following new reports will provide information on the level of the additional agent accounts:

- CB012 will provide daily transactions, positions, premium and variation margin similar to the existing CB010 report,
- CB015 will provide detailed information for average priced transactions.

5. Planned rollout overview

Prior to the introduction of C7, CMs, NCMs and vendors will be able to test the new features of the initial release in simulation. The regular simulation period is scheduled to start in April 2014 and will last until the production launch in June 2014. During that timeframe, CMs, NCMs and vendors will be able to test updates to the Eurex Clearing FIXML Interface, the C7 Derivatives Clearing GUI and the new functionality and technical changes introduced with C7.

6. Additional sources of information

Eurex Clearing is committed to provide CMs and NCMs with information updates throughout the migration process in order to support adequate planning and ensure successful transition to Eurex Clearing's C7. Information regarding necessary steps on customers' side, implementation news, complemented by detailed documentation and screencasts will be offered in the course of the system implementation.

6.1. Implementation News

Prior to the simulation phase, Eurex Clearing will integrate an Implementation News section into the Eurex Clearing website. This service is well known from the introduction of Eurex Exchange's T7 and has proven to be a useful source of information. It will be located under the following path:

Technology > Eurex Clearing's C7 > Implementation News

6.2. Screencasts

Eurex Clearing will create a set of on-demand screencasts providing information of specific topics related to the introduction of C7. The screencasts will be available on the Eurex Clearing website under the following path:

Technology > Eurex Clearing's C7 > Education

7. Contacts

To receive all relevant information about the implementation of Eurex Clearing's C7 regularly, please register as a contact person for C7 in the Member Section of the Eurex Clearing website under the following path:

Member Section > Contacts > Release Contacts

To ensure effective information distribution, please register both a project coordinator and a technical contact for Eurex Clearing's C7.

If you have any questions or require further information, please contact the Trading & Clearing Services team at tel. +49-69-211-1 17 00 or e-mail: technology.roadmap@eurexclearing.com. Alternatively, please contact your Technical Account Manager.

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